# Giza Mastabas <br> Volume 8 

Edited by
Peter Der Manuelian and William Kelly Simpson

Mastabas of Nucleus Cemeterec 2100

Part i: Mayor Mastabas g 2Ioo-2220

Peter Der Manuelian

Giza Mastabas
Volume 8

## Mastabas of Nucleus Cemetery g 2 Ioo Part I



MFA 07.IOO2, detail of standing figure of Nefer from the north entrance thickness of the chapel of mastaba G 2 III (see figs. 6.50, 6.53 ).

## Giza Mastabas

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# Mastabas of Nucleus Cemetery g 2 Ioo 

Part i: Major Mastabas g 2ioo-2220

## Peter Der Manuelian

Based upon the Recording of<br>The Harvard University-Boston Museum of Fine Arts Expedition:<br>George Andrew Reisner, Albert M. Lythgoe, Clarence S. Fisher, William Stevenson Smith, Alexander Floroff, Nicholas Melnikoff, Said Ahmed, Mohammed Said Ahmed, and Mahmoud Said Ahmed<br>With Contributions by the Expedition Staff of the Giza Mastabas Project, Renate Germer, and Nancy C. Lovell

Front jacket illustration: MFA 06.1886, reserve head of Nefer from G 2IIO A; (see Chapter 6, figs. 6.39, 6.90-6.roo). Museum of Fine Arts, SC62136

Back jacket illustration: The Western Cemetery at Giza, looking northwest from the top of the Great Pyramid. November 16, 1993. Peter Der Manuelian, PDM_1993.130.23

Frontispiece: MFA 07.1002, detail of standing figure of Nefer from the north entrance thickness of the chapel of mastaba G 2110 (see Chapter 6, figs. 6.50, 6.53). Museum of Fine Arts, CR735I_di

Endpapers: Overview plan of the Giza Necropolis, showing the location of nucleus Cemetery G 2100

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Published with the assistance of William Kelly Simpson

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For William Kelly Simpson Egyptologist, mentor, friend

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While some publication projects proceed uninterrupted from start to finish, others start and stop over a longer term, due to the intervention of other work. The present volume is an example of the latter scenario. It was initiated many years ago, and great changes have since taken place, in Egyptology, archaeology, technology, and museology, that have altered the book's final form. Giza Mastabas 8 represents the first volume in the series published since the launch (in 2005) of the Giza Archives Project Web site (www.gizapyramids.org), and the rise of the Internet in general as a serious Egyptological research tool. By aiming to provide all of the world's archaeological documentation from Giza, the Web site serves as a sort of "companion volume," enhancing and adding to the illustrations and documentation printed here. It provides new research avenues that were hitherto impossible. It is also the first completely digital Giza Mastabas Series volume, where even the epigraphy is largely the result of hand-drawn vector lines on a digitizing tablet, rather than pen and ink. The book thus includes the results of labors and technologies from as early as 1905, and as late as 2009 .

One of the personal advantages in undertaking a project over a longer period is the ability to make the acquaintance and incorporate the contributions of a large number of individuals around the world. It has been a privilege to work with such a wide variety of talented and generous colleagues from a host of different disciplines, and to have traveled to many lands, in the production of this volume. My colleagues have shown great patience in assisting me to augment and interpret the archaeological data from field seasons now more than a century past. It seems appropriate to list them below by city, arranged in alphabetical order with the exception of Boston first, since most of the work was accomplished there.

* Boston. I thank Rita E. Freed, the John F. Cogan Jr. and Mary L. Cornille Chair of the Department of Art of the Ancient World at the Museum of Fine Arts, Boston, for her constant support of my research over many years, and her permission to publish portions of the extensive Giza collection and excavation archives under her care. It is to her vision and foresight that we owe the continued existence of the Giza Mastabas Series, and the growth of the Giza Archives Project. Our curatorial colleagues in the Department of Art of the Ancient World have been a constant source of inspiration in my work: Lawrence Berman, Denise Doxey, Laura Gadbery, Joyce Haynes, Yvonne Markowitz, and Nicholas Picardo.

My gratitude goes to Malcolm Rogers, the MFA's Ann and Graham Gund Director, and Katie Getchell, Deputy Director for Curatorial Administration. I also thank the four MFA department heads who have supervised the Project over the years and have encouraged and supported the Giza work, including Nancy Allen (Information Resources), and Maureen Melton (Libraries and

Archives). The Project is currently affiliated with the Conservation and Collections Management Department, formerly headed by Arthur Beale, and now by Matthew Siegal. Conservation and Collections Management staff have facilitated every aspect of my research, and I thank Linda Pulliam, Jeff Steward, Emily Dean, Kenneth Leibe, Kay Satomi, and Brooks Rich.

Digital imaging advice over many years has come from John Woolf, of the MFA's digital imaging studio, Department of Intellectual Property. I thank him in particular for the montage of the fragmentary slab stela reproduced in fig. 7.67. I am also indebted to the Publications Department, especially Mark Polizzotti, Emiko Usui, and Terry McAweeney, for their assistance, as well as to the head of Rights and Licensing, Debra Lakind, for facilitating the use of many of the MFA object images that appear throughout the present volume.

Giza Archives Project staff have been instrumental in helping to make this publication a reality, whether by working directly with Cemetery g 2100, or indirectly by relieving the Project Director of other burdens. Giza Research Associate Diane Victoria Flores has been with the Project since its inception in 2000, and her meticulousness, accuracy, and scholarly acumen have proven indispensable time and time again. Much of the Giza data "heavy lifting," has been borne by her. Project Archivist Catherine Pate has organized the chaos of the original Expedition records, and her technological skills are unmatched in ensuring the smooth continuity of the Giza workflow. Ruth Bigio has provided many of the archaeological redrawings from the original Expedition archives. Her vector drawing skills are unique among Giza Archives Project staff, and are matched only by her infinite patience in drawing block after block, tomb after tomb. My Egyptological interns over many years have contributed great service to the Project, and I thank them for their time, patience, and good scholarship: Heidi Saleh, Heather Evans, Christine End, Nicholas Picardo, and Rachel Aronin. In addition, several MFA volunteers have "adopted" the Project, among their other duties, and we would not be as productive without their assistance. In particular, I thank Steven Klitgord, Myron Seiden, and the invaluable women of the Museum Associates for many years of dedicated Giza work.

The teaching aspect of the Giza Archives Project for Egyptology and archaeology students in the Boston area has proven especially fruitful, and I am grateful to many students who have contributed directly to the production of the present work. Laurel Hackley assembled Expedition diary pages and object lists pertaining to Cemetery g 2100; and Meghan Place confirmed shaft measurements and object numbers against Reisner manuscripts. Elizabeth Lehtola created the preliminary formatting for many of the digital hieroglyphs I have inserted in the text, and Caryn Horowitz provided supplemental photographic caption information. Melissa Kisala and Ariana Dunning proofread chapters for consistency of figure numbers and references.

The Giza Archives Project is now an international collaboration, and the colleagues listed below have proven to be distinguished and indispensable partners in processing and providing access to their Giza data. Since the mastabas covered in the present volume span two different excavation concessions, American and German-Austrian, it will be readily apparent below how important their materials are. For their participation in the Giza endeavor I thank Joan Knudsen, Elizabeth Minor, and the late Catherine Keller (Berkeley); Dietrich Wildung, Klaus Finneiser, Stephan Seidlmayer, Stefan

Grunert, and Elke Freier (Berlin); Zahi Hawass and Wafaa el-Saddik (Cairo); Katja Lembke, Bettina Schmitz, and Antje Spiekermann (Hildesheim); Hans-Werner Fischer-Elfert and Friederike KamppSeyfried (Leipzig); David P. Silverman, Josef Wegner, and Jennifer Houser Wegner (Philadelphia); Eleni Vassilika, Giovanni Bergamini, Matilde Borla, and Elisa Fiore Marochetti (Turin); and Manfred Bietak, Peter Jánosi, and Regina Hölzl (Vienna).

* Berlin. Since Lepsius was active in Cemetery g 2100, crucial materials, in particular the chapel of Merib (G 2100-I), are housed at both the Ägyptisches Museum and the Berlin-Brandenburgische Akademie der Wissenschaften. At the Museum, Dietrich Wildung kindly granted permission to publish the chapel of Merib (ÄM iІо7) and its related objects, and Klaus Finneiser was instrumental in putting the relevant materials at my disposal. I also thank conservator Rolf Kriesten, from Restaurierung am Oberbaum, for his spectacular new photography and photo-montaging of Merib's many relief blocks, prior to the chapel's reassembly in the Neues Museum.

At the Berlin-Brandenburgische Akademie der Wissenschaften, Stephan Seidlmayer kindly provided much of the Merib documentation from the original Lepsius expedition. I thank him for his collaboration in the midst of his move from Berlin to the Deutsches Archäologisches Institut in Cairo. I am also indebted to his colleagues at the BBAW, Stefan Grunert, and Elke Freier.

* Birmingham, England. Philip Watson, Head of Collection Management, Birmingham Museums and Art Gallery, was instrumental in providing a photograph of the west wall fragment from Nefer's chapel (G 2IIO), Birmingham 24I/57.
* Cairo and Giza. First and foremost, my thanks go to Zahi Hawass, Secretary General of the Supreme Council of Antiquities. Our collaboration at Giza stretches back to my first season there, in the summer of 1977, and I have valued his friendship, admired his scholarship, and treasured his assistance ever since. He will recognize many old friends in the following pages, whose tombs lie not a stone's throw from his office in the tafteesh at Giza. Inspectors at Giza have become close friends over many years, and without them, my work there would be impossible. Over many seasons I received every kind of assistance, advice, and logistical support for my work in the Western Cemetery. I thank in particular Adel Hussein, Mansour Boraik, Mohamed Shiha, Amal Samuel, Mahmoud Affif, Mohamed Salah, Mohamed Sadek, Magdy Abdel Salam, and Hasan Mohamed. I am also grateful to past chairmen of the EAO, including Abdel Halim Nour el-Din and Mohammed Ibrahim Bakr, and chief inspectors at Giza, including the late Ahmed Moussa.

On the other side of the Wall of the Crow, the expedition staff of Ancient Egypt Research Associates, under the directorship of Mark Lehner, have also shared their expertise, hospitality, and friendship over many years. I consider myself doubly fortunate to benefit not only from AERA's presence at Giza, but also at its US home base in Boston. I am grateful for many fruitful discussions with Mark Lehner, Ana Tavares, John Nolan, Camilla Mazzucato, and Farrah Brown about the site, our ongoing collaboration, and GIS strategies. Ana Tavares and her staff graciously undertook some re-surveying of portions of Cemetery g 2100 in 2008, and Camilla Mazzucato georeferenced several disparate Reisner-era plans of the area (see fig. 2.5). In Boston, Wilma Wetterstrom and I have shared graphic design and publication information as our respective projects have grown increasingly ambitious.

In Cairo, Egyptian Museum directors Mohamed Saleh and Wafaa el-Saddik offered me every assistance with the objects from Cemetery G 2100 under their care. May Trad solved countless numbering discrepancies for me over the years, and lent her wisdom and unparalleled knowledge of the Museum for my benefit. And my Giza expeditions received all manner of support from the American Research Center in Egypt. I am especially indebted to Gerry Scott and Amira Khattab. My friend and colleague Cynthia May Sheikholeslami has provided help and advice during my stays in Cairo, and I have learned much from our many discussions about the Giza Necropolis.
(2. Copenhagen. Mogens Jørgensen was a gracious host during my collation visit to the Ny Carlsberg Glyptotek in 1991 for the two Nefer reliefs in his collection (see figs. 6.59 and 6.75). More recently, he leapt into action as publication deadlines loomed and provided excellent new color photography of these two reliefs (taken by photographer (Ole Haupt/Ny Carlsberg Glyptotek).

- Edmonton. My thanks go to Nancy C. Lovell of the Department of Anthropology, University of Alberta, for her analysis of the Giza skeletal remains at such a wide variety of locations. The descriptions under the "Shafts and Burials" section of each respective tomb chapter are hers. Most of the major mastabas covered in the present volume were plundered, but much more of her work is contained in Part 2, on the subsidiary mastabas and burials.
* Hamburg. My thanks go to Renate Germer for her contribution to the analysis of the extraordinary female mummy and its linen wrappings from G 2220 (see Chapter 16).
* Hildesheim. Fully engaged in their own Volkswagen-Stiftung-funded Giza project, Bettina Schmitz and Antje Spiekermann nevertheless took the time to answer my every query, email, and photographic request about the mastabas included in Steindorff's and Junker's Giza concessions. I am particularly grateful for information regarding the mastabas G 2IOO-II, G 2135 , and G 2155 . None of this assistance would of course have been possible without the enthusiastic support of the director of the Pelizaeus-Museum, Katja Lembke.
* New York. To the Andrew W. Mellon Foundation I owe the very existence of the Giza Archives Project, which has streamlined my own Egyptological work, and I hope made research easier for many others as well. Initiated in 2000, thanks to a grant from the Mellon Foundation, the Giza Archives Project at the MFA has benefited to date from more than $\$ 3$ million in support, and contributions of time and expertise from more than 400 colleagues, students, volunteers, and museum docents. My thanks go to Angelica Zander Rudenstine, Program Officer, Museums and Conservation, who initiated the Project and, since 2004, to Donald J. Waters, Program Officer, Scholarly Communications, who has continued to support our work in every way. Additional Scholarly Communications personnel at the Mellon Foundation who have my sincere gratitude are Helen Cullyer, Associate Program Officer, Hans Rutimann, Senior Advisor, and Paula Muir, Program Associate.

I am most grateful to the Mellon Foundation for the its vision of setting our Project on the road to endowment and long-term sustainability.

* Oxford. Jaromír Málek kindly provided a negative of the missing relief from the south facade of G 2150 (fig. 12.70), as well as countless references from the Topographical Bibliography.
* Paris. For providing the excellent new photograph of the south entrance thickness relief from the tomb of Nefer (G 2IIO,
fig. 6.56), I am indebted to Elisabeth Delange of the Département des Antiquités Egyptiennes, Musée du Louvre. I also thank Christiane Ziegler for her replies to many earlier inquiries about this relief.

As this publication was heading to press, a fruitful collaboration was developing between the Giza Archives Project in Boston and Dassault Systèmes in Paris (www.3ds.com). Building upon the Giza 3D modeling expertise already gained by Dassault in assisting Jean-Pierre Houdin's reconstruction of the Great Pyramid, we decided to expand the Giza computer model and to base it on actual archaeological data from the various excavations. Some of the early results of this collaborative work are reproduced below by kind permission of Dassault Systèmes (see Chapters I-6, and I3). For their interest and their support of applying new technologies to scientific research, I am indebted to Mehdi Tayoubi, Interactive Strategy \& Marketing Director; Richard Breitner, Passion for Innovation Program Manager; and Nicolas Serikoff, 3D Project Head. The computer models of the individual mastabas were produced in collaboration with the talented "infographistes" of Emissive, Paris, and I thank the members of this talented team: Emmanuel Guerriero, Fabien Barati, Pierre Gable, Vanessa Jorry, Adrien Cachinho, Marc Leprêtre, Jean-Baptiste Sarrazin, and Nicolas Montels. A special word of thanks is due to Pierre Gable, who patiently endured our many lengthy weekly video conferences.

* Philadelphia. I am grateful to David Silverman, curator of the Egyptian Section of the University of Pennsylvania Museum, for permission to publish the drum of Nefer from G 3015 A (E 13531; figs. 6.47-6.49). Jennifer Houser Wegner very kindly photographed the drum in storage, and prepared a preliminary tracing of the inscription. And in January 2006, Stephen R. Phillips gave generously of his time at Giza to accompany me to the bones magazine for additional analysis of the skeletal remains from G 2100 A and G 2132 b.
* Providence. My thanks go to James P. Allen of Brown University for his assistance with the short hieratic texts on fragments of linen from the female mummy from G 2220.
* Rome. Photography and collation visits during the I990s to the Museo Barracco in Rome considerably improved my drawing of the false door tablet of Nefer from g 2110 (C.M.B. I; figs. 6.76. 6.78. 6/84). For her assistance, I thank curator Maresita Nota.
* Vienna. My Giza partnership with Egyptological colleagues in Vienna stretches back many years. Time and time again, the objects and expedition archives housed in the Kunsthistorisches Museum and the Ägyptologisches Institut der Universität Wien have proven indispensable to my research. Over many visits I have enjoyed the hospitality and benefited from the scholarly expertise of Helmut Satzinger, Elfriede Haslauer, and Regina Hölzl at the Kunsthistorisches Museum, and Manfred Bietak, Peter Jánosi, and Irmgard Hein at the University. In recent years, Peter Jánosi and Regina Hölzl have provided images, documentation, and scholarly advice on a host of Giza-related topics, far beyond merely the mastaba of Kaninisut I housed in Vienna and discussed below (ÄS 8006, see Chapter I3). I am also extremely grateful to Liza Majerus, for permission to reproduce a number of her excellent archaeological plans of tombs and chapels.

My friend and colleague of many years, Rus Gant, has worn many hats in support of my research. At times archaeological photographer, technology consultant, graphic designer, and general expedition problem-solver, his vision of the larger picture of what is possible at Giza is wonderful and at times breathtaking. I will be pleased indeed if we are able to realize even a portion of this vision.

On the photographic and visual side, another Boston-based friend, Brian Snyder, has assisted me with all types of digital imaging issues. I was fortunate to have his services as expedition photographer during a short documentation season in April 1999. For the present work, his images in the tomb of Kanefer (G 2150, see Chapter 12) are particularly welcome, as they fill a major gap in the original $\mathrm{HU}-$ MFA Expedition's photographic documentation.

I am particularly indebted to Edward Brovarski for his comments on earlier versions of this manuscript. He has provided stimulating suggestions, corrected numerous inaccuracies, and freely shared his considerable knowledge of the Old Kingdom with me for many years.

I thank my wife Lauren Thomas for her help in proofreading the manuscript, and for many design suggestions and improvements. Not least should be acknowledged her skill in helping me to acquire for the MFA in 2006 the newly (re)discovered seventy-two Arabic Expedition Diary volumes from the family of George Reisner's reises in Cairo. For their generous support of our Giza diaries adventure, and of my Giza endeavors in general, I also thank David Pendlebury, Monique Nelson, and Sara Waldheim, all of Bend, Oregon.

On a production note, thanks are to due Jonathan Sawyer, of Sawyer Printers; and Paul Parisi, Ron Raye, Isilda Lang, and the staff at Acme Bookbinding, both of Charlestown, MA, for their patience in dealing with the idiosyncracies of digital hieroglyphs, vector graphics, customized Egyptian transliteration fonts, and unusual publishing formats. All of this work has been invested in a publication with a relatively small print run, and in a time of great economic pressure from online media and overseas presses. Giza Mastabas 8 represents the thirtieth Egyptological volume I have produced with these two publishing firms, and this number speaks for itself to the durability and success of this working relationship.

My final word of thanks goes to William Kelly Simpson, the man who first revived the Giza tradition at the Museum of Fine Arts, Boston, and established the Giza Mastabas Series, among his many other Egyptological accomplishments. If George Reisner was an original "patriarch" of Giza archaeological research, Kelly Simpson has certainly been a worthy counterpart for the modern era. I cannot hope to match the Giza expertise he has gained after forty years as professor of Egyptology at Yale University, and as curator of the Egyptian Department at the MFA. But it is my wish that the present work might serve as a small token of thanks for many years of encouragement, support, and friendship. With sincere gratitude, I dedicate this book to him.

Peter Der Manuelian
Boston, July 2, 2009

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2.13 Schematic comparison of chapel wall decoration programs attested in Cemetery g 2100 .
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a: G 2100-I Merib, November 2I, 1993. PDM_1993.107.2I. b: G 2 IIO Nefer. November 21, 1993. PDM_1993.IO8.I9. c: G 2130 Khentka, November 3, 1993. pDM_1993.055.12. d: G 2150 Kanefer, November 4, 1993. pdm_1993.060.16. e: G 2155 Kaninisut I, November 20, 1993. PDM_1993.096.30.

## Chapter 3. The Tomb of Sedit: Mastaba g 2100

3.I Plan and section of the Merib family complex including (in chronological order) the mastabas of Sedit (G 2100), Merib (G 2100-I), and Nensedjerkai (G 2100-II). Adapted from Priese, Die Opferkammer des Merib, inside back cover.
3.2 Computer reconstruction of mastaba G 2100 (Sedit), looking southwest, with the contiguous mastabas G 2100-I (Merib) and G 2100-II (Nensedjerkai) in the background. Courtesy Dassault Systèmes, 2009.
3.3 G 2100, plan.
3.4 G 2100, east face, cleared southwards to the north niche of G 2100-I (= Lepsius 24, Merib); shafts associated with G 2 II4 and G 2105 in the street, looking southwest. 1906. HUMFA Expedition photograph, A.M. Lythgoe, A5II [= A5965] (rephotographed as C5280).
3.6 36-I-2, alabaster model basin (also visible in fig. 3.6, bottom row, third from left). May 31, 2002. Museum of Fine Arts, SC32813.
3.22 Excavating shaft A of G 2100, with pit D in the background, left, looking northeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, CI475 [= CI244].
$36-\mathrm{I}-3$, alabaster model dishes from G 2100 A ; rows 2, 3, and 4, nos. I-9 in each row; 27 model dishes. February I4, I936. HU-MFA Expedition photograph, Mohammedani Ibrahim, в8609.

36-I-3, two alabaster model dishes from G 2100 A. May I5, 2008. Peter Der Manuelian, PDM_IMGOO520 and PDM_ IMGOOS25.

36-I-4, bones of human skeleton from G 2100 A, profile of teeth in the lower jaw. November 22, 1993. Peter Der Manuelian, PDM_I993.IIO.25.

36-I-4, bones from G 2100 A. January i6, 2006. Peter Der Manuelian, PDM_06287.
MFA 06.1892, restored alabaster jar from G 2100 D and drawing, 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B656 [= G7473] and drawing.
Ceramic profiles sketches adapted from A.M. Lythgoe's tomb card sketch (EGOI4396).

13 Two views of flints from G 2IOO F (originally labeled by A.M. Lythgoe as G 2500). Date not listed. HU-MFA Expedition photograph, photographer not listed, CI3O2O (left) and Ci3O2I (right).

33-2-183, fragmentary alabaster dish east of G 2IOO. Top: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, CI34I3 (detail). Middle: June 25, 2008. Peter Der Manuelian, PDM_IMGO2I38. Bottom: drawing.

33-2-184, steatite amulet from east of G 2IOO. May 15, 2008. Peter Der Manuelian, composite from images PDM_IMGOO573, 00574, 00575, 00577, 00578. Line drawing sketch from HUMFA Expedition Object Register.

33-2-189, fragment of a tablet of Nefri from east of G 2100. Left: February 17, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B828o (detail). Right: line drawing sketch from HU-MFA Expedition Object Register.

G 2IOO, east face, slab stela emplacement, looking west. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, C857 [= CI242I].

Northwest corner of G 2100, lined casing block, and west side of mastaba, looking south. November 15, 1993. Peter Der Manuelian, PDM_1993.077.03.

Section of the street east of G 2100, looking north.
West side of G 2IOO, looking northeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B955 [= B742I].

Filling and toeholds in the shaft of G 2IOO A, looking northeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, CI653 [= CI2442].

G 2IOO A, looking south down the emptied shaft. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B7I8 [= B7428].
3.24 G 2100 A, corridor from the shaft on the north wall, with entrance to the burial chamber showing blocking in the passage, looking north out the door of the burial chamber. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в893 [= в7327]. For a computer reconstruction of this image, compare also fig. I.I2.
3.25 Entrance to chamber of G 2100 A , with door blocking at the bottom of the shaft, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, CI279 [= CI2451].
3.26 G 2100 A , northeast corner of the burial chamber after clearance, looking northeast. January i2, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A 7380.
3.27 Plan and section of G 2100 A.
3.28 Computer reconstruction of G 2100 A , looking southeast, with shafts G 2100-I b and G 2100-I C in the background. Courtesy Dassault Systèmes, 2009.
3.29 Computer reconstruction of G 2100 A, looking southeast, showing portcullis stone in shaft, corridor blocking, and burial chamber. Courtesy Dassault Systèmes, 2009.
3.30 Plan of the floor and red paint lines on the ceiling of the burial chamber of G 2100 A .
3.3I G 2100 A , southeast corner of the burial chamber, wih tumbled limestone blocks, scattered bones ( $36-\mathrm{I}-4$ ), and model vessels (36-I-3), looking southeast. 1905-1906. HUMFA Expedition photograph, A.M. Lythgoe, B934 [= B7323].
3.32 G 2100 A, burial chamber, after clearance, with the canopic pit in the southeast corner, looking southeast. January I2, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7381.
3.33 G 2100 A , deposit in the canopic pit in the floor of the southeast corner of the burial chamber, with tumbled limestone blocks, scattered bones ( $36-\mathrm{I}-4$ ) , and model vessels (36-I-3), looking southeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в883 [= в7320].
3.34 G 2100 A, burial chamber as found in 1936, looking southwest. January 5, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7364.
3.35 G 2100 A , northwest corner of burial chamber after clearance, looking northwest. January I2, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7383.
3.36 G 2100 A, southwest corner of burial chamber after clearance. January 12, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7382.
3.37 G 2100 D, mouth of pit, looking southeast. 1905-1906. HUMFA Expedition photograph, A.M. Lythgoe, c866 [= CI2454].
3.38 G 2100 D, looking down shaft. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, C 844 [= Ci1956].
3.39 G 2100 D, fragments of alabaster jar in situ, MFA 06.1892. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, C1598 [= CI2655].
3.40 Plan and section of G 2100 E .
3.4I G 2100 F in foreground with shaft в of G 2100-I (= Lepsius 24) in background, looking southeast. February 1906. HU-MFA Expedition photograph, A.M. Lythgoe, B1556 [= B7856].

Chapter 4. The Tomb of Merib:
Mastaba g 2IOO-I
G 2100-I, general view showing the area around the chapel removed by Lepsius, looking northwest. January 9, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7896.
4.3 G 2100-I, showing the area around the chapel removed by Lepsius, looking west. March io, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B8289.
G 2IOO-I, street east of the area around the chapel removed by Lepsius, looking southwest towards the tomb of Nensedjerkai (G 2100-II). January 3, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, a789I.

Computer reconstruction of mastaba G 2100-I (Merib), looking northwest, with the contiguous mastaba G 2100 (Sedit) and mastaba G 2 IIO (Nefer), with protruding exterior chapel, in the background. Courtesy Dassault Systèmes, 2009.

Computer reconstruction of the decorated chapel entrance facade of mastaba G 2100-I (Merib), looking southwest, with the contiguous mastaba g 2100-II (Nensedjerkai), in the background. Courtesy Dassault Systèmes, 2009.
Lepsius plan and sections of G 2100-I, from Lepsius, Denkmaeler I, pl. 22.
4.8 Lepsius's sketch plan of G 2100-I, from Lepsius, Denkmaeler I, p. 46.

Lepsius's sketches of ceramics from G 2100-I, after Lepsius, Denkmaeler I, p. 48.

Berlin ÄM I320, ceramic model dish from G 2100-I C. 2008. Courtesy Ägyptisches Museum, Berlin.
Berlin ÄM 1352, ceramic model dish from G 2100-I C. 2008. Courtesy Ägyptisches Museum, Berlin.
Berlin ÄM 8634, ceramic model dish from G 2100-I C. 2008. Courtesy Ägyptisches Museum, Berlin.

Berlin ÄM 1607, unbaked mud seals from G 2100-1 в. 2008. Courtesy Ägyptisches Museum, Berlin.
G 2100-I (= Lepsius 24), chapel entrance, looking northwest. November 4, 1993. Peter Der Manuelian, pdm_1993.064.24.
G 2100-I, fossil located on top of the mastaba, looking west. August II, 2005. Peter Der Manuelian, PDM_03564.
Joint between G 2100-I to the left (south) and G 2100 to the right (north), looking southwest. February 1906. HU-MFA Expedition photograph, A.M. Lythgoe, B1555 [= B7854].
Area of the joint on the west side of G 2100-I (behind meter stick) and G 2100 (left foreground), looking south. November 15, 1987. Peter Der Manuelian, pdm_1993.077.09.

Joint between G 2100-I to the left (north) and G 2100 to the right (south), looking east across the top of mastaba. November 18, 1993. Peter Der Manuelian, PDM_1993.094.15.
Lined casing block, in northwest corner of G 2100 . November 15, 1993. Peter Der Manuelian, pdM_1993.077.02
4. 20 G 2100-I, north niche, looking west. November 2I, 1993. Peter Der Manuelian, PDM_1993.IO7.22.
.2I G 2100-I, plan and section of north niche.

| 4.22 | G 2IOO-I B, mouth of shaft, looking north. November 4, 1993. Peter Der Manuelian, pdm_1993.064.II. | 4.40 | Ägyptisches Museum, Berlin IIO7, south wall from chapel of G 2100-I. September 2, 2008. Photographs and digital |
| :---: | :---: | :---: | :---: |
| 4.23 | G 2100-I b, plan and section. |  | montage by Rolf Kriesten, Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present |
| 4.24 | G 2100-I C, view into the partially dismantled shaft, looking west. November 4, 1993. Peter Der Manuelian, PDM_1993.064.17. | 4.41 | work. <br> Computer reconstruction of the chapel of G 2100-I, looking south towards the south wall. Courtesy Dassault Systèmes, |
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| 4.26 | Computer reconstruction of the burial chamber of G 2100-I C, looking northeast. Courtesy Dassault Systèmes, 2009. | 4.42 | G 2Ioo-I, chapel, south wall; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, |
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| 4.28 | Ägyptisches Museum, Berlin inO7, chapel entrance facade |  | pl. 20e-f. |
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| 4.29 | G 2100-I, entrance facade and chapel as originally exhibited in the Ägyptisches Museum, Berlin. Date not listed. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_0568. | 4.45 | work. <br> Computer reconstruction of the chapel of G 2100-I, looking north towards the north wall. Courtesy Dassault Systèmes, |
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| 4.32 | G 2100-I, chapel, south entrance thickness and rebate with livestock; after Lepsius, Denkmaeler 2, pl. 22 a. | 4.49 | G 2100-I, chapel, south wall and south half of west wall; modern painted plaster reproduction in Berlin. 1989. Peter |
| 4.33 | G 2100-I, chapel, south entrance facade and south entrance thickness as originally exhibited in the Ägyptisches Museum, Berlin. Date not listed. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_0232. | 4.50 | Der Manuelian, PDM_1993.030.I2. <br> G 2100-I, chapel, north wall and north half of west wall; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, PDM_1993.030.08. |
| 4.34 | Ägyptisches Museum, Berlin inO7, north entrance thickness from chapel of G 2100-I. September 2, 2008. Photographs and digital montage by Rolf Kriesten, Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present work. | 4.51 | Ägyptisches Museum, Berlin IIO7, west wall from chapel of G 2100-I. September 2, 2008. Photographs and digital montage by Rolf Kriesten, Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present work. |
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| :---: | :---: | :---: | :---: |
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| 4.59 | G 2100-I, chapel, west wall, north false door; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, |  | Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aEOS_I_5260. |
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| 5.10 | G 2100-II, north face, with west face of G 2120 in foreground left, looking south. November 20, 1993. Peter Der Manuelian, PDM_1993.IO5.23. | 5.27 | G 2IOO-II, chapel pillars, east faces, looking west. November 18, 1993. Peter Der Manuelian, pDM_1993.087.05, and pDM_1993.087.09. |
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| 5.41 | G 2100-II, interior chapel, door sockets in floor. November I7, 1993. Peter Der Manuelian, pDM_1993.084.25. | 5.59 | G 2100-II, interior chapel, north false door, detail of seated figure on architrave. November 17, 1993. Peter Der Manuelian, |
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| 5.47 | G 2IOO-II, interior chapel, drawing of south false door; after Junker, Gîza 2, p. 119, fig. 9. |  | Chapter 6. The Tomb of Nefer: Mastaba g 2iro |
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| 6.81 | mputer reconstruction of the chapel of G 2iIO, looking | 6.106 | G 2IIO p, plan and section. |
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| 6.89 | G 2IIO, west wall, detail of Nefer's face from false door tablet, Museo Barracco, Rome C.M.B i. pdm_1993.I33.oI. |  |  |
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| 6.92 | MFA 06.1886, reserve head of Nefer from g 2IIO A, 3/4 view proper left. 1991. Peter Der Manuelian, pdm_1993.138.o6. | 7.2 | Expedition photograph, A.M. Lythgoe, ci669 [= Ci1945]. <br> G 2I20, east face, looking south towards the Khafre pyramid. |
| 6.93 | MFA o6.1886, reserve head of Nefer from g 2IIO A, profile proper right. 199I. Peter Der Manuelian, pdm_1993.138.09. |  | March 19, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7991. |
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| 6.102 | MFA 31.780, from G 21IO, chapel, south wall, upper half, detail of Wenankhes. November I, 1937. Museum of Fine Arts, c8ios. | 7.13 | photograph, A.M. Lythgoe, ci667 [= Ci256I]. <br> G 2120 A , excavated shaft and blocking stones at bottom, looking south. 1905-1906. HU-MFA Expedition photograph, |
| 6.103 | G 2IIO m, plan and section. |  | A.M. Lythgoe, B879 [= B7446]. |
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| 7.14 | G 2120 A , alabaster jar (33-I-7), pottery model vessels, and cast of basket (33-I-30) in situ in shaft, looking northwest. January 4, 1933. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8264. |
| :---: | :---: |
| 7.15 | G 2120 A, portcullis slab, looking south. January 5, 1933. HUMFA Expedition photograph, Mohammedani Ibrahim, A7035. |
| 7.16 | G 2120 A, reconstruction of sarcophagus from fragments found in shaft. |
| 7.17 | G 2I20 A, plan and section. |
| 7.18 | G 2I20 A, burial chamber, west wall, casing, looking west. January II, 1933. HU-MFA Expedition photograph, Dahi Ahmed, A7037. |
| 7.19 | 38-3-1I, two red granite drum fragments from G 2120 A . Left: May 14, 1939. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI434OA. Right: drawing. Compare Reisner, GNI, p. 427, fig. 246. |
| 7.20 | Pottery and alabaster vessels from G 2I20 A. Top row: 33-I-I2 (MFA 33.1156, model bowl); 33-1-10 (MFA 33.IO28, model jar); 33-I-II (one of two bag-shaped jars); 33-I-II (one of two bag-shaped jars); (the final jar in the top row is $33-\mathrm{I}-33=$ MFA 33.1043, from G $2180=4990$ ). Middle row: [G 2120 A] 33-I-5 (MFA 33.1025, base fragment); 33-I-I4 (MFA 33.IO29, small jar); 33-I-9 (MFA 33.IO27, small jar); 33-1-16 (MFA 33.1031, base fragment); 33-1-15 (MFA 33.io30, base fragment). Bottom row: [G 2I2O A] 33-I-6 (MFA 33.IO26, fragments of alabaster bowl); 32-12-16 (alabaster model jar); 33-I-3 (MFA 33.IO23, alabaster model dish); additional objects from G 2160 and G 2170. March 16, 1933. Dahi Ahmed, HUMFA Expedition photograph, B8300. |
| 7.2I | 32-I2-16, alabaster model jar with pointed base from G 2120 A , drawing. |
| 7.22 | 32-12-19, ceramic tub or bowl from G 2120 A, drawing. |
| 7.23 | 33-I-3 (MFA 33.1O23), alabaster model basin from G 2120 A , drawing. |
| 7.24 | 33-I-5 (MFA 33.IO25), lower part of cylinder jar from G 2120 A , drawing. |
| 7.25 | 33-I-IO, model neckless shoulder jar from G 2I20 A, drawing. |
| 7.26 | 33-I-6 (= MFA 33.IO26), alabaster fragments of two flatbottomed bowls with contracted mouths from G 2I20 A. February 22, 2002. Museum of Fine Arts, SC27879. |
| 7.27 | 33-I-6a (MFA 33.IO26), alabaster flat-bottomed bowl with contracted mouth from G 2120 A , drawing. |
| 7.28 | 33-I-6b (MFA 33.IO26), alabaster flat-bottomed bowls with contracted mouth from G 2120 A , drawing. |
| 7.29 | 33-I-7, alabaster one-handled jug with ringstand from G 2120 A. Left: March 16, 1933. HU-MFA Expedition photograph, Dahi Ahmed, C13405. Right: drawing. |
| 7.30 | 33-I-9 (MFA 33.1027), ceramic jar from G 2I2O A, drawing. |
| 7.3I | 33-I-IO (MFA 33.1028), model neckless shoulder jar from G 2120 A. Top: drawing. Bottom: May 15, 2008. Peter Der Manuelian, PDM_IMGOO593. | from G 2120 A , drawing.drawing.

7.47 33-I-25 (MFA 33.1039), fragment of large jar from G 2I20 A. Left: May 15, 2008. Peter Der Manuelian, pdm_IMG00605. Right: drawing.

33-I-28, fragment of coarse offering jar from G 2 I20 A, drawing.
7.5I $\quad 38-3-16$ (left) and 38-3-17 (right), raised relief fragments from northwest corner of G 2120. Top: April 3, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8948. Bottom: drawings.
7.52 33-I-30, plaster basket cast from G 2120 A. Top left: May I5, 2008. Peter Der Manuelian, Pdm_imgoo664. Top right: May 15, 2008. Peter Der Manuelian, pdm_IMgoo670. Bottom left: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, CI34I2 (detail). Bottom right: section drawing
7.53 G 2120, remains of exterior chapel, looking west. The arrow indicates the original location of the slab stela. November 20, 1993. Peter Der Manuelian, PDM_1993.IO4.IO.
7.54 G 2I20, chapel, section drawing of unfinished monolithic false door.
7.55 G 2120, chapel, looking downward (east) from top of mastaba. November 20, 1993. Peter Der Manuelian, pDM_1993.IO4.I8.
7.56 G 2120, construction square(?) and groove depression in the floor stone just south of the false door in the remains of the exterior chapel, looking south. November 24, 1993. Peter Der Manuelian, PDM_I993.115.20.
7.57 G 2I20, exterior chapel, different levels in rooms b, c, d, and e, with a thin layer of plaster applied, looking southwest. April 7, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI4I48.
7.58 G 2I20, remains of exterior chapel, floor of room b on debris section, and lower floor, looking north. April 7, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI4I47.
7.59 G 2120, chapel area, empty slab stela emplacement, looking west. March 19, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8956.
7.60 G 2I20, chapel area, empty slab stela emplacement, looking west. November 20, 1993. Peter Der Manuelian, PDM_I993.IO9.04.
7.6I G 2I20, graffito on monolithic block from chapel, looking west. December 23, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B9007.
7.62 G 2I20, graffito inscription (in reversed orientation from previous figure), after Smith, $J N E S_{\text {II }}$ (i952), p. II8, fig. 6.
7.63 G 2120 Y, chamber constructed in shaft, looking east. January 7, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI4IO3.
7.64 G 2120 y, burial (skeleton) in chamber in shaft, looking northeast. January I4, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8917.
7.65 G 2120 Z, plan and section.
7.66 MFA 06.1894 from G 2I20, slab stela of Seshatsekhentiu. Colorized drawing showing the four decorative sections.
7.67 MFA 06.1894, slab stela of Seshatsekhentiu from G 2 I2O. Photograph and digital reconstruction by John Woolf. August I4, 2000. Museum of Fine Arts, based on SCi67854.
7.68 Drawing of MFA 06.1894 from G 2I20, slab stela of Seshatsekhentiu.

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8.I G 2I3O, southeast corner, with G 2 I 20 in foreground left, looking northwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B722 [= B7456].
8.2 G 2130, southwest corner, with the street between G 2100, to the west (left), and G 2130 and G 2120 to the east (right), looking northeast from the top of G 2100. 1905-1906. HUMFA Expedition photograph, A.M. Lythgoe, в720 [= в7350].
8.3 G 2I30, north face, looking south (with loose patch stone midway between the meter stick and the northwest corner at right). November 20, 1993. Peter Der Manuelian, digital montage of PDM_I993.IO4.23 and PDM_I993.IO4.24.
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Chapter 9. Anonymous Tomb: Mastaba G 22IO
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| :---: | :---: | :---: |
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G 2210 x, plan and section.
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Chapter io. Anonymous Tomb: Mastaba G 2135 (= G 4770, Junker VII NN)

IO.2 Plan of area east of G 2 I35 and surrounding area, based on and augmented from Junker, Gîza i, p. 228, fig. 52; idem, Gîza 6, p. 8I, fig. 2I, and p. 93, fig. 26.

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| :---: | :---: | :---: | :---: |
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| 10.6 | G 2135, north end, looking south towards shaft A. November 20, 1993. Peter Der Manuelian, pDM_1993.IO4.06. | II.IO | G 2140, east face, looking south across the chapel entrance. November 2I, 1993. Peter Der Manuelian, pDM_1993.IO7.I6. |
| 10.7 | G 2135 A, mouth of shaft, looking north. November 3, 1993. Peter Der Manuelian, pDM_1993.058.08. | II.II | G 2140, chapel entrance, looking west. November 17, 1993. Peter Der Manuelian, pDM_1993.083.I2. |
| 10.8 | G 2135 A, mouth of shaft, looking south. November 3, 1993. Peter Der Manuelian, pDM_1993.058.09. | II.I2 | G 2I40, chapel, entrance, blocks over the doorway with a rectangular cutout on the south (right) side for the upper |
| 10.9 | G 2135 A, plan and section, adapted from Junker, Gîza I, p. 228, fig. 52. |  | door socket hole, looking east. November 17, 1993. Peter Der Manuelian, pDM_1993.083.24. |
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| 10.II | Pelizaeus-Museum, Hildesheim 3051, limestone sarcophagus from g 2135 A. About 1959. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_0566 (305__Pos_or; Hildesheim | II.I4 | G 2140, chapel, north wall, looking north. November 17, 1993. Peter Der Manuelian, pDM_1993.083.23. |
|  | 941_3051_A). | II.15 | G 2140, chapel, south wall, and false door on west wall, |
| 10.I2 | Drawing of limestone sarcophagus from G 2135 A, PelizaeusMuseum, Hildesheim 305ı, after Junker, Gîza I, p. 55, fig. 5. |  | looking southwest. November 17, 1993. Peter Der Manuelian, PDM_1993.083.2I. |
| 10.13 | Kunsthistorisches Museum, Vienna, ÄS 7799 from g 2135 (= VIInn, G 4770). Colorized drawing of the slab stela fragment, showing three of the four decorative sections. | II.16 | G 2140, chapel, west wall, unfinished false door architrave, looking west. November 17, 1993. HU-MFA Expedition photograph. Mohammedani Ibrahim, A577I. |
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|  | Chapter II. Anonymous Tomb: Mastaba g 2140 | II.19 | G 2140 A , stone-lined shaft, with entrance to burial chamber, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, c863 [= CI2622]. |
| II.I | G 2140, plan. | II. 20 | G 2140 A , entrance to burial chamber, looking southwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, |
| II. 2 | G 2140, east face, looking west towards the chapel entrance from the top of the mastaba G 2160. November 2I, 1993. Peter Der Manuelian, PDM_1993.IO7.15. | II.2I | в894 [= в7329]. <br> G 2140 A, plan and section. |
| II. 3 | Excavation of G 2140, chapel area, looking southwest. 19051906. HU-MFA Expedition photograph, A.M. Lythgoe, cıı88 [= CI2613]. | II. 2 | G 2140 A , burial chamber, limestone blocks and skeleton (32-12-20) on floor, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в926 [= B7328]. |
| II. 4 | Street between G 2140 (Fisher's VIII.3) to the left (west) and G 2160 (Fisher's VIII.4) to the right (east), with shafts associated with G 2148 (foreground), G 2147 (middle of street), G 2146 and G 2145 (abutting east face of G 2140), looking north. February 16, 1912. HU-MFA Expedition photograph, photographer not listed, A635P. | I2.I I2.2 | Chapter i2. The Tomb of Kanefer: <br> Mastaba g 2150 <br> G 2150, plan. <br> Street between G 2150, to the west (right) and G 2170, to the |
| II. 5 II. 6 | G 2140, south face, looking north. November 15, 1993. Peter Der Manuelian, PDM_1993.073.20. <br> G 2140, top of the mastaba, looking south. November 18, 1993. Peter Der Manuelian, pDM_1993.093.21. |  | east (left), showing the east face and exterior mud brick chapel of G 2150, looking south from top of G 2220. March 23, 1912. HU-MFA Expedition photograph, Mohammedani Ibrahim, C4817. |

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| :--- |
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\hline 12.II \& 32-I2-7c (MFA 34.58), from G 2150, south entrance thickness fragment. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в92I [= B7463]. \& 12.27 \& Objects from g 2150 A. Top row: 33-I-43 (MFA 33.1049, copper model lid), 33-I-45 (MFA 33.1051, faience disk), 33-I46 (MFA 33.1052, gold foil), 33-1-44 (MFA 33.1050, fragments <br>

\hline 12. \& | 32-I2-8 (MFA 34.57), from G 2150, north doorjamb (quarter view). 1906. HU-MFA Expedition photograph, A.M. |
| :--- |
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| :--- |
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12.34 \& | 33-I-49, drawing of jar fragments from G 2150 A . |
| :--- |
| 33-1-50 (MFA 33.1055), copper model dished rectangular razor from g 2150 A. Top: February 27, 2004. Museum of Fine Arts, | <br>

\hline 12.20

12.21 \& 33-1-4 (MFA 33.ro24), fragment of alabaster statue from G 2150 A , part of the base including the toes of the left foot. Left: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, ci34II. Right: May 2I, 2005. Museum of Fine Arts, sci29920. \& 12.35 \& | sC92887 (compare fig. 12.27 2/2). Left: drawing. |
| :--- |
| 33-I-5I (MFA 34.48a-b), two fragments of carved wood, probably from a chair or a coffin, from G 2150 A . Top: |
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## Chapter I4. Anonymous Tomb: Mastaba g 2160

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16.7 G 2220, chapel interior, larger of two fragments of fallen drum lintel from chapel entrance, looking west. November 3, 1993. Peter Der Manuelian, pdm 1993.056.05.
16.8 Four limestone blocks with mason's marks from debris on top of G 2220: left, upper: 37-7-I; left, lower: 37-7-2; middle: 37-7-3; right: 37-7-4. October II, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, Ci4213.
16.9 Five limestone blocks with mason's marks from debris on top of G 2220: left, upper: 37-7-5; left, lower: 37-7-6; middle: 37-7-7; right, upper: 37-7-8; right, lower: 37-7-9. October II, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI42I4.
ı6.io Three limestone blocks with mason's marks from debris on top of G 2220: left: 37-7-10; middle: 37-7-iI; right: 37-7-I2. October II, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI42I5.
16.II Left to right: 33-4-2I.I, 33-4-21.2, 33-4-2I.3 (MFA OPi.33.IO16, OP2.33.Io16, OP3.33.1o16, OP4.33.IoI6), wooden pegs from coffin from shaft в. Top: March I4, 1933. HU-MFA Expedition photograph, Mohammedani Ibrahim, ci4ı40. Bottom: July 16, 2008. Peter Der Manuelian, PDM_IMG_O2379
16.12 33-4-2I (MFA OPi.33.1o16, OP2.33.1oI6, OP3.33.1016, OP4.33.Ior6), wooden peg elements from the coffin from shaft b. July 16, 2008. Peter Der Manuelian, pdm_img_o2390.
16.13 33-I-83 (MFA 33.1067), limestone headrest from G 2220 в. Left: March 16, 1933. HU-MFA Expedition photograph, Dahi Ahmed, ci3403 (detail). Center: July 16, 2008. Peter Der Manuelian, PDM_IMG_O2344. Right: drawing.
16.14 G 2220, chapel, west wall, south false door, looking northwest. November 15, 1993. Peter Der Manuelian, PDM_1993.077.22.
16.15 G 2220, chapel, west wall, north false door, looking west. November 4, 1993. Peter Der Manuelian, PDM_1993.059.08.
16.16 G 2220 в, mouth of shaft, looking north. November 18, 1993. Peter Der Manuelian, PDM_1993.093.06.
16.17 G 2220 B, mouth of shaft, looking down, eastwards. November 3, 1993. Peter Der Manuelian, pdm_1993.055.16.
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16.20 G 2220 B I, chamber with south end of wood coffin, looking north. January 13, 1933. HU-MFA Expedition photograph, Dahi Ahmed, 88267.

33-4-2I (MFA 33.IOI6), cedar coffin from G 2220 b, with a modern reproduction of the female mummy, prepared for MFA "Mummies \& Magic" exhibition in 1981. Museum of Fine Arts, Boston, sli6173.
16.22 G 2220 в I, plan and section.
16.23 G 2220 в I, mummy (wrappings 33-4-22) in wood coffin (33-4-2I = MFA 33.IOI6), looking south. January 19, 1933. HU-MFA Expedition photograph, Dahi Ahmed, a704r.
16.24 G 2220 в I, mummy (wrappings 33-4-22) in wood coffin (33-4-2I = MFA 33.IoI6), looking north. January 19, 1933. HU-MFA Expedition photograph, Dahi Ahmed, a7040.
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16.28 G 2220 в I, mummy (wrappings 33-4-22) without sheet covering body. January 2I, 1933. HU-MFA Expedition photograph. Dahi Ahmed, A7042.
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| 16.44 | 33-4-22, linen from mummy wrappings from G 2220 в і. May 4, 1933. HU-MFA Expedition photograph, Dahi Ahmed, A7077. |
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| 16.47 | G 2220 c, looking southwest. November 3, 1993. Peter Der Manuelian, PDM_1993.055.17. |
| :---: | :---: |
| 16.48 | G 2220 c, looking down, north. November 3, 1993. Peter Der Manuelian, PDM_1993.055.20. |
| 16.49 | G 2220 c , plan and section. |
| 16.50 | G 2220, chapel, east wall, looking east. November 3, 1993. Peter Der Manuelian, pDM_1993.056.02. |
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| 16.53 | G 2220, chapel, drawing of east wall. |
| 16.54 | G 2220, chapel, east wall, north end, obliques view of unfinished relief carving, looking northeast. February 28, 193 r. HU-MFA Expedition photograph, Mohammedani Ibrahim, A6335. |
| 16.55 | G 2220, interior chapel, east wall, reduced-size overview drawing. |

LIST OF ABBREVIATIONS


## Mastabas of Nucleus Cemetery g 2 Ioo

## WZKM Wiener Zeitschrift für die Kunde des Morgenlandes, Vienna ZDMG Zeitschrift der Deutschen Morgenländischen Gesellschaft, Leipzig/ <br> ZÄS $\quad$ Zeitschrift fir Ägyptische Sprache und Altertumskunde, Leipzig

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## INTRODUCTION

IT is now more than a century since the tombs described in the present volume were first excavated by the Harvard University-Boston Museum of Fine Arts Expedition at Giza under George Andrew Reisner (1867-1842). The lengthy interval between excavation and publication only confirms, as earlier scholars foresaw, ${ }^{1}$ that the massive amount of material unearthed at the beginning of the twentieth century could not be processed and published nearly as quickly as it came to light.

Recent volumes of the Giza Mastabas Series have focused on groups of mastabas in their archaeological context, i.e., in coherent clusters where interrelationships can be examined. In Giza Mastabas 5, Kent R. Weeks treated Cemetery g 6000, a cluster of large tombs at the southwest corner of the Western Cemetery belonging to three or four generations of the same family of Fifth Dynasty administrative district overseers. ${ }^{2}$ These tombs are the most thoroughly decorated in the entire Giza Necropolis. In Giza Mastabas 6, Ann Macy Roth discussed a smaller cluster of tombs at the northeast corner of the great anonymous mastaba G 2000, built for palace attendants (bntyw-s $\left.p r-\xi_{3}\right)^{3}$ These tombs were originally constructed along a unified plan that was altered several times through the Fifth Dynasty. In Giza Mastabas 7 Edward Brovarski published the first portion of the Senedjemib Complex, containing the contiguous mastabas of a family of viziers and royal architects under Izezi and Unas. This complex lies at the northwest corner of the Khufu Pyramid, and in recent years has been restored and opened to the public by the Egyptian Supreme Council of Antiquities (SCA).

The present volume (the first of two parts) is an attempt to expand upon this approach to include one of Reisner's six ${ }^{4}$ nucleus, or core, cemeteries in its entirety: Cemetery G 2100, west of the Great Pyramid of Khufu. A comprehensive look at a nucleus cemetery is essential to any attempt to understand better the layout and development of the early Old Kingdom mastaba field. ${ }^{5}$ Questions that arise include:

I Note, for example, Dows Dunham's decision to take retirement from the curatorship at the Museum of Fine Arts, Boston, in order to publish the backlog of Reisner's Nubian excavations; Dunham, Recollections of an Egyptologist, p. 48.
2 K.R. Weeks, Mastabas of Cemetery G 6000.
3 A.M. Roth, $A$ Cemetery of Palace Attendants.
4 There are four nucleus cemeteries west of the Great Pyramid (Cemeteries G I200, G 2IOO, G 4000, and the Cemetery en Echelon), one east of the pyramid (Cemetery 7000), and one south (cemetery G i-S); see Reisner, $G N_{\text {I, pp. 12-19. For reviews }}$ of this publication, see M.A. Murray, in The Museums Journal 46, no. 7 (October 1946), p. 137; W.C. Hayes, in $A J A$ 50, no. 3 (July-Sept. 1946), pp. 422-23; R.O. Faulkner, in JEA 32 (1946), pp. IO5-I06; J.W. Crowfoot, Antiquity 20, no. 80 (December 1946), pp. I86-90; J. Capart, Erasmus I (1947), pp. 743-46.
5 D. O'Connor, "Political Systems and Archaeological Data in Egypt: 2600-1780 B.C.," World Archaeology vol. 6, no. I, Political Systems (June, 1974), pp. 20-22.

- Is the core cemetery an ancient phenomenon, or an artificial modern archaeological scheme of division? Are Reisner's nucleus cemeteries, like Manetho's dynasties, unrelated to the ancient Egyptian perspective on mastaba field construction? ${ }^{6}$
- If the nucleus cemetery is indeed a bona fide ancient concept, what are its distinguishing features? Is there significance to the presence of specific administrative titles, of familial relations to the king, of particular architects or workshops employed in a specific area, or of geography and quality of bedrock on the Giza plateau?
- Can individual artistic styles be determined within a single nucleus cemetery' decorative scheme? Can distinct architectural features be determined that are absent elsewhere?
- Can the relative dates of the tombs be established with any certainty?

Comparative studies of all the nucleus cemeteries in the Western Cemetery would do much toward answering some of these questions. Spatial analyses ${ }^{7}$ and increased attention to the general geomorphology of the Giza Plateau are also of critical import. ${ }^{8}$ A major step in enhancing our knowledge of Giza's development has been provided by P. Jánosi's monumental Giza in der 4. Dynastie. ${ }^{9}$ In addition, the "Giza Archives Project" Web site, an initiative by the Museum of Fine Arts, Boston, with the support of the Andrew W. Mellon Foundation, has at this writing posted most of the Harvard-MFA excavation records on the Internet. Additional materials supplied by international partners in Berkeley, Berlin, Cairo, Hildesheim, Leipzig, Philadelphia, Turin, and Vienna are also online or scheduled for online publication in the future (see below). ${ }^{\text {IO }}$ Perhaps the more detailed treatment of Cemetery G 2 IOO here as a unit will lead to further progress in the examination of the remaining core cemeteries.

In selecting Cemetery g 2100, with its dozen or so massive core mastabas, as the focus of our analysis, we also gain an opportunity to examine the development of minor mastabas, smaller intrusive tombs often built later against or in proximity to the walls of the larger mastabas. These subsidiary burials, to be presented in volume 2 of this work, often appear to choke the once clear and neatly laid out streets between the major tombs. Questions concerning the development and layout of the minor tombs are also worthy of study:

6 Cf. D.B. Redford, "The Historiography of Ancient Egypt," in Egyptology and the Social Sciences, pp. 16-18.
7 Cf. M. Farouk, "A Spatial Study of the Giza Cemetery," forthcoming (paper presented at the Old Kingdom Art and Archaeology Conference, Cambridge, UK, May 2009). I am grateful to Ms. Farouk for sending me this paper in manuscript form.
8 M. Lehner, in Lehner and Wetterstrom, Giza Reports I, pp. 4-9 ("Geomorphology and Site Location"); idem, "Giza: Overviews and Ground Truths," Aeragram 9.2 (Fall 2008), pp. 14-15; idem, "The Development of the Giza Necropolis: The Khufu Project," MDAIK 4I (1985), pp. IO9-43; idem, "Giza. A Contextual Approach to the Pyramids," $A f O 32$ (1985), pp. 136-58.
9 P. Jánosi, Giza in der 4. Dynastie.
Io At present the Giza Archives Project Web site is located at www.gizapyramids.org (= www.mfa.org/giza). The Project's mission is to serve as a "centralized online repository for all archaeological activity at the Giza Necropolis, beginning with the Harvard University-Boston Museum of Fine Arts excavations (1902-1947)." For general discussions, see Manuelian, "Eight Years at the Giza Archives Project: Past Experiences and Future Plans for the Giza Digital Archive," Egyptian and Egyptological Archives and Libraries, An Annual (EDAL) I (Milan, 2009), forthcoming; idem, "Virtual Pyramids-Real Research: The Giza Archives Project Goes Live Online," $K M T_{\text {I6, no }} 3$ (Fall, 2005), pp. 68-80; idem, "Das "Giza-Archiv-Projekt," Sokar io (2005), pp. Iо-17; and idem, "The Giza Archives Project," Egyptian Archaeology 28 (Spring 2006), pp. 31-33.

- Did the minor mastabas belong to familial relations of the tomb owners who built the large mastabas on the site? ${ }^{\text {II }}$
- Were they servants of the respective funerary cults, or merely later individuals vying for any open ground available at Giza upon which to built their sepulchres?
- Were there orientation guidelines for later burials? ${ }^{\text {² }}$
- Did a necropolis administration define who could build where, and were its orders respected?
- When were the subsidiary mastabas constructed?
- Where the subsidiary mastabas blocked the entrances to the chapels of the major mastabas, what conclusions may be drawn about the longevity of those mortuary cults?

If the subsidiary burials did indeed come to block access to many of the chapels of the major core mastabas, this would indicate that the funerary cults of the latter were no longer in service, and the minor mastaba owners were both later in time and unrelated to the owners of the major tombs of this nucleus cemetery. ${ }^{13}$ If on the other hand, there was still access to the major mastaba chapels, then perhaps the minor mastaba owners were indeed closer contemporaries, related family members, or funerary cult supporters.

After emphasizing the need to treat a nucleus cemetery as a unit, we must note with some irony that in modern times Cemetery G 2100 was actually divided and excavated by several different archaeological missions over many years. The major portion of the area was cleared by Reisner, just after he switched affiliations from the Hearst Expedition of the University of California, Berkeley (I8991904), under the sponsorship of Mrs. Phoebe Apperson Hearst, to the Harvard University-Boston Museum of Fine Arts Expedition. Reisner continued to work at Giza as director of the Harvard-MFA Expedition until his death in 1942; the work closed down officially in 1947. The southern edge of Cemetery g 2100, however, fell within the central strip of the Western Cemetery concession obtained by the German/Austrian expedition, first granted to Georg Steindorff and then to Hermann Junker, on behalf of the Akademie der Wissenschaften in Vienna, the Pelizaeus-Museum in Hildesheim and the University of Leipzig. ${ }^{\text {I4 }}$ Selected aspects of the mastaba tombs covered in detail below may thus be found in both Reisner's History of the Giza Necropolis I, and in various volumes of Junker's twelvevolume Giza series. To further complicate the issue, two of the best preserved chapels were removed from the site (one by Lepsius, the other by Junker), and may now be found in European collections. The chapel of Merib (G 2100-I) is in the Ägyptisches Museum, Berlin (both the original blocks, Ägyptisches Museum inO7, as well

II Compare, for example, the remarks of Reisner, $G N_{\mathrm{I}}$, pp. 77-78; Helck, "Zur Entstehung des Westfriedhofes an der Cheops-Pyramide," ZÄS 8i (i956), pp. 62-65, and El-Metwally, Entwicklung der Grabdekoration, pp. 108-109.
I2 For remarks on the organization of the necropolis at Saqqara, see A.M. Roth, "Social Change in the Fourth Dynasty: The Spatial Organization of Pyramids, Tombs, and Cemeteries," JARCE 30 (1993), pp. 33-55.
13 The duration of funerary cults has recently been re-examined by Y. Shirai, "Ideal and reality in Old Kingdom private funerary cults," in The Old Kingdom Art and Archaeology, pp. 325-33.
14 On the history of Wilhelm Pelizaeus's involvement with ancient Egypt, see Bettina Schmitz in Pelizaeus-Museum Hildesheim, pp. 8-30. Junker describes the history of his concession in Gîza I, pp. iii-vi; idem, "Vorbericht 1912," pp. 3-6, and more recently, see P. Jánosi, Österreich vor den Pyramiden.
as a I:I painted plaster cast reproduction), ${ }^{15}$ while that of Kaninisut I (G2155) is in the Kunsthistorisches Museum, Vienna (ÄS 8006). ${ }^{16}$ Moreover, even before the initial clearance by Reisner's expedition, individual blocks had been removed from other mastabas, turning up later in collections in Europe. This volume will attempt to reunite these disparate elements of Cemetery g 2100.

Dangers abound in attempting to interpret the archaeological work of other expeditions, especially excavations that took place so long ago, and large gaps will be found in the pages that follow. The present volume is doubtless hindered by the excavation methodology employed during the first half of the twentieth century. The absence of the original excavators' georeferenced survey work, matrix analyses of structural relationships, or single context mapping of features all obscure the archaeological record of Cemetery G 2100. Nevertheless, the data that can be gathered are summarized here, without an overabundance of interpretation. They are intended to enhance and focus the much larger corpus of information available, in undigested form, on the Giza Archives Project Web site (www.gizapyramids.org). It is hoped they will prove useful to those investigating the Egyptian Old Kingdom, necropolis development, ancient architectural techniques, faunal remains, inscriptional and grammatical material, and art-historical styles.

The layout followed in the pages of the present work will focus on the major mastabas of Cemetery G 2100. After general and interpretive remarks in Section I, which contains Chapters I-2, Section 2 will follow with a catalogue of individual chapters on the major mastabas themselves. Each mastaba discussion will include all illustration figures at the end of its respective chapter; there is thus be no plates section at the end of the volume. Wherever possible, objects are represented in original expedition photography, more recent, color photography, and archaeological drawings if the original piece was accessible. Scenes and inscriptions are illustrated with digital epigraphy, typically at a scale of 20 percent, although some oversized scenes had to be further reduced.

Part 2 of Giza Mastabas 8 will describe the subsequent, subsidiary structures in Cemetery G 2100: both the post-nucleus cemetery large mastabas, such as the tomb of Kahif (G 2136), and all the minor burials in the streets around and between the major core mastabas. With a few notable exceptions, the identities of most of these subsidiary tomb owners are lost, but the skeletal remains are usually far richer than in the major mastabas covered in Part I. There is also some important evidence to link some major and minor tomb owners together, as the latter individuals are in a few cases listed or represented on the walls of the major mastaba chapels.

15 Lepsius, Denkmaeler, Text1, pp. 46-49, Plates 2, pls. 18-22.; Priese, Die Opferkammer des Merib; E. Freier, "Die Expedition von Karl Richard Lepsius in den Jahren 1842-1845 nach den Akten des Zentralen Staatsarchivs, Dienstelle Merseburg," Karl Richard Lepsius (I810-1884), pp. 113-14; Freier and Grunert, Eine Reise durch Ägypten, pp. 36-42; Wildung, Preussen am Nil, p. 32 fig. 21 and p. 44. It should be noted that, as this volume went to press, Merib's chapel was being reconstructed in the Neues Museum in Berlin. New photography of the individual relief blocks montaged togther was obtained prior to reconstruction, but the time remaining did not suffice to allow new epigraphic drawings from these long-awaited photographs. Thus I hope to present the new epigraphy as an addendum in volume 2 of the Cemetery G 2100 publication.
16 H. Junker, Gîza 2, pp. 135-72; idem, Die Kultkammer des Prinzen Kanjnjswt, idem, The Offering Room of Prince Kaninisut; Hölzl, Reliefs und Inschriftensteine des Alten Reiches 2, pp. 33-87; idem, Ka-ni-nisut.

## Section I

Interpretive Remarks

## Chapter I <br> EXCAVATION HISTORY AND SOURCES

ALL of the major nucleus cemetery mastabas under discussion in this volume were plundered long before the age of scientific excavation. ${ }^{\text {I }}$ With one exception (G2220 B, wrapped female mummy within a cedar coffin, see Chapter 16), the burial chambers were either empty or contained merely scattered bones and a few assorted small vessels and implements. Even the shaft roofing, if indeed there were any particular roofing elements, is missing from these tombs. Nor is Cemetery g 2100 the exception; most of the major mastaba burial chambers in the Western Cemetery were similarly plundered. Faunal studies are much more promising with the later intrusive burials and subsidiary mastabas, covered in the second volume of this publication.

Carl Richard Lepsius was the first Egyptologist to investigate portions of Cemetery g 2100. In December 1842, his expedition unearthed the decorated chapel of Merib, and numbered the tomb LG 24 (= Reisner's number G 2100-I; see Chapter 4). Permission was obtained to remove to Berlin the chapel facade, jambs, and four interior chapel walls. Dismantling and packing began in August 1845. By the time the chapel arrived in Germany, most of the polychromy had disappeared. Fortunately, watercolors of the decoration had been prepared by Lepsius's artist, J.J. Frey, at Giza prior to the dismantling of the walls. Based upon these illustrations, later published as plates 19-22 of Lepsius's Denkmaeler, a full-scale, painted plaster reproduction of the four chapel walls was produced in Berlin between 1982 and 1984 and exhibited in the Bode Museum for many years. ${ }^{2}$ The chapel is now reconstructed in Berlin's Neues Museum (Inv. Nr. 1io7).

At some point between 1875 and 1912 a relief fragment from the exterior chapel facade of the mastaba of Kanefer (G2150) was removed. It eventually surfaced in the private collection of Lord Amherst of Hackney. ${ }^{3}$ On April 19, r88i, W.M. Flinders Petrie copied several inscriptions in Kanefer's chapel. ${ }^{4}$ We may also assume that these years saw the removal of several chapel reliefs from the

## Reisner, $G N$ I, pp. 175-76.

Not included in the plaster reproduction are the decorated reliefs on the facade, the entrance architrave, drum, and door thicknesses.
3 See below, Chapter I2, figs. 12.70-12.71. Its present location is not known; see J. Málek, "New Reliefs and Inscriptions from Five Old Tombs at Giza and Saqqara," BSEG 6 (1982), pp. 48-5o. For this reference, I am grateful to Edward Brovarski, and to Jaromír Málek for supplying a negative of the relief.
4 Ibid., pp. 50-52 (Sayce Mss. 24, middle, Griffith Institute). For more on Petrie's experiences at Giza, see M.S. Drower, Letters From the Desert, p. I4ff; J. Málek, "New Reliefs and Inscriptions from Five Old Tombs at Giza and Saqqara," BSEG 6 (1982), pp. 48-50.
tomb of Nefer (G 2IIO) which were subsequently accessioned by museums in Paris, Copenhagen, Rome, and Birmingham, England (see Chapter 6). ${ }^{5}$

In 1905, under George A. Reisner's direction, the Hearst Expedition of the University of California was transferred to the sponsorship of Harvard University and the Museum of Fine Arts, Boston. Reisner had already been investigating Cemeteries g iooo and Gi200 at the westernmost edge of the Western Cemetery. ${ }^{6}$ During the 1905-1906 season, Cemetery G 2100 became one of the first areas of concentration of the newly formed Harvard UniversityBoston Museum of Fine Arts Expedition. ${ }^{7}$ The primary years of work in this cemetery were 1905-1906, 1912-1913, and 193I-1932. Reisner directed Albert M. Lythgoe, his student at Harvard and, since 1902, the first curator of the MFA's new Egyptian Department, to supervise the Expedition's inaugural season, which ran from November I, 1905 to March I, 1906. Work in Cemetery g 2100 proper did not actually begin until January 28, 1906. The excavation records in the Museum of Fine Arts, Boston, are at their sparsest for this campaign; perhaps no excavation diary was kept by Lythgoe that early in the Expedition's long history. ${ }^{8}$ All that I have so far been able to locate are several handwritten reports penned by Lythgoe and Reisner that outline the early seasons. The first report, written by Lythgoe, covers the period from November i through December IO, 1905, the date appearing just below Lythgoe's signature. Accompanying the report are photographs and a cover letter addressed by Reisner at Girga to the "Joint Committee on the Egyptian Expedition of Harvard University and the Boston Museum of Fine Arts," dated December 6, 1905. Most of this report, however, predates the expedition work in Cemetery G 2100 proper, concentrating on the chapels of G 2000 and the minor mastabas further to the east. ${ }^{9}$ This area came to be called "Strip I" in the reports, while Cemetery G 2IOO received the appellation "Strip II."

The second report, written in Reisner's hand, covers the period from December io, 1905, through February II, 1906, once

5 Ziegler, Catalogue des stèles, pp. 167-70.
6 For his earliest work at Giza, see Manuelian, "On the Early History of Giza: The "Lost" Wadi Cemetery (Giza Archives Gleanings: III)," JEA 95 (2009), forthcoming.
7 For a description of the division of the Western Field between American (Reisner), Italian (Schiaparelli), and German (Steindorff) expeditions, see Reisner, GNI, pp. 22-26, and the author's summaries in "Tombs of the High Officials at Giza," in The Treasures of the Pyramids, pp. 190-223; "Excavating the Memphite Cemeteries: The Giza Necropolis," in Egyptian Art in the Age of the Pyramids, pp. 139-53; and "A Race against Time in the Shadow of the Pyramids. The Museum of Fine Arts, Boston and the Giza Necropolis, 1902-1990," KMT (Winter, 1990-9I), pp. 10-2I.
8 A miscellaneous note by W.S. Smith in the archives of the Museum of Fine Arts states that "This material is confused due to the absence of the Lythgoe diary..." It is not quite clear whether Smith means the 1905-06 diary was lost, or that no diary was ever kept. Reisner, like the present author in recent years, was searching for records of these early seasons. In letters dated to March 24, 1934, he wrote to Lythgoe's widow Lucy, asking if he might have inadvertently taken Giza notes with him to New York. Lucy Lythgoe replied on April I2, 1934 and July 9 1934, however, that her searches for Giza materials proved fruitless. Recent inquiries at the Egyptian Department of The Metropolitan Museum of Art, and with descendants of the Lythgoe family in Connecticut and Alaska, have similarly failed to produce any supplemental Giza documentation. I wish to thank Dorothea Arnold, Marsha Hill, and Adela Oppenheim at The Metropolitan Museum, as well as Katharine Richardson of Fairbanks, Alaska, for their kind assistance.
9 Part of this area is slated for a future Giza Mastabas volume by A.M. Roth.


Fig. I.I. Cemetery g 2100, looking northwest, from top of the Khufu Pyramid. November 16, 1993. Peter Der Manuelian, pdm_1993.I3I.I2.
again describing Strip I, but including G 204I, the minor mastaba of Senenuka, located just west of G 2 IOO. ${ }^{\text {IO }}$ The final page of this report is marked "C. The Work after January 28 [1906]," and begins the description of Cemetery G 2 IOO proper. Many Expedition photographs accompany this report as well. It is here, with a "third report," that a more detailed description of Cemetery G 2100 should begin. However, the next report preserved is not the third but a typewritten "fourth report," dated 1906-April 15, 1907. It describes the relocation of the work force to the pyramid temple of Menkaure. Moreover, it mentions that the previous (missing) third report dealt, not with Cemetery g 2100, but with the discovery of fragments of the colossal statue of Menkaure now in the Museum of Fine Arts (MFA 09.204). Thus, of all four reports, only a single page (at the end of the second report) deals primarily with Cemetery G 2100.

There is nevertheless some useful information in these reports on the procedure of the expedition, the construction of the Decauville railway tracks for removal of debris, and the chronology of the excavation. Hence the following quotes are included (with my own editorial remarks added as footnotes):

## Reisner's cover letter sent with Lythgoe's first report:

To the Joint Committee on the Egyptian Expedition of Harvard University and the Boston Museum of Fine Arts Girga, Upper Egypt Dec. 6, 1905

Gentlemen,
I have to report to you that I arrived at the Pyramids on Saturday, Nov. 18. Mr. Lythgoe arrived on Oct. 28 in Cairo. I had previously sent him a memorandum in regard to site of work, transport of men, etc. As soon as was possible after his arrival, Mr. Lythgoe started the excavation of the selected site. His report, which accompanies this, describes fully the work done up to the present.

The site selected is a strip in front (i.e. on the east side) of the large tomb, or mastaba, known as Lepsius 23 . This strip includes the mastaba of Merib, son of Cheops, ${ }^{\text {II }}$ the chamber of which was torn out by Lepsius and sent to Berlin. The strip is about 70 meters long by 40 meters wide, running north and south. On the west side, we ought to find the external offering chapel of Lepsius 23 , and determine the name and date of its owner. On the east, we ought to find one or two new Cheops mastabas of the 4th

[^0][^1]dynasty. In between, there must be mastabas of the 5 th dynasty which may contain statues, stelae and inscribed chambers.
The terrain is rather more difficult to approach with the railway than I had anticipated. When I arrived, Mr. Lythgoe pointed out that he had been obliged to raise the embankment for the railway to a point about six meters above the level of the lower edge of the strip. We immediately decided to attempt to run in on a lower level through the old dump heaps of Lepsius(? and Mariette?) nearer the face of Lepsius 23. The double track railway was started; and the whole force put to work clearing away the old dump heaps and the drift sand down to the level of decay, of the chapel of the great mastaba. But the RR was soon stopped again by stone walls; and it is probable that to avoid the long carry, we shall have to run out, later on, on the first embankment.
On November 29, I came up to Girga to look over the plans and mss. for the volume now in press. I expect to return to the Pyramids about December I2. I am sending this down to Mr. Lythgoe to be enclosed with a report of his own and photographs of the work.

I regret to be obliged to report that during the last six months there has been a considerable increase in the prices of common foodstuffs and as a consequence an increase in wages in Egypt. This seems to be due to a combination of causes, the cattle plague, the increase in acreage under cotton and sugar cultivation, the failure of crops in the Sudan, the land speculation, etc. Mr. Quibell, in the government excavations at Saqqarah, has found it necessary to pay men five piasters ( 25 cents) a day and boys three piasters ( 15 cts) a day. To meet the new conditions, we also have been forced to raise our scale of wages by $\mathrm{I} / 2$ or $\mathrm{I} / 4$ piaster all the way through. We are now paying $5,4 \mathrm{I} / 2,4,3 \mathrm{I} / 2,3,23 / 4,2 \mathrm{I} / 2$, and $2 \mathrm{I} / 4$ piasters to our different grades of men and boys. The net results is an increase of about 50 piasters (\$2.50) a day in our wage list. That means a $12 \%$ increase in our expenditure for wages or about a $4 \%$ increase in the cost of a year's work. We shall be able to meet this, by a small reduction in our working time. The increase in wages is therefore not yet serious; but I am not certain that the collapse of the present wild speculation in land and other things will lead to a return of the old conditions. Wages in Egypt have, I fear, been abnormally low. The prompt rise in wages is due to the fact that field laborers are paid in kind, for the most part, so that their wages follow the increase in value of wheat, corn, etc.
Yours very respectfully
George A. Reisner
P.S. (December 13). Gizeh Pyramids

I returned to the Pyramids on the ith; and I take this opportunity of adding a note on the present state of the excavations. Photographs of the irth have been added to the series.
In my absence, Mr. Lythgoe has almost entirely finished removing the modern rubbish heaps and the drift sand from the chapel of Lepsius 23. The mastaba is built with a great niche, the three sides of which are, like the walls of the mastaba, of masonry of the style of the Cheops reign. A smaller niche or chamber has been constructed in this niche apparently in the Chephren period. The masonry, fine white limestone beautifully fitted and faced, has been torn away in part by stone thieves (people who stole stone for building material), probably at the time when the other Cheops mastabas were denuded of their white limestone (Turah limestone). This was perhaps a few centuries ago. In front of this niche, mud brick walls are appearing which must have formed part of the external chapel of Lepsius 23 .
These external chapels of the Cheops period originally contained statues. The famous Sheikh el-Beled and his wife, one of the statues of Ra-nefer and his wife were found in such chapels. Mr. Lythgoe has now come on the headless statue of a woman, unfortunately much weatherworn, in the sand in front of our niche; and we may hope at any moment to find the statue of the man. This find indicates moreover that the disturbance of the soil here is due to stone thieves and not to the modern searchers for antiquities. It is therefore probable that neither Mariette nor

Lepsius penetrated to this depth. Mariette has left no account of his work in this cemetery. Lepsius reports of the mastaba, L. 23, that it does not contain a chapel.
A number of blocks of stone bear mason's marks in red ink. Among these we may hope to find the names of the reigning king and of the owner of the mastaba.

The difficulty of searching the northern end of the strip has been overcome by running the tracks up a steep grade. As soon as the rubbish and the sand are completely cleared away from the chapel, the southern end of the strip will, as usual, be divided into divisions each about 5 x io meters in area and assigned by lot to the gangs, one division to each of the two gangs.
Very respectfully,
George A. Reisner

## Lythooe's first report:

To the Committee of the Expedition:
Gentlemen-
I beg leave to submit the following outline of my share in the work of the expedition.
I reached Cairo on Saturday, October 28, and on the following day called upon Mr. J.E. Quibell, of the Dept. of Antiquities who had been employing 30 of our men in the government excavations at Sakkara. These men were sent up to me at once by Mr. Quibell, enabling me to make a start in the year's work on the morning of November ist and I therefore cabled Mr. Lane to that effect on that day. In the meantime I had come out to the site, made lists of the men who were to be summoned from their village (Kuft) in Upper Egypt and had the word sent to them. With the 30 men returned by Mr. Quibell and a dozen men who had been kept here by Dr. Reisner as guards during the summer, work began in transferring the railway from the position of the site where it had been used on the Hearst Expedition, in cleaning and oiling the cars, and in placing everything ready at hand near the section of the site which had been previously agreed upon between Dr. Reisner and me as the place to be cleared the present season. While this work of putting things in order was going on I was able to photograph the site of the work from several points of view, as a record of the actual condition of this portion of the site. On November 6 the work of clearing for the admission of the railway began.
The portion of the site to be excavated at present may be defined as lying about 150 meters west of the Great Pyramid and running north from the line of the north side of the pyramid, [...] due west that distance to the edge of the pyramid plateau; viz. [Lythgoe included a sketch plan here].
If the work of this year be confined to the limits set at present it will include the section bounded on the south by the line above described, on the north by the edge of the plateau, and on the east and west by two lines of tombs of the 4th dyn., the southernmost of the east eastern row being the tomb of Mer-ib while on the western side is the very large mastaba which Lepsius numbered 23 in his plan of the plateau.
The plan of work being to begin clearing along the southern end of the section on a line drawn from the souther face of Mer-ib to Lepsius 23 I first tried to introduce the railway on a north $\&$ south line about 15 m west of Mer-ib and the succeeding tombs in the same row, ${ }^{12}$ and to incline it to the southern edge of the section. This southern end of the section has a level some 5 m higher than the northern end, where there is a gradual drop to that extent as one approaches the edge of the plateau. It proved impossible, after a week's work, to cut in to this higher level at the south sufficiently low to avoid building up a dike for the railway,


Fig. I.2. General view of the Western Cemetery, western half, looking north from upon the Khafre Pyramid (photographed in the evening). First clearance of Cemetery g 2100 (indicated by arrow). December 1906. HU-MFA Expedition photograph, Said Ahmed, A13022 [= A6354].


Fig. I.3. General view of the Western Cemetery, western half, looking west from upon the Khufu Pyramid. June 1912. HU-MFA Expedition photograph, Badawi Ahmed, a765.
as it approached the plateau edge, which could only be cleared afterward with a considerable amount of labor and expense. At the point opposite Mer-ib the tops of the tomb-walls were in some cases so near the present surface that the extension of the line was clearly impossible at anything like a working level and therefore work at this point must be for the time suspended. The only place where the proper level seemed possible was in the other or western side of the section. Here all along the eastern face of Lepsius 23 was a great mound of sand and refuse thrown up probably by Mariette during his work some 50 years ago. By cutting in to the side of this mound and by taking advantage of the tops of several large tombs near the northern edge of the plateau which might be used as "stepping stones" as the dike was extended north, a way through the section to its southern line seemed possible, and at the same time advantage could be taken of the nearness of the railway to the eastern face of Lepsius 23 to clear it as the line advanced.
On November 1534 more men arrived by steamer from Kuft and on the next morning this whole force was set to work cutting in for the new line of rails mentioned above. A week later (Nov. 22) 30 more men \& boys arrived by steamer and these again were put on at the same work, giving us a total force of almost ioo men. It seems probable that we shall hold to approximately that number of men straight through the season. Since November is then the work has been concentrated on clearing along the east face of Lepsius 23 towards the south, including the great southernmost niche or chapel of this tomb near its southeastern corner. In this work the sand and debris have been cut away to a depth at the face of the wall of about 4 m . At that depth the tops of late construction (probably sth or 6th dyn.) have begun to appear and give proof of the fact that this whole section between Lepsius 23 and Mer-ib was, in the dynasties following their construction, filled with tombs of smaller size.
This corresponds exactly with the conditions which Dr. Reisner found to exist on the farther or western side of Lepsius 23 in the work of the Hearst Expedition. When this upper level of sand and debris has been cleared from the whole southern end of the section the work of clearing the tombs themselves will be begun and continued down to the original ground level upon which the tombs were constructed. At the same time the work of clearing the great niche or chapel of Lepsius 23 will be continued in order to determine its construction and to obtain any other evidence which may be preserved.
These are the main facts in outline regarding the progress of the work up to the present date, and I beg to call your attention to the accompanying photographs which I have selected in illustration of the work at its several stages.

Very respectfully yours
Albert M. Lythgoe
Gizeh Pyramids
December Io, 1905

Excerpts from second report written by Reisner and signed by Reisner and Lythgoe:

Report of the Work of the Expedition of Harvard University and the Boston Museum of Fine Arts up to January 3I, 1906
A. Progress of the Work

In our first report, we explained that we had selected a strip of the cemetery of the Great Pyramids lying just east of the work carried on by the expedition for the University of California and separated from it by the enormous mastaba (tomb) known as Lepsius 23. We described the preliminary work and sent a series of
photographs showing the progress of the work from the beginning of November up to December ioth [1905].
At that time, we were ready to begin clearing the southern end of the strip (Strip i) but were in difficulty in arranging the railway owing to the steepness of the slope towards the north. This difficulty was overcome by laying the two lines in wide curves, one to the west and one to the east, running up a steep grade to about 17 meters from the southern edge of the strip (see map p. 2 [= fig. I. 4 below] and Photographs Group iv i3 and 15). Here turntables were laid; and the two lines were connected by a cross-line. Switches were run out from the eastern turntable and from the cross-line to the points of excavation (see Map and Photo. Group iv 2). The two lines approached each other towards the north until they ran parallel about 2 meters apart and were then joined together by a second pair of turntables on the dump heap. Thus the circuit was completed; and the cars ran out loaded on the east line where was the lesser grade, were emptied at the dump, and came back empty on the west line.
The work then proceded in the regular course. The men were divided into io companies of io or II men, each company under the leadership of a working foreman and an assistant-foreman. Certain numbers of men from each company were detailed to push the R.R. cars and to handle the dirt at the dump. The rest, working with turîyah (native hoe) and baskets, did the digging and filled the cars. That part of Strip I which is south of the railway was then divided into working sections each about 5 x io meters in area; and a section at a time was assigned to each gang (see Map a.a.a. etc. marked in yellow; and see Photo. Group ii a 2, where the turîyah men and the basket-boys of each gang stand in the working section of their gang. The baksheesh for all antiquities found in any section is divided among all the members of the gang which worked that section.
The southernmost end of the strip (see Map a.a.a.a. etc.) which adjoins the German concession south of us, was first cleared of sand and surface debris to the level of decay. The level of decay is in this case, an irregular surface of hard packed debris formed by the decay of the superstructures of the tombs in ancient times before the cemetery was covered with sand (about the 6th dynasty) (see Photo. Group ii a I-8). The tombs of this period, it may be explained in passing, are called mastabas (plu. English, from the Arabic word mastaba, a mud bench or bank used instead of a divan in shops and houses) and consist ( I ) of a rectangular superstructure containing on the valley side, the chapel in which the monthly and yearly offerings to the dead were made and (2) of a subterranean chamber for the burial, reached by a shaft descending from the top of the superstructure in the long axis of the tomb. The superstructures consist of retaining walls of mud-brick or of stone with a filling of limestone chips and gravel. The whole is very often cased with an additional wall of stone or mud-brick. When, after the lapse of years, the presentation of offerings ceased in tomb after tomb, the mud-brick melted and fell to pieces, stone was stolen from the casing for later tombs, the filling poured out in places into the streets of the cemetery and the whole gradually fell into decay forming the uneven surface described above. The hollows in this surface filled up with drift sand; and finally the drift sand, stopped by the great wall north of the second Pyramid, was banked up over the whole site to a depth of from I to 7 meters in the hollows. But the tops of the higher mastabas were always visible.
After the surface of decay in the part south of the railway had been laid bare and photographed, the debris of decay was cut out, and the ancient ground level of the 4th and 5 th dynasties (ca. 2500 b.c.) was exposed to view (see Photo. Group ii a I-6) and iii $9-15$ ). The burial pits were cleared yielding a large number of sealed burial chambers. After the work of excavation is over for the season, these chambers will opened by Lythgoe personally being photographed at each stage of the proceeding until finally the skeleton is ready to be examined in position by Dr. Elliot-


Fig. I.4. Redrawn sketch of the westernmost row of Cemetery G 2100 tombs and the area further west, from Reisner and Lythgoe second report, 1906.

Smith for determination of sex and age, measurements, traces of disease, etc.
The part of the strip immediately north of the railway was next cleared in the same way (see Map b.b.b.b. etc., and see Photo. Group ii a 9). The turntables were then shifted to where the two lines approach each other (see Map x ); the cross-line was taken up; and the sand and the debris under the cross line were removed as before, thus joining up the two pieces a.a.a.a. and b.b.b.b. See Photo. Group ii a IO-I2.
So the work was continued northward stage by stage until Strip I was cleared including the chapel of Lepsius 23 ( see Photo. Group xiv and iv). On January 28 [1906], the work was then transferred to Strip ii ${ }^{13}$ which adjoins Strip i on the east and includes the group of late Cheops' mastabas of which the tomb of Mer-ib, son of Cheops [sic], has been known for sixty years. The mastabas found in the first strip are the tombs of priests and officials and their families who lived in the "City of the Glory of Cheops" ("Glory of Cheops" is the name of the First Pyramid) ${ }^{14}$ and had under their care the Pyramid with its two temples, the maintenance of the offerings to Cheops, and the administration of the estates left by Cheops for the maintenance of the offerings and the government of the city itself. They are therefore to be dated to the period subsequent to the death of Cheops, and
belong, as a matter of fact, mostly to the sth dynasty. Strip II however contains part of the royal cemetery of Cheops (see below c. The Work after Jan. 28) and its mastabas are therefore of the $4^{\text {th }}$ dynasty... ${ }^{\text {Is }}$
...8. Tomb $204 I$ was a mastaba found entirely under the level of decay (see Photo. xii I-4). It was built on the lowest level, in the style of masonry and with the kind of limestone used in the days of the first pyramid. It had been recased however in the style of masonry and with the kind of limestone used in the time of Mykerinos (3rd Pyramid,-i.e., end of the 4th dynasty). In this connection, it may be said that one of the most interesting points discovered during our excavations at the Pyramids has been the effect produced on the skill of the stone workers and on the numbers of trained stone workers in Egypt by the building of the first and second pyramids. The increase in the number of skilled masons caused a more general use of the best work and enables us to date the different styles of masonry by a comparison with the work found in the pyramids and in the royal mastabas. In accordance with the style of the outer case, the final form of the mastaba is that with the southern niche enlarged to an interior chapel,-a type which we have dated to the late 4th and early 5 th dynasties. It is therefore certain that the tomb belongs to this early period,-a fact which is important on account of the reliefs on the walls of the chapel. For the western wall is covered with offering scenes and inscriptions in very fine low relief (see xii $6-13$ ), some parts of which being unfinished show in the most interesting manner the stages of the work. The design was drawn in black ink; the background was cut out roughly with copper chisels and the surface was finished by rubbing with smooth hard stones.
C. The Work after Jan. 28

An examination of the ground east of the tomb of $\operatorname{Mer}-i b$, son of Cheops [sic], showed that we had there a group of very early mastabas with a considerable depth of sand between them. The back of the mastaba just north of Meri-ib ${ }^{16}$ had been uncovered during the work on Strip i; and was seen to have been recased in the fine style of the late 4th dynasty.
The railway was laid in a cutting made in the street between the second and third row of tombs; ${ }^{17}$ and a new dump heap was formed on the edge of the valley to the north. Photo. Group xv I-4 show the appearance of Strip ii before work began. Photo. Group xv 5-IO show the installation and operation of the railway on our usual double track plan. Nos. 8-IO show especially how we save basket carrying by driving our lines up to the points of excavation.
A complete report of this, the final stage in the active digging work of the season will made later.

George A. Reisner
Albert M. Lythgoe

This concludes the early unpublished reports dealing with parts of Cemetery g 2ioo. The "complete report" mentioned at the end of the passage above was either lost or never written. However, a short summary was published by Lythgoe in the Annual Report, 1905 of the Museum of Fine Arts, Boston. Dated to February i, 1906, and written at the Pyramids in the middle of the Cemetery G 2IOO excavation season, the report describes the establishment of the Harvard University-Boston Museum of Fine Arts Expedition. Portions are excerpted below:
he including remarks on G 2009, G 2036, G 2002, G 2035, G 2038, G 2037, G 201I, G 2003, G 2000 (labeled here 2001), and G 2016, are omitted from the excerpt above. Tomb G 2041, of Senenuka, is included since it relates to Cemetery G 2100.
16 I.e., G 2IIO, the mastaba of Nefer.
17 I.e., running north-south in front of the east faces of G 2120 and $G 2130$.

In September last I left America to undertake a plan of work here in Egypt, for the Museum and Harvard University jointly, which, from the time of my appointment to the Museum, I had hoped would prove possible as a means of developing our Egyptian collection on a sound basis,-by the acquisition of material resulting from systematic work of excavation, where every object had been closely recorded and would in consequence have a determined value and place in the development of the collection...
The plan for the work gave to the University the record and the publication of the results, while the sculpture and the other works of art which the work should produce were to be given to the Egyptian collection of the Museum. In the following month of June it proved possible to effect a combination by which the expedition took over the organization and the concessions of the Hearst Egyptian expedition, with Dr. G.A. Reisner as Director and myself as Field-Director of the new plan of work....
Work was begun, on November ist, on the most important concession acquired from the Hearst expedition, in the pyramid-field of Gizeh. The point at which the work is now proceeding is on the northern end of the plateau, in a line due west from the northwest angle of the Great Pyramid and about 150 metres from it. That part of the field is covered by the great cemetery of mastaba tombs laid out in a uniform plan in the fourth dynasty, under Khufu, the builder of the Great Pyramid. The tombs, which are separated by streets running north and south as well as east and west, stretch out row upon row in regular order. In the succeeding dynasties of the Old Empire advantage was taken of the streets between the tombs of this original plan to place in them smaller tombs of the same type; but since that time the cemetery has been practically unused. The work of clearing the tombs of the drift sand and deposit with which they were covered has already yielded most satisfactory results in the portion of the field on which the work has been concentrated, and the importance of making as complete a photographic record as possible has been emphasized at every point in the progress of the work. Additional facts and material have been gained for the history of the development of the "mastaba" tomb, and their publication should establish the value of the results on that side. The statue-chambers of the tombs already uncovered have produced a series of portrait statues, both single statues and groups, of which the Museum will ultimately receive its share in the division with the Egyptian government. These will place our collection on a new footing in its representation of Old Empire sculpture in the round. In addition the work has yielded a number of inscribed offering-stelae or "false-doors," and two tombs have proved to contain offering chambers with walls sculptured in low relief,-in the case of one chamber its color beautifully preserved. ${ }^{18}$
The work of excavation will be continued until March ist, and I am confident that the final results of the year will prove

18 Lythgoe is referring here to the tomb of Tjetu, G 200I, further west of Cemetery g 2100, and published by W.K. Simpson in Mastabas of the Western Cemetery, pp. 7-15. While most of the photoraphs taken (by Lythgoe himself) during the field season in question are simply labeled "1905-1906," several of the Tjetu excavation images are dated to "January 1906," the same period when Lythgoe's published report was written.
it to have been a strong one in the systematic development of our collection. ${ }^{19}$

Albert M. Lythgoe<br>Pyramids of Gizeh, February I, 1906

Additional formally published MFA Annual Reports give only two scant references directly concerning Cemetery G 2IOO. The 1906 Report, written by "Temporary Assistant in Charge" Oric Bates, provides a list of new acquisitions. Object no. 7 is the reserve head of Nefer from G 2110 (MFA 06.1886), and object no. 14 is a fragmentary dish from the tomb of Merib (G 2IOO-I). ${ }^{20}$ The other concerns the acquisition of the lower part of a false door from G 2132 in 1938. ${ }^{21}$

The next two reports, the third and fourth, are both typewritten and dated to 1906-07, but they cover solely the pyramid complex of Menkaure. ${ }^{22}$

After clearing the subsidiary mastabas between Cemetery G 2100 and the east face of the large mastaba G 2000 (= Lepsius 23), the Harvard-MFA Expedition concentrated on the westernmost, earliest mastabas of the cemetery: G 2100 (Sedit), G 2100-I (Merib), G 2110 (Nefer), g 2120 (Seshatsekhentiu), and G 2130 (Khentka(?)). From here, work shifted to the temples of the Menkaure pyramid. On July 19, 1906, Lythgoe left the Museum of Fine Arts to become the first Egyptian Department curator at The Metropolitan Museum of Art in New York.

The 1912-1913 season was led first by Clarence $S$. Fisher from January I through February 20, 1912, and later, from February 2I through April 4, by Reisner himself. ${ }^{23}$ Reisner's original plan was for Fisher to begin clearing a portion of Cemetery g 4000 that was newly acquired through the departure of the Italian expedition under Schiaparelli. Fisher's field diary mentions this area at the beginning of his campaign (see entry for January 3, 1912; www. gizapyramids.org). However, on January 8, 1912, Fisher writes: "In the first post received a letter from the acting Director of the Service des Antiquités stating that M. Schiaparelli had not given up his right to the original Italian concession, but had applied for its renewal." Fisher cabled Reisner in Boston for guidance, and in the meantime opted to work in the Harvard-MFA Expedition concession area northwest of the great anonymous mastaba Lepsius 23 (G 2000). While excavating g isoi, Fisher received a cable from Reisner on January Io, 1912, stating: "Begin dig mastabas northeast corner edge Lythgoe's work." Fisher proceeded accordingly, reaching the eastern

19 Lythgoe, "Report of the Curator of the Egyptian Department," Museum of Fine Arts, Boston, Thirtieth Annual Report, 1905, pp. 53-55.
20 O. Bates, "Report of the Department of the Egyptian Art," Museum of Fine Arts, Boston Thirty-first Annual Report for the Year 1906, pp. 75-76. For these two objects, and Bates's Annual Report text, see the respective Chapters 4 and 6 below on mastabas G 2100-I (Merib) and g 2110 (Nefer).
21 See Part 2, chapter on the tomb of Seniwehem, G 2132; Dunham, "Department of Egyptian Art," Museum of Fine Arts, Boston, Annual Report 1938, p. 4I (quoted below).
22 The third report is labeled, "Third Report of the Egyptian Expedition of Harvard University \& the Boston Museum of Fine Arts, 1906-07. Special Report," relating to the finding of fragments of two alabaster statues of Mykerinos. The fourth report is entitled, "Fourth Report of the Egyptian Expedition of Harvard University \& the Boston Museum of Fine Arts, 1906-07."
23 Remarks on Clarence Fisher's career may be found in Alan H. Gardiner JEA 27 (1941), p. 164; by J.A. Wilson, Signs and Wonders upon Pharaoh, p. 220; by Dawson and Uphill in Who Was Who in Egyptology, p. 105, and in Expedition 21, no. 2 (Winter, 1979), pp. 22-26.


Fig. 1.5. Cemetery G 2100, area east of G 2170, and north of G 2180 ( $=$ G 4990), showing G 2231 X, G 2227 (= G 2177), G 2224, G 2225, G 2174, G 2173, G 2176, G 2175, G 2172, G 2179, G 2178, G 2186, and G 2184, looking south from a photographic tower. January 6, 1913. HU-MFA Expedition photograph, Mohammedani Ibrahim, A82I.


Fig. 1.6. Cemetery G 2100, area east of G 2170, G 2184 (foreground left) and G 2186 (foreground right), showing G 2172, G 2175, G 2227 ( $=$ G 2177), G 2174, G 2173, G 2225, and G 2224, looking northwest from a photographic tower. January 7, 1913. HU-MFA Expedition photograph, Mohammedani Ibrahim, A822.


Fig. I.7. Cemetery G 2100, area north and east of G 2170 , G 2154 , and G 2154 A in the foreground. Further away are mastabas G 2223 , G 2224 , G 2227 (= G 2177), and G 2175; looking southeast from photographic tower. January 8, 1913. HU-MFA Expedition photograph, Mohammedani Ibrahim, a825.
edge of Cemetery G 2100 by January 17, 1912, and photographing much of the progress on January 21, 1912. He cleared many of the subsidiary mastabas surrounding the major tombs, numbering the burial shafts with his own system, often placing number cards in the photographs themselves. In all, 1,231 photographs were registered in 1912, although many show areas located outside of Cemetery G 2100 .

One particular focus in 1912 was on the eastern half of Cemetery G 2100, especially the cluster of densely packed subsidiary mastabas in the wide area north of G 2150 and south of G 2220 (fig. 2.5). After April I, 1912, the Expedition focus was outside of Cemetery g 2100. Reisner's diary for March 5, 1912, notes that "EEarle] Rowe is in charge of recording of pits; Fisher is in charge of mastaba plans and map." Diary entries for January 1913 describe additional work on subsidiary tombs (G2170s, figs. I.5-1.7) directed by Louis Coulton West, a graduate student from Harvard University. ${ }^{24}$ Fisher left the Museum in September 1914 to join the University Museum, University of

Pennsylvania, and later received from Reisner his own portion of the Western Cemetery to publish further to the west. ${ }^{25}$ Reisner's Expedition meanwhile moved eastward, clearing the later mastabas of the cemetery, including the Senedjemib complex (G2370-238I), and portions of the so-called Cemetery en Echelon.

An outline description of Cemetery G 2100 was the subject of Appendix C of Reisner's monumental History of the Giza Necropolis I (pp. 417-53). The summary of the main features of the area from pp. 417-18 is reproduced below:

About 50 m east of the great mastaba G 2000 is the western side of a nucleus cemetery of eleven mastabas, designated G 2100 . That great mastaba stands on sound, but uneven, nummulitic limestone with the rock on the eastern side much lower than on the west. The space between g 2000 and Cem. G 2100 slopes gently upwards to the east and is mainly covered by a weak geological deposit of red gravel mixed with boulders of various

[^2]25 The minor Cemetery G 3000 was excavated from January 28 through March 9, 1915: see C.S. Fisher, The Minor Cemetery.


Fig. I.8. Cemetery g 2100, looking northwest, from upon the Khufu Pyramid. 1912(?). German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_ 5441.
sizes. The western line of mastabas in Cem. G 2100 is built on a low ridge east of this space and also shows some patches of bad rock. From this ridge under G 2100 and G 2110 the rock surface slopes gently down to the east and is mainly of sound rock. This rock also slopes gently to the north. The foundation courses of the cores and the casings are founded on rock and the streets and avenues were packed with limestone debris to the level of the adjacent chapel floor. The finished sloping casings are dressed to the level of the packed floor of the streets.
The nucleus Cemetery G 2100 consists of eleven core-mastabas of type IIa or IIb. These cores, eleven in number, were laid out in four N-S lines. The cemetery fell into two groups. The western group of five mastabas were in two $\mathrm{N}-\mathrm{S}$ lines, two in the western line and three in the eastern line, but not in rows. That is, they were built after the manner of a family cemetery. All the cores were correlated by the use of the portcullis groove in the shafts, the only shafts with portcullis grooves in the necropolis. These cores were constructed before the eastern group and were finished in general before any core of the eastern group. The eastern group consisted of six core-mastabas of type Ila laid out in two lines of three cores each, set in three E-W rows of two mastabas each. These six cores were aligned with each other and those of the
middle row had their southern ends aligned with the southern end of the core G 2 I 20 , the southern core in the eastern line of the western group. The northern row stood in a similar relation to G 2130. The cores were numbered by me as follows:

Western group, western line: from south to north, G 2 IOO and G 2110.
Western group, eastern line: line 2: from south to north, G 2120, G 2130, and G 2210 .
Eastern group, western line: line 3: from south to north, G 2135, G 2140, and G 2150 .
Eastern group, eastern line: line 4: from south to north, G 2155 , G 2160, and G 2170 .

The eastern group gave the cemetery its appearance of a unified plan and was obviously built after the western group. The cores also were finished, with the exception of G 2135 , after the cores in the western group. G 2135 and G 2155 were excavated by Professor Junker and published in Giza I and II respectively under the numbers 7 NN (4770) and 8 NN (4870) (tomb of Kaninisut). But as the cores belong to Cem. G 2100, not to Cem. G 4000, I


Fig. I.9. Area south of Cemetery g 2100 (G 2100-II and G 2120), cleared by the German-Austrian expedition, looking northwest. 1912(?). German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_ 5443 .


Fig. i.io. Area west of Cemetery G 2100 (right background: G 2IOO-II, G 2IOO-I, G 2IIO), being cleared by the GermanAustrian expedition, looking north. 1912(?). German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, AEOS_I_ 543I.


Fig. I.II. Western Cemetery, middle and northern sections, looking northwest, from the top of the Khufu Pyramid. June 25, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, A6973.
have renumbered them G 2135 and G 2155 and described them here with Cem. G 2100 .
In spite of the fact that the western group of five cores all had shafts with portcullis grooves and were all built by the same gang of workmen about the same time, the cores were finished as mastabas at different times. I place them in the order of their finishing, as G 2100, G 2130, G 2120 , G 2110 , G 2210 . The first mastaba of the eastern group to be finished, G 2135 (Junker), was finished about the same time as G 22IO. Thus it may be concluded that the six cores of the eastern group were built before the cores in the western group were finished and probably in continuation of the western cores. The cores in the eastern group were finished in the order, G 2135 (connected with the western group), G 2140, G 2150 (after Mycerinus), G 2155 (about the time of Neferirkara). The two cores, G 2160 and G 2170, were used unfinished and uncased for unimportant persons about the same time as G 2150 and G 2155 . Thus the cores were constructed from west to east and finished as mastabas also from west to east with slight variation in the order of growth.
The building of Cem. G 2100 in two groups, of which only the eastern group of six was laid on a unified plan, created streets and avenues of different widths in two groups. The spaces in the
western group were comparatively small and occupied by a few very small mastabas. The spaces in the streets and avenues of the eastern group were larger and filled with complexes of small and medium-sized mastabas. North of G 2150 and G 2170 was built the large mastaba G 2220 (east of G 2210), before the cemetery of the secondary mastabas was begun on this side, and left a wide empty space between this large mastaba and the eastern group. This space was filled with complexes of mastabas beginning with a mastaba of a funerary priest of G 2150 . South of the western group, between it and the northern end of Cem. G 4000, again (page 418) a wider space was left and occupied mainly with the mastabas of "Prince" Merib and his daughter added in succession to G 2100 . West of the western group, the space between it and G 2000 was filled with complexes of small and medium sized mastabas of Dyn. V and Vl close up to the backs of 2iIO and 2100. East of the whole cemetery ran the northern ends of the three lines of the Cem. en Echelon built later with its streets filled with secondary mastabas. East of G 2220, north of the Cem. en Echelon, the cemetery of the secondary mastabas extended eastwards to the Senezemib complex, NW of the NW corner of the Cheops Pyramid.

During the years 1912-1914, Hermann Junker excavated the German-Austrian concession's strip of Cemetery g $2100 .{ }^{26}$ This area contained the tombs at the southernmost edge that protruded over the German/American boundary formed by continuing an imaginary line westwards from the northwest corner of the Great Pyramid (figs. 1.8-I.10, 2.5). ${ }^{27}$ Some of Reisner's crew, including an Egyptian photographer, were borrowed for Junker's expedition, and sometime after January 8, 1913, a clearance ramp was constructed over the already examined eastern portion of Cemetery G 2100 (covering G 4980, G 2180, and the subsidiary G 2170 tombs). ${ }^{28}$ Major portions of this ramp still cover G 2180, and the subsidiary G 2170 tombs, rendering detailed reexamination impossible without considerable reclearance (fig. I.Io). A brief outline of Junker's activities as they pertain to Cemetery g 2100, gleaned from his Vorberichte and Gîza volumes, follows:

First season, January 22-April 7, 1912 29
January 2I, 1912. Arrival of the expedition (from Nubia) in Cairo February IO, 19I2. Discovery of the mastaba of Nensedjerkai (G 2100-II) February 27, 19I2. Permission granted by Reisner for construction of railway through the American concession out to the north February 28-March I, I912. Completion of the new railway
March 7, 1912. Outlines of mastaba of Qedfy (G 2135 a) become visible
March 8, 1912. Discovery of the pair statue of Qedfy (G 2135a) and his wife March 10-13, 1912. Excavation of the area surrounding the mastaba of Qedfy (G 2135a)
April 8, 1912. Departure of the Expedition (after 2 I/2 month season)
Second season, December i6, i9I2-March 24, $1913{ }^{30}$ December 16, 1913. Arrival of the expedition
January 9, 1913. Discovery of the mastaba of Kaninisut I (G 2155) February 4, 1913. Excavation of area north of G 2155
February 6, 1913. Discovery of the mastaba of Kahif (G 2I36)
February 8, 1913. Discovery of undecorated sarcophagus of Kahif (G 2136) February II, 1913. Discovery of second undecorated shaft of Kahif (G 2136) February I2, 1913. Clearance of large serdab in the extension of G 2136 west towards the mastaba of Nensedjerkai (G 2IOO-II)
February 15, 1913. Discovery of the statue of Nimaatre (G 2136b)
March 9, 1913. Discovery of the sarcophagus of Nensedjerkai (G 2IOO-II) March 24, 1913. Departure of the expedition

Third season, January 3-April 23, 1914 ${ }^{31}$
January 3, 1914. Arrival of the expedition
January 26, 1914. Junker travels to Luxor concerning the purchase of the mastaba of Kaninisut I (G 2155)
February 25, 1914. Cleaning of chapel of Kasewedja (G 5340; son of Kanefer, g 2150)
March 17, 1914. Beginning of the dismantling of the chapel of Kaninisut I (G 2155)

April I6, 1914. Removal of the crates of Kaninisut I (G 2155) to Cairo April 23, 1914. Departure from Cairo

Fourth season January 4-April 20, $1926{ }^{32}$
January 29, 1926. Discovery of the mastaba of Kaninisut III and Irienre March 20, 1926. Clearance of the burial chamber of Kaninisut ${ }^{33}$

Major excavation in this part of the necropolis did not recommence until the end of the 1932 season, when G 2100 and G 2210, originally excavated by Lythgoe, were reexamined (fig. I.II). (Reisner's eyesight had been failing since 1930). From December 16, 1932 to April 4, 1933, Noel F. Wheeler excavated a number of large shafts in both Cemetery G 2100 and the Cemetery en Echelon, with the assistance of Hansmartin Handrick, between the American and Austrian concessions. The year 1934 saw the clearance of the exterior walls and chapel of G 22 I 0 , and the last major period of concentrated work in Cemetery G 2100 by the original Harvard-MFA Expedition occurred in 1938.

Excavated objects from Cemetery G 2100, and indeed the rest of the Western Field, came to rest in a variety of locations. Divisions between the Harvard-MFA Expedition and the Egyptian antiquities authorities resulted in additions to the collections of both the Egyptian Museum, Cairo, and the Museum of Fine Arts, Boston. Some objects remained in storage magazines at Giza; others were reburied or never removed from burial chambers. Skeletal remains seem to have been the most widely dispersed, with specimens today in the Museum of Fine Arts, Boston; the Peabody Museum, Harvard University; the Hearst (formerly Lowie) Museum of Anthropology, University of California, Berkeley (even though the excavation of Cemetery G 2100 postdated the work of the Hearst Expedition); and storage magazines still standing as late as 1993 on the original site of Harvard Camp west of the Khafre Pyramid. These remains were subsequently moved to a storage facility further west, after the original Harvard Camp magazines were torn down. In the early 1990s, additional skeletons were "rediscovered" at the Kasr el Aini Faculty of Medicine in Cairo.

In continuation of the more recent Giza Mastabas Project, initiated in the early 1970s by William Kelly Simpson, Cemetery G 2100 was chosen as the subject of the present volume in the Giza Mastabas Series. Research began with the archives (original Expedition diaries, registers, plans, drawings, and photographs) in the Museum of Fine Arts, Boston. Original Expedition photographs were enlarged for preliminary epigraphic tracings following the

32 Junker, "Vorbericht 1926," pp. i18-20. The 1926 season was actually the second return to Giza by the Austrian expedition after World War I. In winter, 1925, a rescue campaign was undertaken to complete the documentation of the first three seasons prior to the outbreak of the war. It was only after this 1925 "season," which never received an actual campaign number, that the expedition obtained the funding to continue with a bona fide fourth season in 1926. For the 1925 salvage campaign, see Junker, "Vorbericht 1925," pp. I47-54. The only work mentioned here concerning Cemetery G 2100 directly was the painting of two watercolors by Uvo Hölscher, one of the complex of tombs of Qedfy, Nefer, and Kaninisut, and the other of Nensedjerkai (ibid., p. 153).
33 Ibid., p. I2O. Both Seshemnefer II and Kaninisut I are mentioned in the entry. But this must be an error, at least in Kaninisut's case: Junker, Gîza 2, p. 135 notes that the chapel reliefs were already sent to Vienna on April 16, 1914 and reassembled in the Kunsthistorisches Museum there in 1926.

Chicago House method. ${ }^{34}$ These were later finalized using digital epigraphy. In March 1993, a two-day photographic survey of Cemetery G 2IOO was undertaken with photographer Rus Gant.

A formal concession for the reexamination and publication of Cemetery g 2IOO was granted for a five-week season from October 30 to November 28, 1993, supported by a grant from the Andrew W. Mellon Foundation. The goals of the November, 1993 field season were to:
i) Prepare a first collation of the drawings of the decorated surfaces of the tombs. These drawings were prepared from photographic enlargements of the original Harvard UniversityMuseum of Fine Arts, Boston, Expedition photographs, dating as early as 1905, and stored in the collections of the MFA. In most cases, black-and-white photographic enlargements ( $16 \times 20$ ") were traced in Boston for collation at Giza
2) Complete the color photographic documentation of all the architecture, reliefs, and inscriptions. Many of these images provided comparison photographs with the original Expedition plates from 1905-6, 1912-13, and 1931-32
3) Confirm (where possible) and expand upon the original expedition records with additional plans, notes, and measurements 4) Seek the skeletal remains from the original Reisner excavations to determine how many and which individuals from Cemetery G 2100 could be identified for physical anthropological analysis
5) Analyze the cemetery as a whole, with a view towards understanding the development and the interrelationships of tombs within a single nucleus cemetery, from the original Dynasty 4 tombs through the later burials of Dynasty 6; conduct limited re-excavation where necessary
6) Survey the records of the Egyptian Museum, Cairo, for objects from Cemetery G 2 IOO

Additional study of Cemetery G 2100 was undertaken amid other work at Giza during short seasons in April I999, January 2004, March and August 2005, and January and November 2006.

It should be noted that Reisner did not fully clear Cemetery G 2IOO. As is clearly indicated on his plan (fig. 2.5), ${ }^{35}$ the northernmost edge of the nucleus cemetery was left unexcavated. The streets in front (east) of G 2220 and on both east and west of G 22 IO remain uncleared. This area could be the focus of renewed study in the future. The results would most likely provide a clearer picture of the northwest half of G 2220, the third largest mastaba in the entire Giza Necropolis (after the anonymous mastaba G 2000 in the Western Cemetery; and g 75io, Ankh-haf, in the Eastern Cemetery); as well as reveal a number of later, subsidiary burial shafts surrounding G 2210 .

Museum Expedition Sources. Numerous sources exist for the publication of Cemetery g 2100. Most are stored in a variety of archives in the Museum of Fine Arts, Boston. ${ }^{36}$ Many gaps, however, are present in the records, especially from the 1905-1906 Lythgoe season, the earliest years of work in the area. By combining and comparing dates assigned to photographs, excavation director's and reis's diary entries, and published and unpublished descriptions of

34 Cf. L. Bell, "The Epigraphic Survey: Philosophy of Egyptian Epigraphy after Sixty Years' Practical Experience," in Problems and Priorities in Egyptian Archaeology, pp. 43-55.
35 Original, simpler version in Reisner, $G N_{\mathrm{I}}$, map 5.
36 For a more detailed description of the records of the Harvard-MFA Expedition, see A.M. Roth's remarks in Giza Mastabas 6, A Cemetery of Palace Attendants, pp. 4-6.
the area, it is generally possible to piece together the chronology of the excavations. While discrete areas were the focus of particular field seasons, the Expedition also returned sporadically over the years to specific tombs and streets for additional excavation, sometimes decades after the original clearance of the area. For this reason, dates have been appended to all datable photographs; a particular image could range from 1905 to 1939, or even represent a more modern comparative view dating between the i970s and the present. All original Harvard-MFA Expedition photography, as well as most of the more recent color photography, is at this writing available online on the Giza Archives Project Web site (www.gizapyramids.org).

Expedition Diaries. No diaries could be located for the years 1905-1906 when Lythgoe began clearing Cemetery g 2100. For the work of 1912, the diary of Clarence Fisher runs from January I through February 20. At that point Reisner himself took over and continued until April I, 1912, when the Expedition moved elsewhere in the Western Cemetery. Noel F. Wheeler kept the Expedition diaries marked XII and XIII for the period from August 8, 1932 until March 9, 1933. His employment for the Expedition was terminated on September I, 1933.

Reis's Diaries: In addition to the diaries kept by Reisner and his Western colleagues, the Expedition's Egyptian reises were often also recording the daily progress of the work. These trusted foremen, all trained by Reisner, included Said Ahmed Said (Diraz; reis from 1908 to 1926);37 his nephew Duwy Mahmud Ahmed (reis from 1933 to 1935); after Said's sudden death of pneumonia on February 14, 1926, during the Hetepheres excavations, Mahmud el-Meyyit (reis from i905 to 1907 and 1926 to 1931); then one of Said Ahmed's sons, Mohamed Said Ahmed (Diraz, b. February 16, I9II; d. February 25 , 2004, reis from 1936 to 1947). This son's Arabic diaries dating to the 1930s were translated into English and typed by his brother Mahmud Said Ahmed (Diraz, b. 1914; d. 1974 or 1975). Earlier Giza Arabic diaries were kept by Duwy Mahmud. Unfortunately, the English translations from the later years often omit copies of the architectural sketch plans present in the original Arabic versions. Oddly enough, none of the original Arabic diaries (covering Giza and other sites) came to Boston when Dows Dunham and William Stevenson Smith closed Harvard Camp and shipped all the archaeological archives back to Boston in 1947. ${ }^{38}$

I was fortunate to make contact with the third-oldest son of Reisner's last reis (Mohamed Said Ahmed [Diraz]) in August 2005

37 As an indication of the high esteem in which he held these diaries, Reisner wrote in a letter to MFA Director A. Fairbanks, dated July ir, 1918: "Said's merits are, however, far more than the technical skill and courage necessary to mechanical jobs. He keeps a diary which if it were the only diary of the expedition would be no mean scientific record of our work, illustrated with drawings of tombs and strata of debris, and lists of the finds. This Arabic Diary is destined to a place in the archives of the Egyptian Department of the Museum along with my Diary..." (Reisner to Fairbanks, page 4; archives of the Museum of Fine Arts, Boston).
38 My explanation for the diaries remaining in Egypt after the close of Harvard Camp in 1947 assumes that they were stored in the reis's dig house, rather than with the rest of the archaeological archives in the main buildings, and thus escaped packing and shipping by Dunham and Smith in 1947. It is difficult to believe that Dunham would not have wished to take the books home, had he known about them. But I have no reason to suspect an intentional withholding of the documentation on the part of the Diraz family. I have so far seen no references to the diaries in the post-I947 correspondence between employees of the MFA and Mohamed and his brother Mahmoud Said Ahmed Diraz.
and January 2006. 39 This man, Hagg Hassan Mohamed Said Ahmed Diraz (b. January 20, 1938), had spent ten years as a boy at Harvard Camp, and was four years old upon Reisner's death (June 6, 1942). He and his family had carefully preserved the original Arabic diaries of his grandfather, father, and first cousin. Seventy-two books had lain in storage in the family's village in el-Qella, near Quft, presumably since some time after 1947. In November of 2006, the books were obtained for the Museum of Fine Arts and shipped back to Boston. ${ }^{40}$ Forty-two books concern the Giza excavations; the rest cover Reisner's other sites in Egypt and Nubia. ${ }^{41}$ They range in date from 1913 to 1947. At this writing, the plan is to post the Arabic Giza volumes and English translations on www.gizapyramids.org, alongside their English-language counterparts. In many cases, the Arabic diaries include more information than the English versions.

Object Registers. One object from Cemetery g 2100 was recorded in 1913; otherwise everything dates to the 1930s. The Object Registers (40 x 44 cm ledger books stored in the Museum of Fine Arts, Boston) have been scanned, with their entries converted to database fields, and are posted online at www.gizapyramids.org.

Tomb Cards. These cards contain rough plans and sections of individual shafts. Skeletal positions are often sketched in. The cards are especially important since the Harvard-MFA Expedition staff decided to omit the skeletal remains on most of the final publicationready inkings made from these burial shaft tomb cards (see below).

Shaft Inkings. Many of the burial shafts were retraced and inked by the original Expedition. Shafts that were omitted usually contained no subterranean chamber, often ending at bedrock. These drawings have been redrawn for the present publication. ${ }^{42}$

Pottery and Small Object Drawings. Selected pottery and small objects were inked by the original Expedition. Many of these drawings were published in Appendix C of Reisner's $G N$ I. ${ }^{43}$

Photographic Registers. The Expedition photographs, on glass negatives housed in the Museum of Fine Arts, Boston, provide the foundation upon which all volumes of the Giza Mastabas series depend. Moreover, since the photographic metadata are in most cases intact, they are extremely useful in tracking the workflow of the Expedition and linking objects with images and register entries. In many cases, the ancient monuments have deteriorated or even

39 Mohamed Said Ahmed (Diraz) had twelve children in all. I am grateful to Giza inspector Mohamed Shiha for his assistance in locating Hagg Hassan Mohamed Said Ahmed Diraz.
40 For their assistance in relocating the diaries to Boston, I am indebted to Zahi Hawass, Secretary General of the Egyptian Supreme Council of Antiquities, his staff, and to Hagg Hassan Mohamed Said Ahmed Diraz. For their help in expediting the shipping, we thank Elhamy Boulos (Cairo), and Pat Loiko (formerly Registrar, MFA, Boston). In addition to the diaries, tomb cards with plans and sections of individual burial shafts were retrieved for the following tombs: G 2103 H, I, J, K, Y, Z, and G 2104 в and E.
4 I Images and passages referring to Mohamed and Mahmoud Said Ahmed (Diraz) may be found in W.S. Smith, "Harvard Camp, The Earliest American Archaeological Center in Egypt," Archaeology 2 (1949), pp. 194-95, and B.V. Bothmer, Egypt 1950, esp. figs. 46-48.
42 It should be noted that, in 1912, Clarence Fisher apparently devised his own system for numbering the subsidiary burial shafts, covered in Part 2 of this study.
43 Giza pottery and stone vessel typologies were published in Reisner and Smith, GN 2, Appendix I-II, pp. 60-IO2.
disappeared since these photographs were taken, hence the images have only increased in value over time. Photographic plates were given size designations (A: $18 \times 24 \mathrm{~cm}$; B: $13 \times 18 \mathrm{~cm}$; and C: $9 \times$ 12 cm ) along with their negative numbers. Photographic Registers contained descriptive information (site, date, photographer, etc.). The images from the 1905-1906 season, the most important season for Cemetery G 2100, were produced primarily by Albert Lythgoe, but rarely contain dates other than the year. The majority of the remaining Harvard-MFA photographs consulted and reproduced in this volume were taken by Expedition photographers Mohammedani Ibrahim, Mahmud Shaddûf, and colleagues. ${ }^{44}$ All of these images are also posted online at www.gizapyramids.org.

Giza Necropolis 2-3 (Unpublished Reisner Manuscripts). Reisner originally envisioned his monumental History of the Giza Necropolis continuing after volume i through volumes 2-4. On p. ix of $G N_{I}$, he outlined the contents of each of his volumes:

Giza Necropolis I (published): Chapters I-VIII
Giza Necropolis 2 (unpublished):
Chapter IX: Service Equipment of the Chapels: Statues, Offering-basins, and Vessels
Chapter X: Burials and Burial Equipment
Chapter XI: Funerary Equipment found in Burial Chambers: Canopic Receptacles, Reserveheads; Stone Vessels; Pottery
Chapter XII: Funerary Equipment found in Burial Chambers; Miscellaneous Objects
Chapter XIII: Funerary Equipment found in Burial Chambers; Miscellaneous Objects (continued)
Chapter XIV: The Masons' Lines and the Quarry-marks found in the Mastabas
Appendixes: Nucleus Mastabas in the Cemetery en Echelon and Cemetery 7000
Giza Necropolis 3 (unpublished):
Chapter XV: The Chronology of the Finished Mastabas of the Giza Necropolis;
Historical chapters on the royal family of Dynasty 4 and important families buried in the Giza Necropolis
Appendixes: Secondary mastabas in the Western Field

Giza Necropolis 4 (unpublished):
Secondary mastabas (completion) and rockcut tombs

Manuscripts for many of these chapters are preserved in the Museum of Fine Arts, Boston, and are posted on www.gizapyramids .org. Reisner's publication scheme was confused somewhat when, after his death, William Stevenson Smith published the tomb of

44 For more information on the photographic operations of the Harvard UniversityMuseum of Fine Arts, Boston, Expedition, see the author's edited version of one chapter from Reisner's unpublished manual on archaeological fieldwork: "George Andrew Reisner on Archaeological Photography," JARCE 29 (1992), pp. i-34.

Hetepheres ( G 7000 x ) and Giza pottery and stone vessel typologies under the rubric of Giza Necropolis 2. Thus, there is a published volume Giza Necropolis 2 (Hetepheres, by the [deceased] Reisner and Smith), and a completely separate, unpublished manuscript by Reisner called Giza Necropolis 2 outlined above, as well as manuscripts for Giza Necropolis 3 and 4. These are all abbreviated below as Reisner, GN.

Most of the summary descriptive material for the Cemetery G 2100 tombs in the present volume derives from six principal sources: the published Appendix C from GNI (pp. 417-53, major mastabas only), Appendix M-N from Reisner's unpublished $G N_{3}$ (pp. 7a-36b, subsidiary mastabas G 2IO2 to G 2157), Appendix A from the unpublished Cemetery en Echelon manuscript of $G 一 N_{3}$ (pp. 72-87, subsidiary mastabas from G 216I onwards), Reisner's separate "List of Finished Mastabas" manuscript (pp. 22-25), miscellanous manuscripts and notes, and supplementary work at Giza undertaken in recent years.

Original Expedition Plans and Drawings. In A History of the Giza Necropolis I, Reisner published a series of loose maps surveyed and drawn by Alexander Floroff and traced by Nicholas Melnikoff. Map 5 (now numbered egoozo28 on the Giza Archives Project Web site) from $G N_{\text {I }}$ is the main plan for Cemetery g 2IOO, although it is not without problems, and does not include the minor mastabas from G 2165 onwards. It has been modified somewhat in the present work (fig. 2.5), and now includes outline plans of the subterranean burial chambers for the major mastabas, as well as mastabas omitted from the original (primarily in the southern part of the cemetery). Additional maps and plans critical to the study of Cemetery G 2100 include the "Map of Cemetery en Echelon" for the eastern groups of tombs G 2165-2179 and G 222I-2225 (EGOOO498), a preliminary plan showing the row of subsidiary burial shafts west of G 2 IIO and their relation to G 2051-2054 (figs. 6.4-6.5, 6.1I7) and "Map of Cemetery 2000" (EGOOO497) for the street west of the cemetery, including the related tombs G 204I, G 2051, and G 2052 (not published here).

In addition to architectural plans and sections, a large number of three-dimensional object and two-dimensional wall and stela drawings round out the original Harvard University-Boston Museum of Fine Arts Expedition archival materials. Many of these have been redrawn, especially in those cases where the original wall or object (in Boston or Cairo, or at Giza) was accessible for study and collation. In other cases, the reproduction of original Expedition drawings or, failing those, rough sketches based on Object Register entries, were the only options. Wherever possible, digital epigraphy was the method of choice for rendering facsimile illustrations. ${ }^{45}$ No ink was used for the vast majority of the drawings in both Parts I and 2 of the present work. For wall scenes and inscriptions, reduction scales are generally 20 percent. In a few cases, however, additional reduction was necessary due to space constraints.

Original Expedition Skeletal and Vessel Typology and Terminology. Summaries of Reisner's descriptions of the individual mastabas, from both published and unpublished sources, are provided in the chapters below. These descriptions include some of

45 This method is described in Manuelian, "Digital Epigraphy: An Approach to Streamlining Egyptological Epigraphic Method," JARCE 35 (1998), pp. 97113 and idem, "Digital Epigraphy at Giza," Egyptian Archaeology 17 (Autumn, 2000), pp. 25-27.
his abbreviations and terminology. For positions of skeletal remains, Reisner employed the following abbreviations:

| TERM | EXPLANATION |
| :--- | :--- |
| csk | contracted body on the left side, with head facing north |
| tcsk | tightly contracted on left side, with head facing north |
| lcsk | leg contracted on the left side, with head facing north; <br> heels brought up under and near the buttocks |
| hcsk | half contracted on left side, with head facing north; legs <br> bent slightly at the knees <br> extended skeleton, body on the back, with legs straight, <br> and head facing north |
| exsk |  |

Reisner's ceramic and stone vessel typologies were published after his death in Reisner and Smith, GNI, Appendices I and II. In recent years, several new ceramic publications have substantially improved upon Reisner's system. ${ }^{46}$

The Giza Archives Project and New Giza Tomb Numbers. Since late 2000, a project funded by the Andrew W. Mellon Foundation at the Museum of Fine Arts, Boston, has been preserving and presenting the Giza archives on the Internet. The Project's mission is to serve as a centralized online repository for all archaeological activity at the Giza Necropolis, beginning with the Harvard University-Boston Museum of Fine Arts excavations. ${ }^{47}$ In recent years the Project has initiated its international phase, collaborating with all of the world's major Giza collections and archives in Berkeley, Berlin, Cairo, Hildesheim, Philadelphia, Leipzig, Turin, and Vienna. ${ }^{48}$ Many of the images and drawings in the present volume are also posted on the Giza Web site, and many more images and documents not reproduced here are available for study there. These online items are cited in the pages below with the photographic ID numbers or file names under which they may be found on the Giza Archives Project Web site. ${ }^{49}$ While the URL for the site will most likely change in years to come as the Internet evolves, the ID numbers of individual items should remain intact, as should access to the data online.

One of the goals of the Giza Archives Project is to organize those parts of the necropolis that lack consistent tomb numbers.

46 A. Wodzińska, A Manual of Egyptian Pottery, v 2: Naqada III-Middle Kingdom. See also Hawass and Senussi, Old Kingdom Pottery from Giza.
47 See Manuelian, "Virtual Pyramids-Real Research. The Giza Archives Project Goes Live Online." KMTI6 (2005), pp. 68-8o; idem, "Das "Giza-ArchivProjekt," Sokar io (2005), pp. io-17; and idem, "The Giza Archives Project," Egyptian Archaeology 28 (2006), pp. 3I-33.
48 For their tireless collaboration, expertise, and encouragement, the Giza Archives Project staff are deeply indebted to the late Cathleen A. Keller, Joan Knudsen, and Elizabeth Minor (Berkeley); Dietrich Wildung, Klaus Finneiser, Stephan Seidlmayer (now DAI, Cairo) and Stefan Grunert (Berlin); Zahi Hawass and Wafaa el-Saddiq (Cairo); Katja Lembke, Bettina Schmitz, and Antje Spiekermann (Hildesheim); Hans-Werner Fischer-Elfert and Friederike Kampp-Seyfried (Leipzig and Berlin); David P. Silverman, Josef Wegner, and Jennifer Houser Wegner (Philadelphia); Eleni Vassilika, Giovanni Bergamini, Matilde Borla, and Elisa Fiore Marochetti (Turin); and Manfred Bietak, Peter Jánosi, and Regina Hölzl (Vienna).
49 Junker himself followed a similar practice, often citing his expedition photographs by their ID numbers, even though they remained unpublished images omitted from his Gîza volumes; see, for example, his Gîza 2, pp. 138-39; Gîza 6, pp. 88, 91-92, 94, 100, 103, I28, and I54-55.

Working with the SCA in Egypt, Giza Archives Project staff have created new tomb numbers for several previously unnumbered zones. ${ }^{50}$ In particular, the Central Field, excavated by Selim Hassan, has now been named Cemetery G 8000, and scholars have begun citing these tombs under their new numbers. ${ }^{51}$ In Cemetery g 2100, covered in the present volume, several tombs, mostly those of the Junker concession, have received new numbers. A concordance chart is provided below.

| Previous tomb designation |  |
| :--- | :--- |
| Qedfy | New Giza tomb number |
| Djednefret | G 2135a |
| Nimaatre | G 2136a |
| G 2136 (Reisner tomb; not Kahif) | G 2136b |
| G 2156 (Redines; not Kaninisut II) |  |
| Kaninisut III | G 215 $6^{\prime}$ |
| Irienre | G 2156a |
| Ankhmare | G 2156b |

3D Computer Modeling. As an outgrowth of the Giza Archives Project work listed above, recent work in 3 D computer modeling have allowed for unique, reconstructed views of the Giza Necropolis and, in particular, selected mastabas of Cemetery G 2100 (figs. I.I2-I.I5, 2.6-2.9, and Chapters 3-6, I3). In contrast to some archaeological modeling projects, which aim at hypothesized architectural models, these reconstructions are based on the actual excavation images and data collected by the original Giza expeditions, and supplemented by extensive Egyptological consultation. Thus each loose block, ceramic vessel, and bone fragment could be plotted in ${ }_{3} \mathrm{D}$ on the floor of a burial chamber in exactly the position recorded by excavation photography as early as 1905-1906 (see figs. I.I2-I.I3). Simulations and reconstructions, such as the restoration of statues to their original serdabs, are of course, also possible. Produced as a collaboration between the Museum of Fine Arts, Boston, and Dassault Systèmes, Paris, the Giza computer model displays spatial relationships between Giza features, both above and below ground, that previously could not be visualized in three dimensions. This process will evolve and improve over time as we attempt to create new types of real-time interfaces and research approaches to the Giza data. Sample rendered images from the Giza computer model are included in the present volume for mastabas G 2100, G $2100-\mathrm{I}$, G $2100-\mathrm{II}, \mathrm{G} 2110$, and G 2155 .

Principles of Chapel Description. For tombs with extensive amounts of relief decoration, a system was sought for describing consistently the sequence of walls and scenes. The description procedure outlined below is based, with some abbreviation and
so I am particularly grateful to Zahi Hawass, Secretary General, and Mohamed Shiha, chief inspector at Giza, both of the Supreme Council of Antiquities, for their permission, support, and encouragement in our efforts to (re)number selected Giza mastabas.
sI See, for example, P. Jánosi, "'...an intact burial-chamber belonging to a great lady of the Royal Family of the Fourth Dynasty' oder: Wo waren Chephrens Töchter bestattet?", in "Fs. Schmitz, pp. 131-39.


Fig. I.I2. Sequence of images showing the computer modeling process, from excavation photograph of burial chamber of G 2100 A (top; 19051906, HU-MFA Expedition photograph, A.M. Lythgoe, B893), to wireframe build (center), to final rendered image, which can be rotated in real time (bottom). Reconstruction based on original HU-MFA Expedition data. Courtesy Dassault Systèmes, 2009.

modification, on W. Schenkel and K.P. Kuhlman, Das Grab des Ibi I, p. 9ff:

Entrance (architrave, drum, etc.)
South entrance thickness
North entrance thickness
South (right) facade
North (left) facade
East Wall
South Wall
North Wall
West Wall
I. W-P rule

The whole is described before its parts. Architectural features are described before the decoration added to them. The decorated wall surfaces of a room are treated in a series of steps from the whole to its parts.
2. O-I rule

The outside is described before the inside. Decorated walls are treated in order, beginning with the wall containing the entrance door, and ending with wall containing the exit door, or, if there is no exit door, then the wall farthest (across) from the entrance door wall.
3. C-E rule

The center is described before the edges on self-contained elements such as a false door.
4. A-B rule

Scenes and registers above are generally described before those below.
Text-critical key:

| $[\ldots]$ | destroyed |
| :--- | :--- |
| <... | omitted by the Egyptians by mistake |
| $\{\ldots\}$ | added by the Egyptians by mistake |
| $(\ldots)$ | approximate translation/restoration |
| tr/trs | traces |

Fig. i.I3. Sequence of images showing the computer modeling process, from excavation photograph of burial chamber of G 2100 A (top; January 5, 1936, HU-MFA Expedition photograph, Mohammedani Ibrahim, A7363), to wireframe build (center), to final rendered image (bottom). Reconstruction based on original HU-MFA Expedition data. Courtesy Dassault Systèmes, 2009.


Fig. I.I4. Wireframe computer images for reconstructing the G 2100 family complex (looking northwest), based on original HU-MFA and GermanAustrian Expedition plans and survey data. Courtesy Dassault Systèmes, 2009.


Fig. I.15. Rendered computer model of the G 2100 family complex (looking northwest), based on original HU-MFA and German-Austrian Expedition plans and survey data. Courtesy Dassault Systèmes, 2009

## Chapter 2 <br> ARCHITECTURAL HISTORY AND CHRONOLOGICAL DEVELOPMENT

## The Three Initial Nucleus Cemeteries in the Western Cemetery

Well into Khufu's reign, plans were underway for the layout and development of the Giza Necropolis (figs. 2.I-2.2, 2.5). In addition to the construction of the Great Pyramid itself, most likely organized and overseen by Hemiunu, ${ }^{1}$ several discrete mastaba clusters were constructed in the areas east and west of the pyramid construction site. The Eastern Cemetery was reserved primarily for members of the royal family, while the Western Cemetery came to hold the tombs of the governing classes and high officials. In the early twentieth century, George Reisner identified these separate areas as core, or nucleus, cemeteries. The distinguishing feature of a nucleus cemetery lies in the similar proportions and construction of the individual mastabas, along with their arrangement in a wellordered, preconceived layout. ${ }^{2}$ In the Western Cemetery, Reisner distinguished three initial nucleus cemeteries, and he numbered them Cemetery G I200, G 2100, and G 4000 (fig. 2.2).

It remains a matter of debate whether there is an earliest or most important nucleus cemetery. Could construction have continued in these separate areas simultaneously? Even the reasons behind specific owners obtaining specific mastabas (royal assignment? personal choice?) is unresolved. Nevertheless, our picture of the development of the Giza Necropolis is slowly coming into focus, thanks to publications in recent years by Simpson, Roth, Baud, Brovarski, Harpur, Hawass, Weeks, Jánosi, Lehner, and others. ${ }^{3}$ These scholars, as well as the present author, owe an immense debt to their predecessors-Reisner, Hermann Junker, Selim Hassan, and Abdel Moneim Abu-Bakr-for providing the foundation upon which recent advances have built.

I Cf. W. Helck, "Hemiunu," LÄ 2, col. III7; B. Schmitz, in Eggebrecht, Das Alte Reich, pp. 36-38; Junker, Gîza I, pp. 132-62.
2 Reisner, GNi, pp. 77-8o; Jánosi, Die Gräberwelt der Pyramidenzeit, pp. 4859; Lehner, "The Development of the Giza Necropolis: The Khufu Project," MDAIK4I (1985), pp. 109-43; idem, "Giza. A Contextual Approach to the Pyramids," $A f O_{32}$ (1985), pp. 136-58. For Khufu's queens and their satellite pyramids, see Jánosi, Die Pyramidenanlagen der Königinnen, pp. 9-19.
3 For many of these Giza publications, the reader is referred to the bibliography. More recent studies are either in print or in preparation by V. Chauvet, L. Flentye, S. Winlaw, Y. Shirai, and M. Farouk.

A number of features identify the nucleus cemetery tombs as the earliest in the Western Cemetery. The presence of slab stelae at Giza, precursors to decorated niches and interior and exterior chapels, is usually a clear indicator of Khufu-era tomb occupation. ${ }^{4}$ Furthermore, stone-lined burial chambers, canopic pits, and reserve heads, rarely found after the reign of Khufu, abound in the earliest Western Cemetery tombs. ${ }^{5}$ Of the three earliest nucleus cemeteries, ${ }^{6}$ Cemetery g 4000, with its forty-one core mastabas, is the largest and most regularly laid out, occupying an area of solid, level rock that is centrally located relative to the axis of the Khufu Pyramid. ${ }^{7}$ While Cemetery G 4000 could have formed the original nucleus cemetery to the west of the king's mortuary complex, it is equally possible that we should rather seek the earliest Western Cemetery construction further away from the pyramid, owing to the debris, scaffolding, masonry work, and general constructional chaos that must have surrounded the immediate vicinity of the royal construction site. If distance from the pyramid were the overriding concern for the Egyptian tomb-builders, then Cemetery G izOO is the prime candidate for earliest nucleus cemetery. The preponderance of slab stelae and stone-lined burial chambers found there, both of them Khufu-era features, might seem to confirm this interpretation. ${ }^{8}$ As the numbers of blocks and personnel needed for the rising pyramid declined, the mastaba fields could have encroached eastwards, towards the less encumbered royal construction site. 9

The third early nucleus cemetery, numbered g 2IOO, forms the subject of the present volume. ${ }^{\text {IO }}$ The least regular of all three cemeteries, it nevertheless shares features with Cemeteries G I200 and G 4000 . For example, at least three slab stelae and one reserve head were unearthed there, and a number of tombs display stonelined burial chambers. The general sizes of the mastaba cores are similar to the those of the other nucleus cemeteries, and evidence for expansion, annexes, and other alterations are abundant. However, Cemetery g 2100 contains one unique feature that associates it with the period prior to Khufu's reign; it thus forges a link to the past that no other area at Giza can claim. The shafts leading to the burial chambers in the five earliest mastabas depart from standard Giza practice by displaying portcullis grooves at their southern ends. Allowing for the portcullis stone to slide down over the southern entrance passage to the burial chamber to seal the burial chambers, these portcullis grooves create a T-shaped burial shaft in plan view, a feature found earlier at Meidum and Dahshur, but nowhere else

4 Manuelian, Slab Stelae, passim; Jánosi, "The Tombs of Officials. Houses of Eternity," in Egyptian Art in the Age of the Pyramids, pp. 27-39.
5 Reisner, GNI, pp. 64-65, IO5; Jánosi, Giza in der 4. Dynastie, pp. 52-58.
6 Excluding the clearly later Cemetery en Echelon, at the eastern edge of the Western Cemetery; see Jánosi, "Old Kingdom Tombs and Dating—Problems and Priorities: The Cemetery en Echelon," in The Old Kingdom. Art and Archaeology, pp. 175-83.
7 The massive mastaba cores of Cemetery G 4000 represented for Reisner the most influential branch of Khufu's family, Reisner $G N$ I, pp. 77-78.
8 W. Helck also believed Cemetery G i200 to be the earliest nucleus cemetery, "Miszelle," ZÄS 8i (i956), pp. 62-65.
9 The last area to be developed in the Western Field, the so-called Cemetery en Echelon, is actually the closest to the Great Pyramid.
io Some summary remarks on this cemetery were offered in Manuelian, "A Reexamination of Reisner's Nucleus Cemetery Concept at Giza: Preliminary Remarks on Cemetery g 2100," in The Old Kingdom Art and Archaeology, pp. 22I-30.




Fig. 2.3. T-shaped portcullis groove in a burial shaft at Meidum, after J. de Morgan, Fouilles à Dahchour I, p. 9, figs. 3-4.

Fig. 2.2. Western Cemetery from threequarters of the way up the Khufu Pyramid, showing the three earliest nucleus cemeteries marked in colors. December 23, 1927. HU-MFA Expedition photograph, Mohammedani Ibrahim, A4874.


Fig. 2.4. T-shaped portcullis groove in the shaft of tomb $\mathrm{II} / \mathrm{I}$ at Dahshur, after N. Alexanian, Kunst des Alten Reiches, p. 2, fig. i.


Fig. 2.5. Overview plan of Cemetery g 2IOO, based on Reisner's Map 5 from $G N_{\text {I }}$ (EGOO2028), with additions to the east from the unpublished Cemetery en Echelon plan (EGOOO498), and various other sources. Original plans drawn by Alexander Floroff and traced by Nicholas Melnikoff. 2008 Survey by A. Tavares, El Azab A. Hassan, and Sayed Talbeah, combined with GIS referencing and rectification by Camilla Mazzucato (Ancient Egypt Research Associates).

at Giza (figs. 2.3-2.4, and remarks below). ${ }^{\text {II }}$ This feature most likely indicates a construction tradition imported by Khufu's, or his father Snefru's, architects from the earlier necropoleis to Giza, a tradition that was only later replaced by square burial shafts lacking the two portcullis stone grooves. The transition from the older T-shaped to the newer square burial shafts may be seen within Cemetery G 2100 itself, in the two halves of the cemetery: the earlier western mastabas (T-shaped shafts) versus the later eastern mastabas (square shafts).

Who were the original owners of these nucleus cemetery tombs? Were they members of separate branches of the royal family? ${ }^{\text {? }}$ Helck argued in 1956 that the three nucleus cemeteries were not representative of royal family branches, since several individuals buried in Cemetery G i200 were clearly not princes. He viewed the owner of the most prominent mastaba in each of the three nucleus cemeteries as the founder of the mastabas in that area:

Kern und Ausgangspunkt der Mastabengruppen ist die schon durch ihre Größe hervorgehobene Anlage eines hohen Beamten der Bauleitung, der in dieser Zeit natürlich noch ein Prinz sein muß: Wp-m-nfr.t, Hm-jwnw und wohl auch der Vater des Mrj$j$ b. An diese "Kernanlagen" anschließend sind die Mastaben für die Angehörigen des "Stabes" angelegt, wobei deren Gattinnen eigene Anlagen erhielten. Ein Unterschied zwischen Prinzen und Nichtprinzen wird hier nicht gemacht. ${ }^{13}$

Contrary to previous publications on Cemetery g 2IOO, our research has shown that the owner of G 2100, identified as the father of Merib by Helck, Reisner, Priese, and others, may well be a woman, hence Merib's mother, Sedit. It would be interesting to know if a woman had equal authority to "found" a nucleus cemetery as did a man in early Dynasty $4 .{ }^{14}$

Other attempts to understand the development of the Western Cemetery have included archaizing reuse of an earlier burial site, ${ }^{15}$

II See Mastabas I/I and II/I at Dahshur: Alexanian, Das Grab des Prinzen Netjer-aperef, fig. 4, pl. 2; Stadelmann, Alexanian, Ernst, Heindl, and Raue, "Pyramiden und Nekropole des Snofru in Dahschur. Dritter Vorbericht über die Grabungen des Deutschen Archäologischen Instituts in Dahschur," MDAIK 49 (1993), p. 273 fig. Io, p. 277, esp. 278 n. 40, and p. 279 fig. 12; also Alexanian, "Die Mastaba II/I in Dahschur-Mitte," in Kunst des Alten Reiches, esp. pp. I-3. For Meidum, cf. Petrie, Medum, pl. 7; Petrie, Mackay, and Wainwright, Meydum and Memphis 3, pls. 17-18 ("Far Western Cemetery;" Harpur, The Tombs of Nefermaat and Rahotep at Maidum, pp. 51-52; De Morgan, Fouilles à Dahchour I, fig. 3; cf. in general, Wildung, "Meidum," in $L \not \ddot{A}_{4}$, esp. cols. I2-I3; and for a brief announcement of a Dynasty 4 shaft found within the Dynasty 12 mastaba of Nebit that also bears the T-shaped form, see Arnold, "Die letzte Ruhestätte ägyptischer Beamter," Antike Welt 6 (2002), pp. 628-29. On different aspects of portcullis construction and deployment, see Reisner, $G N \mathrm{I}, \mathrm{pp}$. 168-75; Jánosi, Die Gräberwelt der Pyramidenzeit, p. 36 fig. 29, p. 48 fig. 4I, p. 52 fig. 45. Arnold, Building in Egypt, pp. 73-74, 226-27, Clarke and Engelbach, Ancient Egyptian Construction and Architecture, pp. 7, 168, and Birrell, "Portcullis Stones: Tomb Security during the Early Dynastic Period," BACE in (2000), pp. 17-28.
12 Reisner, $G N$ I, pp. 66-70.
13 Helck, Wolfgang. "Zur Entstehung des Westfriedhofes an der Cheops-Pyramide." ZÄS 8i (1956), p. 65.
14 Cf. Kemp, "Old Kingdom, Middle Kingdom and Second Intermediate Period, c. 2686-1552 B.C.," in Trigger et al., Ancient Egypt. A Social History, p. 79. Junker first suggested that G 2100 might belong to Merib's mother, since she appears in his mastaba chapel immediately to the south; Junker, Gîza 2, pp. I22, 131-32.
15 See Schott, "Friedhofsbräuche in Giza," in Studien zu Sprache und Religion Ägyptens 2, pp. 1121-30.
something Reisner himself noted in limited areas, such as the Senedjemib complex. ${ }^{16}$

It should be remembered that early construction of a mastaba core and its ultimate occupation were rarely simultaneous events. There was often considerable lag time between the various construction stages of the mastabas. Mastaba core construction formed step one, followed by the excavation of burial shafts, the potential addition of casing of various types, and the addition of annexes, niches, and chapels. In many cases, an interior chapel was subsequently broken into the originally solid core; in others, stone or mud-brick chambers were built in the street and appended to the mastaba superstructure. ${ }^{17}$ These facts suggest that the only way to understand the development of the Giza necropolis is in terms of "prefabricated" mastaba construction, in other words, the carefully planned and organized layout of discrete nucleus cemeteries, and then their subsequent assignment to actual individual families or officials. ${ }^{18}$ It was only after a mastaba core was assigned to an individual that decisions were made concerning enlargements, casing types, chapel form and decoration, and the number of burial shafts. All of these issues were most likely settled according to the status and resources of the prospective mastaba owner. ${ }^{19}$ Additional support for this interpretation comes from the occasional termination of (unfinished) burial shafts at ground level, at the bottom of the mastaba core. This indicates that while the upper portion of the shafts in the mastaba core were constructed as the core rose, the subterranean portion of the shaft was a task reserved for later. ${ }^{20}$ The developmental history of the major mastabas of the Western Cemetery is one of construction, expansion, and alteration. Cemetery G 2 IOO displays its share of use, reuse, and abuse, of multiple phases and eras, from the reign of Khufu into the Fifth and most likely the Sixth Dynasties. In fact, the long delays between construction and decoration/occupation, as well as the unfinished state of so many of the mastabas may indicate that many of the ultimate owners of Cemetery G 2100 tombs were not Khufu-era individuals at all.

## Cemetery G 2IOO: General Remarks

Like many tomb clusters in the Western Cemetery, the mastabas of Cemetery g 2Ioo generally developed from west to east, moving closer to the Khufu Pyramid. The twelve core mastabas of this nucleus cemetery were placed on sound but uneven rock, perhaps the worst of the three nucleus cemetery locations, as far as a regular, graded foundation was concerned. East of the depression between the east face of the great anonymous mastaba G 2000 (= Lepsius 23) and the western edge of Cemetery G 2100, the rock slopes downward gently to the east and north. The builders of Cemetery G 2IOO packed

16 Cf. Reisner, "Note on Overbuilding and Intrusive Burials at Gizah," JEA 23 (1937), p. 260. The first volume of the Senedjemib complex mastabas, at the northwest corner of the Great Pyramid (G 2370, G 2374, and G 2378) was published by Brovarski, The Senedjemib Complex (Giza Mastabas 7).
17 In Cemetery G 2100, eight tombs show alterations to the original mastaba core (G 2110, G 2120, G 2130 , G 2210 , G 2140 , G 2150 , G 2155 , G 2220 ), while four do not (G 2100, G 2135, G 2160, G 2170). For useful charts on the development of Giza mastaba types, see Jánosi in Egyptian Art in the Age of the Pyramids, p. 31, fig. 15; idem, Giza in der 4. Dynastie, p. 277, fig. 61; idem, Die Gräberwelt der Pyramidenzeit, p. 55, fig. 47.
18 Cf. Junker, Gîza I, p. 38; Jánosi, Giza in der 4. Dynastie, p. 281 with n. 1784.
19 See Alexanian, "Tomb and social status. The textual evidence," in The Old Kingdom Art and Archaeology, pp. I-8.
20 Cf. Reisner, $G N_{\mathrm{I}}$, p. 85.


Fig. 2.6. Computer reconstruction of the mastabas of the G 2100 family complex, looking northwest; from right to left: G 2100 (Sedit), G 2100-I (Merib) and G 2100-II (Nensedjerkai). Courtesy Dassault Systèmes, 2009.
the streets and avenues with limestone debris (from the construction of the pyramid itself?) level with the floors of adjacent chapels and mastaba casings.

As he did throughout the necropolis, Reisner labeled the northsouth corridors between the mastabas "streets," while the east-west passages he designated as "avenues." ${ }^{21}$ The north-south running streets I to 3 (counting from the west) in Cemetery G 2 IOO measure $6.4,6.2$, and 6.8 m in width respectively. This averages to 6.4 m , in comparison with 6 m for Cemetery G I200, 6.7 m for Cemetery G 4000, and 5 m for the later Cemetery en Echelon at the eastern edge of the Western Cemetery. The avenues of Cemetery G 2 IOO (running east-west) range from 6 to $6.4 \mathrm{~m} .{ }^{22}$

The uncertainties of tomb-number assignments during an ongoing excavation resulted in Reisner's numbering the two large mastabas at the northern edge of the area under discussion in the 2200s, rather than 2IOOS, as if they were part of a separate cemetery. It later became clear that they belonged to Cemetery g 2100. The present volume includes these tombs (G 2210 and G 2220), and also
refers to a few others out of the 2100 sequence. G 2220 remains one of the most problematic tombs of the group. ${ }^{23}$

A brief introductory list of the major mastabas and mastaba owners, grouped by tomb number, follows below. For more exhaustive remarks, the reader is directed to the individual mastaba chapters in Part 2.

## Summary of the Original Twelve Mastabas of Cemetery g 2 IOO

g 2ioo, Sedit (Mother of Merib)
Little is known about the owner of this uncased mastaba, but he or she is presumed to be the founder of the family complex that came to consist, in chronological order and from north to south, of G 2100; G 2100-I, the tomb of Merib; and G 2100-II, the tomb of Merib's daughter, Nensedjerkai. Each of the three tombs of this family complex is treated separately in its own chapter below. G 2IOO

[^3]23 There are additional mastabas bearing numbers in the 2100s, but these are clearly later constructions, further to the east of the nucleus cemetery under discussion here. Examples include G 2184, the mastaba of Akhmeretnisut; G 2190; and others.


Fig. 2.7. Computer reconstruction of the burial shaft arrangement for the G 2100 family complex, looking east towards the Khufu pyramid. From left to right (north to south): G 2IOO A, G 2IOO-I B, G 2IOO-I C, and G 2100-II A (with sarcophagus). Courtesy Dassault Systèmes, 2009.
thus forms the first of this unique and contiguous family complex. Only the gender of the skull and scattered bones found in shaft a allow us to determine that the owner was female, most likely the mother of Merib, Sedit, who is represented several times in her son's tomb chapel. No decoration of any kind survived from G 2100 proper. A slab stela emplacement is present towards the south end of the mastaba's exterior east wall, but no stela or stela fragments are known. ${ }^{24}$ Whatever form the mud-brick chapel built in front (east) of the stela once took has also disappeared beneath subsequent minor tomb construction.

G 2iIO, Nefer
One of the most intriguing tombs of the entire Western Cemetery belonged to Nefer, whose many titles included overseer of royal scribal writing equipment, scribe of the palace, overseer of every royal ornament, controller of regiments(?) of recruits, overseer of the double storehouse of provisions, overseer of the weapons house (armory?), great one of the tens of Upper Egypt, overseer of the double treasury, master of secrets of the king in every place, and keeper of

24 Some of the Harvard-MFA Expedtion records refer to a slab stela fragment (MFA 33-2-187) containing the lower torso and legs of the seated tomb owner that was once thought to belong to this emplacment of G 2100 . But this is actually the lower left fragment of the slab stela of Seshatsekhentiu from G 2120 (MFA 06.1894); see Manuelian, Slab Stelae, pp. 77-78, fig. 102.
the king's property/royal acquaintance. ${ }^{25}$ This tomb is one of the few to show completed casing stones with the subsequent addition of an exterior stone chapel. The decoration on three of the four chapel walls provides us with Nefer's identification, as well as that of his wife, the mitrt Wenankhes, incorrectly restored to "Meresankh" in many earlier publications, and by extension incorrectly assumed to be the mother of Kanefer, the owner of G $2150 .{ }^{26}$ No children or parents are represented, however, and Nefer's genealogy thus remains obscure. One of Nefer's scribes, however, Senenuka, possessed tomb G 2041 just to the southwest of mastaba G 2IIO. Nefer's burial shaft contained Cemetery G 2IOO's only reserve head (MFA 06.1886; figs. 6.90-6.100). This fact, plus the existence of portcullis grooves in the shaft, and the tomb's location in the earlier, western half of Cemetery G 2IOO, speak for its early date. It may also have once possessed a slab stela, prior to the later construction of its exterior stone chapel. ${ }^{27}$ However, several anomalies suggest its final

25 As noted elsewhere the original reading of rb nswt was iry-bt nswt; see Brovarski, The Senedjemib Complex, p. 24, n. 55 with important bibliography. For the sake of convenience, the later interpretation of the title ( $r b n s w t$, "royal acquaintance") is used throughout the present publication.
26 Correct "Meresankh" to read "Wenankhes" in the following publications: Reisner, GNI, p. 422; Baer, Rank and Title, p. 146 [536]; Jánosi, Giza in der 4. Dynastie, p. 123; PM III, p. 72; Harpur, Decoration, p. 286 (table 2.3); Piacentini, Les scribes, pp. 97-98. The correct reconstruction of Wenankhes's name was first discovered by Fischer, Varia, pp. 31-32.
27 See the discussion of fragment 38-2-3 below in the chapter on G 2IIO.


Fig. 2.8. Computer reconstruction of mastaba G 2IIO (Nefer), looking southwest. Courtesy Dassault Systèmes, 2009.
occupation and use under Nefer date posterior to Khufu's reign. The burial chamber is not lined, no canopic niche is present, and the decoration of the chapel extends far beyond the simpler slab stela decoration program favored in Khufu's reign.

## g 2I20, Seshatsekhentiu

Larger than either G 2IOO or G 2IIO, mastaba G 2120 belonged to a man named Seshatsekhentiu. No titles survive on his fragmentary slab stela, which, apart from a few granite sunk-relief fragments bearing $h r y-t p$ and $\ldots t y w,{ }^{28}$ give the only indication of the tomb's ownership. Mud-brick offering rooms were replaced by an exterior stone chapel and the addition of an (unfinished) monolithic false door, while massive casing blocks served to wall up the earlier slab stela. North of the false door, a painted mason's graffito bore the date rnpt-sp I2, II šmw..., generally attributed to the reign of Khufu. To the south, Merib's daughter, Nensedjerkai, built the enclosed portico to her unusual mastaba-directly abutting, and thus post-dating Seshatsekhentiu's casing stones.

## G 2130, Khentia

This mastaba, the second-largest and certainly one of the oldest of Cemetery g 2100, is primarily noteworthy as the only tomb to receive solid limestone fill blocks, rather than loose debris, in its mastaba core. It was clearly intended for an important individual, and received a northern extension, presumably for the construction of an additional shaft and burial chamber. An interior stone chapel was added during the casing alterations, and severely damaged decorated surfaces here hint at the high quality of the relief carving, as well as at the tomb-owner's name. Fragmentary texts on the chapel's sole false door preserve bunt in one place and $k_{3}$ in another, suggesting the name Khentka (or Kakhent). The titles ss nswt and $s m r$ [ $\left.w^{〔} t y\right]$ are also preserved here, although the tomb's location in the Western (rather than Eastern) Cemetery casts doubt on Khentka's royal lineage. Seal impressions (32-I2-6) ending in $\ldots w$ from the debris of shaft A

[^4]have most often been linked with [ $H \cdot r$ Md $d] w$ (Khufu). Moreover, a graffito bearing $r m p t-s p$ 4? on a dressing stone on the mastaba's west side is usually associated with Khufu's reign.

G 22IO, Anonymous
No information on the owner of this mastaba has survived. While the original form and dimensions are typical for a Khufu-era mastaba, a massive extension with giant limestone blocks considerably enlarged the superstructure to the north and east. The recess among the massive boulders is all that remains of what was intended as an interior chapel in the new configuration, but its precise layout can no longer be determined. Moreover, shaft a contains not one but two burial chambers, indicating multiple construction phases. The principal chamber is among the largest of Cemetery G 2IOO, and bears numerous quarry marks on the stones blocking the passage between the shaft and the burial chamber.

G 2135, Anonymous
Along with G 2100-II (Nensedjerkai) and G 2155 (Kaninisut I), G 2135 lies south of the east-west boundary line dividing Reisner's American concession to the north from Junker's German-Austrian concession to the south. No substantial changes to this uncased mastaba are evident after the initial construction of the core and preparation of a slab stela emplacement and exterior mud-brick chapel. Unfortunately, the emplacement is no longer visible, and only a single slab stela fragment emerged from the debris, bearing neither name nor title(s) of its owner. Therefore there is little that can be said about the ownership history of G 2135, other than that it appears to form a transitional tomb between the earlier western half and later eastern half (its actual location) of Cemetery g 2IOO. The Dynasty 6 addition of G 2136 , the multi-shaft tomb of Kahif, to the north side cannot be linked genealogically to G 2135 .

G 2140, Anonymous
Alterations to this mastaba include the construction of an interior stone chapel. However, the only decoration is a partially carved architrave on the chapel's single false door. The inscription terminates before listing the name and title(s) of the tomb owner. The tomb contains a single burial shaft.

## G 2150, Kanefer

Kanefer's mastaba is the only one in its street (comprising G 2135, G 2140, and G 2220) to bear enough decoration to reveal the name of its owner. Exterior casing, a north niche, and an interior chapel with a serdab were all added to this mastaba core, which clearly belongs to the second, later half of Cemetery g 2ioo's core mastabas. Along with the tomb of Merib (G 2100-r; chapel removed by Lepsius to Berlin), G 2150 is the only mastaba to display decoration on its exterior facade, with carved scenes in raised relief still in place on either side of the chapel entrance. Inside the chapel, all four walls are carved, thus ranking Kanefer's as one of the very few tombs whose decoration could be called "finished." For purposes of dating, the tomb provides our clearest example of a terminus ante quem non, in that both Khafre's and Menkaure's cartouches are present in funerary estate place names on the chapel's east wall. Despite the original construction of the core under Khufu, the final occupation of the tomb most likely dates to early Dynasty 5. Kanefer is also the only core mastaba owner to add a serdab and a second burial shaft, to the west of his chapel. The two shafts might be thought to


Fig. 2.9. Computer reconstruction of mastaba G 2155 (Kaninisut I), looking southwest, including the adjoining subsidiary mastabas G 2156 (Kaninisut II) to the east and G 2156a (Kaninisut III) to the north. Courtesy Dassault Systèmes, 2009.
correspond well to the two false doors in his chapel (similar to Merib's arrangement in G 2100-I), but for the fact that they both appear to be inscribed for Kanefer himself (the northern false door is damaged). Furthermore, other mastabas in the cemetery bear two false doors but only a single (G2155) or even no (G2220 ${ }^{29}$ ) burial shaft.

Kanefer was a king's son, ${ }^{30}$ overseer of commissions, sole companion, elder of the chamber of the double administrations, controller of the two canals of the king, overseer of the marshlands, master of secrets of every foreign land, controller of interpreters, controller of the (two?) bowcase bearers, elder of the chamber, controller of the palace, staff of the subjects, favorite of his god, and sole companion. His wife, Shepsetkau, was priestess of the goddesses Hathor and Neith. Presumably, the other woman, the sole companion, royal acquaintance, Meresankh, who appears on

Shafts B and C of G 2220 are later, intrusive additions. Shaft A was apparently never cut (or, less likely, was missed by the Harvard-MFA Expedition).
30 Once again, mostly likely an honorary title. True princes of the blood royal under Khufu should have been interred in the Eastern Cemetery, and in Dynasty 5 should be sought in cemeteries other than Giza. For an opposing view, see Kanawati, Tombs at Giza 2, p. 17.
the exterior facade, is Kanefer's mother, but this is only conjecture. His daughter, Meretites, was a "royal ornament," while his son, Kasewedja, was the eventual owner of mastaba G 5340, much further east in the Cemetery en Echelon. An overseer of funerary priests, Ptahwer, appears in his tomb, no doubt the same man who later constructed a subsidiary mastaba (G 215I) with two small exterior false doors immediately to the north of Kanefer's own tomb. ${ }^{31}$
g 2155, Kaninisut I
Along with G 2135, G 2155 is one of two core mastabas that extend Cemetery g 2100 to the south. This may be taken as an indication that the massive mastaba G 2220 was already in existence further to the north, and that a southern expansion of the nucleus cemetery was the only remaining option available. A typically sized mastaba core when first constructed, G 2155 underwent substantial alterations after the reign of Khufu. The core superstructure was cased, given a north niche, and a southern extension enlarged the mastaba much

31 In addition, a certain Neferherenptah appears on the chapel's south facade (see fig. 12.7 I ), and a loose architrave of a sbsty nswt, "royal instructor," Neferherenptah (36-I-5), surfaced east of G 2130 (fig. 8.28).
further southwards, out of (southern edge) alignment with the older tomb G 2135. Most important, this southern extension housed an interior stone chapel with two false doors and a serdab. This chapel was removed to the Kunsthistorisches Museum, Vienna (Inv.Nr. ÄS 8006), by Junker after excavation in 1912. ${ }^{32}$ It is one of the very few chapels from Cemetery G 2IOO that might be considered "finished" in terms of decoration. Despite the presence of two false doors, only a single burial shaft was found in the core mastaba. The tomb also served as the center of a family complex, with a small annex building for Kaninisut's son, Kaninisut II (G 2156), added on to the center of his father's exterior eastern facade. In fact, the son transformed a portion of his father's exterior east wall into the decorated west wall of his own interior chapel. Furthermore, a grandson, Kaninisut III, added his own mastaba (G 2156a) abutting the northern end of G 2155 .

Kaninisut I bore a number of titles, but was doubtfully a prince of the blood royal. He was the king's (bodily) son, sem priest, controller of kilts, (sole) companion, stolist of Horus, district administrator of Dep, mouth of all the people of Pe , master of secrets of the robing room, who is in charge of el-Kab, chief of reversion offerings of the house of life, ruler of Bat, controller of the black jar, priest of the lord of Buto, son of the north, lector priest, follower of Ha, one (among) the great ones of the festival, controller of the palace, and sole companion. His wife was the royal acquaintance, Nefre(t)hanisut. His children included two sons, the royal acquaintance, district administrator of Dep, mouth of all the people of Pe, Horwer, and Kaninisut II; along with a daughter named Wadjethetep.

For a host of reasons-among them the style and expansive repertoire of the chapel decoration, the extension and casing of the mastaba, and the existence of two chapel false doors-the tomb as finally occupied by Kaninisut I must postdate Dynasty 4. Whether it once contained a slab stela prior to its extension, and whether this slab stela belonged to a previous tomb owner other than Kaninisut, remain open questions. ${ }^{33}$

## G 2160, Anonymous

No alterations to this core mastaba are discernible. There is no sign of a slab stela emplacement, secondary chapel construction, mastaba casing, or northern niche. The single burial shaft remained unfinished, with the burial chamber off axis, extending atypically to the east instead of to the south. No decoration is preserved, and the dearth of Khufu-era features points to a long-unused mastaba that only later may have served for an intrusive burial.

## G 2170, Anonymous

The situation with G 2170 is very similar to that of G 2160 . Again, no inscriptions or decoration, no casing, northern niche, slab stela emplacement, or recognizable chapel construction are preserved. The single shaft in this tomb, however, diverges from the norm under Khufu in positioning the burial chamber, not to the south, but to

32 See most recently on the chapel (Vienna, ÄS 8oo6) Hölzl, Ka-ni-nisut, and idem, Reliefs und Inschriftensteine des Alten Reiches 2, pp. 33-87. See also Junker, Gîza 2, pp. 135-72; idem, Die Kultkammer des Prinzen Kanjnjswt = The Offering Room of Prince Kaninisut, H. Satzinger, Das Kunsthistorische Museum Wien, pp. 90-93.
33 The anonymous slab stela fragment, Vienna Inv.-Nr. ÄS 7447, may derive from G 2155; see below, Chapter 13, and Manuelian, Slab Stelae, pp. 88-91, and correct the caption in Hölzl, Ka-ni-nisut, p. 21, fig. Io, to read Kaninisut I rather than II.
the west. Reisner believed both burial chambers, those of G 2160 and G 2170, dated to late Dynasty 4 or early Dynasty 5.34

G 2220, Anonymous
This mastaba is perhaps the most enigmatic of the entire group. Considered by some not to be a core mastaba of the original nucleus Cemetery g 2IOO, we have nevertheless included it, bringing the total to twelve that other scholars have counted only as eleven. Unfortunately, the unfinished state of the Harvard-MFA Expedition excavations here left the tomb largely uncleared on its eastern, western, and northern sides.

This tomb is not only the largest in the nucleus cemetery ( $62 \times 20.4 \mathrm{~m}$ ), but is in fact, after tombs G 2000 (= Lepsius 23; $105 \times 53.2 \mathrm{~m}$ ), and G 75 IO (Ankh-haf; IOI $\times 52 \mathrm{~m}$ ), the largest mastaba at Giza. ${ }^{35}$ While this chapel bears features seemingly later than Khufu's reign, it may nevertheless represent a secondary construction phase for the mastaba. Despite Reisner's numbering in the 2200 s instead of 2100s, it is difficult to explain away the significance of this oversized mastaba for the nucleus cemetery in question. One wonders if it is to be taken as the principal tomb of Cemetery G 2100, after the manner of G I2OI (Wepemnefret) in Cemetery G I200 and G 4000 (Hemiunu) in Cemetery g 4000. (Helck argued in 1956 for such principal tombs for each of the three early nucleus cemeteries [see above], although he cited G 2100 rather than G 2220 in the case of Cemetery g 2100. ${ }^{36}$ ) As further evidence for its early date, it might be argued that G 2220 predates the core construction of G 2135 and G 2155, for its location appears to have forced the two latter tombs out of alignment with the rest of this cemetery. G 2135 and G 2155 had to be placed further south than any other Cemetery G 2100 mastabas. More research is clearly in order on the concept of principal mastabas within nucleus cemeteries.

As originally constructed, G 2220 aligned with G 2210 along its southern edge. Subsequent extensions can only be estimated, due to the unfinished nature of the excavations, but they included an interior stone chapel with two false doors. Extremely sophisticated preparation of the fine limestone chapel blocks is in evidence here, even though the walls bear only uncompleted decoration. The only scenes begun are some large-scale standing figures of the tomb owner and his family on the east wall.

Even more unusual is the apparent absence of a principal shaft A in the northern half of the mastaba's superstructure. Instead, Reisner's expedition located two shafts, в and C , in an east-west alignment just to the northwest of the chapel. Both of these shafts are clearly later intrusive additions. Shaft b, further away from the chapel, contained the finely wrapped, mummified body of a female, placed within a massive, undecorated cedar coffin (33-4-2I = MFA 33.IOI6). This is the best-preserved of all the core mastaba burials in Cemetery G 2100. Shaft c, by contrast, was left unfinished.

The identity of the tomb owner, most likely a male to judge from the unfinished chapel reliefs rather than the female buried in shaft c, remains unknown. If the chapel was a later addition, then the presence of two false doors, often dated to Menkaure or later, need not counter the interpretation of the mastaba core itself as belonging to the original group of twelve Cemetery G 2IOO mastabas.

## Reisner, $G N$ i, p. in 3.

35 By comparison, the mastaba of Hemiunu (G 4000), at $53.2 \times 26.77 \mathrm{~m}$, is larger on the long sides, but smaller on the small sides than G 2220 .
36 Helck, ZÄS 8 I (1956), p. 65.

## Relative Chronology

In its final-albeit never completely finished-form, Cemetery G 2100 came to consist of the twelve major mastaba cores listed above and a host of later "minor" subsidiary sepulchres. Reisner correctly divided the major tombs into two sections, an earlier western half, and a later eastern half. Each half contains two north-south rows of mastabas, and the regularity of their layout increases as one moves from west to east. The initial irregularity of the older half thus raises questions about the sequence of construction. If we consider the four rows from west to east, and list the tombs from south to north, we find the following mastabas:

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Western half, western row:
G 2100 Sedit (see below), G 2 IIo Nefer
Western half, eastern row:
G 2 I20 Seshatsekhentiu, G 2130 Khentka(?), G 22IO (anonymous)
Eastern half, western row:
G 2135 (anonymous), G 2140 (anonymous), G 2150 Kanefer
Eastern half, eastern row:
G 2155 (Kaninisut I), G 2160 (anonymous), G 2170 (anonymous)
G 2220 (anonymous).
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Regularity of alignment appears in all but the westernmost row of the cemetery (G2IOO and G 2IIO). On the east-west axis, the southern ends of many of the mastabas clearly align, forming ordered streets and avenues. Originally these streets allowed unimpeded access to all the mortuary chapels of the cemetery, and were gradually filled with subsidiary structures only after the reign of Khufu. The alignments are clearest at the southern ends of G 2100-I = Lepsius 24 (Merib), G 2120 (Seshatsekhentiu), G 2140, and G 2160. Another series of southern end alignments includes G 2130 (Khentka), G 2150 (Kanefer), and G 2170, although there are discrepancies of alignment between original cores and the subsequent casings. G 22IO and G 2220 likewise align along their southern ends, while the two tombs at the southernmost edge of the cemetery, G 2135 and G 2155 (Kaninisut I), align along their northern ends.

Junker argued that construction of the eastern half of the cemetery dated to the reigns of Menkaure-Shepseskaf. 37 However, the presence of G 2135 in this half of the cemetery vitiates that argument. G 2135 displays too may features deriving from Khufu-era mastabas to be dated later: the remnants of a slab stela, a mud-brick exterior chapel, and a lined burial chamber. As Jánosi has pointed out, it would make little sense for this tomb to contain the items just listed and date as late as Menkaure, while other Menkaure-era mastabas were being adorned with fully decorated chapels and two false doors. ${ }^{38}$ Reisner's interpretation, namely that all the mastaba cores of Cemetery G 2IOO dated to Khufu, regardless of the period of their subsequent occupation and alterations, is the neater solution. The one mastaba core that remains problematic in this regard is G 2220 .

Reisner argued for distinguishing building phases as detailed as the fifth, tenth, and fifteenth years of Khufu's reign, and he devised

[^5]his chronological reconstruction accordingly. ${ }^{39}$ More recently, however, Jánosi has shown that dating to this level of detail is simply not supported by the evidence. $4^{\circ}$ Long delays between completion and occupation render it unlikely that portions of the Eastern and Western Cemeteries were complete a mere five years into Khufu's reign. For example, construction graffiti on tombs such as G 4000 (Hemiunu) would indicate more than a decade between construction and completion of that tomb. $4^{11}$ Only about a quarter of the sixtyfour core mastabas of the Western Cemetery could be considered finished. Since it is unlikely that these tombs languished over two or more decades of Khufu's reign since their initial completion, it seems safer to dispense with Reisner's five-, ten-, and fifteen-year framework for mastaba construction under Khufu. Rather, considering Khufu's reign as a unit of its own, and attempting to ascertain mastaba construction/occupation as dating either to Khufu or post-Khufu is the more prudent approach, based on the evidence at hand.

A number of factors allow us to construct a skeletal framework for the development of Cemetery g 2100, although we are hindered by the lack of precise geomorphological analysis of the area by the original excavators. Among the architectural features of chronological relevance are the form of the chapel, the number of false doors, the shape of the primary shaft and lining of the burial chamber, the presence or absence of slab stelae and reserve heads, the presence of masons' marks or dated construction graffiti, seal impressions or other inscriptional evidence, elements of decoration and style, and the overall extent of alterations to the core mastaba. Many of these features can be linked to the reign of Khufu; others appear only later.

SUPERSTRUCTURES. The procedure for cased mastaba construction took, according to Reisner, the following steps: I) construction of the core, including the portion of the burial shaft located in the superstructure; 2) excavation of the subterranean portion of the burial shaft and chamber; 3) construction of the offering chapel and exterior casing of the core; 4) decoration of the chapel; 5) actual burial, placement of the body, burial equipment, sealing of the burial chamber, and filling of the burial shaft. $4^{2}$

Analysis of the Western Cemetery has revealed a "standard" core size for the original Khufu-era mastabas: $23.5 \times 10.22 \mathrm{~m}$, giving a proportion of I:2.17, and 240.5 square meters. ${ }^{43}$ Curiously, Cemetery G 2IOO falls further outside of this norm than either of the other two nucleus cemeteries. Tombs G 2 IOO (prior to the southern annex addition of G 2100-I, Merib) and G 2 IIO are identical in superstructure dimensions, but slightly smaller (at $21.6 \mathrm{xI2} \mathrm{~m}$ ) than the standard mastaba size listed above. By contrast, tombs G 2120, G 2130, G 22IO, and G 2220 are much larger than the standard mastaba size. If Cemetery G 2100, and in particular the five core mastabas of the earlier, western half of the cemetery (G 2100, G 21IO, G 2120 , G 2130, and G 2210), show such unusual (echelon) alignment and core mastaba sizes, could these features support an extremely early

39 Reisner, $G N$ I, pp. 12, 75-76, 78. Reisner's layout for the Western Cemetery is schematically illustrated by Jánosi, Giza in der 4. Dynastie, p. 130, fig. Io. For his discussion of Junker's chronological reconstruction, see ibid., pp. 136-42.
40 Ibid., pp. 13I-32.
4 I Cf. Junker, Gîza i, p. 16r.
42 Reisner, $G N_{\mathrm{I}}$, pp. 30-3I and 39-52, including a list of indexes for dating the different stages of mastaba construction. See also J. Sainte Fare Garnot, "Etudes sur la nécropole de Gîza sous la IVe Dynastie," RdE 9 (1952), pp. 70-79.
43 Reisner, GN I, pp. 56-57. Jánosi gives slightly modified standard mastaba measurements in Giza in der 4. Dynastie, p. 151: $23.6 \times 10.5$ m.


Fig. 2.1o. Typical Khufu-era mastaba superstructure, with an exterior chapel protecting the offering place containing the slab stela. After Jánosi, Giza in der 4. Dynastie, p. 82, fig. 2. Drawing by Liza Majerus.
date in the original layout of the Western Cemetery? Was it only after the construction of the earlier half of Cemetery G 2IOO that mastaba sizes were standardized throughout the rest of the cemetery? By the time of the construction of the later, eastern half, regularity of alignment and standardization of core sizes may have set in.

One of the best sources for determining a relative chronology for these major mastabas lies in the history of their alterations. Fewer examples of annexes and alterations to the basic mastaba cores are attested in Cemetery g 2100 than in Cemetery g i200. ${ }^{44}$ And yet the tombs did not remain static following their original construction. While the nucleus cemetery was clearly constructed during Khufu's reign, the extent of the alterations, and the apparently long delay prior to the completion and occupation of some tombs, may indicate that either some mastaba cores lay unassigned to individuals for a long time, or that the final tomb owners were not always the original ones. Otherwise we would have to reconstruct a scenario whereby an official received a mastaba core during the reign of Khufu, but then waited a decade or two ${ }^{45}$ to proceed with its customization. ${ }^{46}$ Fully seven or eight of the twelve mastabas show changes to their cores, while only four do not. Those showing alterations to the core mastaba include: G 21IO, G 2I20, G 2130, G 22IO, G 2140, G 2150 , G 2155 , and possibly G 2220 (assuming it is indeed contemporary with the rest of the cemetery). Those occupied (or left unused) without major alterations include: G 2100, G 2135, G 2160 , and G 2170.

Of the many core types described in Reisner's typology, the type designated II accounts for the majority of mastabas constructed in Cemetery g 2100. Type II mastabas were built by first laying a retaining wall course of drab limestone blocks, filled in with a layer of sand, rocks, chips, and debris. A succeeding course of retaining

44 Of the ten core mastabas of Cemetery G i200, four tombs show annex extensions to provide for additional burial shafts. All have lined burial chambers, and three tombs were given massive stone extension walls on the east side for interior stone chapels to replace the original cult focus with slab stela. See Jánosi, Giza in der 4. Dynastie, p. 218, and Reisner and Fisher, "Preliminary Report on the work of the Harvard-Boston Expedition in 1911-13," $A S A E_{13}$ (1914), pp. 227-52.
45 Absolute chronological reconstructions depend, of course, on the accuracy assigned to our interpretation of the biennial cattle counts. For a recent reexamination, suggesting a reduction by approximately 20 percent in the interval between the counting and the doubling of regnal years, see J. Nolan, "The Original Lunar Calendar and Cattle Counts in Old Kingdom Egypt," in Basel Egyptology Prize I, pp. 75-97.
46 Jánosi, Giza in der 4. Dynastie, p. 219, and A.M. Roth, "The Practical Economics of Tomb-Building in the Old Kingdom: A Visit to the Necropolis in a Carrying Chair," in For His Ka. Essays Offered in Memory of Klaus Baer, pp. 227-40.
wall blocks then arose, followed in turn by more interior fill, and so on until the core and retaining wall were complete. A slab stela was probably present or planned for emplacement towards the southern end of the eastern exterior wall in the majority of type II tombs, and was protected by one or more mud-brick offering rooms (fig. 2.io). No northern niche was envisioned at this original construction stage. A single, two-meter square burial shaft was placed in the northern half of the core and cased down through the superstructure in a fashion similar to the core's exterior retaining wall. 47 Ten mastabas of Cemetery g 2100 were constructed in this fashion, termed by Reisner type IIa. His type IIb was applied to G 2130, which is the only core mastaba in this nucleus cemetery to be filled with small, cut limestone blocks rather than simply debris. ${ }^{48}$ This fact probably explains the currently depleted state of G 2130's core, since this tomb is the only one to provide a ready-made source of small blocks for quarrying away for other structures. Both the interior core and the exterior casing have been largely removed from G 2130 (see figs. 8.I-8.3).

Three more of Reisner's core types, reserved primarily for later structures, appear in this cemetery: types IV, VII, and IX. Two of these apply to tombs later than the original twelve core mastabas. Type IV, as represented in this case by G 2220,49 shows a massive core of large nummulitic limestone blocks. Type VII designates a filled mastaba with large, sloping nummulitic limestone slabs in the retaining wall, interior chapel, and two 2-meter square burial shafts. The tomb of Merib (G 2100-I) fits this description, ${ }^{50}$ but it is considered an annex building abutting G 2IOO, rather than an independent, original core mastaba of Cemetery g 2IOO. Finally, Reisner's type IX is differentiated by its construction of an exterior stone chapel. Tombs g 2110 (Nefer) and G 2120 (Seshatsekhentiu), both originally of core type IIa before the addition of their exterior chapels, fit into this category. ${ }^{51}$

CASINGS. The exteriors of the mastabas of Cemetery g 2100 do not present the uniform style found in other areas of the Western Cemetery. A number of different casing types, and even an absence of casing, account for the individual appearance of each mastaba. Some tombs contain fine, sloping white limestone walls with precise joins and sharp corners, while others show massive nummulitic limestone slabs, or casings, consisting of small blocks in vertical steps. Some casings appear completely finished, others are interrupted. Several portions of casings were later quarried away as a convenient source of building material. The mastaba cores of Reisner's type II, the primary core type used in Cemetery G 2IOO, were cased about as often as they were left uncased. ${ }^{52}$

The four uncased cores of the cemetery are G 2100, G 2135 , G 2160, and G 2170. Recent reexamination of mastaba g 2100, however, revealed foundation blocks and grid lines aligned with the exterior casing of the abutting tomb G 2IOO-I to the south,

47 Reisner, $G N$ I, pp. 39-40.
48 Reisner, $G N$ I, p. 40, and Jánosi, Giza in der 4. Dynastie, pp. 221-22.
49 Reisner, $G N_{\text {I }}$, pp. 4I, 45ı.
50 Reisner, $G N$ I, pp. 49, 419.
51 Reisner, $G N$ I, pp. 52 and 422-23 for G 2110 Nefer: ibid., pp. 52 and 425 for G 2120 . Although dating to later than the original core mastabas of Cemetery g 2IOO, G 2100-II (Nensedjerkai) may also be placed in this type IX; ibid., pp. 52, 421.
52 Reisner's tomb count of the three early Western Cemetery nucleus cemeteries (G I200, G 2IOO, and G 4000) in 1942 resulted in 17 limestone-cased mastabas and 45 either uncased or cased with other materials, such as mud brick. See his remarks in $G N_{\mathrm{I}}$, p. 181.


Fig. 2.II. Reisner's casing types, as attested in Cemetery g 2100; after Reisner, $G N$ I, p. 179, figs. 84-86, 89. Redrawn by Ruth Bigio.
indicating that G 2 IOO was once intended to be cased (fig. 3.18). According to Reisner, the casing construction on G 2120 and G 22IO was interrupted by the death of Khufu, and at this time G 2130, G 2100, and G 2135 were finished and perhaps already occupied by their owners. ${ }^{53}$ There is, however, no sound evidence to link these alterations so precisely to the death of Khufu.

Reisner distinguished two casing types, $x$ and $y$, used during the reign of Khufu, and four others, $\mathrm{z}, \mathrm{w}, \mathrm{u}$, and zu , which first appear after that king's reign. His classification follows below, excluding the casing types not attested in Cemetery g 210054 (fig. 2.II):

| Casing types attested in Cemetery g 2ioo |
| :--- |
| Casing x: finely fitted and smoothly dressed fine white limestone to a <br> sloping surface: blocks of stone laid with the grain horizontal |

Casing y: similar appearance to x but with higher courses and with the blocks (or slabs) set with the grain slanting (parallel to the dressed face of the casing)

Casing z: gray nummulitic limestone: small blocks set in low-stepped courses

Masonry w: gray nummulitic limestone: great slabs set in high courses and roughly dressed to a sloping surface

Mastaba superstructures seem rarely finished with roof slabs, but two examples appear in Cemetery g 2IOO. G 2100-I (Merib) and G 2155 (Kaninisut I) are both tombs whose final occupation dates to early Dynasty 5 (figs. 4.1, 4.3, 4,14, 4.18, 13.2, I3.10). 55 Since the chapel of Merib (G 2IOO-I) was removed by Lepsius, this tomb

[^6]affords a particularly instructive sectional view of the roofing stones (fig. 4.I4). ${ }^{56}$

Beyond the clear division of Cemetery g 2100 into an earlier (western) and a later (eastern) half, additional clues gained from the relative positioning of individual mastabas shed light on the developmental sequence for this nucleus cemetery. A few of these will be summarized here. Most obvious among them is the sequence for the unique family complex founded by the owner of G 2100 . The annex mastaba of Merib, g 2IOO-I, envelops and extends the southern end of G 2100 . It must, therefore, postdate G 2100 proper, and the suspicion is likely that the owner of the earlier tomb is either the father or mother (Sedit) of Merib himself. The extension, or doubling of the length of this mastaba is comparable to the creation of the great twin mastabas of the Eastern Cemetery. However, as Jánosi has noted, the Eastern Cemetery royal mastaba extensions occurred all within the same generation, while Merib was a descendant of the owner of G 2100.57 Furthermore, the original mastaba, G 2100, was apparently never completely cased, as was G 2IOO-I, although preparational evidence has been recently located (fig. 3.18). And finally, yet another generation joined this family complex, as Merib's daughter, Nensedjerkai, added her unique porticoed sepulchre (G 2IOO-II) to the southern end of her father's annex mastaba. ${ }^{58}$ Taken together, these three tombs form the clearest evidence of sequential family development in all of Cemetery G 2IOO, primarily due to their contiguous layout and the presence of inscriptional evidence in two of the three chapels. Another family complex, though less contiguous or linear in its arrangement, developed around G 2155 , the tomb of Kaninisut I, primarily to the east and north.

56 The chapel area of G 2155 (Kaninisut I) lies at this writing completely buried under sand fill. Other tombs at Giza with roofing stones intact or partially intact include G 2100-II (Nensedjerkai), G 2155 (Kaninisut I; see esp. Junker, Gîza 2, p. I40), G 5340 (Kasewedja), G 2135 a (Qedfy; Junker, Gîza 6, pp. 88-89), g 4940 (Seshemnefer I), and G 5230 (Babaef). At Saqqara see, for example, Davies Ptahhetep I, pls. 23-24 (offering room), and pl. 2 (pillared hall); and Lythgoe and Ransom, Perneb, p. 28 (roof of main offering chamber). For general remarks, primarily focused on shaft roofing, see Junker, Gîza i, p. 4I.
57 Jánosi, Giza in der 4. Dynastie, p. 153.
58 This tomb is sometimes called g 2IOI in the older literature; cf. PM III, p. 72.

For Reisner，G 2100 was the first mastaba built in Cemetery G 2100，and the oldest tomb in the westernmost row． 59 There is much evidence to support his claim，since this tomb contained a slab stela emplacement，portcullis groove on the T－shaped burial shaft， and a lined burial chamber－all Khufu－era features．Another option， alluded to above，might consider the massive core G 2220 as being of primary significance，similar to G I2OI（Wepemnefret）in Cemetery g 2100 and g 4000 （Hemiunu）in Cemetery g 4000 （assuming one interprets the interior stone chapel of G 2220 as a later alteration to the original core mastaba）．But more likely still as a candidate for earliest mastaba of Cemetery G 2100 might be，as Jánosi argues，${ }^{6} 0$ G 2130，the core that was ultimately occupied by Khentka．Like G 2220，this core is also of extraordinary size，and is the only one to show solid limestone blocks（type $\mathrm{IIb}^{61}$ ）instead of fill debris in its core．It was one of the more labor－intensive and time－consuming tombs to build；was it therefore Cemetery G 2IOO＇s prototype tomb that proved too expensive to imitate？G 2130 has the smallest lined burial chamber of the group，which agrees in dimensions，not with the huge chamber of the neighboring G 2120，but with the typical chamber sizes of the oldest mastabas of Cemeteries G i200 and G 4000．This led Reisner to posit that shaft A of G 2130 was the oldest completed burial chamber in the group．${ }^{62}$ Like G 2IOO，G 2130 likewise shows a T－shaped burial shaft portcullis groove，and a lined burial chamber．G 2130 received a northern extension，presumably to take an additional burial shaft that was never begun，as well as a stone interior chapel and northern niche．It thus clearly predates G 22IO to its north，for the latter tomb had no space to its south for expansion， and was therefore forced to expand further to the north．Whether the origins of Cemetery G 2IOO hinge on the initial construction of G 2100 （westernmost tomb），G 2130 （solid filled mastaba），or even G 2220 （largest mastaba），remains a matter of conjecture．

Other architectural clues to relative chronology and sequential development are provided by G 2220，whose volume occupies the space of two individual mastabas．The two mastabas that should have arisen here would have been，following Reisner＇s numbering， a northern ${ }^{*} \mathrm{G} 2160$ and a northern ${ }^{*} \mathrm{G} 2190$ ．Instead，two core mastabas，G 2135 and G 2155 were forced to extend Cemetery G 2100 further south and out of alignment；hence they should postdate the construction of G 2220 ．

Core mastaba construction of G 2140 most likely predates the casing and expansion of $\mathrm{G}_{2} \mathrm{I} 2 \mathrm{O}$ ，located further west．The original core of G 2120 aligns with G 2I40，but the southern expansion of G 2120 does not．Likewise，a relational sequence between G 2130 and G 2150 may be reconstructed as follows：

| I） | G 2130 extension |
| :--- | :--- |
| 2） | G 2150 core construction |
| 3） | G 2150 extension（resulting in southern misalignment with <br> G 2130） |
| 4） | G 2130 walls off exterior chapel，blocking access from the south |

A host of other matrix relationships are in evidence between the major core mastabas and the later，subsidiary tombs filling in the

[^7]streets and avenues of Cemetery G 2100，but these will be discussed below in the second volume of the present work．

The table below summarizes types and dimensions for the major elements of the twelve core mastaba superstructures．

| Томв | Core <br> mastaba（m） | Extension | Mastaba type | Casing type |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { G 2100 } \\ & \text { Sedit } \end{aligned}$ | $2 \mathrm{I} .6 \times 12$ | － | IIa | uncased |
| $\begin{aligned} & \text { G 21IO 会 } \\ & \text { Nefer } \end{aligned}$ | $21.6 \times 12$ | $24.8 \times 14.4$ | IIa | $\mathrm{x}\left(G N_{\mathrm{I}},\right.$ <br> p． 422 but y－finished on p． 180 |
| G 2120 通 Seshat－ sekhentiu | $28 \times 12.4$ | $30.4 \times 14.8$ | IIa | y－unfinished |
| $\begin{aligned} & \text { G } 2130 \text { 淄 } \\ & \text { Khentka } \end{aligned}$ | $30.8 \times 12.1$ | $36.15 \times 15.1$ | IIb | $y$－finished |
| G 2210（？） | $26.35 \times 11.75$ | $34.5 \times 17.4$ | IIa | ＂stepped， <br> drab＂（ $G N_{\mathrm{I}}$ ， <br> p．433） |
| G 2135 （？） | $23.45 \times 10.3$ | － | IIa | uncased |
| G 2140 （？） | $23.2 \times 10.4$ | － | IIa | z |
| G 2150 洽 Kanefer | $23.2 \times 10.4$ | $25.2 \times 12$ | IIa | z |
| G 2155 滛 <br> Kaninisut I | $23.5 \times 10.5$ | $32.2 \times 12.4$ | IIa | y and w mixed |
| G 2160 （？） | $23.6 \times 10.4$ | － | IIa | uncased |
| G 2170 （？） | $23.2 \times 10.8$ | － | IIa | uncased |
| G 2220 （？） | $62 \times 20.4$ | $66.8 \times 25.2$ （est．Reisner， $G N_{\text {I }}$ p．45I） | IV－iii | unfinished |

CHAPELS，NICHES，AND FALSE DOORS．Prior to the construction of interior or exterior stone chapels，the preference during the reign of Khufu consisted of a simple slab stela inserted in the southern half of the mastaba core＇s eastern exterior wall and protected by one or more exterior mud－brick chambers．${ }^{63}$ At least three tombs（G 2100，G 2120，and G 2135），and possibly four（G 2110）， contained a slab stela，or an emplacement for one．${ }^{64} \mathrm{G} 2100$ and G 2135 show no subsequent alterations to the chapel area，while Seshatsekhentiu later walled up his slab stela in G 2 I2O and replaced the mud－brick with a stone chapel and monolithic false door．To this list might be added one or two tombs whose slab stela location was perhaps destroyed when chapel alterations were made．These include G 2 IIO（casing followed by exterior stone chapel），G 2130 （interior stone chapel），G 2155 （southern extension with interior stone chapel，

63 For an exceptional example of a slab stela set into the mastaba＇s extension casing， see the tomb of Meretites（G 4140）：Manuelian，Slab Stelae，pp．93，94－95， figs．132－37， 167.
64 On the possibility that G 2155 also once contained an unusual slab stela，possibly proving original ownership of the mastaba by someone other than Kaninisut I， see below，Chapter 13，and Manuelian，Slab Stelae，pp．88－91．For speculation on the original appearance of G 21 I 0 （ Nefer ），and mention of the patch stone just north of the interior chapel of G 2130 （Khentka），cf．ibid．，pp．161－62，168－69， and below，Chapters 6 and 8 ．


Fig. 2.12. Comparison of chapel types attested in Cemetery G 2100 .
and annex tomb G 2156 abutting the east wall), and G 2210 (eastern extension for interior stone chapel).

Reisner developed an elaborate scheme for designating no less than thirteen different chapel types at Giza. ${ }^{65}$ His types I through 4a occur in Dynasty 4. Type I represents the mud-brick exterior chapel, type 2 the exterior L-shaped chapel, type 3 the interior L-shaped chapel, and type 4 the north-south offering room with two false door niches in the west wall and an asymmetrical entrance from the east. The only mastaba chapel in Cemetery G 2IOO to bear a different type number from those outlined above is G 2IOO-II, the unique structure of Nensedjerkai, which falls outside (i.e., later than) our group of original core mastabas. Her tomb contains a roofed exterior chapel built against the facade of a mastaba, with the false doors in the west wall of the corridor (type 8). ${ }^{66}$

Alterations to the cult focus resulted in superceding the slab stela with a stone chapel built either inside the mastaba core, or over the previous mud-brick offering rooms out in the street. ${ }^{67}$ But it is a curious feature that the majority of the chapels of Cemetery G 2100 remained unfinished. Only two or possibly three chapels out of all the original twelve Cemetery g 2100 core mastabas may be considered finished in terms of their decoration: G 2130 (Khentka), ${ }^{68}$ g 2150 (Kanefer), and G 2155 (Kaninisut I). ${ }^{69}$ Kaninisut I's chapel, however, is of Dynasty 5 date, and is set in the southern annex of the core mastaba. ${ }^{\circ}$ Turning now to the unfinished chapels, we find the chapel of G 2 III (Nefer) bears no decoration on its false door jambs ${ }^{71}$ or north wall (figs. 6.74, 6.79-6.80). Nothing remains of the walls of the stone chapel of G 2120 (Seshatsekhentiu), but his monolithic false door is unfinished (figs. 7.8-7.Io). The sculptors working on G 2140 proceeded no farther than the beginning of a $h t p \underline{d} i n s w t$ formula on the architrave of the chapel's false door (figs. II.16-II.I8). They abandoned the carving before reaching the location normally reserved for the deceased's name. And finally, the chapel of G 2220 shows only rough outlines of the tomb-owner and family standing on the east wall (figs. 16.50-16.55). Figures 2.12-2.13 summarize the surviving decorative progream of the chapels.

Interior chapels were added to six tombs: G 2130, G 2210 (postextension), G 2140, G 2150, G 2155 (in southern extension), and G 2220. Although G 2100-I (Merib) also possessed a stone interior chapel, his is a special case, namely, an annexed addition forming a family complex with the owner of G 2 IOO (and later with Merib's daughter, Nensedjerkai, owner of G 2IOO-II). Nefer, owner of G 2IIO, provides the only example of a stone exterior chapel added subsequent to the casing of the core mastaba. In addition, Nefer's chapel shows the unique layout of an entrance at the south side of the east wall, rather

65 Reisner, GNi, p. 296.
66 Minor mastabas preserving chapels of additional types in Cemetery g 2100 include G 2136 (Kahif; type io), and G 2175 (Nedju, Khnumnefer, type 7). See Part 2 of the present work.
67 See Reisner, GNI, pp. 183-84, and Jánosi, Die Gräberwelt der Pyramidenzeit, pp. 54-57.
68 Khentka's (G 2130) chapel is almost completely destroyed, but seems to show areas lacking relief sculpture; see below, Chapter 8.
69 Although the definition of "completed decoration" might be argued, note that Jánosi claimed Kaninisut I (G 2155) was the only possessor of a completed chapel in Cemetery g 2100: Giza in der 4. Dynastie, p. 218.
70 On the possibility of an earlier slab stela deriving from this tomb, see below and Manuelian, Slab Stelae, pp. 88-91.
71 The otherwise undecorated false door does, however, have an inscribed panel, now in the Museo Barracco in Rome; see below, Chapter 6 (Nefer, G 2IIO).
than the customary north side. While the orientation of the chapel's original wooden door is clear, and even related to the presence and absence of decoration on the chapel's south wall, no convincing argument is yet forthcoming to explain this divergence in Nefer's L-shaped chapel layout. Were the architects forced to relocate the door further south in order to protect the interior (and sole) false door niche from direct exposure across from the entrance door? Was a preexisting structure already in the street that necessitated the southward slide of Nefer's entire chapel along his mastaba's recently cased east exterior wall, resulting in the unusual arrangement? ${ }^{72}$ If the subsidiary mastaba G 2 II5 did not exist at the time of Nefer's alterations, would his exterior chapel have been placed further north, so that the false door and entrance could take their usual postions, i.e. the entrance towards the northern end of the east wall, and the false door towards the southern end of the chapel's west wall?

As the protective locus for the all-important offering ritual, the chapel ${ }^{73}$ must be viewed in conjunction with the layout of the false door(s). ${ }^{74}$ The chronological progression at Giza is generally agreed to follow from slab stela to exterior chapel and false door, to interior chapel. 75 In those tombs with preserved chapels, all contain a single false door except for the two false doors in the chapels of G 2100-I (Merib), g 2150 (Kanefer), G 2155 (Kaninisut I), and g 2220. ${ }^{76}$ In the cases of G 2150 (Kanefer), G 2155 (Kaninisut I), and the chapel of G 2100-I (Merib), both doors appear dedicated to the tomb-owner himself, and not to a spouse or any other individual(s). ${ }^{77}$ Strudwick has determined that the west wall between the two false doors generally displays one of three decorative schemes: a standing figure just south of the north false door and facing left (south); a standing figure just north of the south false door and facing right (north); and a seated figure just north of the south false door and facing right (north). ${ }^{8}$ Since the earlier, L-shaped chapels with a single false door follow the first decorative scheme listed above (a standing figure at right, facing left [south]), Strudwick labels this the oldest of the three schemes. ${ }^{79}$ Cemetery G 2 IOO tombs that follow this layout on their

72 Direct exposure of false doors across from the chapel entrance are attested in the chapels of G 2100-I (Merib), G 2150 (Kanefer), and G 2155 (Kaninisut I). However, in each of these cases we have two false doors, whereas Nefer shows only one.
73 For recent discussions on tomb decoration in the Old Kingdom, see R. van Walsem, Iconography of Old Kingdom Elite Tombs; and Fitzenreiter and Herb, Dekorierte Grabanlangen im Alten Reich.
74 On false doors in general see Reisner, $G N_{\mathrm{I}}$, pp. 330-46; idem, "The Position of Early Grave Stelae," in Studies Griffith, pp. 324-31; S. Wiebach, Die ägyptische Scheintür; Cherpion, Mastabas et hypogées, pp. 70-75; D. Arnold, Lexikon der ägyptischen Baukunst, pp. 226-27; A. Rusch, "Die Entwicklung der Grabsteinformen im Alten Reich," ZÄS 58 (1923), pp. roi-24; Junker, Gîza 12, pp. 68-75; Hassan, Gîza 5, pp. 65-180; G. Haeny, "Scheintür," in $L \ddot{A}$ 5, cols. 563-74; Strudwick, Administration, pp. 9-52; and Piacentini, Les Scribes, pp. 96-99.
75 For more on the discussion of false door versus slab stela as original cult focus at Giza, see G. Haeny, "Zu den Platten mit Opfertischszene in Helwan und Giseh," in Fs. Ricke, esp. pp. 158-59; Manuelian, Slab Stelae, pp. 161-62; and Fitzenreiter, "Zum Phänomen der isolierten Speisetischtafel in der 4. Dynastie," GM 208 (2006), pp. 19-28.
76 Tombs outside of the original i2 nucleus mastabas with two false doors include G 2100-I (Merib), G 2100-II (Nensedjerkai), G 2151 (Ptahwer), G 2041 (Senenuka), and G 2136 (Kahif).
77 Kanefer's northern false door is preserved only in its lower jambs, but the tomb owner's name and standing figure is preserved on the left (southern) jamb.
78 Strudwick, Administration, p. 44, with figs. 7-9.
79 Ibid., p. 49.


Fig. 2.13. Schematic comparison of chapel wall decoration programs attested in Cemetery g 2100.
west walls include g 2100-I (Merib), G 2150 (Kanefer), and G 2155 (Kaninisut I). ${ }^{80}$

There are no examples in Cemetery g 2100 of the so-called "Prunkscheintür," with cavetto cornice and torus molding, a form that originated at Saqqara around the reign of Djedkare Izezi. ${ }^{81}$

Northern niches are found on the eastern facades of G 2IIO, G 2130, G 2150, and G 2155 (along with the annex chapel of G 2100I, Merib, fig. 2.I4). In each of these tombs, the northern niche is set into the exterior casing, rather than the core mastaba. They are therefore part of the subsequent alterations made to each mastaba. None of the three tombs definitely equipped with slab stelae (G 2100, G 2120, and G 2135) shows a northern niche. The simpler northern niches belong, as one might expect, to the older tombs G 2110 and G 2130, each with just one set of jambs. In each case, merely the

[^8]niche's lower portion is preserved, so no conclusions can be drawn about panels, lintels, or architraves. G 2130 shows a massive platform block (figs. 2.14c, 8.4, 8.8) just in front of the niche, presumably for offerings. The only other niche with an offering place in front is the tiny rectangular basin "depression" carved in front of Kanefer's elaborate niche (G 2150 , figs. $12.48-\mathrm{I} 2.50$ ). This niche is fully formed, and consists of separately prepared blocks installed into the casing with little relation to it. It shows two sets of jambs, a drum, lintel, panel, and apertures. No architrave is preserved; Reisner found an architrave inscribed for Kanefer in the street east of the mastaba and assigned it here, but it more likely derives from the entrance to the chapel proper, further to the south. The northern niche of G 2155 (Kaninisut I) bears a single set of jambs, but is preserved high enough to display a drum; what lay above is lost. Finally, while not part of the original core mastabas proper, Merib's southern annex extension (G 2100-I) of his mother's mastaba (G 2IOO) shows an elaborately worked northern niche. Unlike Kanefer's "separately produced" niche, Merib's niche is clearly conceived as a part of the casing construction. While two pairs of jambs were planned, the left (southern) outer jamb remains unfinished. A drum, lintel, panel, apertures, and architrave complete the composition. If any


Fig. 2.I4. Comparison of north niches attested in Cemetery g 2100 (all images by Peter Der Manuelian). a: G 2100-I Merib, November 2I, 1993. PDM_1993.107.2I. b: G 2110 Nefer. November 2I, 1993. PdM_1993.IO8.19.
c: G 2130 Khentka, November 3, 1993. PDM_1993.055.12.
d: g 2150 Kanefer, November 4, 1993. pdM_1993.060.16.
e: G 2155 Kaninisut I, November 20, 1993. PdM_1993.096.30.
decoration adorned this, and indeed any of the northern niches, it was painted, not carved, and has not survived.

SERDABS. Early Old Kingdom mastabas rarely show evidence of a serdab. K. Lehmann has gathered fourteen Giza mastabas from Dynasty 4, ten of which contain a single serdab, three of which
contain two, and one that contains four serdabs. ${ }^{82}$ (This is in stark contrast to Dynasty 5 at Giza, where 168 mastabas with 229 serdabs are attested. ${ }^{83}$ ) Most of these are located behind the west wall of

82 On serdabs, see Reisner, $G N_{2}$ (unpublished manuscript), Chapter IX, pp. I-71, "The Use of Statues and Statuettes Exposed to View or Placed in Concealed Statue-Rooms (Serdabs)." See also K. Lehmann, Der Serdab in den Privatgrä̈bern des Alten Reiches, p. 23.
83 Ibid., p. 3r.
the chapel，and are overwhelmingly oriented east－west．Alignment directly behind a false door，however，appears quite arbitrary．In Cemetery G 2IOO only two or three serdabs were present in the major mastabas，all of them in tombs of the later（eastern）half of the cemetery，and all occurring behind chapels with two false doors． G 2150 （Kanefer）revealed a serdab behind the northern of its two chapel false doors．The door itself had been broken open and the serdab plundered long before excavation by the Harvard－MFA Expedition，but a few alabaster stauette fragments may originally have been deposited here．${ }^{84} \mathrm{G} 2155$（Kaninisut I）contained a serdab behind the southern of its two chapel false doors．It too was discovered empty．And finally，the southern of the two chapel false doors of G 2220 contains what appears to be a window slit underneath the drum，but no actual cavity behind the door is readily discernible．${ }^{85}$

The table below shows the comparative data for chapels，false doors，northern niches，and Reisner＇s chapel typology．For the sake of completeness，we add the chapel information for G 2100－I（Merib）， even though it is not an independent mastaba： $3.85 \times 1.56 \mathrm{~m} ; 2$ false doors；north niche．

| Tomb | Chapel（m） | Number of FALSE DOORS | North NICHE | Reisner CHAPEL TYPE |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { G 2IOO } \\ & \text { Sedit } \end{aligned}$ | － | － | － | I a？（traces） |
| $\begin{aligned} & \text { G } 2110 \\ & \text { Nefer } \end{aligned}$ | $3.7 \times 1.15$ | I | ＋ | 2 b |
| G 2 I 2 O淬 Seshat－ sekhentiu | $3.55 \times 1.50$ | I | － | i a（ext．mud－ brick chapel）； later ext．white stone： 2 b |
| G 2130 盗 Khentka | $4.50 \times 1.60$ | I | ＋ | 3 a |
| G 22IO（？） | － | － | － | $3 \mathrm{a}($ ？$) 4 \mathrm{a}($ ？$)$ |
| G 2135 （？） | － | － | － | I a |
| G 2140（？） | 2.65 x．I．IO | I | － | 3 a |
| $\begin{aligned} & \text { G } 2150 \\ & \text { Kanefer } \end{aligned}$ | $3.15 \times 1.05$ | 2 | ＋ | 4 a <br> ext．mud brick： $\lg$ |
| G 2155 盛 Kaninisut I | $3.70 \times 1.50$ | 2 | ＋ | $\begin{array}{\|l\|} \hline 4 \mathrm{a} ; \\ \text { ext. c.b chapel if } \\ \hline \end{array}$ |
| G 2160（？） | － | － | － | I？destroyed |
| G 2170 （？） | － | － | － | I？destroyed |
| G 2220 （？） | $6.0 \times 1.6$ | 2 | － | 4 a |

SUBSTRUCTURES．Reisner designated shafts with alphabetical letters，beginning with a for the principal shaft，and continuing in order（ $\mathrm{B}, \mathrm{C}, \mathrm{D}$ ）．This system accounted for shafts that were part of the original construction of the tomb in question．For shafts that were

84 These statue fragments include $32-\mathrm{I} 2-3,33-\mathrm{I}-\mathrm{I}=$ MFA 33．IO2I（both from debris of shaft B ），33－1－2（＝MFA 33．1022，from debris on top of the mastaba），and 33－1－4（＝MFA 33．IO24，from debris of shaft A）．For more information see below， Chapter I2（G 2150）．
85 Among the later subsidiary mastabas added to Cemetery G 2IOO，those with serdabs include G 2100－II（Nensedjerkai），G 2136 （Kahif），G 2173，and G 2175 （Khnumnefer and Nedju）；see below，Part 2，and Lehmann，Der Serdab in den Privatgräbern des Alten Reiches，catalogue nos．Giroa，Giir，Gii4，and Giis．
later，intrusive or both，Reisner began from the end of the alphabet and worked backwards（ $\mathrm{Z}, \mathrm{y}, \mathrm{x}$, etc．）．${ }^{86}$

Burial shafts are composed of one or more of three principal elements：i）the shaft itself，descending through the mastaba superstructure down into the bedrock；2）a short connecting passage，usually leading off to the south from the shaft；and 3）the burial chamber itself．Some of the burial shafts in Cemetery G 2100 contain all three of these elements，and are finished with great care and precision．Generally speaking，the more sophisticated the shaft， the older its date，i．e．the greater the likelihood that construction occurred during Khufu＇s reign．Others are little more than unfinished shallow pits of irregular shape．Since the present volume considers primarily the original nucleus mastabas of Cemetery G 2100，we will focus on the principal shafts for these tombs，which are，not surprisingly and with few exceptions，the deepest and most carefully prepared．For the twelve core mastabas there are fourteen shafts to summarize．${ }^{87}$ The discrepancy between numbers of tombs and numbers of shafts lies in the fact that the tomb of Kanefer（G 2150） contains two burial shafts（A and B），while that of G 2220 apparently lacks a principal shaft a but has two，later intrusive ones（в and с）． Were we to consider solely the principal shafts，we would find a total of eleven shafts for twelve mastabas．

The burial shafts of most of the nucleus mastabas of Cemetery G 2100 are approximately 2 m square．This is also true of most shafts in mastaba cores of Reisner＇s types II，III，and IV throughout the Giza Necropolis．Where the shafts pass through the mastaba core，they are cased in a manner similar to that of the mastaba＇s exterior retaining wall casing．Burial chambers opened off a small passageway leading from the south wall of the shaft．In the earlier，Khufu－era mastabas， the chambers were lined with fine white limestone blocks．Square canopic pits were often cut in the southeast corner of the burial chamber，and sarcophagi were placed along the west wall，oriented north－south．Unfortunately，all the nucleus mastaba burial shafts in Cemetery g 2100，and indeed most primary burial shafts throughout the Western Cemetery，were plundered long before the arrival of any of the modern archaeological expeditions．${ }^{88}$ What usually remained for the excavators was either a bare floor or scattered bones，the latter accompanied by an empty or fragmentary stone sarcophagus or wood coffin，and miscellaneous funerary implements．

Reisner discerned nine different types of burial shafts for the Giza Necropolis，but only a few of them need concern us here for the tombs of Cemetery g 2100．These are described，in Reisner＇s own terms，${ }^{89}$ as follows，with my addition of the tombs under discussion added in parentheses：

86 Reisner，$G N$ i，p．85ff．
87 This tally omits G 2100－I，the tomb of Merib，which has two shafts A，and b，in its southern annex tomb abutting G 2100 ．
88 Reisner，$G N \mathrm{I}, \mathrm{p} .175$ ．One exception，albeit in a later，intrusive shaft，was the mummified female placed in a large cedar coffin from shaft B of G 2220；see Chapter 16.
89 Reisner describes his shaft typology in GNi，pp．86－Ior．Note that he treats G 2220 separately，under＂large outlying mastabas in the Western Field＂（ $G N_{\mathrm{I}}$ ， p．I45，section 5）．G 2220 B is listed as type 4 b （2）and G 2220 C as type 4 （2） （unfinished）．Reisner assumed the owner was related to the tomb owners of G 2210 and G 2130，based on little more than geographical proximity．Jánosi also tends to consider this mastaba separately from the original core mastabas of Cemetery g 2100：Giza in der 4．Dynastie，pp．224－25．

Reisner shaft types attested in Cemetery g 2ioo
TYPE i：large lined chambers，always south of the shaft，entered by a long connecting passage at or near the east end of the north wall of the chamber；chamber lined and paved with fine white limestone dressed smooth，but not roofed（G $2100 \mathrm{~A}, \mathrm{G} 2 \mathrm{I} 20 \mathrm{~A}$ ， G $2130 \mathrm{~A}, \mathrm{G} 2210 \mathrm{~A}, \mathrm{G} 2135 \mathrm{~A}$ ）

TYPE 3：like type I ，but unlined；high chambers（G 2140 A）
TYPE 4：like type 3，but with low chamber，roof－level of chamber at roof－level of passage；height of chamber as height of passage on inside，or with low step from floor of passage to floor of chamber，connecting passage not less than 0.5 m in length （G 2110 A，G 2150 A，G 2155 A，G 2160 A，G 2220 B，G 2220 C ）．

TYPE 6：without connecting passage or doorjambs；chambers open directly into shaft（G $2150 \mathrm{~B}, \mathrm{G} 2170 \mathrm{~A}$ ）

Shafts of type I were used in 14 of the first 15 tombs of the three nucleus Cemeteries g i200，G 2100，and G 4000 of the Western Field （the exception being G 2IIO A）．Type I also appears in one tomb from the later group of six mastabas in Cemetery g 2100 （G 2135 A）．

Portcullis stones originally served to block the passage opening from the burial shaft＇s south wall on all five of the earlier，western－ half mastabas：G 2100，G 2110，G 2120，G 2130，and G 2210．By adding portcullis grooves for the stones to slide into，lending a T－shaped appearance to the mouth of the shaft，the Khufu－era architects used an archaizing construction technique，attested prior to Khufu＇s reign （see remarks above）．They also prevented the easy prying－back of the portcullis stones by thieves；however，merely smashing a corner of the stone provided access to the passage and burial chamber，as can be seen in tombs G 2100 （figs．3．25，3．29）and G 2120 （fig．7．15）． Portcullis stones were broken into fragments in G 2130 and G 2110. Some irregularities in the groove construction are also in evidence． The eastern groove was not cut into the bedrock in G 21Io．The shaft of G 2 I2O terminates its portcullis grooves at ground level，and the portcullis stone blocking the passage at the bottom of the shaft is not part of the groove system．${ }^{\circ}$ In G 22IO，which contained two chambers，both portcullis grooves stop .8 m below the passage to （the smaller and higher）chamber I．This provides further evidence that the enormous，lower chamber II is a later，post－Khufu era addition to the tomb．

In terms of methods of descent prepared by the Egyptians， several nucleus mastaba burial shafts show semicircular toeholds cut on the north and east walls（for G 2130 A ：figs．3．2I－3．23；for G 2130 A ： 8．17；and for G 22IO A： $9.23^{91}$ ）．This choice of north and east walls quite logically avoided the south wall，since the latter eventually opened onto the passageway to the burial chamber．However，one anomalous exception，G 2170，shows toeholds cut on the west wall， the same wall bearing the entrance to its unusually oriented burial chamber（fig．15．7）．.$^{92}$ The chart below summarizes the presence or absence and location of the toeholds，at least as far as was visible in recent years：

90 While the termination of the portcullis grooves at bedrock level might suggest that the subterranean portion of the shaft is of a later date，note that the burial chamber contained lined walls and a canopic niche，both features contemporary with original Khufu－era mastaba construction．
91 See also image PDM＿1993．086．05 for G 22IO A on www．gizapyramids．org．．
92 Junker，Gîza I，p．4I，discusses these toeholds，noting that his older workmen were content to use them to ascend and descend the shafts without mishap，and preferred them to ropes or ladders．

| Томв | Shaft | Shaft status （2007） | Visibility of Toeholds | Visibility of Bedrock |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { G 2 Ioo } \\ & \text { Sedit } \end{aligned}$ | A | visible down about 7－10 m | on N and E ；in stone courses | not visible |
| $\begin{aligned} & \hline \text { G 2 Ioo } \\ & \text { Sedit } \end{aligned}$ | D | filled | unknown | not visible |
| G 2 Ioo Sedit | E | filled | unknown | not visible |
| $\begin{aligned} & \hline \text { G 2 Ioo } \\ & \text { Sedit } \end{aligned}$ | F | filled | unknown | not visible |
| $\begin{aligned} & \text { G 2100-I 通 } \\ & \text { Merib } \end{aligned}$ | A | visible down about 1.5 m （N and W sides） | none | not visible |
| G 2100－I 设 Merib | в | visible down about 1.5 m | none | not visible |
| G 2100－II ${ }^{3}$ <br> Nensedjerkai | A | unfilled | none |  |
| G 2100－II ॥ึ <br> Nensedjerkai | в | filled |  | not visible |
| $\begin{aligned} & \text { G 2IIO 给 } \\ & \text { Nefer } \end{aligned}$ | A | unfilled | on E：begin at top； continue down through bedrock； on N begin about io $m$ down， continue through bedrock |  |
| G 2120 通 Seshatsekhentiu | A | filled；visible down about I m | unknown | not visible |
| $\begin{aligned} & \text { G } 2130 \text { 洽 } \\ & \text { Khentka } \end{aligned}$ | A | visible about 25 m down | on N and E；continue down through bedrock |  |
| G 2210（？） | A |  | on N and E；continue down through bedrock |  |
| G 2135 （？） | A | visible about 25 m down | on N and E ； begin about 15 m down， beyond stone courses in bedrock |  |
| G 2140 （？） | A | filled | unknown | not visible |
| $\begin{aligned} & \text { G } 2150 \text { 没 } \\ & \text { Kanefer } \end{aligned}$ | A | visible about 25 m down | i toehold on N ，about 4 m below beginning of bedrock | visible to burial chamber |
| $\begin{aligned} & \hline \text { G } 2150 \text { 通 } \\ & \text { Kanefer } \end{aligned}$ | в | filled | unknown | not visible |


| Tomb | SHAFT | Shaft status （2007） | Visibility of Toeholds | Visibility of Bedrock |
| :---: | :---: | :---: | :---: | :---: |
| G 2155 呺 Kaninisut I | A | visible about 30 m down | none |  |
| G 2160 （？） | A | filled | unknown | not visible |
| G 2170 （？） | A | visible about 20 m down | I toehold on W（in bedrock）； beginning about Io m down |  |
| G 2220 （？） | B | visible about <br> 15 m down | none visible | not visible |
| G 2220 （？） | C |  | on N （in bedrock）； beginning about 20 m down |  |

The chart below shows the Reisner shaft typology and shaft and burial chamber dimensions for the nucleus mastabas of Cemetery G $2100:{ }^{93}$

| Tomb | Shaft <br> TYPE | Shaft（m） | Burial <br> CHAMBER <br> （LINED） | Burial <br> CHAMBER <br> （UNLINED） |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { G 2100 } \\ & \text { Sedit } \end{aligned}$ | I | $2.05 \times 2.1 \times 7.8$ | $\begin{aligned} & 3.55 \times 3.45 \\ & \times 3.0 \\ & \hline \end{aligned}$ | $4.25 \times 4.15 \times 3.25$ |
| $\begin{aligned} & \text { G } 2110 \text { 得 } \\ & \text { Nefer } \end{aligned}$ | 4 | $\begin{aligned} & 2.1 \times 2.05 \text { X } \\ & 11.05 \end{aligned}$ | － | $3.45 \times 3.8 \times 2.5$ |
| G 2120 织 Seshatsekhentiu | I | $2.5 \times 2.5$（at top）， $2.15 \times 2.15$ <br> （at bottom） $\text { x } 7.3$ | $\begin{aligned} & 3.1 \times 3.6 \mathrm{x} \\ & 2.55 \end{aligned}$ | $4.15 \times 4.65 \times 2.88$ |
| $\begin{aligned} & \text { G } 2130 \text { 通 } \\ & \text { Khentka } \end{aligned}$ | I | $\begin{aligned} & 2.6 \times 2.5 \text { (at } \\ & \text { top), } 2.4 \times 2.35 \\ & \text { (at bottom) } \\ & \times 7.0 \end{aligned}$ | $\begin{aligned} & \text { 3.1 x 3.1 X } \\ & 2.85 \end{aligned}$ | $4.25 \times 4.25 \times 2.9$ |
| G 22IO（？） | I | $\begin{aligned} & 1.95 \times 2.15 \times \\ & 7.85(21.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.25 \times 3.8 \\ & \times 3.3 \end{aligned}$ | $4.95 \times 4.5 \times 3.3$ |
| G 2135 （？） | I | $\begin{aligned} & \text { 2.1 x 2.I (at } \\ & \text { top), I. } 8 \times \mathrm{I} .8 \\ & \text { (at bottom) } \\ & \text { x } 7.0 \end{aligned}$ | $\begin{aligned} & 3.01 \times 3.06 \\ & \times 3.05 \end{aligned}$ |  |
| G 2140（？） | 3 | $\begin{aligned} & \text { I. } 85 \times \mathrm{x} .85 \text { (at } \\ & \text { top), } 1.6 \times \mathrm{I} .6 \\ & \text { (at bottom) } \\ & \times 2.9 \end{aligned}$ | － | $2.3 \times 2.1 \times$ x 4.45 |
| $\begin{aligned} & \text { G } 2150 \text { 通 } \\ & \text { Kanefer } \end{aligned}$ | 4 | $\begin{aligned} & \text { shaft A: 2.1 x } \\ & 2.07 \text { x. } 8.5 \\ & \hline \end{aligned}$ | － | $4.0 \times 3.5 \times 1.65$ |
| $\begin{aligned} & \text { G } 2150 \text { 通 } \\ & \text { Kanefer } \end{aligned}$ | 4 | shaft B：I． 6 x <br> I． 6 （at top）， <br> 1．5 X 1.5 （at <br> bottom）x 8.4 | － | 1．15 $\times 2.25 \times 0.95$ |
| G 2155 给 Kaninisut I | 4 | $\begin{aligned} & 2.12 \times 2.12 \times \\ & 12.0 \end{aligned}$ | － | $4.0 \times 4.3 \times 2.2$ |

93 Compare Reisner＇s chart in GNI，pp．III－I2（＂The Distribution of the Shaft Types in Cem．G 2100＂）．

| Tomb | SHAFT <br> TYPE | Shaft（m） | Burial <br> CHAMBER （LINED） | Burial <br> CHAMBER <br> （UNLINED） |
| :---: | :---: | :---: | :---: | :---: |
| G 2160（？） | 4 | $\begin{aligned} & \text { I. } 9 \times 2.05 \text { (at } \\ & \text { top), I. } 7 \times 1.55 \\ & \text { (at bottom) } \\ & \text { x } 8.0 \end{aligned}$ | － | $2.7 \times 2.65 \times 1.5$ |
| G 2170 （？） | 6 | $2.07 \times 2.05$（at top）， $1.25 \times 1.5$ （at bottom） x 5.1 | － | $2.5 \times 1.35 \times 1.2$ |
| G 2220 （？） | 4 | shaft в： 2.05 <br> x 1.8 （at top）， <br> 1． $8 \times 1.5$（at <br> bottom）x 4.4 | － | $6.3 \times 2.4 \times 1.4$ |
| G 2220 （？） | 4 | shaft C： 2.25 x 2.2 （at top）， I． $8 \times \mathrm{x} .85$（at bottom）x 22.4 | － | $2.5 \times 2.95 \times 1.4$ |

A certain＂symmetry＂would be in evidence if the number of chapel false doors corresponded to the number of burial shafts，but this is seldom the case．G 2150 （Kanefer）shows two interior chapel false doors and two burial shafts，as does the annex mastaba of Merib （G 2100－I）．But G 2155 （Kaninisut I）contains merely a single shaft in contrast to its two（interior）chapel false doors．G 2220 is perhaps the most confusing case of all，with an unfinished interior chapel with two false doors，two later intrusive shafts located in unusual positions in the south half of the mastaba，and apparently no primary burial shaft whatsoever on the north side．${ }^{94}$

Almost all the burial shafts in Cemetery G 2100 show passages of varying lengths on the south that serve to connect the shaft to the burial chamber．The only exceptions are G 2150 b and G 2170 A． 95 In four cases（G2210 A，G 2150 B ，and G 2220 b and C），the burial chamber is not located at the bottom of the shaft；evidently，a second burial chamber was planned but was only realized in a single case （ G 2210 A ）．Three of these shafts represent later or intrusive additions， while G2210 A is a special case that dates to the original Khufu－era construction，resulting in chamber I ，followed by a second，later phase resulting in chamber II．Evidence for the lag time between the two phases，and in particular for the post－Khufu dating of the second construction phase，lies in the previously mentioned abandonment of the portcullis grooves in the shaft below chamber $I\left(\begin{array}{ll}\text { at } \\ I 3 & \mathrm{~m}\end{array}\right)$ ，the unusual depth of the continuing shaft（for another 26.80 m ），and the unusually large size of the burial chamber（ 16.5 sq．m．； 54.45 cubic m ）．Its passage is also the only one to contain a＂window＂ above the actual corridor，possibly a primary cutting to the chamber that was subsequently abandoned（fig．9．24）．${ }^{96}$ Masons＇marks are occasionally present on blocking stones（G2210 A，chamber II），on

94 For a discussion of the correlation between false doors and burial shafts，see P．Jánosi，＂Aspects of Mastaba Development：The Position of Shafts and the Identification of Tomb Owners，＂in Abusir and Saqqara in the Year 2001. Proceedings of the Symposium（Prague，September 25th－27th，2001），Archiv Orientální 70，No． 3 （2002），pp．337－50． the burial chamber，but the depth of the cutting is minimal．
96 See Reisner，$G N$ I，pp．163－64，with fig． 72.
the walls or ceiling of the passage（G2130 A，G 22IO A，chamber II），or on the walls of the burial chamber（G $2130 \mathrm{~A}, \mathrm{G} 22 \mathrm{IO}$ A，chamber II）．

While standard practice put the burial chamber to the south of the shaft，some unusual chamber orientations are attested in Cemetery g 2100．In all cases，these provide evidence for post－ Khufu－era construction．In G 2150 b，the small chamber leads off to the north of the shaft．The burial chamber of G 2I60 a leads off to the south，but then extends to the east，rather than the west as was the norm．G 2170 A＇s chamber leads off to the west．And G 2220 B，the chamber containing the great cedar coffin with a mummified female， extends not to the south but to the north．We should also note in passing that the post－nucleus cemetery mastaba of Nensedjerkai （G 2IOO－II），also includes a shaft a that extends northwards off the burial shaft and under the mastaba of her father Merib（G 2100－I； see figs．2．7，3．1）．${ }^{97}$

| Томв | Canopic niche in SE CORNER（m） | Niche lid remarks |
| :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { G 2 } 100 \text { 腹 } \\ & \text { Sedit } \end{aligned}$ | ． $57 \times .53 \times .55$ depth | rebate for lid on north and east sides |
| G 2120 溫 Seshatsekhentiu | $.65 \times .5 \times .68$ depth （． 35 in rock） |  |
| G 2135 （？） | ． $52 \times .5 \times .43$ depth |  |
| $\begin{aligned} & \text { G } 2150 \text { 殓 } \\ & \text { Kanefer } \end{aligned}$ | ． $95 \times .6 \times .65$ depth | slab lid： 1.15 x .65 x .15 m thick |
| G 2155 通 Kaninisut I | ． $8 \times .6 \times .6$ depth |  |

The earliest burial chambers conform to the specifications found in the other Khufu－era nucleus cemeteries $9^{8}$ with a few exceptions． Canopic pits are present in five of the mastabas presently under discussion：G 2100，G 2120，G 2135，G 2150，and G $2155 .{ }^{99}$ Interestingly， the final occupation of at least two of these tombs，those of Kanefer （G2150）and Kaninisut I（G2155），are clearly post－Khufu and probably date to early Dynasty 5．A slab－like cover was found by the canopic niche in Kanefer＇s burial chamber，and the sarcophagus lid lay against a recess cut in the west wall（fig．12．52）．${ }^{100}$ In addition to the recess in G 2150，the burial chamber of G 2140 similarly shows an unfinished coffin bench along the western wall（fig．II．22）．

There are also canopic niches in some of the later，non－nucleus cemetery mastabas．G 2IOO－II（Nensedjerkai）has a canopic niche in shaft A：． $5 \times .5 \times .5 \mathrm{~m}$ depth．and limestone coffin with krst lid．${ }^{\text {IOI }}$ Note that it is located along the south wall，but not in the southeast corner，as the burial chamber opens to the north of the shaft，and the usual placement of the canopic niche would put it right at the

[^9]chamber＇s entrance．Moreover，G 2IOO－I（Merib）preserves a canopic niche in shaft c；． $5 \times .5 \times .45$ depth．${ }^{102}$

Only one wooden coffin and three stone sarcophagi－two of limestone and one of red granite－were found in the shafts of the major mastabas．None of these objects was inscribed．The remaining primary burial shafts preserved either fragments or no trace of a sarcophagus at all．The wooden coffin comes from the intrusive shaft в of G 2220 （MFA 33．IOI6）．One limestone sarcophagus，from G 2135 A， is in Hildesheim（Pelizaeus－Museum，Hildesheim 3051，），and the other presumably remains in shaft A of G 2IOO－II（Nensedjerkai）．The red granite sarcophagus，showing a plaster coating intended to protect it during its descent into the burial chamber，belonged to Kanefer （G 2150；MFA 33－4－20）．The presence of sarcophagus fragments was mentioned for mastabas G 2100 A，G 2100 F（＝Lythgoe＇s＂G 2500＂）， G 2110 A（Nefer），G 2120 A（Seshatsekhentiu），and G 2130 A（Khentka）．

The chart below shows the relative sizes of the burial chambers listed in order from largest to smallest，while noting lined and unlined chamber walls and the presence or absence of canopic niches in the southeast corner：

| Burial <br> Chamber of Томв | Shaft | Square <br> M | Cubic <br> M | Lined <br> （＋） <br> Unlined $(-)$ | Canopic <br> NICHE | Reserve <br> HEAD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G 2210（？） | A | 21．56 | 39.88 | ＋ | － | ＋ |
| G 2155 㳑 <br> Kaninisut I | A | I7．2 | 37.84 | － | ＋ | － |
| G 2220 （？） | B | 15．12 | 21．16 | － | － | － |
| G 2150 㳑 Kanefer | A | 14．0 | 23．1 | － | ＋ | － |
| $\begin{aligned} & \text { G 2IIO 设 } \\ & \text { Nefer } \end{aligned}$ | A | I3．II | 26.87 | － | － | － |
| $\begin{aligned} & \text { G 2IOO } \\ & \text { Sedit } \end{aligned}$ | A | I2．24 | 36.74 | ＋ | ＋ | － |
| G 2 I 2 O <br> 盛 Seshat－ sekhentiu | A | II．I6 | 28.45 | ＋ | ＋ | － |
| G 2130 㿽 Khentka | A | 9.6 I | 27.38 | ＋ | － | － |
| G 2135 （？） | A | 9.21 | 28.09 | ＋ | ＋ | － |
| G 2220 （？） | C | 7.37 | 10.32 | － | － | － |
| G 2160 （？） | A | 7.15 | 10.73 | － | － | － |
| G 2140（？） | A | 4.83 | 7.0 | － | － | － |
| G 2170 （？） | A | 2.76 | 3.32 | － | － | － |
| $\begin{aligned} & \text { G } 2150 \\ & \text { Kanefer } \end{aligned}$ | B | 2.58 | 2.46 | － | － | － |

From the data summarized above，it is clear that Cemetery g 2IOO represents one of the earliest Khufu－era nucleus clusters．Most of the major mastaba cores were laid out by royal decree，and then assigned to individuals who decorated，altered，and extended the tombs according to their means and tastes，both above and below ground．The actual tomb owners，and the dates of their burials，however，often followed several reigns after Khufu himself，even into Dynasty 5．The earlier mastabas lay further west，and there is unique evidence to link certain

102 Reisner，$G N \mathrm{I}, \mathrm{p} .42 \mathrm{I}$ ．
construction techniques firmly to those，not just of Khufu，but even to his father Snefru，based on parallels at Meidum and Dahshur．

One of several mastabas（G 2100？G 2220？）could qualify as the primary or leader tomb of the cluster，in much the same fashion that G 4000 and G I2OI bore primary significance for their respective nucleus cemeteries．Part 2 of this Giza Mastabas volume will explore the hundreds of subsidiary tombs and burials from Cemetery g 2100， and their chronological relationship to the twelve surrounding major mastabas presented in the following pages．The chart below summarizes the dates suggested for the major mastabas covered in the chapters that follow．

| Томв | Suggested date | Remarks |
| :---: | :---: | :---: |
| G 2100 Sedit | Khufu |  |
| $\begin{aligned} & \text { G 2100-I 彾 } \\ & \text { Merib } \end{aligned}$ | Very early Dynasty 5 | Son of Sedit |
| G 2100－II Nensedjerkai | Early Dynasty 5 | Daughter of Merib |
| G 21IO Nefer | Khafre | Core：Khufu |
| G 2120 会 <br> Seshatsekhentiu | Khufu |  |
| G 2130 澏 Khentka | Khufu |  |
| G 22IO（？） | Khafre | Core：Khufu |
| G 2135 （？） | Khufu |  |
| G 2140 （？） | Khafre |  |
| G 2150 洽 Kanefer | Userkaf |  |
| G 2155 没 <br> Kaninisut I | Early Dynasty 5 |  |
| G 2160 （？） | Dynasty 5 | Core：Khufu |
| G 2170 | Dynasty 5 | Core：Khufu |
| G 2220 （？） | Menkaure（？） | Core：Khufu |

## Section 2

Catalogue of the Major Mastabas

## Chapter 3 <br> THE TOMB OF SEDIT:

## Mastaba g 2 Ioo

## Summary of Reisner's Description <br> Mastaba: ${ }^{1}$ type II a, core mastaba, uncased <br> $2 \mathrm{I} .6 \times \mathrm{I} 2.0 \mathrm{~m}$ <br> area 259 sq. m; proportion I/I. 8 <br> empty emplacement for slab-stela towards south end of east face, h. $0.38 \mathrm{~m} ; 1.0 .58 \mathrm{~m}$ <br> h. of mastaba 3.0 m ; on nearly level rock <br> average height of stepped courses 3I.I cm <br> average width of steps, 8.0 cm <br> general angle of batter of stepped wall, 77 degrees, 19 minutes <br> southern end later enclosed in the heavy retaining wall of w-masonry of the mastaba (type VII a) of Merib <br> Chapel: traces of an exterior crude brick chapel, apparently of type (i a) <br> only NE corner preserved with whitened mud floor and small bench inside the corner <br> slab-stela exposed in crude brick west wall of offering-room, destroyed by denudation and by the construction of intruded small mastaba of crude brick <br> Shaft A: original shaft, north of middle; $2.05 \times 2.1 \mathrm{~m} ;-7.8 \mathrm{~m}$ in rock <br> lined above with drab masonry, 2.9 m ; ten courses in south end portcullis slab in grooves in south ends of east and west walls; w. $0.55 \mathrm{~m}(\mathrm{~N}-\mathrm{S}) \times \mathrm{d} .0 .25 \mathrm{~m}(\mathrm{E}-\mathrm{W})$ portcullis slab h. I. 9 m ; w. 2.3 m ; th. 0.4 m ; upper left-hand corner broken off by plunderers to gain access to chamber <br> chamber: type $\mathrm{Icl},{ }^{2}$ with lining and pavement complete on south. $3.55 \times 3.45 \mathrm{~m}$; h. 3.0 m <br> area, 12.24 sq. m; capacity, $36.74 \mathrm{cu} . \mathrm{m}$ (measurements of the rock-cut chamber could only be estimated): $4.25 \times 4.15 \mathrm{~m} ; \mathrm{h} .3 .25 \mathrm{~m}$ area 17.63 sq. m; capacity $57.29 \mathrm{cu} . \mathrm{m}$ <br> passage: horizontal opening in chamber flush with east face of lining, low down in north wall; rock-cut I .23 m h. 1.23 m ; continued through the lining with total 1.2 .35 m step down from passage floor to pavement of chamber 0.53 m <br> blocking: interior blocking of white masonry set in plaster, penetrated by plunderers in upper part; outside, portcullis slab in portcullis grooves (for size see under shaft above) with upper left hand corner broken off by thieves; blocks of interior blocking found in shaft and chamber

I See Reisner, GN I, pp. 418-19, Map 5 and figs. 34 (shaft), 75 (blocking), 174 (IIann. Chapel), 238 (section through northern chapel), 239 (objects); pls. 27a-e, 28a-d, 40a.
2 A minor contradiction has crept into Reisner's publication here. In his $G N \mathrm{I}$, p. 92, fig. 32, and p. 106, he calls the chamber type 1 cm ("opening at or near middle of chamber wall, with rise to roof and a drop to floor of chamber'), versus the perhaps less accurate type Icl cited on p. 418 ("opening low down in north wall with a small step down from floor of passage to floor of chamber and a high rise to roof of chamber").
coffin: fragments of white limestone coffin with flat lid (type d) found in debris in lower part of shaft: in the chamber, scattered on the floor, fragments of decayed wood (probably from inner coffin of wood), scattered bones and model vessels
canopic pit: in the SE corner; $0.57 \times 0.53 \mathrm{~m}$ and 0.55 m deep rebate for lid on north and east sides
Shaft b: chief shaft in G 2100-I (Merib); see below
Shaft c: secondary shaft in 2100-I (Merib); see below
Shaft D: north of A and intrusive; I.O x $1.0 \mathrm{~m} ;-9.12 \mathrm{~m}$, ends at rock ${ }^{3}$
lined with small masonry, 3.5 m
no chamber; type 7 x ; filled with drift sand in which were found fragments of white limestone coffin and seven other objects obviously thrown out from shaft a (see shaft A, finds)
Shaft E: askew east of A; intrusive, I. 3 x I. $3 \mathrm{~m} ;-2.9 \mathrm{~m}$ in rock
lined above with gray masonry, 4.8 m , fourteen courses
no chamber; type 7 x , completely plundered
Shaft F: in south end of mastaba, just north of north end of G 2100-I
$1.6 \times \mathrm{I} .2 \mathrm{~m} ;-4.0 \mathrm{~m}$, ends at rock ${ }^{4}$
lined with small masonry; no chamber; type 7 x ; empty

## Excavation

The family complex of three mastabas, G 2100, G 2100-I, and G 2 200II (fig. 3.I-3.4) has a convoluted archaeological history, ranging from the year 1845 to 1905-1906, 1912, and beyond. The northernmost mastaba under discussion, G 2100, was first investigated by the Harvard-MFA Expedition during its initial season in Cemetery G 2100, under A.M. Lythgoe, in 1905-1906 (fig. 3.4). Unfortunately, no excavation diary is available for this season; only a few tomb cards detailing the clearance of shaft F survive (see below). Lythgoe also cleared the extension of this mastaba immediately south, the tomb of Merib (G 2100-I = Lepsius 24), whose decorated chapel had already been removed to Berlin by the Lepsius expedition in 1845. Finally, the southernmost extension of the complex, the tomb of Merib's daughter, Nensedjerkai (G 2100-II), fell to the Junker concession, and was cleared in 1912. The street area immediately in front (i.e., east) of the complex was examined during the 1905-1906 season under Lythgoe (fig. 3.5), and diary entries record additional work decades later, from February 9-17 and on March 2, 1933.

Shaft A, the principal shaft, was excavated in 1906, as recorded by excavation photographs (figs. 3.20-3.25). However, the shaft must have been subsequently refilled, since a re-excavation was conducted between December 29, 1935 and January 8, 1936, according to entries in the reis's diary (figs. 3.26, 3.32, 3.34-3.36). Curiously, these entries mention the daily progress in clearing the shaft, and then describe the burial chamber and its contents, as if it were being cleared for the first time. The objects were removed on January 8, 1936, and final photography of the chamber was completed on January 12.

For shaft D we likewise have excavation photographs dating to 1905-1906 (figs. 3.37-3.39). Additional clearance was done on April 28-29, 1932, as noted in the expedition diary of N.F. Wheeler.

Wheeler's diary records that shaft E was cleared on April 27, 1932 (containing only the phrase: "depth 7.35 m ; no chamber"), and the reis's diary mentions a return to the shaft for purposes of drawing,

3 The figure of 9.12 m comes from N.F. Wheeler's diary entry for April 29, 1932 (p. II78); the published description on Appendix C of GNI, p. 419 merely states: "ends at rock." Furthermore, notes for Appendix C stored in the Museum of Fine Arts, Boston, call the shaft type 8 X rather than 7 X .
4 The figure of 4.0 m comes from Wheeler's diary entry for April 27, 1932 (p. II77).
on June 24-25, 1937. It was recorded as filled with sand, pebbles, and limestone debris.

Shaft F was first cleared by Lythgoe, and the notation of February 1906 on HU-MFA Expedition photograph Bi556 (fig. 3.4r) most likely dates his excavation. Five tomb cards (EGOI4935-OI4938), written in pencil in Lythgoe's hand, discuss his clearance of Lepsius's debris dumped from the latter's i845 clearance of shaft в of Merib's tomb immediately to the south. Lythgoe's cards are transcribed in full below with my own edits supplied in brackets:

## G $2500\left[\right.$ G 2100] ${ }^{5}$

Tomb of Mer-ib (Lepsius 24)
Hamid Ahmed \& Abul Hasan Osman.
South shaft: [= F]
In southern end of original tomb (previous to Kephren extention [sic]). Surface deposit over mouth of shaft proved to be undisturbed (in modern times) and on it was small dump-heap of rock and gravel from 30 cm to about 75 cm high evidently put there by Lepsius in clearing the northernmost [= G 2100-I shaft b] of the two shafts in the Kephren extention [sic]. This dump blanketed the mouth of this shaft or original Mer-ib construction $\&$ it had not been noticed by Lepsius. ${ }^{6}$
On trenching from northern end of Mer-ib to locate original shaft the trench finally struck through Lepsius' dump, through surface-crust over shaft, and into the filling of sand.
At depth of about $40 \mathrm{c} . \mathrm{m}$. in this filling of shaft was worked flint-flake $9^{1 / 2}$ c.m. long (G $2500 / \mathrm{I}$ ). At depth of I metre began to turn up fragments of lid of limestone sarcophagus, with traces of dark ${ }^{7}$ red color. From this point down to depth of 3.50 m . the shaft was filled with this drift sand, in which these fragments of sarcophagus-cover continued to turn up. Also fragments of characteristic 4th dynasty pottery \& pieces of an alabaster dish:-

2 red-pol.; 3 red-pol.; 4 smooth brown ware; 5 large pol. brown ware covered with white slip; 6 fragments of alab. dish; size $\&$ shape undeterminable.
At depth of 3 m . in n.e. corner of shaft began to find fragments ${ }^{8}$ of alabaster vases of good size, and at 3.50 m . the drift sand ended and the filling became solid ground. On top of this ground in n.e. corner was mass of fragments of sarcophagus-cover $\&$ fragments of alabaster vase or vases altogether (see photo). ${ }^{9}$ These alabaster fragments numbered G $2500 / 7$.

Shaft F was cleared again on April 27, 1932 by Wheeler, who noted only a "depth of 4.0 m , no chamber."

## Finds

Found scattered on floor of chamber of shaft A:
36-1-2 (shipped to Boston after April 26, 1937) alabaster model basin of type $\mathrm{S}-\mathrm{X} \mathrm{b}$; broken in two pieces and fragment of a second; h. 3.4 cm ; d. rim 4.2 cm ; d. base, $1.9 \mathrm{~cm}(\text { fig. } 3.6)^{10}$

36-I-3 (shipped to Boston after April 26, 1937): 4I or more alabaster model basins, type S-X a, with slightly convex sides; i8 complete, 4 broken but complete, 7 broken and incomplete, and fragments of I2 or more ${ }^{\text {II }}$ (figs. $3.7-3.8$ ); (a) h. I. 4 cm ; d. max. 4.8 cm ; d. base, I. 6 cm; (b) h. I. 6 cm ; d. max. 6.8 cm ; d. base, 2.6 cm (figs. 3.7-3.8)

This text begins on Lythgoe tomb card EGOI4935.
6 The text continues here on Lythgoe tomb card Egoi4934.
7 The text continues here on Lythgoe tomb card Egoi4936.
8 The text continues here on Lythgoe tomb card EGOI4937.
9 No photographs of the interior of shaft F have yet been identified in the HUMFA Expedition photographic archives.
iо Reisner, $G N_{\text {I }}$, pp. 418-19, fig. 239; Reisner and Smith, $G N_{2}$, p. 100.
II Reisner $G N_{\text {I }}$, p. 419, fig. 239; Reisner and Smith, $G N_{2}$, p. 99 (misidentified as 36-3-I).

36-I-4: Broken and scattered human bones, including skull; stored in Giza magazine as of January 2006 (figs. 3.9-3.10, 3.33) ${ }^{12}$

Found in shaft в, in debris of pit:
32-4-60: 5I fragments of pottery bowl (twelve rim, only two fitting), type XXVIII; RW, fine red slip; d. 28 cm
32-4-6I: I4 fragments of pottery bowl (five rim, only two fitting), type XXVIII; RBrW, red slip; d. 18 cm

Found in shaft D, perhaps thrown out from shaft A:
MFA 06.1892: fragmentary large travertine (alabaster) shoulder jar with neck and ledge rim; type S-XV a (I); h. 29.4 cm ; d. rim 15.6 cm ; d. neck, 13.8 cm ; d. max., below shoulder 29.2 cm ; d. base, 14.4 cm ; th. of walls in some places 4 cm ; one place patched out with plaster (fig. 3.1I) ${ }^{13}$
(I) flint flake with rounded butt and pointed end; $1 ., 9.5 \mathrm{~cm}$
(2) RP: fragmentary deep bowl with plain rim and contracted mouth; type uncertain
(3) RP fragments of bowl with recurved rim; type XXXII or XXXVI
(4) BrW smooth; bowl with recurved rim; fragments
(5) WSRW: large jar of type A-II b; fragments ${ }^{\text {I4 }}$
(6) alabaster fragment of shallow dish with plain rim

Found in shaft f: ${ }^{15}$
$2500 / \mathrm{I}:{ }^{16}$ worked flint flake from a depth of about 40 cm in shaft filling; 1. 9.5 cm (fig. 3.13)

No number: fragments of limestone sarcophagus lid, from a depth of I-3.5 m, with traces of dark red color
No number: fragments of Dynasty 4 ceramics, and of an alabaster dish
No number: red-polished ware; details not recorded
No number: red-polished ware; details not recorded
No number: smooth brown ware; details not recorded
No number: large polished brown ware covered with white slip
No number: fragments of alabaster dish; details not recorded
No number: fragments of alabaster vase or vases, from northeast corner of shaft filling, at a depth of 3.5 m ; details not recorded
2500/7: flints (called alabaster fragments by Lythgoe), from northeast corner of shaft filling, at a depth of 3.5 m (fig. 3.13 )

East of G 2100:
33-2-183 (shipped to Boston May 1933): fragment (one-half) of alabaster dish, type X b; h. 2.5 cm ; diam. $9.6 \mathrm{~cm}(\text { fig. 3.14 })^{17}$
33-2-184 (shipped to Boston after May i, 1947): steatite amulet of lion(?); no hole; portion of face broken off; traces of black paint on haunches; h. I. 6 cm ; w. I cm; 1. 2.8 cm (fig. 3.15)
33-2-189 (shipped to Boston after May 1, 1947(?)): limestone stela or tablet fragment from debris east of mastaba, near G 2102, on February 17, 1933 (N.F. Wheeler diary, p. I224), with two figures in raised relief and inscriptions in sunk relief; h. 30 cm ; w. 54.5 cm . Seated male figure at right before table piled with offerings. At left standing male figure inclines toward the seated figure, extending the cut haunch of an ox (fig. 3.16).

I2 This skull, identified as a female, is primarily responsible for the assignation of G 2 IOO to Sedit.
I3 Reisner, GNI, p. 419, fig. 239, pl. 43e; listed by Aston, Ancient Egyptian Stone Vessels, p. 139.
14 Reisner, $G N$ I, p. 419 (5), Reisner and Smith, $G N 2$, p. 69.
15 This information is preserved solely on handwritten tomb cards by Lythgoe, most likely dating to February 2, 1906: EGOI4935, EGOI4934, EGOI4936, EGOI4937, and EGOI4938 (fig. 3.12).
16 In early 1906, Lythgoe originally numbered the Merib complex as G 2500 , hence the numbering system for these objects: 2500/i, 2500/7, etc.
17 Reisner and Smith, $G N_{2}$, p. Ioo.


Text: (I) imshbw m(?) (2) br Wsir hbr(t) nswt Nffi (3) [trs.] ${ }^{18}$ t hnkt nb (4) $[\ldots] n i$

Translation: (I) The revered one (2) before Osiris, the royal ornament Nefri. (3) [trs.] all (kinds of) bread and beer. (4) [...]ni

## Architecture

This uncased mastaba contains no north niche, but preserves a slab stela emplacement at the southern end of the east wall (fig. 3.7). This area shows traces of an exterior mud-brick chapel. ${ }^{19}$ Along with G 5230 (Babaef), this is the only roofed mastaba at Giza, according to Reisner. ${ }^{20}$ But roofing blocks have since been noticed on G 2130, and G 2155, as well as the mastabas of the G 6000 cemetery. While the massive nummulitic blocks on the roof of G 5230 seem to cover the shafts as well, it is not clear if the shafts of $G 2100$ were covered. ${ }^{2 I}$

It is difficult to determine the exact distance of the slab stela emplacement from the southern end of the mastaba core, since the latter is enclosed by the surrounding casing of G 2100-I, the tomb of Merib. However, the emplacement size indicates that the missing slab stela was of the "short form" variety, ${ }^{22}$ and a survey of shortform slab stelae at Giza indicates that they are usually located within about $3-5 \mathrm{~m}$ from the the southern end of their respective mastabas. "Long-form" stelae, on the other hand, appear at a greater distance, between $5-7.5 \mathrm{~m}$ from their southern ends. The emplacement in G 2IOO-I occurs at about 4.8 m from the point at which Merib's large casing blocks begin. Thus it is a logical assumption that Merib's casing blocks do indeed mark the southernmost extent of mastaba G 2100, and do not extend further north beyond Merib's annex building proper.

The core mastaba shows small finished blocks in vertical stepped casing (type II a). The thinnest of corridors, less than a meter wide, remains between its northern side and the later, subsidiary mastabas built immediately south of G 2 III (i.e., G 2 III). ${ }^{23}$ To determine whether Merib's large casing blocks were intended to wrap completely around G 2100 as well as G 2100-I, an examination of the perimeter of G 2100 was conducted in November 1993. Casing block emplacement lines were discovered on casing stones on the northwest corner of the mastaba (fig. 3.18). Since these lines align with the massive casing stones that cover G 2100-I (Merib) along

I8 The pencil sketch for this fragment in the Object Register, p. I189, hints at a hand followed by a horizontal sign here.
19 An attempt at reconstructing the exterior chapel walls is provided by Jánosi, Giza in der 4. Dynastie, Plans 2-3.
20 Reisner, $G N$ I, pp. 85-86.
2 Reisner, $G N$ i, p. 176.
22 On short- and long-form stelae, see Manuelian, Slab Stelae, pp. I, II7-18; figs. 175-76.
23 The northern niche of G 2041 is visible fairly near the middle of the east-west avenue obscured between G 2100 and G 2110 as one looks west, but it would have been obscurred by the height of mastabas G 2III, G 2II3, and surrounding tombs.
its west side, this seems to prove at least the intention of covering the entire double mastaba, G 2100 as well as G 2IOO-I, with massive casing blocks. But clear proof that the massive casing intended for G 2100 was never completed lies in the southern exterior wall of G 2III, which is located further south than the exterior of the casing indicated by the east-west corner markings of the large foundation block (fig. 3.4, lower right). G 2III's southern face could not have extended so far to the south if massive casing stones had previously been added to the northern edge of mastaba G 2100.

At this writing, several of the later shafts on top of G 2100 are filled in, and perhaps some of the fill from shaft a forms the hill in the street at the north end of the tomb's east side, forming a considerable rise between G 2100 and G 2130. This area appears to have been completely excavated in 1905-6 by the Expedition. The shafts in the street east of G 2100 (figs. 3.4-3.5) show a present-day exposure of varied material, from the remains of mud-brick walls to stratigraphy of limestone chips, gravel, mud, and even a fine browncolored dirt. Several massive, rectangular limestone blocks cross the street east to west at the join of G 2100 and G 2100-I but it remains unclear whether these stones were shaft walls, part of the leveling and paving of the street itself, or both.

The core of G 2100 has suffered more on the west side of the tomb (fig. 3.20), and several areas at the mastaba's northern end expose crumbling, friable, yellow limestone blocks.

## Shafts and Burials

G 2100 was originally a one-shaft mastaba, represented by shaft a with a lined burial chamber north of the mastaba's center axis, and doubtless holding the burial of the individual once shown on the now missing slab stela (figs. 3.23-3.26). Three small shafts were subsequently added (figs. 3.28). The furthest north of these was shaft D (figs. 3.37-3.39), to the north of A, with E (fig. 3.40) askew to the east of A , and F (figs. $3.4 \mathrm{I}-42$ ) close to the southern end of the mastaba, near the addition of Merib's annex. Shaft F was probably subsidiary to the Merib addition; shafts в and c were sunk into the Merib addition, further to the south.

G 2100 A (figs. 3.9-10, 3.29-3.30, 3.33-3.34)
View of disarrayed skeletal elements near square hole in floor: Visible elements include posterior view of left tibia and fibula, apparently held in articulation by soft tissue; posterior view of right tibia; right fibula appears half in the hole, also on floor are a few hand and/or foot bones, a large mammal scapula (something as big as a cow or a horse). Visible inside the hole are two vertebrae and a right os coxa. Other bones present but unidentifiable. Human individual is adult, sex uncertain. No tomb card sketches.

Some confusion in the skeletal remains has occurred, casting doubt on a definitive attribution of gender. Most of the bones identifed in November 1993 (in a Giza magazine on the site of the old Harvard Camp, after undoubtedly several relocations over the years) as coming from G 2100 A were determined to belong to a female, while a mandible was certainly from a male.

Elements in favor of a female attribution (in which case, most likely the mother of Merib):

The bones of the pelvis and pubis where there is a ventral arc; the sacrum is wide and not curved. In addition, the sacroiliac joint reaches the second sacral segment only. The long bones are smooth and light, the diameter of the head of the femur is 36 mm
and the head of the humerus is 35 mm . Both of these features are characteristic of a female. Estimated age and sex: female, aged 45 to 49 years old. ${ }^{24}$

Elements in favor of a male attribution (in which case, most likely the father of Merib):

The mandible identified as G 2100 A is that of a young adult, aged about 24 to 30 years (based on the degree of molar tooth wear) and, from what can be seen of the jaw morphology, it is that of a male, not that of a woman aged 45 to 49 years. There is no way of ascertaining that the bones located in the Giza magazine in November, I993 are the same bones in the original Reisner expedition photograph, since the same bones are not shown in both images. ${ }^{25}$

A chance to reexamine these bones arose on January i, 2006. By this time, they had been moved to the large storage facility far west of the Western Cemetery.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. i: early reign of Khufu (core); Khufu (mastaba).

Features supporting an early date for the tomb include the portcullis grooves on the T-shaped shaft A, one of only five tombs at Giza (all in Cemetery g 2IOO) to display this "archaic" feature; the lined burial chamber with canopic niche, the presence of a slab stela, coupled with the absence of extensions or alterations to the chapel area, and of course the location of the mastaba in the westernmost row of tombs in this nucleus cemetery. A date in the reign of Khufu is therefore certain. ${ }^{26}$

## Decoration

The original excavation records introduced some confusion into the interpretation of the decoration of G 2100 . This is due to the discovery of a slab stela fragment showing the lion-legged stool and

24 I am indebted to Azza Mohamed Sarry el-Din for this analysis; personal communication, February 17, 1994.
25 For analysis of skeletal photographs, I thank Nancy C. Lovell; personal communication, January, 1994.
26 Compare Baud, Famille royale et pouvoir 2, p. 579 [222]: Khufu; Schmitz, Untersuchungen zum Titel $S_{3}$-Njśwt, pp. 70-71, 118-19.
lower torso of the seated tomb owner. ${ }^{27}$ Although the fragment emerged in the street east of G 2100 and west of G 2120, it clearly belongs to the slab stela of Seshatsekhentiu, owner of G 2120 (see below). The rest of the fragments forming this slab stelae were found on the east side of G 2120, hence W.S. Smith's mistaken assumption that the fragment derived from the otherwise missing slab stela from G 2 IOO .

## Tomb Owner and Dependents

Name: not preserved, but owing to the identification of the skeletal remains from shaft a as a female, the tomb may be ascribed to Sedit, the mother of Merib.

Reisner originally believed Sedit to be one of Khufu's queens, and even the owner of one of that king's subsidiary pyramids in the Eastern Cemetery: "... the ladies of the small pyramids, G I-a, G I-b, Henutsen, Nefertkauw, Sedyt(?)." ${ }^{28}$ Later he modified his views: "Queen Sedyt the mother of Prince Merib (of Mastaba G 2100) who was a king's daughter but whether married to Cheops or to one of his two sons is uncertain." ${ }^{29}$ Neither Merib nor his mother Sedit were of the blood royal, despite their titles. ${ }^{30}$ Neither is ever listed with a title higher than $s 3$ or $s s t n s w t n t \underline{h} t=f$. For Sedit, one would expect $m w t=f m_{33 t} \mathrm{Hr}$ Sth or similar titles. Except for her appearances on the south and east walls of the chapel of her son, ${ }^{31}$ we have no further information about her.

## Titles of Sedit

$m w t=f$, his mother (in G 2100-I)
$h m(t)-n t r$ Nt mbtt inbw, priestess of Neith, north of the wall (in G 2100-I) sit nswt n $\underline{b} t=f$, king's daughter of his body (in G 2100-I)

27 MFA fragment 33-2-187 (now part of MFA 06.1894); HU-MFA Expedition photograph C 13410, March 22, 1933; see Manuelian, Slab Stelae, pp. 77-78, fig. IO2, and below, Chapter 7, figs. 7.66-7.68.
28 Reisner, "The Tomb of Meresankh, a Great-Granddaughter of Queen HetepHeres I and Sneferuw," BMFA 25, no. I5I (October, 1927), p. 74.
29 Reisner, Mycerinus, p. 240.
30 Junker, Gîza 2, pp. 132-33, and in general on titles, p. 3iff.
31 Lepsius, Denkmaeler 2, pls. 20-2I, and see below, Chapter 4.


Fig. 3.I. Plan and section of the Merib family complex including (in chronological order) the mastabas of Sedit (G 2100), Merib (G 2100-I), and Nensedjerkai (G 2100-II). Adapted from Priese, Die Opferkammer des Merib, inside back cover.


Fig. 3.2. Computer reconstruction of mastaba G 2100 (Sedit), looking southwest, with the contiguous mastabas G 2100-I (Merib) and G 2100-II (Nensedjerkai) in the background. Courtesy Dassault Systèmes, 2009.



Fig. 3.4. G 2IOO, east face, cleared southwards to the north niche of G 2IOO-I (= Lepsius 24, Merib); shafts associated with G 2 II4 and G 2105 in the street, looking southwest. 1906. HU-MFA Expedition photograph, A.M. Lythgoe, A5iI [= A5965] (rephotographed as C5280).


Figs. 3.6. 36-I-2, alabaster model basin (also visible in fig. 3.6, bottom row, third from left). May 3I, 2002. Museum of Fine Arts, sC32813.

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Fig. 3.5. Shafts along the east face of G 2100, looking northwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, C1345 [= C12424].


Fig. 3.7.36-I-3, alabaster model dishes from G 2100 A; rows 2, 3, and 4, nos. I-9 in each row; 27 model dishes. February 14, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8609.


Figs. 3.8. 36-1-3, two alabaster model dishes from G 2100 A. May 15, 2008. Peter Der Manuelian, pdm_imgoos2o and PDM_IMGOOS25.


Fig. 3.9.36-1-4, bones of human skeleton from G 2100 A, profile of teeth in the lower jaw. November 22, 1993. Peter Der Manuelian, pDM_1993.IIO.25.

Fig. 3.io. 36-I-4, bones from g 2 Ioo A. January 16, 2006. Peter Der Manuelian, PDM_06287.


Fig. 3.1I. MFA 06.1892, restored alabaster jar from G 2100 D and drawing, 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B656 [= G7473] and drawing.


Fig. 3.12. Ceramic profiles sketches adapted from A.M Lythgoe's tomb card sketch (EGOI4396).


Fig. 3.13. Two views of flints from g 2100 F (originally labeled by A.M. Lythgoe as G 2500 ). Date not listed. HU-MFA Expedition photograph, photographer not listed, C13020 (left) and C13O2I (right).


Fig. 3.14. 33-2-183, fragmentary alabaster dish east of G 2100. Top: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, C13413 (detail). Middle: June 25, 2008. Peter Der Manuelian, PDM_IMGO2I38. Bottom: drawing.



Fig. 3.15. 33-2-184, steatite amulet from east of G 2100. May 15, 2008. Peter Der Manuelian, composite from images PDM_IMG00573, 00574, 00575, 00577, 00578. Line drawing sketch from HU-MFA Expedition Object Register.


Fig. 3.16. 33-2-189, fragment of a tablet of Nefri from east of G 2100. Left: February 17, 1933. HU-MFA Expedition photograph, Dahi Ahmed, b8280 (detail). Right: line drawing sketch from HU-MFA Expedition Object Register.


Fig. 3.17. G 2100, east face, slab stela emplacement, looking west. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, c857 [= CI2421].


Fig. 3.18. Northwest corner of G 2100, lined casing block, and west side of mastaba, looking south. November 15, 1993. Peter Der Manuelian, pdm_1993.077.03.

base line

| $l$ |  |  |
| :--- | :--- | :--- |
| 0 | 1 | 2 |

Fig. 3.19. Section of the street east of G 2 IOO, looking north.


Fig. 3.20. West side of G 2100, looking northeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B955 [= B7421].


Fig. 3.21. Filling and toeholds in the shaft of G 2100 A , looking northeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, ci653 [ $=$ CI2442].


Fig. 3.22. Excavating shaft A of G 2100, with pit D in the background, left, looking northeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, CI475 [= CI244].


Fig. 3.23. G 2100 A, looking south down the emptied shaft. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в718 [= B7428].


Fig. 3.24. G 2100 A , corridor from the shaft on the north wall, with entrance to the burial chamber showing blocking in the passage, looking north out the door of the burial chamber. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B893 [= B7327]. For a computer reconstruction of this image, compare also fig. I.I2.


Fig. 3.25. Entrance to chamber of G 2100 A , with door blocking at the bottom of the shaft, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, CI279 [= CI245I].


Fig. 3.26. G 2100 A , northeast corner of the burial chamber after clearance, looking northeast. January 12, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A 7380.

Mastabas of Nucleus Cemetery g 2 Ioo


Fig. 3.27. Plan and section of G 2100 A .


Fig. 3.28. Computer reconstruction of G 2100 A, looking southeast, with shafts G 2100-I B and G 2100-I C in the background. Courtesy Dassault Systèmes, 2009.


Fig. 3.29. Computer reconstruction of G 2100 A , looking southeast, showing portcullis stone in shaft, corridor blocking, and burial chamber. Courtesy Dassault Systèmes, 2009.



Fig. 3.3I. G 2100 A , southeast corner of the burial chamber, wih tumbled limestone blocks, scattered bones ( $36-\mathrm{I}-4$ ), and model vessels ( $36-\mathrm{I}-3$ ), looking southeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B934 [= B7323].


Fig. 3.33. G 2100 A, deposit in the canopic pit in the floor of the southeast corner of the burial chamber, with tumbled limestone blocks, scattered bones (36-I-4), and model vessels (36-I-3), looking southeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в883 [= в7320].


Fig. 3.35. G 2100 A , northwest corner of burial chamber after clearance, looking northwest. January I2, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7383.


Fig. 3.32. G 2100 A, burial chamber, after clearance, with the canopic pit in the southeast corner, looking southeast. January 12, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A738r.


Fig. 3.34. G 2100 A , burial chamber as found in 1936, looking southwest. January 5, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7364.


Fig. 3.36. G 2100 A , southwest corner of burial chamber after clearance. January 12, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7382.


Fig. 3.37. G 2100 D, mouth of pit, looking southeast. 1905-1906. HUMFA Expedition photograph, A.M. Lythgoe, c866 [= CI2454].


Fig. 3.38. G 2100 D, looking down shaft. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, C 844 [= CII956].


Fig. 3.39. G 2100 D, fragments of alabaster jar in situ, MFA 06.1892. 19051906. HU-MFA Expedition photograph, A.M. Lythgoe, CI598 [= CI2655].


Fig. 3.40. Plan and section of G 2 IOO E.


Fig. 3.4I. G 2100 F in foreground with shaft b of G 2100-I (= Lepsius 24) in background, looking southeast. February 1906. HU-MFA Expedition photograph, A.M. Lythgoe, BI556 [= B7856]


Fig. 3.42. G 2100 F looking south towards G 2100-I. November 4, 1993. Peter Der Manuelian, PDM_1993.064.08.

## Chapter 4 <br> THE TOMB OF MERIB: <br> Mastaba G 2100-I (annex)

## Summary of Reisner's Description

Mastaba: ${ }^{\text {I }}$ type VII a (2); heavy retaining wall of w-masonry (gray nummulitic limestone) covering the top of the mastaba (cf. G $5230^{2}$ ); enclosed south end of the core G 2100 22.0 x I4.0 m; area, 308.0 sq. m proportion I/I. 57 ; h. about 5.0 m
Chapel: type (4 a) interior two-niched chapel of nummulitic limestone, carved with sized technique; $3.85 \times \mathrm{I} .56 \mathrm{~m}$; area, $6.0 \mathrm{sq} . \mathrm{m}$ proportion $\mathrm{I} / 2.46$; relation $\mathrm{I} / 5 \mathrm{I} .33$; fully decorated
Subsidiary north niche: towards north end of east face of mastaba, cut in gray retaining wall of mastaba topped by an architrave of separate block: framed false door; h. to top of architrave, 4.2 m ; w. of architrave, I .84 m ; w. of false door, I .34 m tablet, cross-bar, and drum; inner niche, $0.18 \times 0.16 \mathrm{~m}$ outer niche, $0.62 \times 0.1 \mathrm{~m}$; outer panels, very shallow, d. 2 cm
Exterior crude brick chapel nearly destroyed: on south, a magazine, room (b), and north of it the end of a long N-S room which apparently surrounded the doorway to the interior chapel, room (a)
(b) N-S magazine(?): $2.27 \times \mathrm{I} .8 \mathrm{~m}$; area, 4.08 sq. m
entered from north from (c), by doorway in north wall
(c) hall around doorway to (a); $9.75 \times 2.25 \mathrm{~m}$; area, 2 I .93 sq. m; whitened walls; entered from east by doorway in north end of east wall; northern end destroyed by small intruded mastabas and shafts
entrance: drum over doorway; titles and name in relief architrave over doorway: offering formula in two horizontal lines; combined formula in name of Merib; no serdab
Shafts in G 2IOO-I: two shafts in mastaba; B on north and C on south; for shafts A, D-F, see G 2100
Shaft b: secondary shaft; i. $8 \times$ г. 8 m ; -I0.9 m in rock
lined above with masonry, 4.9 m ; eight courses
chamber: type 3 bf , at 0.9 m above bottom of shaft on south. $4.15 \times 3.15 \mathrm{~m}$; h. I. 45 m ; area, 13.07 sq. $\mathrm{m}^{3}$ capacity $18.95 \mathrm{cu} . \mathrm{m}$
passage: $\mathrm{I} .55 \times \mathrm{I} .0 \mathrm{~m}$; h. I .2 m
blocking: probably type I b (I); blocked with portcullis slab
h. I .55 m ; th. 0.3 m
burial: Lepsius found the remains of an adult male skeleton but no traces of coffin or of objects
Shaft c: chief shaft; $1.8 \times$ I. 95 m; -I6.4 m in rock

I See Reisner, GNi, pp. 419-2i; Junker, Gîza 2, pp. 12I-35; Lepsius, Denkmaeler 2, pls. 18-22, ibid 3, pl. 288, nos. 4, 5; ibid I, Text, pp. 46-49.
2 Reisner is referring to the roofing stones on the mastaba of Babaef, G 5230; PM III, pp. 155-56; Reisner, $G N$ I, pl. 8b. For Giza Archives Project online images (at this writing: www.gizapyramids.org), see B26I2, and PDM_1993.I26.16.
3 Note the minor discrepancies in Reisner, $G N_{\mathrm{I}}$, p. III, where the area is given at I2.91 sq. m, with capacity 18.62 cu . m, while in Appendix C, p. 42 I it is listed as 13.07 sq. m with capacity $18.95 \mathrm{cu} . \mathrm{m}$.
lined above with masonry, 4.I m; eleven courses
chamber: type $3 \mathrm{br} ;{ }^{4}$ on south. $3.05 \times 2.95 \mathrm{~m}$; h. I. 95 m area 8.99 sq. m; capacity $17.52 \mathrm{cu} . \mathrm{m}^{5}$
passage: I .45 x I. 0 m ; h. $\mathrm{I} . \mathrm{I} 5 \mathrm{~m}$; entrance at roof-level with step down of 0.8 m
blocking: destroyed, but at top the passage on the shaft side is a rebate, h. 0.15 m ; d. 0.25 m ; this indicates a blocking of vertical slab or slabs backed on inside by interior blocking
h. $1.55 \mathrm{~m}^{6}$
coffin pit: along west side; $2.2 \times 0.95 \mathrm{~m}$ and 0.3 m deep
Lepsius found fragments of wooden coffin and bones of a female skeleton
canopic pit: in SE corner; $0.5 \times 0.5 \mathrm{~m}$. d. 0.45 m , with slab cover

## Excavation

By 1905-1906, when the Harvard-MFA Expedition began the excavation of this central tomb in the family complex of G 2100, G 2100-I, and G 2100-II, the decorated chapel had long since been taken by Lepsius to Berlin in 1845 (fig. 4.I). ${ }^{7}$ Lepsius removed all but the lowest courses and foundation blocks of the chapel, and cleared both shafts B and c, but left the rest of the area largely undisturbed. Max and Ernst Weidenbach wrote the Merib text for Lepsius's Denkmaeler (quoted below). ${ }^{8} \mathrm{~J}$. Bonomi produced the pencil drawings of the wall reliefs, and J.J. Frey the final color illustrations. ${ }^{9}$ After more methodical excavation and clearance by Lythgoe in 19051906, the area was re-examined by the Harvard-MFA Expedition in the early 1930 s.

Since Lepsius's activity at the tomb is so integral to its history, the entire entry on Merib's tomb from his Denkmaeler aus Ægypten und Ethiopien 1, Text, pp. 46-49, is quoted here: ${ }^{10}$

Im Dezember 1842 fand ich an dem großen Gebäude No. 24, das fast ganz im Sande vergraben lag, eine Vertiefung in der Mauer des oberen Gesimses, welche verriet, daß eine Thüre darunter verborgen sei [fig. 4.8]. Ich grub selbst ein tiefes Loch, kam aber nicht bis zum Architrav; den andern Tag schickte ich Leute zum Ausgraben hin und diese gelangten bald bis zum oberen Architrav, aus dessen Inschrift ich sogleich sah, daß der Verstorbene ein königlicher Prinz war. Die Inschriften dieses Architravs, der Seiten darunter, des Thürbalkens, der Laibungen usw. waren vortrefflich erhalten, und so auch das Innere, das in gemaltem Relief ausgeführt ist. Auch hier, wie in allen Gräbern, war man vor Zeiten eingebrochen und hatte mehreres beschädigt, doch ist es immer noch eins der besterhaltenen, die wir gefunden haben (vgl. die Aufnahme LD $\mathrm{I}_{1} 22$ ).

Das ganze Gebäude ist noch ziemlich gut erhalten, die Kammer mit dem Eingang ist jetzt in Berlin No. IIO7.
Der Eingang, der sich an der Ostseite des Gebäudes nahe der südlichen Ecke befand, trägt außen Inschriften und Darstellungen

4 Reisner gives two different types for shaft c: " 3 cr" in $G N_{\text {I }}$, p. in but " 3 br" in Appendix C on p. 42I. The "b" refers to the long axis of the chamber being at right angles to the adjoining side of the shaft, while " c " denotes that the chamber is square or roughly square; cf. Reisner, $G N \mathrm{I}, \mathrm{p} .9 \mathrm{I}$. The " r " is correct (indicating the entrance of chamber at roof level; ibid., pp. 92-93).
5 Minor discrepancies in Reisner, $G N_{\mathrm{I}}$, p. III (area: 9.0 sq. mand capacity I7.I cu. m) versus ibid., Appendix C, p. 421: area 8.99 sq. m and capacity 17.52 cu . m.
6 This measurement comes from Junker, Gîza 2, p. 124.
7 The chapel in Berlin bears the accession number no7.
8 Lepsius, Denkmaeler I Text, pp. 46-49.
9 Lepsius, Denkmaeler 2, pls. 18-22.
Io For a slightly different description of portions of the following, taken from Lepsius's Notizbuch, see Priese, Die Opferkammer des Merib, p. 16.
des Verstorbenen, der runde Thürbalken nennt seine Titel und Namen. LD 2, 18. (Porträt des Verstorbenen LD 3, 288, 4.5).
An der rechten Thürlaibung die Darstellung $\mathrm{L} D_{2}, 22 \mathrm{~b}$, an der linken LD 2, 22a (links). Die Thüre selbst war, wie meistens, keine Doppelthüre, sondern einflüglig. Am nördlichen Ende des Thürbalkens ist unten noch ein rundes Loch (Dm. 9 cm .) zu sehen, in dem sich einst der Zapfen drehte.
Auf der schmalen Wand a links vom Eintretenden sind 3 Opfertiere dargestellt: LD 22 (rechts). Der dieser Wand gegenüberliegende Teil $b$ der Nordwand, an welche die Thür anschlug, war als Holz gemalt. [Die Farben sind hier wie in der ganzen Kammer jetzt verschwunden. Auch der Thüranschlag bei c und d ist ohne Darstellungen und war also vermutlich ebenso als Holz gemalt.]
Im Innern der Kammer sind an der dem Eingang gegenüberstehenden Westwand zwei Blendthüren, deren Mauergrund als Granit angemalt ist, wie auch die Decke. Ringsum sind Darstellungen, die alle auf einem roten, von 2 schwarzen Linien eingefaßten Bande stehen; darunter ist fast i Fuß breit Holztäfelei nachgeahmt, darunter sind die Wände noch mehrere Fuß tief schwarz gemalt.
Nordwand, Teil e: LD 2, 22 c (wo die schwarze Bemalung unten aus Raummangel verkürzt ist).
An der Westwand steht in der Mitte zwischen den beiden Blendthüren der Verstorbene in großer Figur, umgeben von seinen Kindern, wie es scheint, deren Namen aber nur gemalt waren oder [noch zugefügt] werden sollten. Das Tier links mit der Überschrift ( $\Theta_{0}$ ) ist größtenteils grïn gemalt, wodurch man wie die heutigen Araber grau ausdrücken wollte. LD 2, 19.20a (südliches Ende der Wand). ${ }^{\text {II }}$
An den Laibungen der nördlichen Blendthüre ( $\mathrm{L} \mathrm{D}_{2}$, 19) sind Opferständer dargestellt: $L D_{2,}$ 2o b. c., an denen der südlichen ( $\mathrm{L} D 2_{2}$, 19-20 a) desgl.: $\mathrm{L} D 2,20$ d. e.
Südwand: LD 2, 20 f (der Kopf der Mutter des Verstorbenen $\left.\operatorname{Sdit} \|_{\square}^{\square} ; L D_{3}, 288,6\right)$.
Ostwand: südlicher Teil (rechts neben der Thüre) LD 2, 2I, nördlicher Teil (über der Thüre) LD 2, 22 d.
In dem hinteren Teile des Gebäudes sind 2 Brunnen, links ein kleinerer c. 60 Fuß tief, rechts ein größerer nicht ganz so tief. In jedem öffnet sich auf dem Boden eine Grabkammer nach Süden.
In dem kleineren Brunnen, in dem die Frau oder Mutter des Verstorbenen begraben gewesen zu sein scheint, fanden sich bei der Ausgrabung viele Steine unter dem Sande, dann ein ganz großer Stein, welcher die Kammer ganz verschlossen hatte. ${ }^{12}$ Hinter diesem Steine war noch eine Mauer von mächtigen Steinen aufgebaut; der Stein war [von den Grabräubern] nach Norden abgebeugt und die eine obere Ecke abgebrochen; so war auch die linke obere Ecke der Mauer durchbrochen. Im Innern der Grabkammer lagen noch mehrere Steine dieser Mauer, hereingefallener Sand, Knochen und Scherben. - Auf der rechten Seite der Kammer (s. den Grundriß LD I, 22) war von N. nach S. eine Vertiefung im Felsen, von der Länge und Breite eines Sarkophags. Hier lag ein Menschengerippe zerstreut nebst den Knochen von einem Vorderfuße und zwei Hinterfüßen eines Rindes; ferner eine unzählige Menge Gerippe von Fledermäusen und von einigen Vögeln; endlich auch eine Anzahl länglicher Holzstücke von c. $6 \times 4$ Zoll Größe.- Links war hinten in der Kammer, dem Eingange gerade gegenüber, eine andere viereckige Vertiefung im Felsen (c. i I/2 Fuß tief), neben welcher eine viereckige Platte lag, die als Deckel gedient hatte (vgl. den Durchschnitt nach ef LD I 22). In diesem Loche lagen die Scherben von etwa 3 größeren etwas über I Fuß hohen Vasen aus roter gebrannter Erde von dieser form: [drawing; see

II In der Publikation scheinen die Blendthüren auf dem roten Streifen zu stehen. Dieser Fehler der Zeichnung ist nach dem Durchschnitte nach cd (LD I 22) zu verbessern.
I2 Lepsius is referring here to the smaller shaft located directly behind (west of) the decorated chapel; this shaft was designated shaft c by Reisner's expedition.
fig. 4.9]; ferner von mehreren kleineren; nur die kleinsten (zwei von der Form a (eine in Berlin No. 1235) und 9 von der Form b, gleich kleinen Schüsselchen (Berlin No. 1319-1322. 1345. 1347. 1352. 8634) waren erhalten. Auch mehrere Stücken Nilthon, wie es scheint vom Verschluß der Vasen fanden sich; ferner eine kleine verzierte Kugel (jetzt in Berlin No. 86st).
Ein steinerer Sarkophag kann nie in dieser Grabkammer gewesen sein, denn die Oeffnung der Mauer und des Thürsteines war viel zu klein, als daß er, wenn dies auch nicht sonst unwahrscheinlich wäre, hätte herausgeschafft werden können. Vielleicht deuten aber die Stücke Holz, die bei der leisesten Berührung in Staub zerfielen, auf einen hölzernen Sarkophag; doch ist auch das nicht sehr wahrscheinlich, weil sonst wohl längere Stücke Holz zu sehen gewesen wären. - Der Körper scheint nach dem sehr dünnen Hirnschädel zu schließen, einer Frau angehört zu haben.

In dem größeren nördlichen Brunnen fand sich die Kammer nach derselben Seite in den Fels gehauen (s. den Durchschnitt nach g h L $D_{\mathrm{I}}, 22$ ). ${ }^{13}$ Hinter dem Thürsteine, der sie verschloß, fand sich eine Mauer von ungebrannten Nilerdziegeln (von 0,37 x 0,19 x 0,13 Größe), zwei Stücke davon sind jetzt in Berlin No. 1607 .
Die Kammer enthielt wieder, ganz wie die erste, rechts die Reste eines menschlichen Körpers, aber keine Rinderknochen und keine Vasen; ein einziges kleines Schüsselchen fand sich beim Ausgraben des Schachtes, es war vielleicht aus dem anderen dahin geworfen. - Der Hirnschädel war dicker als der andere und aus dem Beckenknochen ließ sich ersehen, daß das Gerippe einem Manne angehörte. Schädel- und Knochenstücke dieser Leiche sind jetzt in Berlin (Inv. VI II73).

Die Kammer enthielt keine Vertiefungen, keinen Sarkophag, aber kleine Holzstücke, die aber wiederum kaum zur Annahme eines hölzernen Sarkophags berechtigen.

Lepsius mentions two skulls found, one from shaft C and one from shaft в. Based on nothing more than the thickness of the cranium, he designated the shaft c skull as female, and the second as male. Rather than ascribe this skull to Merib's mother, Sedit, however, we have more compelling evidence to place her in shaft A of G 2100 proper (see above). If the shaft c skull really did belong to a female, then perhaps Merib's daughter Sednet was the occupant of shaft c. His other daughter, Nensedjerkai, possessed her own tomb immediately to the south (see below, G 2IOO-II); she clearly takes the more favored position, holding onto her father's staff on the south entrance thickness to his chapel. There no mention of Merib's wife on the walls of his chapel. ${ }^{14}$

Moving beyond Lepsius's work and into the twentieth century, we find that no preserved diary entries exist for the Lythgoe season of 1905-1906. But later entries are recorded by both Noel Wheeler and the HU-MFA Expedition reis. The earliest entries here, concerning primarily the clearance of shafts в and c, run from April 18 to May 3, 1932, and January is to February 17, 1933. The fill of shaft b was mostly sand, as was to be expected since Lepsius had already cleared it in 1842; the chamber was reached on April 29, 1932, at which point work began on shaft c, directly west of the removed chapel. The entry for May 3 notes that the masonry on the south side was unstable, and work stopped until additional safety measures could be taken. January 15, 1933 saw the first return to shaft c. Several stones from the south wall of the pit had been undermined by sand

13 This came to be designated shaft в by Reisner's expedition.
14 On the burials of spouses and females in general in the Old Kingdom, see V.G. Callender, "A Contribution to the Burial of Women in the Old Kingdom," in Abusir and Saqqara in the Year 2001, pp. 337-350; and P. Jánosi, "Aspects of Mastaba Development: The Position of Shafts and the Identification of Tomb Owners," ibid., pp. 337-50.
and had to be removed. Once again, sand and fallen stones alone filled the shaft, since Lepsius had preceded the expedition with his own clearance in 1842. On January 28, 1933, work was expanded to the street in front (east) of the mastaba, and the fragmentary stela (33-2-189) from a minor mastaba was discovered. The Expedition reached the burial chamber of shaft c on February 5, 1933, and the chamber was cleared on February 6-7. The Wheeler diary mentions only the clearance of debris from the street in front of the mastaba until February 16 - 17 , when the mud-brick structure of G 2102 came to light. Wheeler's diary entry for March 2, 1933 contains a sketch plan of the street area just in front (east) of the chapel of Merib. The diary states: "Clearing street. Uncovered part of original mud-brick exterior chapel of G 2100, and the opening of the interior chapel (in Berlin)." 5 The sketch plan indicates the location and lettering of the shafts, with some discrepancies from the published Map 5 of Reisner's $G N_{\text {I }}$.

## Finds

Found by the Harvard-MFA Expedition in the debris of the pit of shaft b: no number: "Parts of a shallow alabaster dish. Dyn. V. These fragments have an extrinsic merit as coming from the mastaba tomb of Mer'ib, son of the great Kufu [sic]." ${ }^{16}$
32-4-60: fifty-one (twelve rim, only two fitting) fragments of pottery bowl, type XXVIII; RW (red ware), fine red slip; diam. rim 28 cm .
32-4-61: fourteen (five rim, only two fitting) fragments of pottery bowl, type XXVIII; RBrW (red brown ware), red slip; diam. rim 18 cm .

Found by Lepsius in December 1842:17
From the shaft of shaft в itself:
One small dish, possibly originally from shaft $\mathrm{C}^{18}$
From the burial chamber of shaft в:
Berlin 1607: Two fragments of unbaked mud seals $0.37 \times 0.19 \times 0.13$ (fig. 4.13) ${ }^{19}$
Berlin Inv. $\mathrm{IV}_{\text {II73: }}$ : male skull and skeletal remains ${ }^{20}$
Small fragments of wood, not necessarily from a coffin ${ }^{21}$
Found by Lepsius in December 1842 in shaft c:
From the "sarcophagus-shaped depression" on the west side of the burial chamber: ${ }^{22}$
Scattered remains of human skeleton, assumed by Lepsius to be female based on the thinness of the skull ${ }^{23}$

5 Expedition Diary, by N.F. Wheeler, March 2, 1933, p. I234.
16 O. Bates, in Museum of Fine Arts, Boston Thirty-first Annual Report 1906, p. 76.
17 Some of the objects listed below could be confirmed in the Ägyptisches Museum, Berlin. The rest are presumed to be lost during the Second World War.
I8 Lepsius, Denkmaeler I, Text, p. 48: "... ein einziges kleines Schüsselchen fand sich beim Ausgraben des Schachtes, es war vielleicht aus dem anderen dahin geworfen."
19 Lepsius, Denkmaeler I, Text, p. 48: "... eine Mauer von ungebrannten Nilerdziegeln (von 0,37 x 0,19 x 0,13 Größe), zwei Stücke davon sind jetzt in Berlin No. 1607." Note that Lepsius's measurements are in German feet.
20 Lepsius, Denkmaeler I, Text, p. 48: "Der Hirnschädel war dicker als der andere [from shaft c] und aus dem Beckenknochen ließ sich ersehen, daß das Gerippe einem Manne angehörte. Schädel- und Knochenstücke dieser Leiche sind jetzt in Berlin (Inv. VI i173)." Cf. Junker, Gîza 2, p. i23.
2 Lepsius, Denkmaeler I, Text, p. 48: "... kleine Holzstücke, die aber wiederum kaum zur Annahme eines hölzernen Sarkophags berechtigen."
22 Lepsius, Denkmaeler i, Text, p. 48: "Hier lag ein Menschengerippe zerstreut nebst den Knochen von einem Vorderfuße und zwei Hinterfüßen eines Rindes; ferner eine unzählige Menge Gerippe von Fledermäusen und von einigen Vögeln; endlich auch eine Anzahl länglicher Holzstücke von c. $6 \times 4$ Zoll Größe.... Der Körper scheint nach dem sehr dünnen Hirnschädel zu schließen, einer Frau angehört zu haben."
23 Junker, Gîza 2, p. 123.

Front leg and two hind legs of a cow
Numerous bat and bird skeletons
Wood fragments, ca. IO x 15 cm
From the canopic depression in the southeast corner of the burial chamber: Fragments of about 3 large RBrW neckless shoulder-jars; h. ca. $30 \mathrm{~cm}^{24}$
Berlin I235: I of 2 small RW model neckless shoulder-jars, h. 4.6 cm ; d. $6 \mathrm{~cm}^{25}$

Berlin ÄM i319: small, footed ceramic model basin; 1.5 cm ; diam. $6.5 \mathrm{~cm}^{26}$ Berlin ÄM 1320 : small, footed ceramic model basin; 1.5 cm ; diam. 6.5 cm (fig. 4.io)
Berlin ÄM 1321: small, footed ceramic model basin; 1.5 cm ; diam. 6.5 cm Berlin ÄM I322: small, footed ceramic model basin; 1.5 cm ; diam. 6.5 cm Berlin ÄM 1345: small, footed ceramic model basin; 1.5 cm ; diam. 6.8 cm Berlin ÄM i347: small, footed ceramic model basin; 1.5 cm ; diam. 6.2 cm Berlin ÄM 1352: small, footed ceramic model basin; 1.8 cm ; diam. 7 cm (fig. 4.II)
Berlin 8634: 9 small RW model basins; h. I. cm ; d. 7.0 cm (fig. 4.I2) Mud jar stoppers ${ }^{27}$
Berlin 865r: small decorated ball ${ }^{28}$

## Architecture

Enveloping the southern end of the core mastaba g 2IOO, this tomb is often referred to as G 2IOO-I-Annex in the original excavation records. It also bore the number G 2500, assigned by Lythgoe. But this number only survives on a few handwritten tomb cards, and was abandoned thereafter. ${ }^{29}$ Foundation blocks showing both of the chapel's false doors are still in place post-Lepsius, as shown by Expedition photography from 1933 (fig. 4.3) and 1938 (fig. 4.4). At this writing, Lepsius's removal of the chapel allows one of the most informative sectional views of the interior of a mastaba. The massive exterior casing blocks are clearly visible (figs. 4.12-I4), with rubble fill in the mastaba core, topped by large roofing slabs (fig. 4.I4). Massive casing blocks continue around the back (west) side of the mastaba. The roof even preserves an impressive fossil between shafts B and C (fig. 4.15).

The street in front of the mastaba is choked with later shafts and subsidiary burials, many of which are no longer visible at this writing. It is difficult to imagine unimpeded access to Merib's chapel, supporting the probability that these subsidiary burials had nothing to do with Merib or his family.

Viewed clockwise, from the east, to the south, to the west faces of the mastaba, the casing stones terminate at the same location on the west face relative to the east face (fig. 4.I6). The roofing slabs on top of the mastaba terminate here too, forming a distinct eastwest line (fig. 4.18). However, at the northwest corner of the earlier mastaba, G 2100, to the north, one may see four foundation stones marked for the placement of courses of casing stones upon them (above, figs. 3.18, 4.19). These layout guides align precisely with the massive casing stones of Merib further to the south. One might thus

24 Lepsius, Denkmaeler i, Text, p. 48: "... die Scherben von etwa 3 größeren etwas über r Fuß hohen Vasen aus roter gebrannter Erde..."
25 Lepsius, Denkmaeler I, Text, p. 48: "... von mehreren kleineren; nur die kleinsten (zwei von der Form a (eine in Berlin Nr. 1235) waren erhalten."
26 Lepsius, Denkmaeler I, Text, p. 48: "9 von der Form b, gleich kleinen Schüsselchen (Berlin No. 1319-I322, I345, 1347, 1352, 8634)." For confirming object information on these basins and for supplying photography, I am grateful to Klaus Finneiser, Ägyptisches Museum, Berlin.
27 Lepsius, Denkmaeler I, Text, p. 48: "... mehrere Stücken Nilthon, wie es scheint vom Verschluß der Vasen....'
28 Lepsius, Denkmaeler i, Text, p. 48: "... "eine kleine verzierte Kugel."
29 These tomb cards, EGOI4935-OI4938, are quoted above in the chapter on mastaba G 2100 .
conclude that at the time of Merib's tomb construction, the earlier mastaba G 2100 was also meant to receive massive exterior casing (further strengthening the family relationship between the two tombs. ${ }^{30}$ Perhaps G 2100 may have even received some of its new exterior casing, only to lose it to quarrying in later times. Clear proof that the massive casing intended for G 2IOO was never completed lies in the southern exterior wall of G 2 III, which is located further south than the exterior of the casing indicated by the east-west corner markings of the large foundation block.

At the north end of the east face, a fairly elaborate but slightly irregular north niche is set into the facade (figs. 4.20-4.21). If the door was once painted, no traces now remain.

## Shafts and Burials

No detailed descriptions are preserved, beyond Lepsius's original report quoted above, and Junker's remarks in Gîza 2, pp. 124-25. No photography is available for the burial chambers. For photographs, plans, and sections of shafts в and c, see figs. 4.22-4.26.

## Date

Although he did not excavate the tomb, Junker includes a lengthy discussion of Merib's mastaba, arguing that it cannot date to Dynasty 4. ${ }^{31}$ Among the Dynasty 5 features of the tomb are the massive casing stones in local nummulitic limestone; the extensive interior chapel decoration, and above all the exterior facade scenes; the atypically small shaft c; the unlined, unpaved burial chambers of both shafts B and C; and the presence of ceramic canopic jar fragments found in the canopic depression of shaft c . The tomb is not without "archaisms," such as the canopic depression itself, and the slab stela-like tablet on the chapel's northern false door, but these are not enough to allow a Dynasty 4 date. Merib's completed mastaba fits best in early Dynasty 5, along with the parallel mastabas of Seshathetep (G 5150), Nisutnefer (G 4970), Kaninisut I (G 2155), and Kanefer (G 2150). ${ }^{32}$

## Decoration

Smith relates the chapel to a general group including G 2100-II (Nensedjerkai), G 2155 (Kaninisut I), G 5150 (Seshathetep), G 4970 (Nisutnefer), G 5170 (Seshemnefer III), G 4710 (Setju), G 4920

30 It is unlikely that Merib would have bothered to encase the mastaba of an individual unknown to him.
31 Junker, Gîza 2, pp. 121-35.
32 Compare PM III, p. 7I: Menkaure or Shepseskaf (Reisner) or early Dynasty 5 (Junker); Baer, Rank and Title, p. 79 [182]: early Dynasty 5; Barta, Opferliste, p. 156: Dynasty 4, Pre-Menkaure; Baud, Famille royale et pouvoir I, pp. 35-40, 2, p. 458 [73]: Djedefre-Khafre; Cherpion, Mastabas et hypogées, p. 224: Khufu; Harpur, Decoration in Egyptian Tombs, p. 267 [93]: Shepseskaf to Userkaf; JacquetGordon Domaines funéraires, p. 229 ( $13 \mathrm{G}_{4}-5$ ): late Dynasty 4-early Dynasty 5; Junker, Gîza 2, pp. 39, 135: early Dynasty 5; Kanawati, Egyptian Administration, pp. 18, 95-96, 153 [I22]: early Dynasty 5; Priese, Die Opferkammer des Merib, p. 28: end of Dynasty 4 to begin Dyn. 5; Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. I: Dynasty 4-5 (mastaba; no core); Reisner, GN I, pp. 216, 3II: late Menkaure-late Neferirkare or slightly later; Reisner, "List of Finished Mastabas," p. 22: Dynasty 4-5; Reisner, Mycerinus, p. 99: ("the later stone chapel, built round the southern end of the mastaba and more nearly of the type of Medum mastabas, was actually built in the reign of Chephren"); Schmitz, Untersuchungen zum Titel $S_{3}-N j s j w t$, p. 26: early Dynasty 5; Strudwick, Administration, p. 94 [59]: Menkaure to end of Dynasty 4 (Strudwick notes that Merib's chapel shows one of the earliest examples of the deceased standing and facing left between two false doors on the west wall).
(Tjenti), G 50IO, G 5030 ( $=$ Lepsius 46), G 5210 (Khemten), and G 5340 (Kasewedja). These chapels are characterized by "reliefs of medium height and mediocre execution, and some of them show evidence of a use of plaster washes to give a smoother finish to the relief for the laying on of the color...."33 In particular he compares the chapel of Merib with those of G 5150 (Seshathetep) and G 4970 (Nisutnefer) in the distribution of scenes, style, and imitation wood graining around the bases of the walls, suggesting that G 2100-I and G 5150 are the product of the same workshop. ${ }^{34}$ Merib's chapel inscriptions are reproduced by Roeder. ${ }^{35}$

Although the wall decoration is quite well known from the plates in Lepsius's Denkmaeler, and from Priese's 1984 booklet, ${ }^{36}$ nevertheless the absence of published photography of the original reliefs in Berlin has hindered the study of this chapel. For example, few have commented on the major recarving of Merib's seated figure on the north wall (see fig. 4.44). At the time the present volume went to press, the chapel was being reconstructed in Berlin's Neues Museum in preparation for the first public exhibition since World War II. New photographs of the chapel walls were specially prepared and digitally montaged together for this volume prior to the chapel's physical reconstruction, but it was not possible to prepare new epigraphic drawings in time for publication. For full epigraphic coverage of Merib's chapel, the reader is therefore referred to Part 2 of Giza Mastabas 8.

Entrance (figs. 4.27-4.30). ${ }^{37}$ Along with the tomb of Kanefer (G 2150), Merib's chapel is one of only two in Cemetery G 2100 to contain decoration on its exterior facade. All the carving is in raised relief. A two-line architrave, with a standing figure of Merib at the left (south) edge, surmounts two large-scale standing figures of him on either side of the chapel entrance. Each figure holds a staff and scepter, and is accompanied by a single son, Khufumernetjeru on the south facade panel, and Merib Junior on the north. While both figures appear to march "into" the tomb, Junker has explained that each figure in fact faces rightward, out of the tomb, mirroring the customary arrangement for the deceased found on entrance thicknesses and other locations. ${ }^{38}$ The right (north) entrance facade figure is thus "reversed," Curiously, however, one expects the scepter in Merib's hand to pass behind his body in this leftward-facing figure, as it does inside the chapel on the east and west walls. But it does not.

Wigs and costume differ, but the sekhem scepter in each case passes in front of Merib's legs. The south facade figure wears a short, valanced wig and short kilt. On the north facade, Merib wears a longer, tressed wig and a leopard skin and shoulder knot over his short kilt.

33 Smith, HESPOK, p. 166.
34 Smith, HESPOK, pp. 165, 362.
35 G. Roeder, Aegyptische Inschriften aus den königlichen Museen zu Berlin I, pp. 88-ıoo.
36 Priese, Die Opferkammer des Merib.
37 Lepsius, Denkmaeler 2, pl. 18; Priese, Die Opferkammer des Merib, pp. 19, 36-42, 43.
38 Junker, Gîza 2, pp. 126-27. Harpur, Decoration in Egyptian Tombs, p. 456, fig. 20, reproduces Lepsius's line drawing.

Architrave over Chapel Entrance (figs. 4.28-4.30).


Text: ( ( ) htp di i nswt 'Inpw bnty sh ntre krs (m) smyt imntt nb imsh br ntrr ${ }_{3}$ isw nfr wrt btmty 39 ntr biw ntrw ss nswt Mrib (2) prt brw $t$ ḅnkt psn dhwtt wsg sid wsh ch prt Mnw $36 d$ smdt $4^{40}$ hab wr hab nb re nb btmty ntr dws tswy nb imsh mrr nb $=f$ Mrib
Translation: (1) A gift which the king gives and Anubis, foremost of the divine booth, (of) a burial in the western desert (as) a possessor of veneration before the great god, having achieved a very great old age, the seal-bearer of the god of (the ship) "Ba-netjeru," ${ }^{41}$ king's son Merib, (2) (and for) invocation offerings of bread, beer, and cakes (on the) festival of Thoth, ${ }^{42}$ the wag-festival, the sadj-festival, the brazier festival, ${ }^{43}$ the festival of going forth of Min, the festival of the month and half-month, the great festival, and every festival of every day; the seal-bearer of the god of (the ship) "Duwa-tawy," 44 possessor of veneration, beloved of his lord, Merib.

Drum over Chapel Entrance (figs. 4.28-4.30).


Text: (I) ss nswt n blt=fblmty ntr bs ntrw dws twwy nb rbyt Mrib Translation: (I) King's son of his body, the seal-bearer of the god of (the ships) "Ba-netjeru," "Duwa-tawy" and "Neb-rekhyt,"45 Merib.

South Facade Panel (figs. 4.28-4.30). Above the figure of Merib:


Text: (I) btmty ntr bs ntrw (2) btmty ntr nb rbyt (3) btmty ntr dws tswy (4) Mrib

39 On the preference for reading btmty, instead of $s d \underline{d} w t y$, for "seal-bearer," see Fischer, Varia Nova, pp. 50-52.
40 A better reading for this festival than smdt may be mddint, consisting of the number is ( $m \underline{d}+\underline{d} i \underline{+}$ element $n t$, cf. Edel, Altägyptische Grammatik, $\$ 408$ ); see Luft, Die chronologische Fixierung, p. 163 (3.I.I7).
41 For this title, see Jones, Index of Ancient Egyptian Titles 2, p. 770, no. 2799; idem, Glossary of Ancient Egyptian Nautical Titles, p. 106, no. 243.
42 Spalinger labels this feast list under his "oddities" category, The Private Feast Lists of Ancient Egypt, p. 158: "This very mixed up arrangement still reveals that when wsh ch occurs feasts 8 [prt Mn] and $9[(3 b d n) s s d]$ tend to move around it to a small degreee. However, the opening of Dhbwtyt $+w z g y$ cannot be left unnoticed."
43 For comments on this ceremony, see Junker, Gîza 2, p. i17, and Hannig, Ägyptisches Wörterbuch I, p. 305 \{6620.
44 For this title, see Jones, Index of Ancient Egyptian Titles 2, pp. 771-72, no. 2802; idem, Glossary of Ancient Egyptian Nautical Titles, p. 106, no. 243; and more recently K.O. Kuraszkiewicz, "The title btmtj ntr-god's sealer-in the Old Kingdom, in The Old Kingdom Art and Archaeology, pp. 193-202, with important bibliography on p. 196, n. I4.
45 For this title, see Jones, Index of Ancient Egyptian Titles 2, p. 771, no. 28or; idem, Glossary of Ancient Egyptian Nautical Titles, p. IO6, no. 243.

Translation: (r) Seal-bearer of the god of of (the ship) "Ba-netjeru," (2) seal-bearer of the god of (the ship) "Neb-rekhyt," (3) seal-bearer of the god of (the ship) "Duwa-tawy," (4) Merib.

Above the figure of the son:


Text: (5) $s s=f n t=f(6) r b n s w t$ (7) Hwfw-mr-ntrw
Translation: (5) His bodily son, (6) royal acquaintance, (7) Khufumernetjeru.

North Facade Panel (figs. 4.28-4.30).
Above the figure of Merib:


Text: (I) btmty ntr bs ntrw (2) Mrib
Translation: (I) Seal-bearer of the god of (the ship) "Ba-netjeru," (2) Merib.

Above the figure of the son:


Text: (3) $s 3=f n \underline{b} t=f(4)$ rbb $n s w t$ Mrib-nds Translation: (3) His son of his body, (4) royal acquaintance, Merib Junior. ${ }^{46}$

South Entrance Thickness (figs. 4.3I-4.33).47 Bearded and dressed in a short kilt, leopard skin, shoulder knot, and long striated wig, Merib leans on a staff, facing out of the chapel to his left. His leg musculature is carefully modeled. Before him are three of his children. Nensedjerkai, the owner of G 2IOO-II, stands clutching Merib's staff, while his eldest son Khufumernetjeru, and a daughter named Sednet, kneel before him. Nensedjerkai holds a lotus blossom in her right hand as she turns her head back to gaze at her father. Her hair is close-cropped, and she wears a choker and a long, tight-fitting garment with shoulder straps. Her hips and slightly protruding stomach are clearly defined underneath the dress. The kneeling Khufumernetjeru presumably grasps a papyrus scroll or fold of cloth in his left hand. Like his father, he too is bearded, but he wears a

46 The $n \underline{d} s$ bird (Sign List G37) is written in front of Mrib, at the bottom of column 3.
47 Lepsius, Denkmaeler 2, pl. 22a; Priese, Die Opferkammer des Merib, pp. 21, 43; Junker, Gîza 2, p. 128, fig. II; Harpur, Decoration in Egyptian Tombs, p. 472, fig. 62; and B. Schmitz, in Schmitz and Steffgen, Waren sie nur schön? Frauen im Spiegel der Jahrtausende, p. 77, where the author notes that Merib's daughter Nensedjerkai grasps her father's staff, a motif otherwise reserved primarily for sons, and p. 79, fig. 2I (partial line drawing); El-Metwally, Entwicklung der Grabdekoration, p. 212 fig. 3 r.
short, curled wig and simple, short kilt. His sister Sednet is emptyhanded. Wearing bracelets, a long garment, and striated wig, she rests one hand on her lap while the other is bent back across the breast.

The inscriptions above the children consist of four columns plus Merib's name, followed by three horizontal lines, all divided by register lines. An interesting solution to the sloping batter of the exterior wall is used here to retain the sense of symmetry in the inscription. In the first vertical column ( $s 3$ nswt $n \underline{h} t=f s m r$ ), the hieroglyphs inch further left with each successive word, towards the exterior sloping wall, in order to fill up the increasingly empty space. Thus the reversed $s$ of $s m r$ is far to the left of the $n s w t$ sign at the top of the column. Yet the hieroglyphs remain vertical. This should be compared to the north entrance thickness of Nefer (G 2IIO; figs. 6.50, 6.53 ), where the hieroglyphs actually lean to align with the sloping exterior wall. Both solutions make for a successful composition. Behind Merib, whose standing figure appears directly beneath the entrance drum, three registers of livestock proceed unaccompanied into the chapel.


Text: (I) ss nswt n blt=f smr (2) btmty ntr bs ntrw dws tswy (3) btmety ntr nb rbyt be ntrw (4) imy-r k3t nbt nswt (5) Mrib (6) m33 htmt int pr-nswt
 $N n-s d r-k s=(i) s_{3}=f s m s w$ Hुwfw-mr-ntrw, sst=fSdnt
Translation: (I) King's son of his body, companion, (2) the seal-bearer of the god of (the ships) "Ba-netjeru," and "Duwa-tawy," (3) sealbearer of the god of (the ships) "Neb-rekhyt," and "Ba/ab-netjeru," 48 (4) overseer of all construction projects of the king, (5) Merib. (6) Viewing the sealed valuables ${ }^{49}$ which are brought (from) the Palace: ${ }^{50}(7)$ idemi linen: men(?), a thousand of $6,4,2,1$; a thousand pellets of incense; a thousand quantities of green eye-paint, black eyepaint; all kinds of best ointments. (8) His daughter, Nensedjerkai, his eldest son Khufumernetjeru, his daughter, Sednet.

In the rebate on the south side of the doorway (door embrasure) are three small registers, each containing a single animal facing into

48 Could $b r$ be a reversal for $c b$, "horn of the gods," or similar? Cf. Jones, Index of Ancient Egyptian Titles 2, p. 771, no. 2800; idem, Glossary of Ancient Egyptian Nautical Titles, p. 106, no. 243.
49 For the translation "valuables" or "treasure," see Fischer, "A Group of Sixth Dynasty Titles Relating to Ptah and Sokar," JARCE 3 (1964), p. 26, n. 9.
so Lines 6-7 are translated by Strudwick, Texts from the Pyramid Age, p. 407 (text 307).
the chapel to the right (west). These probably belong to the scene that continues on the east wall.


Text: (1) $r n n g(3 w)$ (2) iws $n$ mdd $t h r y-d b r$ (3) $r n h \underline{d}$
Translation: (I) Young bull, (2) ox of the stall; suckled calf ${ }^{51}$ (3) young oryx. ${ }^{52}$

North entrance thickness (figs. 4.34-4.35).53 Merib stands facing out of the tomb, to the right. He sports a beard, valanced wig, and holds a staff and scepter. He wears a lector priest's sash and back flap. His naked son, Merib Junior, clings to his father's staff from his own raised register line. With his right hand, Merib Junior reaches back towards his father's scepter. Before Merib stand two evidently unrelated individuals. One unnamed keeper of the festival perfume acts in the role of a document presenter. The papyrus he reads from is inscribed with numbers in raised relief. The chief of the bag Ishi follows behind him carrying a bolt of cloth and a rack containing three ointment jars. As with the south entrance thickness, the first of four columns of vertical inscription above splays outward to fill the wide, triangular space formed by the sloping batter of the exterior wall. Beneath this text, two lines of horizontal hieroglyphs, followed by the identifying inscriptions above the officials complete the scene. ${ }^{54}$

51 Only one animal appears in this register; should "suckled calf" be taken as the type of "stalled ox"? Since the $p r$ sign precedes the $m \underline{d} t$ hobble (Vi9), perhaps the word should be read pr-mdt.
52 Hannig, Großes Handwörterbuch Ägyptisch-Deutsch, p. 574 (omitted from Hannig, Ägyptisches Wörterbuch I).
53 Lepsius, Denkmaeler 2, pl. 22b; Junker, Gîza 2, p. 128, fig. i1; Priese, Opferkammer des Merib, pp. 21, 46-49; Schmitz, in Schmitz and Steffgen, Waren sie nur schön? Frauen im Spiegel der Jahrtausende, p. 80, fig. 22 (partial line drawing); El-Metwally, Entwicklung der Grabdekoration, p. 210 fig. 27. For the father-son pose as an example of "filial emphasis," see H.G. Fischer, "Some Iconographic and Literary Comparisons," in Fragen an die altägyptische Literatur, p. 159 with n. 15 , and p. 168, fig. 4.

54 Illustrated and translated by H. Altenmüller, "Presenting the $n \underline{d} t$ - $b$ - $r$-offerings to the tomb owner," in The Old Kingdom Art and Archaeology, p. 30, fig. 4.


Text: (1) ss nswt n blef smr (2) btmty nter bs ntrw dws t3wy (3) btmty ntr nb rhyt be ntrw (4) imy-r kst nb(t) nt nswt (5) Mrib (6) m3s prt-hrw int pr-nswt (7) h3 rn iw3 ha rn m3-had b3 rn nisw ha rn ghs ha dust ha trp mst (8) di sš in butmty stī-hb (9) 200,000 t 40,000 hnkt 3,300 psn 500 šsţt 500 iws 400
 Translation: (I) King's son of his body, companion, 55 (2) the seal-bearer of the god of (the ships) "Ba-netjeru," and "Dua-tawy," (3) sealbearer of the god of (the ships) "Neb-rekhyt" and "Ba/ab-Netjeru," (4) overseer of all construction projects of the king, (5) Merib. (6) Viewing ${ }^{56}$ the invocation offerings which are brought (from) the Palace: (7) a thousand young oxen, a thousand young oryxes, a thousand young ibexes, a thousand young gazelles, a thousand cranes, a thousand white-fronted geese and meset-geese. (8) Presenting the valuables by the keeper of the festival perfume. ${ }^{57}$ (9) 200,000 loaves of bread, 40,000 jars of beer, 3,300 cakes, 500 shatjet-food, ${ }^{58}$ 500 oxen, 400 oryxes, 200 greylag geese, 400 white-fronted geese. (io) Chief of the bag, Ishi. (iI) His son, Merib Junior.

Note the reversal of the $s$ sign.
56 Lines 6-7 are translated by Strudwick, Texts from the Pyramid Age, p. 407 (text 307).
57 See Junker, Gîza 2, pp. 128, fig. II, and I29. Similar document presentation scenes may be found in a large number of tombs, but very few of the actual papyrus scrolls are inscribed. For inscribed documents, see the tombs of Khafkhufu I, Simpson, Kawab, Khafkhufu I and II, pl. ı7b, fig. 29 (north inner jamb of chapel entrance), and of Fetekta at Saqqara (Lepsius i), Lepsius, Denkmaeler 2, pl. 96, bottom right, PM III, p. 35ı. It possible that many such papyrus documents were inscribed in paint only, which has long since faded from the wall relief; in this regard see possibly the tomb of Meresankh III, Dunham and Simpson, Mersyankh, pl. 2c, fig. 3b (south thickness of chapel entrance). An actual legal document concerning the provisions of the mortuary cult of Penmeru was inscribed on his serdab niche (G 2197); cf. Simpson, Mastabas of the Western Cemetery, p. 24, pls. 46-47. On document presentation in general see Manuelian, "Presenting the Scroll: Papyrus documents in tombs scenes of the Old Kingdom," in Studies in Honor of William Kelly Simpson 2, pp. 561-88.
58 This is called "selten" in Wb. 4, $414.9=$ Lepsius, Denkmaeler 2, pl. 44b (= Lepsius 95), "eine Speise." For additional references, see Hannig, Ägyptisches Wörterbuch I, p. 1282 [32222].

East Wall, Over the Doorway (figs. 4.36-4.39).59 Only three major mastabas in Cemetery G 2100 preserve decoration inside the chapel on the east wall above the entrance door: Merib (G 2100-I), Kanefer ( g 2150 ), and Kaninisut I (G 2155). Only Kanefer chose a scene other than boating for this area. Merib's scene contains two superimposed river boats proceeding to the right (southwards), each with a crew of fourteen. The crew on the hedgehog-prowed ship above is sailing, with tall mast and sail unfurled, while the crew of the plain-prowed ship below is rowing. ${ }^{60}$ In each case, Merib is shown at a scale larger than that of the crew. He leans on a staff, supervising; this is the same pose shown on the south entrance thickness. He is named twice on the lower ship.

The upper register reads:


Text: (1) bytmty ntr hrw Mrib (2) fit țw ir sht htp
Translation: (I) The seal-bearer of the god of the fleet, Merib. (2) Sailing to the field of offerings. ${ }^{61}$

Below the sailboat, and above the rowboat, is inscribed:

Text: (I) ss nswt btmty ntr hrw Mrib (2) smr Mrib
Translation: ( I ) King's son, seal-bearer of the god of the fleet, Merib. (2) The companion, Merib.

East wall, Presentation Scenes (figs. 4.36-4.39). The rest of the east wall contains a double presentation scene, with three large-scale standing figures. ${ }^{62}$ On the left (north), by the boating scenes and the chapel entrance, Merib and his mother Sedit face to the right. ${ }^{63}$ Merib holds a staff and a scepter, which passes in front of his figure; Sedit extends her left arm around his shoulder. ${ }^{64}$ He wears a broad collar and a half-coffered kilt. She wears the same type of closefitting dress with shoulder straps that appears on her figure on the south wall. She also has a broad collar, a choker, and a bracelet but

59 Illustrated in Lepsius, Denkmaeler 2, pl. 22d; Priese, Opferkammer des Merib, pp. 23-24, 33; Landström, Ships of the Pharaohs, pp. 35-36, figs. 95-96; Borchardt, Śas'hurer, pp. 162-63, figs. 22-23; Demel, Die Reliefs der Kultkammer des Kaninisut, p. 24, fig. 19. The gestures are discussed by Dominicus, Gesten und Gebärden, pp. IO7-III (with this scene illustrated in fig. 28). (Henet) versus the papyrus-prowed day-boats (Shabet), see H. Altenmüller, "Funerary Boats and Boat Pits of the Old Kingdom," in Abusir and Saqqara in the Year 2001, pp. 26990. On the hedgehog-headed prow itself, see von Droste zu Hülshoff, Der Igel im alten Ägypten, pp. 97-98 (cat. no. 48, fig. 39), with extensive bibliography, and on hedgehogs in general, idem, "Igel," in $L \ddot{A}_{3}$, col. i24.
61 The boating texts are discussed by Junker, Gîza 2, pp. 66-69, idem, Gîza 3, pp. 184-85, idem, Gîza 5, p. 69(r). Cf. in general, Jones, Boats, pp. 36-45.
62 Lepsius, Denkmaeler 2, pl. 2I; Priese, Opferkammer des Merib, pp. 22-23, 30-31, 5I-54.
63 This is one of two representations of Merib's mother and the presumed owner of G 2 IOO to the north. The other scene is on the south wall. For more on Sedit, including doubts that she could ever have married Khufu, see Junker, Gîza i, p. 152; idem, Gîza 2, pp. I22, I3I-32; Reisner, Mycerinus, p. 240.

64 Smith, HESPOK, p. 298, fig. I49, reproduces a line drawing of the embracing couple, our figs. 4.36-4.39 ( = Lepsius, Denkmaeler 2, pl. 2I).
no anklets，to judge from the Lepsius color illustration．At the right end of the wall Merib stands again，this time facing to the left．He wears a leopard skin，half－coffered kilt，broad collar，and valanced wig，and his scepter，in contrast to his rightward－facing figure on the same wall，passes behind his body．Between these three figures， five registers of offering bearers fill the remaining space，oriented to both the left and right．The staves held by both figures of Merib act as vertical register lines containing the central portion of the scene． Registers I－3（from the top）contain personified estates bearing offerings in baskets upon their heads．Register 4 shows，from left to right，a scribe，a man with a bird，another with a calf and gazelle， and two men with linen．In register 5 ，a slaughter scene takes place； in the center，two men sever a bull＇s haunches．Two more present the haunches，and a scribe with a writing kit appears at either end， closest to the large－scale figures．

Above the standing couple at left（north）is inscribed：


Text：（I）ss nswt n bِt＝f snwt（y）Inpw（2）btmty ntr bs ntrw dws twwy （3）imy－r mš̌（4）wr md्dw Šm‘w rb nswt smr hary hbb（5）mry nb＝f mrr $n b=f M r i b$（6）$m w t=f s s t n s w t n \underline{b} t=f(7) n b$ imshb br ntr Sdit
Translation：（1）King＇s son of his body，who belongs to the snwt－utensil of Anubis ${ }^{65}$（2）seal－bearer of the god of（the ships）＂Ba－netjeru＂（and） ＂Duwa－tawy，＂（3）overseer of the army，（4）great one of the Tens of Upper Egypt，royal acquaintance，companion，lector priest（5）beloved of his lord，whom his lord loves，${ }^{66}$ Merib．（6）His mother，king＇s daughter of his body，（7）possessor of veneration before the god，Sedit．

East Wall，Center（Funerary Estates）（figs．4．36－4．39）．Jacquet－ Gordon has studied the series of sixteen figures，nine men and seven women，that occupy the central portion of the wall．${ }^{67}$ She notes the likelihood that estates $1-7$ were located in Lower Egypt，and 8－16 in Upper Egypt，and cites the similarity of arrangement with the tombs of Seshathetep $(\mathrm{G} 5150=\mathrm{LG} 36)$ and Khufukhaf $(\mathrm{G} 7130-7140) .{ }^{68}$

65 Translation uncertain；for the suggestion of snwt（y）＇Inpw，＂he of the snt－utensil，＂ see E．Brovarski，＂The Priestly Title of Anubis：ैํㅇ，＂in Hommages à Fayza Haikal， pp．67－78．See also Fischer，The Orientation of Hieroglyphs，p．142（g）；the tomb of Djau，Urk．I，i18．13；Priese，Opferkammer des Merib，p．27：＂Versorger（？）des （Gottes）Anubis（？），＂and＂Speiser（？）des（Gottes）Anubis（？）．＂See also Fischer， The Orientation of Hieroglyphs，p．142（g）．
66 The presence of the $n$ above the $n b$ sign is taken as part of the word＂lord，＂ rather than an indirect genitive；cf．Simpson，Kayemnofret，p．ro．Phonetic complementation is present in both cases here：$\mu m+\square$ ．
67 Jacquet－Gordon，Les noms des domaines funéraires，pp．229－31（no．13G4－5）；see also，in general，Junker，Gîza 12，pp．114－18．
68 For Khafkhufu I see Simpson，Kawab，Khafkhufu I and II，pp．I5－17，pls．20， 22b，figs．32－33；Jacquet－Gordon，Les noms des domaines funéraires，pp．207－208 $\left.{ }^{(2} \mathrm{G}_{4}\right)$ ．For Seshathetep（G $\left.5150=\mathrm{LG} 36\right)$ ，see Junker，Gîza 2，pp．16，182，fig．28； idem，Gîza 3，pp．15－16，and Kanawati，Tombs at Giza 2，pls．7b，45；Lepsius， Denkmaeler 2，pl．23；Jacquet－Gordon，Les noms des domaines funéraires，pp．251－ 52 （23G5）．

| Facing <br> Left | M／F | Text | Translation | Remarks |
| :---: | :---: | :---: | :---: | :---: |
|  | 通 | iwwy Hufw | The two islands of Khufu |  |
| （2） | ，${ }^{3}$ | kbht t Hufw | the fountain of Khufu |  |
| （3） | 通 | mn tobwt Ȟwfw | firm are the sandals of Khufu |  |
| （4） | ，${ }^{\text {a }}$ | is hmt | the island of the hemet－animal | Wb．3，80．I4； Junker，Gîza 3 ， p．79；Jacquet－ Gordon， Les noms des domaines funéraires p． 230. |
| （5） | 通 | iwwy $\underline{H} n m$ | the two islands of Khnum |  |
| （6） | 通 | ssbw wr | Sabu the great |  |
| （7） 10 | ，${ }^{\text {a }}$ | sht nt $r 3$ wpy | the field of Ra－wepy |  |


| FAcing RIGHT | M／F | Text | Translation | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| （8） | 通 | ¿nbw Hufw | the lives of Khufu |  |


| （9） | 込 | int Hwfw | the valley of Khufu |  |
| :---: | :---: | :---: | :---: | :---: |
| （io） | 通 | nfr htpt Hewf | perfect of offerings is Khufu |  |
| (iI) | ，${ }^{\text {a }}$ | grgt Hufw | the foundation of Khufu |  |
| （I2） | 通 | $r 3^{\text {s }}$ ¢ Hufu | mouth of the lake of Khufu |  |
| （13） | 込 | nssiwt | the place of the nesha plant |  |
| （14） | 通 | iwnss | the island of the nesha plant |  |
| $\begin{gathered} \text { (15) } \triangle 1 \\ \square! \\ \square \\ \therefore \end{gathered}$ | ， 3 | st $3 k s$ | the seat of the god Aqes | Hannig， Ägyptisches Wörterbuch I， p． $1583\{4308 \mathrm{I}\}$ |
| （16） | 通 | iwy Hnm | the two islands of Khnum |  |

Above the standing figure of Merib at right（south）is inscribed：


Text：（I）ss nswtn $n \underline{b} t=f s m r \underline{h r y}$－hb（2）betmty ntr bs ntrw dws twy（3）wt Inpw wr mdxw Šmw rb nswt brp ch（4）imy－r mšr（5）mry nb＝fmrr nb＝fMrib Translation：（I）King＇s son of his body，companion，lector priest （2）seal－bearer of the god of（the ships）＂Ba－netjeru＂（and）＂Duwa－ tawy，＂（3）embalmer of Anubis，great one of the Tens of Upper Egypt，
royal acquaintance，controller of the palace，${ }^{69}(4)$ overseer of the army， （5）beloved of his lord，whom his lord loves，${ }^{70}$ Merib．

South Wall（figs．4．40－4．43）．${ }^{71}$ An abbreviated offering scene fills most of the available space．Merib stands facing left with his mother Sedit behind him．She places her right arm around his shoulder． His scepter passes behind his body．His costume consists of a half－ coffered kilt with belt tie，broad collar，and valanced wig．Sedit wears the same close－fitting dress with shoulder straps that appears on the east wall．She also has a broad collar，a choker，a bracelet，and anklets， to judge from Frey＇s color illustration．

Between Merib＇s figure and his staff stands an unnamed naked figure on his own register line．Further left of the staff are four vertical registers，each containing a single male proffering items for the funerary ritual：from top to bottom a libation，fowl， incense，and linen．Above the scene，three columns of rightward－ facing hieroglyphs make up a short $h t p$ di i nswt formula，while seven columns identify the names and titles of Merib and Sedit．


Text：（I）htp di ì nswt prt－brw renb $3 b d$（2）smdt $\underline{d b w t t} w 3 g^{72}$（3）$m b ̣ b b$
 brp ch（6）btmty ntr bs ntrw dws tswy（7）imy－r mš（8）mry nb $=f m r r n b=f$ Mrib（9）mwt＝fsst nswt n $\underline{h} t=f(\mathrm{I})$ ）hm（t）－ntr Nt mbtt inb Sdit
Translation：（I）A gift which the king gives，（consisting of）invocation offerings every day，on the month（2）and half－month festival，the festival of Thoth，the wag－festival，（3）（and）on every festival ${ }^{73}$ forever． （4）The king＇s son of his body，companion，lector priest，（5）who belongs to the snwt－utensil of Anubis，great one of the tens of Upper Egypt， royal acquaintance，controller of the palace，（6）seal－bearer of（the ships） ＂Ba－netjeru，＂and＂Duwa－tawy，＂（7）overseer of the army，（8）beloved of his lord，whom his lord loves，${ }^{74}$ Merib．（8）His mother，king＇s daughter of his body，（io）priestess of Neith，north of the wall，Sedit．

North Wall（figs．4．44－4．47）．${ }^{75}$ Merib sits upon a bull－legged stool with visible cushion．He holds a staff in his left hand，while his right hand is outstretched，palm down．He wears a short，curled wig that

69 For this title see M．Bárta．＂The Title Inspector of the Palace during the Egyptian Old Kingdom，＂Archiv Orientální 67，no．I（1999），pp．I－20，citing this tomb on p． 5.
70 Phonetic complementation is present in both cases here：$m \times n+\checkmark$ ．
7 I Lepsius，Denkmaeler 2，pl．20f；a detail of Merib＇s head is discussed and illustrated in Smith，HESPOK，p． 302 and pl．46c，in Cherpion，in Egyptian Art in the Age of the Pyramids，p．IO5，fig．63，and in Capart，Documents 2，pp．24－25，pl．24．See also Priese，Opferkammer des Merib，pp．20－21．
72 On this festival，occasionally written wzgi，see Luft，Die chronologische Fixierung， p．I50（3．1．7），and E．Winter，Das ägyptische Wag－Fest，esp．pp．3－7，71．On feast lists in general，see Spalinger，The Private Feast Lists of Ancient Egypt．
73 Lepsius，Denkmaeler 2，pl．2of incorrectly places a $\mathbb{\pi}$ sign here as if the title bry－ḥb were intended．
74 Phonetic complementation is present in both cases here：$m m+\square$ ．
75 Lepsius，Denkmaeler 2，pl．22c；Priese，Opferkammer des Merib，pp．23，32， 59.
leaves a large area around the top of the crown free, ${ }^{76}$ and a simple kilt with belt tie but no pleating indicated. There is clear evidence of major recarving on the upper half of the torso, particularly visible on the arms and around the shoulders and neck area. The result is a rather awkward appearance to the transition from head to torso.

Above Merib are six columns of identifying text, along with a scene caption beneath his arm. The right-hand portion of the wall shows seven registers of highly repetitive offerings; from top to bottom they include: hanging meats, bread (or beer jars with tall, dome-shaped stoppers), bread, cakes, bread loaves and four vessels, ${ }^{77}$ bread, and six tables of dates, grapes, and other fruits and vegetables. Beneath the offerings are two registers facing Merib, each with two males. The upper register shows a seated scribe offering a papyrus document to Merib, with an empty-handed assistant behind. Below are two standing figures, the first with a bolt of cloth in his outstretched hands, ${ }^{78}$ and tied bundles before, the second with a papyrus document in his right hand, and a tied bag behind him that is often used for sticks and staves. ${ }^{79}$ The lowest register beneath Merib's seated figure shows six males. Four march to the left, preparing a libation, bearing tables of breads and cakes, and a haunch. The final two at right are engaged in cutting a foreleg from a sacrificial ox.


Text: (I) ss nswt n ht=fsmr htmty ntr hrw (2) imy-r mšchrp ch (3) wr mdw Šm‘w rb nswt snwt(y) Inpw 〔d mr h‘w (4) imy-r kzt nb (t) nt nswt r3 P nb (5) wr ms(w) 'Iwnw hm-ntr $\underset{H}{H} w f w(6) m r y n b=f m r r n b=f w t$ 'Inpw Mrib Translation: King's son of his body, seal-bearer of the god of the fleet, (2) overseer of the army, controller of the palace, (3) great one of the Tens of Upper Egypt, royal acquaintance, who belongs to the snwtutensil of Anubis, administrator of the fleet, (4) overseer of all royal construction projects, mouth of all the $\mathrm{Pe},(5)$ greatest of seers of Heliopolis, priest of Khufu, (6) beloved of his lord, whom his lord loves, ${ }^{80}$ embalmer of Anubis, Merib.

76 This feature is taken by Fischer and Cherpion as a sign of early Old Kingdom date: Cherpion, Mastabas et hypogées, pp. 55-56, critère 28; Fischer, "A Scribe of the Army in a Saqqara Mastaba of the Early Fifth Dynasty," JNES 18 (1959), pp. 238-39.
77 Note that Lepsius, Denkmaeler 2, pl. 22c simply repeats the bread loaves across the entire second register from the top. However, the bread loaves terminate towards the right in favor of four ceramic vessels.
78 To judge from Frey's color reconstruction (Lepsius, Denkmaeler 2, pl. 22c), the fact that this item is painted white suggests it is linen, contra Priese, Opferkammer des Merib, p. 23. But a papyrus document could also be colored white.
79 See Fischer, Varia, pp. 229-30, with fig. 35 from the tomb of Ti at Saqqara.
8o Phonetic complementation is present in both cases here: $\mu m+\sigma$.

Before the seated figure is a single vertical column of text:


Text: (I) m33 sš wdnw hnkt t p 3 t k ${ }_{3}$
Translation: (I) Viewing the document of the offerings (of) beer, bread, cakes, and oxen.

West Wall (figs. 4.48-4.6I). ${ }^{8 \mathrm{r}}$ With two false doors of unequal height and decoration on their respective thicknesses, a major scene between them, and additional offering scene at the south end, this wall is by far the most complex of the entire chapel. South of the south false door sits a medium-sized figure of Merib upon a bulllegged stool. He wears a short, curled wig and a half-coffered kilt. With outstretched, empty hands he faces right and is attended by three registers of single male figures. From top to bottom, the first has a fist on his chest in a gesture of respect. ${ }^{82}$ The second offers a rolled and sealed papyrus document, and the third proffers a bolt of linen. Below Merib's figure, three male offering bearers march rightward, the first bearing a foreleg and a fowl, the second carrying a skewered goose and a table of loaves and a cake, and the third a sealed beer jar in each hand. Above Merib's figure are three columns of text: In the register below, two men remove the leg of a bound ox in a slaughter scene.


Text: (1) ss nswt n blt=f (2) snwt(y) Inpw smr (3) b.tmty ntr bs ntrw dws tswy Mrib
Translation: King's son of his body, (2) who belongs to the snwt-utensil of Anubis, companion, (3) seal-bearer of the god of the (ships) "Banetjeru," and "Duwa-tawy," Merib.

In front of Merib is the caption:


8I Lepsius, Denkmaeler 2, pls. 19, 20a-e; Priese, Opferkammer des Merib, cover, and pp. 22, 55-58.
82 Cf. Dominicus, Gesten und Gebärden, pp. 5-8.

## Text: m3s ${ }^{\prime}(w y)$ pr hts $(w) t$

Translation: Viewing the production ${ }^{83}$ of the house of weavers. ${ }^{84}$
West Wall, South False Door (figs. 4.48-4.49, 4.51-4.56). This false door bears a wide architrave with a combined offering formula, which extends to the top of the decoration. Beneath is a tablet with a table scene (omitting the linen list that is present on the north false door tablet). Merib sits on a bull-legged stool with a wide cushion; he wears a leopard skin. The tablet flanges are painted in imitation of granite, as is the central niche of the false door below. The lintel, drum, and niches are all inscribed, terminating at the bottom with a standing figure of Merib. The thicknesses of the outer niche show a vertical row of vessels on stands.

West Wall, South False Door, Architrave (figs. 4.48-4.5I, 4.54, 4.56).


Text: htp dí nswt htp rdidis Inpw bnty sḥ ntre krs $m$ smyt imntt $m$ nb imsh smr snwt(y) Inpw ss nswt n h ht=f flemty ntre dws tswy bs ntrw Mrib Translation: A gift which the king and a gift which Anubis, ${ }^{86}$ foremost of the divine booth, give, (namely) a burial in the western desert as a possessor of veneration, (for the) companion, ${ }^{87}$ who belongs to the snwt-utensil of Anubis, king's son of his body, seal-bearer of the god of the (ships) "Duwa-tawy," and "Ba-netjeru," Merib.

West Wall, South False Door, Tablet (figs. 4.51, 4.54-4.56).


83 On the reading of this sign, cf. Fischer, Varia Nova, pp. 180-82; Scheele, Die Stofflisten, pp. 72-73; Edel, "Beiträge zum ägyptischen Lexikon VI. Die Stoffbezeichnungen in den Kleiderlisten des Alten Reiches," ZÄS io2 (1975), p. IO2; Junker, Gîza 5, p. 44.

84 For this transliteration, preferring htst over in't or iryt, see Fischer, "Notes on Some Texts of the Old Kingdom and Later," in Studies in Honor of William Kelly Simpson I, pp. 273-74; idem, Varia Nova, pp. 180, 238-39 with figs. I-2; idem, Egyptian Women, pp. 20-21. For intt, see Ziegler, Le mastaba d'Akhethetep, pp. II6-20, with n. b; Hannig, Großes Handwörterbuch, p. 76. An older solution, $m_{33}$ šsp pr irywt, may be found in Junker, Gîza 3, pp. 210-13; Junker, Gîza 5, p. 47 (imy-r pr irywt), with long discussion pp. 50-56. The tomb of Seneb at Giza shows a phrase almost identical to that of Merib, cf. Junker, Gîza 5, pp. 4I, 43 fig. 7 (false door, north outer jamb, east side, middle section): "Viewing the production of the house of weavers and the northern house."
85 Note the full writing of $r \underline{d} i$ with the $r$.
86 Lepsius, Denkmaeler 2, pl. 19 omits the mirt feather off the back of the Anubis jackal.
87 Note the reversal with the $m r$ sign preceding the $s$.

Text: (I) btmty ntr brw smr Mrib (2) sntr wid msdmt bustt mrbt irp (3) stt
 (8) mnbt $b_{3}(9) i w_{3}$ hry-dbe ${ }^{d} 3 t m 3-h d$

Translation: (I) Seal-bearer of the god of the fleet, Merib. (2) Incense, green eye-paint, black eye-paint, best ointment, wine, (3) setjet-cakes, peru-drink, pesen-bread(?), ${ }^{88}$ (4) container of cool water, hedjet-milk, shat-bread, (5) hetja-bread, greylag goose, (6) bread, beer, and cakes, $2,000^{89}$ (7) a thousand alabaster vessels, (8) a thousand (pieces of) cloth, (9) ox, suckled calf, crane, oryx.

West Wall, South False Door, Lintel (figs. 4.5I, 4.54, 4.56).


Text: btmty ntr bew imy-r kst nb(t) nt nswt snwt(y) Inpw smr w‘ty Mrib Translation: Seal-bearer of the god of the fleet, overseer of all royal construction projects, who belongs to the snwt-utensil of Anubis, sole companion, Merib.

West Wall, South False Door, Drum (figs. 4.5I, 4.54, 4.56).
$\stackrel{0}{\square}$
Text: Mrib
Translation: Merib.
West Wall, South False Door, Left (South) Jamb (figs. 4.51, 4.54, 4.56). Merib stands at the bottom of each jamb, facing inward. In each case he wears a short, curled wig and a half-coffered kilt; no interior detail is carved on either item. He holds a staff in one hand and a scepter in the other. The staff passes in front of the body on the left (south) figure, and behind it on the right (north) figure.


Text: (I) btmty ntr bs ntrw dws tswy smr (2) ss nswt n blt=f snwt(y) Inpw Mrib
Translation: (I) Seal-bearer of the god of the (ships) "Ba-netjeru," and "Duwa-tawy," companion, (2) king's son of his body, who belongs to the snwt-utensil of Anubis, Merib.

88 This area is damaged; Lepsius's watercolor seems to show $p r$ with a round determinative; Denkmaeler 2, pl. 19. In Priese's modern plaster reproduction of the chapel, he opted for 'HA4t' (unpublished; see image AAW 383 and AAW 42 I on www.gizapyramids.org). Both the bolt $s$ and the determinative seem certain.
89 For variant spellings of prt-brw with the quantity i,0oo, see Lapp, Opferformel, pp. II2-13. There are two I,OOO-signs but three items listed here, if $p s n$ is not to be taken as a determinative.

West Wall, South False Door, Right (North) Jamb (figs. 4.5I, $4.54,4.56$ ). For a description of the figure, see above.


Text: (I) wr mdiw Šm‘w rb nswt bury-ḅb wt Inpw (2) mry nb=fmrr nb=f Mrib
Translation: ( I ) Great one of the tens of Upper Egypt, royal acquaintance, lector priest, embalmer of Anubis, (2) beloved of his lord, whom his lord loves, ${ }^{90}$ Merib.

West Wall, Between the Two False Doors (figs. 4.48-4.51, 4.56). One large-scale standing figure of Merib, facing left (south) forms the focus between the two false doors. Adorned with a leopard skin, half-coffered kilt, broad collar, valanced wig, and at least one bracelet, Merib holds a staff and a scepter. As is the case on the east wall, the left-facing figure shows the staff passing behind the body; the only exception to this rule in the tomb occurs on the chapel's north exterior facade. ${ }^{91}$

Merib is confronted by seven registers of male scribes and offering bearers. The largest figures kneel in (topmost) registers I and 2. The one preserved figure in register 2 is clearly a scribe; with pens behind his ear, he inscribes his document. Lepsius restores the figure in front of him as holding an outstretched papyrus roll. ${ }^{92}$ Offerings make up the following registers below. Register 3 shows four males, but the first three are damaged. The first pours a libation; the second preserves legs only. A portion of the third figure indicates that he carries a haunch across his shoulder, while the complete figure behind him stands with a sealed beer jar in each hand, and a vessel on an offering stand before him. Five figures appear in register 4 bearing, from right to left: nothing, linen and a leather sack, a bed, more linen and a tray heaped with foodstuffs, and finally a staff and a fan. Register 5 below shows five more figures, the first two with cranes, the third leading a gazelle, and the fourth a calf. The fifth and final male carries a spotted hyena in his arms. ${ }^{93}$ Two men and two oryxes fill register 6 , while register 7 shows two more men and long- and short-horned cattle.

In front of Merib stands an unidentified naked son(?) facing left, who touches the staff with right hand while standing on his own elevated register line. Behind the deceased are four superimposed registers, each containing a single individual. From top to bottom are shown: a naked standing male with accompanying text (see below); a kneeling female in a close-fitting dress and with close-cropped hair; an empty-handed, standing male in a kilt; and a standing male in a kilt and carrying a staff.

Phonetic complementation is present in both cases here: $m \times n+\checkmark$.
91 Cf. the examples in Fischer, The Orientation of Hieroglyphs, pp. 22, fig. 21, 53, fig, 54.
92 Lepsius, Denkmaeler 2, pl. 19.
93 For a recent study of two possible "hyena cages" in the far Western Cemetery (south of Lepsius 19, the tomb of Ipi), originally excavated by A.M. Abu-Bakr, see S.R. Phillips, "Two enigmatic circular mud brick structures in the Western Field at Giza," in The Old Kingdom Art and Archaeology, pp. 239-58.

Register 6, above the men leading oryxes:
$9<$
Text: $r n$ hd
Translation: Young oryx ${ }^{44}$
Register 7, above the men leading cattle:
$0 \infty$
$\triangle \operatorname{mm}$
Text: rn nwdw
Translation: Young addax antelope.
Above the standing figure of Merib wearing a leopard skin, facing left (south):


Text: (I) ss nswt n blt=f btmty nter [dws tswy] 95 (2) wt Inpw btmty ntr bs ntrw smr (3) imy-rkstnb(t) nt nswt (4) wr md_w Šm`w iry ht nswt snwt (y) Inpw hry-hb (5) imy-r mšc (6) mry nb=fmrr nb=fMrib
Translation: (I) King's son of his body, seal-bearer of the god of the (ship) ["Duwa-tawy"], (2) embalmer of Anubis, seal-bearer of the god of the (ship) "Ba-netjeru," companion, (3) overseer of all royal construction projects, (4) great one of the tens of Upper Egypt, who belongs to the snwt-utensil of Anubis, lector priest, (5) overseer of the army, (6) beloved of his lord, whom his lord loves, ${ }^{96}$ Merib.

A short text once accompanied the standing naked male figure:
$\stackrel{0}{5}$
Text: [hrpmi]trt(?)
Translation: [The controller of] (text illegible?) ${ }^{97}$
West Wall, Above North False Door (figs. 4.50-4.51, 4.56, 4.59, 4.6I). The north false door does not extend as high as the south false door. Instead a small table scene occupies this space, with three funerary priests performing initial rites before Merib seated at table

94 Hannig, Großes Handwörterbuch Ägyptisch-Deutsch, p. 574 (omitted from Hannig, Ägyptisches Wörterbuch I).
95 The relief is damaged here; the restoration comes from Lepsius, Denkmaeler 2, pl. 19; Priese, Die Opferkammer des Merib, cover. More often in the tomb the ship title $b_{3}$ ntrw precedes the ship dws twwy.
96 Phonetic complementation is present in both cases here: $m m \times$
97 This text is indicated in Lepsius's color illustration: Denkmaeler 2, pl. 19. Roeder, Aegyptische Inschriften aus den königlichen Museen zu Berlin I, p. 97, records the same signs with the note "jetzt verschwunden." The signs are indeed invisible on the wall today. Perhaps the most likely reconstruction is the female title mitrt. However, since the text accompanies a standing (naked) male figure, the male title brp mitrt has been suggested above. For remarks on the title mitrt and some male examples, see H.G. Fischer, "A Scribe of the Army in a Saqqara Mastaba of the Early Fifth Dynasty," JNES 18 (1959), pp. 262-63, fig. 24; Jones, Index of Ancient Egyptian Titles 2, 715, no. 26II; Wb. 2, p. 45.6; Hannig, Großes Handwörterbuch Ägyptisch-Deutsch, p. 326; Hannig, Ägyptisches Wörterbuch I, pp. $515-16$ [12513].
and facing left with staff in hand．.$^{98}$
Before Merib is inscribed：


Text：（I）btmty ntr ḅw Mrib（2）htp dì nswt prt－brw re nb $3 b d$ smdtm bb nb
Translation：（I）Seal－bearer of the god of the fleet，Merib．（2）A gift which the king gives，（consisting of）invocation offerings every day， on the festival，the month，the festival of the half－month，and on every festival．

Offerings intended for Merib are listed around and below the offering table：


Text：（3）hn $h k t p_{3 t} h_{3}$（4）$t k_{3} h_{3}(5) t-w r t-r t h$（6）$d_{s} t r t(r p) m s i t s r$（7）m3－ hd ${ }^{2} w s$ h hry－dbr（8）hnkt t
Translation：（3）a thousand jars of beer，and cakes，（4）a thousand loaves of bread，and oxen，（5）great loaf，baked bread，（6）cranes，greylag geese，white－fronted geese，mesit－geese，${ }^{99}$ greylag geese，${ }^{\text {I00 }}(7$ ）oryx，ox， suckled calf，${ }^{\text {10I }}$（8）beer，bread．

Three priests perform a ritual offering scene．${ }^{\text {I02 }}$ The procedure for this ritual involved the naming of certain offering items by the
 uttering of spells by the $w t$（embalming）priest，and finally the extension of the actual offerings（milk，wine，loaves，cakes，etc．）to the deceased by the kneeling $\exists$ 解 $w d p w$ figure holding $n w$ jars or other items．The first priest in Merib＇s scene（proceeding from left to right） stands in the pose of addressing，with his left arm extended in front， hand open upward．The second figure kneels in the hnw pose，in this example with the left arm in front，extended to the head，and the right arm upraised＂behind．＂${ }^{103}$ The third priest kneels with both hands extended，holding either two $n w$ jars with wine，or one wine jar and

98 Junker notes that this scene would normally be expected on the south wall； Gîza 2，p． 130.
99 On the reading msit instead of $s t$ ，see Lapp，Opferformel，p．I23，$\$ 215.11-13$ ．
100 For the sequence of fowl names，cf．Lapp，Opferformeh，pp．120－24；Edel， Hieroglyphische Inschriften des Alten Reiches，pp．70－71．
ior See Lapp，Opferformel，pp．124－26，for the reading of the cattle names in the Old Kingdom．
102 The ritual offering scenes and their accompanying texts have been studied by Lapp，Opferformel，pp．153－64．Merib＇s scene is illustrated on p．153，fig．28．See also Junker＇s discussions，Giza 2，pp．62－66，130－31（Merib）and pp．148， 169 （ G 2155 ，Kaninisut）．Figures in identical poses may be found in the tombs of Seshathetep（G 5150）and Nisutnefer（G 4970）；see Junker，Gîza 2，p．187，fig．33， and idem，Giza 3，pp．74－75，figs．9a－b；Smith，HESPOK，pp．165， 358.
103 This is the earlier form of the ritual；the later form shows the arm at the breast； cf．Lapp，Opferformel，p．159，fig．32；see also Dominicus，Gesten und Gebärden， pp．6I－65．
one beer vessel．${ }^{104}$ Both hands are balled into fists．The inscriptions that are normally apportioned to individual figures in this ritual are somewhat jumbled together in Merib＇s version．The standing figure has merely the identifying caption instead of the longer text wdi bt in $h r y-w d b$ ．The central figure is identified similarly simply，but his caption may actually be part of the phrase found in front of the $w d p w$ figure presenting the actual offerings．The standard caption for the embalming priest is snmt 3h in wt，＂Supplying the akh by the embalming priest．＂

$$
\begin{aligned}
& \begin{array}{llll}
12 & 11 & 10 & 9
\end{array}
\end{aligned}
$$

$$
\begin{aligned}
& \frac{2}{0}
\end{aligned}
$$

Text：（9）snmt 3 b（⿺辶）$w d p w$（II）$w t$（I2）$h r y ~ w d b$
Translation：（9）Supplying the akh．（io）Butler．（II）Embalming priest．${ }^{\text {IO5 }}$ （I2）Chief of reversion offerings．${ }^{106}$

West Wall，North False Door（figs．4．48，4．50－4．5I，4．56－4．6I）． This door bears decoration similar to that on the south false door， but the tablet includes a linen list normally found on slab stelae．

West Wall，North False Door，Architrave（figs．4．5I，4．54，4．56， 4．59）．This lintel seems less carefully executed than its counterpart on the south false door．The ntr of bnty sh nter has been omitted，and there is a dittography with nb im3h written twice：


Text：htp di inswt htp rdiv Inpw bunty sh（ntr）krs m imntt nb imshb nb imsh

Translation：A gift which the king gives，and a gift which，Anubis， foremost of the（divine）booth gives，（consisting of）a burial in the west （as）a possessor of veneration，a possessor of veneration ${ }^{\text {sic }}$ before the god，the seal－bearer of the god of the fleet，king＇s son of his body，Merib．

I04 Junker notes that Lepsius＇s watercolor has one object black and the other white， but a collation of the original stone in Berlin indicated merely a pointed object in the priest＇s left hand，and a rounded one in the right．The painted plaster reproduction of the scene today shows both objects painted black；cf．Giza 2， p． 65 ，and compare the figures on the north and south entrance thicknesses to the tomb of Kaninisut I（G 2155），our figs．13．27－13．37 below，and Junker， Gîza 2，pp．146－47，figs．15－16．
IOS Note that the $t$ that belongs with snmt，and is most often found above the back of the $3 h$ bird，has been shifted to belong to the bird due to the extended left hand of the kneeling priest，giving the incorrect reading snm sht；see Lapp， Opferformel，pp．155，184，where he notes this early form of the ritual spell evolved into the later version ssht in wt．
io6 Note that Lepsius，Denkmaeler 2，pl．19，and hence Junker，Giza 2，p．63，no．3， （above）omitted the $h r y-w d b$ text．This omission has found its way into the literature；see，for example，Lapp，Opferformel，p．153，fig． 28.

West Wall, North False Door, Tablet (figs. 4.51, 4.56, 4.594.60). ${ }^{107}$


Text: (I) btmty ntr bow smr Mrib (2) sntr widd msdmt bistt mrbt irp
 msit
Translation: (I) Seal-bearer of the god of the fleet, companion, Merib. (2) Incense, green eye-paint, black eye-paint, best ointment, wine. (3) container of cool water(?) (4) a thousand alabaster vessels, (5) a thousand (pieces of) cloth, (6) a thousand jars of beer, (7) a thousand loaves of bread, (8) oxen, oryx, (9) greylag geese, white-fronted geese, mesit-geese.

The offerings above the table face uncharacteristically rightward, award from Merib. Similarly, the linen list at right contains falcons on standards that likewise face away from the deceased, whereas most such lists show them facing towards him or her. ${ }^{108}$ The qualities of cloth included are idmy, represented by the four Horus standards above, $s s_{r}$ and $\check{S} m r t-n f r t$, and in the next category, ${ }_{3}$-linen below that. Only one Giza slab stela (from g 4860) similarly doubles up sšr and Šm't-nfrtlinen in the same section. ${ }^{\text {. }}{ }^{09}$ Each quality division contains two rows of four columns containing a cloth type designation above and a quantity below. At the bottom of the list, where one often finds the names of individual granaries, several groups of vessel, jar and headrest signs appear.


Reproduced in Manuelian, Slab Stelae, p. III, fig. 169, and p. 235, figs. 308-09 Manuelian, Slab Stelae, pp. 153-55, 235 figs. 308-09 and, for a parallel example of a rightward-facing linen list from G 4860, ibid., pp. Io8-Io, figs. 164-65, 169; Scheele, Die Stofflisten, esp. p. 97 n. 22; Smith, "The Old Kingdom Linen List," $Z \ddot{A} S_{71}$ (1935), pp. 134-49.
Manuelian, Slab Stelae, pp. 108-III, pls. 29-30.

 $h_{3}, s z f b_{3}$ (13) (see below)
Translation: (IO) idemy-linen: a thousand of $100^{112}$ (cubits wide), a thousand of of $4 \times$ Iо (cubits), a thousand of $3 \times$ Io (cubits), a thousand of width sezef; (II) sesher-linen: a thousand of width roo (cubits wide), a thousand of 4 x Iо (cubits wide); fine linen: a thousand of 2 x Io (cubits wide) and I $x$ io (cubits wide), a thousand of width sezef; (12) aa-linen: a thousand of IOO (cubits wide), a thousand of 4 x го (cubits wide), a thousand of 2 x Io (cubits wide) and ix io (cubits wide), a thousand of width sezef; (13) (see below)

The final (bottom) row ( 13 ) of compartments in the linen list contains a headrest (wrs), a bed ( $3 t t)$, an offering table ( $b_{3} w t$ ), an ewer, a basin (i` $(w y)$, a bowl with lug handles, and three vessels. ${ }^{\text {II }}$

West Wall, North False Door, Lintel (figs. 4.51, 4.56, 4.59).

Text: ss nswt n bl=f htmty ntr bs ntrw dws tswy smr Mrib
Translation: King's son of his body, seal-bearer of the god of (the ships) "Ba-netjeru," and "Duwa-tawy," companion, Merib.

West Wall, North False Door, Drum (figs. 4.51, 4.56, 4.59).
By®r

Text: btmty ntr hrw Mrib
Translation: Seal-bearer of the god of the fleet, Merib.
West Wall, North False Door, Left (South) Jamb (figs. 4.5I, $4.56,4.59$ ). The two jamb figures differ somewhat on the north false door. Both figures display the short curled wig, short kilt, staff, and scepter (passing in front of the body on the left, behind it on the right). However, the left (south) figure is the only one of all four jamb figures to show the individual curls of the wig. This figure shows the carved broad collar, while the right (north) jamb figure shows a bare neck; the broad collar may once have been indicated in paint only. Moreover, the right jamb figure shows a leopard skin instead over the short kilt, which appears to lack the half-coffer.

While the Priese plaster cast leaves this box blank, the Lepsius watercolor has four $\begin{gathered} \\ t \\ \text { signs in linen; these are clearly visible on the wall today (figs. 4.5I, 4.56). }\end{gathered}$
ini While the Priese plaster cast leaves this box blank, the Lepsius watercolor has four mnbt signs; these are clearly visible on the wall today (figs. 4.51, 4.56).
II2 While the modern plaster reproduction of the chapel wall in Berlin leaves the first two boxes blank, Lepsius, Denkmaeler 2, pl. 19, shows the št sign, most likely within a bolt of cloth that resembles the $m n$ biliteral $ש$. This figure appears on several other Giza slab stelae: Wepemnefret (G 2IOI), Kanefer (G I2O3), Iunu (G 4150; no longer visible today), and the anonymous G 486o; cf. Manuelian, Slab Stelae, pp. 32-33, esp. pp. 38, 42, 98, 108, pls. 1-4, 25-26, 29-30,
II3 Lepsius, Denkmaeler 2, pls. 19-20 (our fig. 4.56) has 7 , but both the photograph and Priese's reconstruction, (our fig. 4.60), show the vessels listed above. For discussions of furniture and other such list items see E. Brovarski, "An Inventory List from "Covington's Tomb" and Nomenclature for Furniture in the Old Kingdom," in Studies in Honor of William Kelly Simpson I, pp. i1755, and idem, "Inventory Offering Lists and the Nomenclature for Boxes and Chests in the Old Kingdom," in Gold of Praise. Studies on Ancient Egypt in Honor of Edward F. Wente, pp. 27-54.


Text: (I) wr mdw Šm‘w rb nswt hry-ḩb (2) smr w‘ty Mrib
Translation: (I) Great of the tens of Upper Egypt, royal acquaintance, lector priest, (2) sole companion, Merib.

West Wall, North False Door, Right (North) Jamb (figs. 4.5I, $4.56,4.59)$.


Text: (I) ss nswt n $\underline{b} t=f(2)$ btmty ntr $b \underset{\sim}{w}$ Mrib
Translation: (I) King's son of his body, (2) seal-bearer of the god of the fleet, Merib.

The final portion of the west wall to be described is north of the north false door. Four registers are squeezed between the false door and the chapel's northwest corner, each showing a standing man facing left and bringing in the funerary meal. The first, labeled hm $k$, grasps an ewer and basin on a ceramic stand. The second man, also labeled $h m-k 3$, carries a bird in each hand. The third man holds a haunch, while the fourth bears a table with bread loaves and bowls.

## Tomb Owner and Dependents

Junker and Schmitz have convincingly demonstrated, contra Reisner, ${ }^{\text {II4 }}$ that neither Merib nor his mother Sedit were of the blood royal, despite their titles. ${ }^{\text {II }}$ Neither is ever listed with a title higher than $s 3$ or $s 3 t n s w t n t \underline{b} t=f$. For Sedit, one would expect mwt=f m mist Hr Stb or similar titles. Strudwick has noted, in agreement with Junker, that the titles of $s 3$ nswt and $s h d \underline{d} b_{3}$ ntrw equate Merib with the Kapunisut shown in the tomb of his daughter, Nensedjerkai. ${ }^{\text {II }} 6$

## Titles of Merib

(also in G 2100-ri; called $K_{3} p(w)$-nswt, Kapunisut)
imy- $r m s ̌$, overseer of the army
imy-r $k_{3} t n b(t) n t n s w t$, overseer of all royal construction projects ${ }^{117}$
${ }^{d} \underline{d} m r b \uparrow w$, administrator of the fleet
wr mı'swnw greatest of seers of Heliopolis
wr mdw Sm`w, great one of the tens of Upper Egypt
wt Inpw, embalmer of Anubis
$m r y n b=f$, beloved of his lord
$m r r n b=f$, whom his lord loves
$n b i m 3$, possessor of veneration

114 Reisner, Mycerinus, p. 240.
i15 Junker, Gîza 2, pp. 132-32; Schmitz, Untersuchungen zum Titel S3-Njóst, pp. 707I, 73.
${ }^{1} 6$ Strudwick, Administration, p. 94 n. 3; Junker, Gîza 2, fig. 8.
II7 For bearers of this title at Giza, see Smith's remarks in HESPOK, pp. 357-58.
${ }_{r 3} P n b$, mouth of all the people of Pe
rb nswt, royal acquaintance (originally iry-bt nswt, keeper of the king's property)
hm-ntr Hufw, priest of Khufu
$b r p c h$, controller of the palace
$\underline{b} r y-b b b$, lector priest
ss nswt, king's son
$s 3$ nswt $n \underline{b} t=f$, king's son of his body
smr, companion
smr wrty, sole companion
shbd $b_{3}$ ntrw, inspector of the (ships) "Might of the gods,"
btmty ntr wiz, seal-bearer of the god of the barque btmty ntr bs ntrw, seal-bearer of the god of the (ship) "Ba-netjeru" btmty ntr br ntrw, seal-bearer of the god of (the ships) "Ba/ab-netjeru" btmty ntr $n b$ rbyt, seal-bearer of the god of the (ship) "Neb-rekhyt" $b$ tmty $n t r b{ }^{\circ} w$, seal-bearer of the god of the fleet btmty ntr dws tswy, seal-bearer of the god of the (ship) "Duwa-tawy" snwt(y) Inpw, who belongs to the snwt-utensil of Anubis

## Family:

Mother: Sdit (owner of G 2100; in G 2100-I), Sedit $m w t=f$, his mother $h m(t)-n t r r N t m b t t ~ i n b w$, priestess of Neith, north of the wall sst nswt $n \underline{b} t=f$, king's daughter of his body

Sons:
Mrib-nds, Merib Junior
$r b n s w t$, royal acquaintance
$s_{3}=f$, his son
$s s=f n \underline{b} t=f$, his bodily son
Heffw-mr-ntrw, Khufumernetjeru
$r b n s w t$, royal acquaintance
$s s=f n \underline{b} t=f$, his bodily son
$s s=f s m s w$, his eldest son
Daughters:
$N n$-sdr-ks=(i), (also owner of G 2100-II), Nensedjerkai
mryt $=f$, beloved of him
nbt imshb br ntr $\varsigma_{3}$, revered under the great god
$h m-n t r ~ H w t-b r$, priest(ess) of Hathor
hm-ntr Huffu, priest(ess) of Khufu
hkrt nswt, royal ornamented
$s s t=f$, his daughter
sst nswt, king's daughter
Sdnt, Sednet
$s s t=f$, his daughter
Other People ${ }^{\mathrm{II} 8}$
Iši, Ishi
$h r y-t p s t z i-h b$, chief of the bag

[^10]

Fig. 4.I. G 2100-I, general view showing the area around the chapel removed by Lepsius, looking northwest. January 9, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, a7896.



Fig. 4.3. G 2100-I, showing the area around the chapel removed by Lepsius, looking west. March io, 1933. HU-MFA Expedition photograph, Dahi Ahmed, b8289.


Fig. 4.4. G 2100-I, street east of the area around the chapel removed by Lepsius, looking southwest towards the tomb of Nensedjerkai (G 2IOO-II). January 3, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, a7891.


Fig. 4.5. Computer reconstruction of mastaba G 2100-I (Merib), looking northwest, with the contiguous mastaba G 2100 (Sedit) and mastaba G 2110 (Nefer), with protruding exterior chapel, in the background. Courtesy Dassault Systèmes, 2009.


Fig. 4.6. Computer reconstruction of the decorated chapel entrance facade of mastaba G 2100-I (Merib), looking southwest, with the contiguous mastaba G 2100-II (Nensedjerkai), in the background. Courtesy Dassault Systèmes, 2009.


Fig. 4.7. Lepsius plan and sections of G 2100-I, from Lepsius, Denkmaeler I, pl. 22.


Fig. 4.8. Lepsius's sketch plan of G 2 IOOI, from Lepsius, Denkmaeler I, p. 46.


Fig. 4.9. Lepsius's sketches of ceramics from G 2100-I, after Lepsius, Denkmaeler I, p. 48.


Fig. 4.İ. Berlin ÄM 1607, unbaked mud seals from g 2100-і в. 2008. Courtesy Ägyptisches Museum, Berlin.


Fig. 4.I4. G 2100-I (= Lepsius 24), chapel entrance, looking northwest. November 4, 1993. Peter Der Manuelian, pdm_1993.064.24.


Fig. 4.15. G 2IOO-I, fossil located on top of the mastaba, looking west. August II, 2005. Peter Der Manuelian, PDM_03564.


Fig. 4.I6. Joint between G 2100-I to the left (south) and G 2100 to the right (north), looking southwest. February 1906. HU-MFA Expedition photograph, A.M. Lythgoe, BI555 [= B7854].


Fig. 4.18. Joint between G 2100-I to the left (north) and G 2100 to the right (south), looking east across the top of mastaba. November 18, 1993. Peter Der Manuelian, PDM_1993.094.15.


Fig. 4.19. Lined casing block, in northwest corner of G 2100. November 15, 1993. Peter Der Manuelian, PDM_1993.077.02


Fig. 4.I7. Area of the joint on the west side of G 2100-I (behind meter stick) and G 2100 (left foreground), looking south. November 15, 1987. Peter Der Manuelian, pDM_1993.077.09.


Fig. 4.20. G 2100-I, north niche, looking west. November 21, 1993. Peter Der Manuelian, PDM_1993.IO7.22.


Fig. 2I. G 2100-I, plan and section of north niche.


Fig. 4.22. G 2100-I B, mouth of shaft, looking north. November 4, 1993. Peter Der Manuelian, PDM_1993.064.II.

Fig. 4.23. G 2100-I B, plan and section.


Fig. 4.24. G 2100-I C, view into the partially dismantled shaft, looking west. November 4, I993. Peter Der Manuelian, PDM_1993.064.I7.



Fig. 4.26. Computer reconstruction of the burial chamber of G 2100-I C, looking northeast. Courtesy Dassault Systèmes, 2009 .


Fig. 4.27. Computer reconstruction of the chapel entrance facade of G 2100-I, looking west. Courtesy Dassault Systèmes, 2009.


Fig. 4.28. Ägyptisches Museum, Berlin iro7, chapel entrance facade from G 2100-1. September 2, 2008. Photographs and digital montage by Rolf Kriesten,
Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present work


Fig. 4.29. G 2100-1, entrance facade and chapel as originally exhibited in the Ägyptisches Museum, Berlin. Date not listed. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_os68.


Fig. 4.30. G 2100-I, chapel, entrance facade; after Lepsius, Denkmaeler 2, pl. 18.


Fig. 4.3I. Ägyptisches Museum, Berlin inO7, south entrance thickness and east (blank) and south (livestock; next page) rebates from chapel of G 2Ioo-I. September 2, 2008. Photographs and digital montages by Rolf Kriesten, Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present work.


Fig. 4.33. G 2100-I, chapel, south entrance facade and south entrance thickness as originally exhibited in the Ägyptisches Museum, Berlin. Date not listed. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_0232.



Fig. 4.34. Ägyptisches Museum, Berlin iIO7, north entrance thickness from chapel of G 2100-I. September 2, 2008. Photographs and digital montage by Rolf Kriesten, Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present work.


Fig. 4.35. G 2100-I, chapel, north entrance thickness; after Lepsius, Denkmaeler 2, pl. 22b.


Fig. 4.36. Computer reconstruction of the chapel of G 2100-I, looking east towards the east wall. Courtesy Dassault Systèmes, 2009.


Fig. 4.37. Ägyptisches Museum, Berlin iIO7, east wall from chapel of G 2100-I. September 2, 2008. Photographs and digital montage by Rolf Kriesten,
Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present work.



Fig. 4.38. G 2100-I, chapel, east wall; after Lepsius, Denkmaeler 2, pls. 2I-22d.


Fig. 4.39. G 2100-1, chapel, east wall; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, digital montage of pdm_1993.030.01 and PDM_1993.030.06.


Fig. 4.40. Ägyptisches Museum, Berlin iIO7, south wall from chapel of G 2100 -I. September 2, 2008. Photographs and digital montage by Rolf Kriesten, Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present work.


Fig. 4.4I. Computer reconstruction of the chapel of G 2100-I, looking south towards the south wall. Courtesy Dassault Systèmes, 2009.


Fig. 4.42. G 2100-r, chapel, south wall; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, pDm_1993.030.02.


Fig. 4.43. G 2100-I, chapel, south wall; after Lepsius, Denkmaeler 2, pl. 20e-f.


Fig. 4.44. Ägyptisches Museum, Berlin iIO7, north wall from chapel of G 2100-I. September 2, 2008. Photographs and digital montage by Rolf Kriesten, Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present work.


Fig. 4.45. Computer reconstruction of the chapel of G 2100-I, looking north towards the north wall. Courtesy Dassault Systèmes, 2009.


Fig. 4.46. G 2100-I, chapel, north wall; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, PDM_1993.030.04.


Fig. 4.47. G 2100-I, chapel, north wall; after Lepsius, Denkmaeler 2, pl. 22 c.


Fig. 4.48. Computer reconstruction of the chapel of G 2100-I, looking west towards the west wall. Courtesy Dassault Systèmes, 2009.


Fig. 4.49. G 2100-I, chapel, south wall and south half of west wall; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, PDM_1993.030.I2.


Fig. 4.50. G 2100-I, chapel, north wall and north half of west wall; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, PDM_1993.030.08.


Fig. 4.5I. Ägyptisches Museum, Berlin IIO7, west wall from chapel of G 2100-I. September 2, 2008. Photographs and digital montage by Rolf Kriesten, Restaurierung am Oberbaum, Berlin. For the epigraphy of this wall, see Part 2 of the present work.



Fig. 4.53. G 2100-I, chapel, west wall, south false door thicknesses; after Lepsius, Denkmaeler 2, pls. 20e-f and 2od.

Fig. 4.52. Agyptisches Museum, Berlin IIO7, thicknesses from chapel of G 2100-I, west wall, south false door. September 2, 2008. Photographs and digital montage by Rolf Kriesten, Restaurierung am Oberbaum, Berlin.


Fig. 4.54. G 2100-I, chapel, west wall, south false door; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, PDM_I993.030.09.


Fig. 4.55. G 2100-I, chapel, west wall, south false door tablet; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, PDM_1993.030.05


Fig. 4.56. G 2100-I, chapel, west wall; after Lepsius, Denkmaeler 2, pls. 19-20.


Fig. 4.57. Ägyptisches Museum, Berlin IIO7, thicknesses from chapel of G 2100-I, west wall, north false door. September 2, 2008. Photographs and digital montage by Rolf Kriesten, Restaurierung am Oberbaum, Berlin.


Fig. 4.58. G 2100-I, chapel, west wall, north false door thicknesses; after Lepsius, Denkmaeler 2, pls. 20c and 2ob.


Fig. 4.59. G 2100-I, chapel, west wall, north false door; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, pDM_1993.030.II.


Fig. 4.60. G 2100-I, chapel, west wall, north false door tablet; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, PDM_1993.030.03


Fig. 4.6I. G 2IOO-I, chapel, west wall, offering scene above north false door; modern painted plaster reproduction in Berlin. 1989. Peter Der Manuelian, pdm_1993.030.23.

## Chapter 5 <br> THE TOMB OF NENSEDJERKAI:

Mastaba G 2IOO-II (annex) $=$ G 2IOI

## Summary of Reisner's Description <br> Mastaba: type ${ }^{\text {I }}$ IX a (2); rubble-faced core cased with w-masonry of gray nummulitic limestone <br> measurements: $8.85 \times 8.0 \mathrm{~m}$ <br> area 70.8 sq . m; proportion $\mathrm{I} / \mathrm{I}$.II <br> h. 3.40 m <br> Mastaba increased in size by addition against the east face containing a chapel of type (8 e) <br> measurements: outside $9.5 \times 3.6 \mathrm{~m}$ area 34.2 sq . m <br> portico and open court to east $6.0 \times 5.45 \mathrm{~m}$ area 32.7 sq . m <br> total area of chapel addition 66.9 sq. m <br> total area of mastaba and additions $70.8+66.9=137.7 \mathrm{sq} . \mathrm{m}$ <br> h. of mastaba 5.0 m ; h. of chapel 2.83 m ; h . of court wall 2.5 m <br> Chapel: type (8 e) exterior stone chapel with offering-room (a), pillared portico (b), and open court (c) ${ }^{2}$ <br> (a) N-S offering-room with two niches in west wall $6.6 \times 1.35 \mathrm{~m}$ <br> area 8.9 I sq. m; proportion $\mathrm{I} / 4.88$; entered from east by doorway in middle of east wall <br> (b) portico with two side walls (north and south), and roof supported on two pillars <br> floor area including pillars $4.65 \times 2.1 \mathrm{~m}$ area 9.76 sq. m; approached by a crude brick ramp ascending from floor of court to floor of portico (h. 0.4 m ) doorway to room (a) in west wall, not in axis (c) open court enclosed by walls with batter on outside and rounded coping on top; $3.8 \times 2.55 \mathrm{~m}$; area including ramp $8.89 \mathrm{sq} . \mathrm{m}$; entered from east by doorway at north end of east wall; the ramp is not in the E-W axis of either portico or court; the doorway from portico to room (a) is in E-W axis of room (a), but not of the portico <br> total floor area of rooms (a) and (b), 18.67 sq. m total floor area of (a), (b), (c) $27.56 \mathrm{sq} . \mathrm{m}$ <br> Shaft A: I. $6 \times$ x .6 m; -4.48 m in rock <br> lined above with rubble plus masonry, 5.12 m <br> chamber type 4 (I) on north. $3.4 \times 3.0 \mathrm{~m}$ and 2.0 m high

I See Reisner, GNI, pp. 42I-22; and Junker, Gîza 2, pp. 97-I21; idem, "Vorbericht 1912," pp. 90-94, pls. 2-3 (= pp. 6-II, pls. 2-3 of separately printed version).
2 Smith, HESPOK, p. 166, relates the chapel particularly to that of tomb G 52 IO (Khemten), and to the general group including G 2100-I (Merib), G 2155 (Kaninisut I), G 5150 (Seshathetep), G 4970 (Nisutnefer), G 5170 (Seshemnefer III), G 4710 (Setju), G 4920 (Tjenti), G 5010, G 5030 (= Lepsius 46), and G 5340 (Kasewedja). These chapels are characterized by "reliefs of medium height and mediocre execution, and some of them show evidence of a use of plaster washes to give a smoother finish to the relief for the laying on of the color...."
area 10.2 sq . m; capacity $20.4 \mathrm{cu} . \mathrm{m}$
passage: I.O x 1.3 m and I .7 m high; step down from floor of passage to floor of chamber 0.29 m
blocking: probably with masonry, type II b (I)
coffin: limestone coffin with $k$ rss(w)-lid; outside $2.2 \times 0.9 \mathrm{~m}$
h. 0.8 m ; inside $\mathrm{I} .8 \times 0.5 \mathrm{~m}$; d. $0.6^{3}$
canopic pit: $0.5 \times 0.5 \mathrm{~m}$ and 0.5 m deep
burial: skeleton dismembered and scattered by thieves; also
animal bones from meat offerings
Shaft b; $1.6 \times \mathrm{I} .6 \mathrm{~m}$; no chamber; type 7 x

## Excavation

This tomb is the smallest and latest of the family complex of three mastabas (G 2100, belonging to Merib's mother Sedit; G 2100-I belonging to Merib; and G 2IOO-II Nensedjerkai4). The HarvardMFA Expedition conducted no work in this area. Lepsius was unaware of its existence when he discovered and removed the chapel of Merib just to the north. In 1905-1906, Lythgoe began excavating portions of the family complex, but the dividing line between the American and German (later Austrian) concessions ran east-west, separating the south face of Merib's tomb from the north face of Nensedjerkai's. The latter's tomb therefore lay outside (i.e., south of) the American concession, and was not discovered until February io, 1912, when Hermann Junker cleared the area (fig. 5.I). Subsequent excavation of the shafts resulted in the discovery of Nensedjerkai's sarcophagus on March 9, 1913.

Finds
Alabaster arm of a female statue, found "bei der Mastaba... zweifellos zum Grabe der $N$-s $\underline{d} r-k 3 j$ gehörend" ${ }^{5}$
Rectangular limestone sarcophagus from shaft A: uninscribed, with krs (w) lid bearing wide, rounded lug handles on short ends intact; h .80 cm ; w. $90 \mathrm{~cm} ; 1.2 .20 \mathrm{~m}$; th. 20 cm ; depth 50 cm ; presumably still in situ (figs. 5.20-5.23) ${ }^{6}$

Junker notes a late Old Kingdom limestone sunk relief architrave, with some unusual textual anomalies, belonging to a imy-r $m \underline{d} \underline{b}(w)$ is pr nswt Ni-pth, "overseer of carpenters of the is-chamber of the royal estate, Niptah" ${ }^{7}$ and his wife Peseshet. This architrave was found "nicht weit von der Mastaba der Nd́srkjj. Die Anlage, zu der er gehörte konnte, auch später nicht ermittelt werden, da sich der Name des Eigentümers nicht wiederfand, auch nicht auf der angrenzenden amerikanischen Konzession...." ${ }^{8}$ Niptah seems to have a second name of $\mathrm{Hw}(\mathrm{i})$-pth; this confusion is just one of several inscriptional anomalies present in this text. It is interesting to note that a $h m-k_{3}$ funerary priest $N i$ i-pth (apparently spelled without the

3 Junker, Gîza 2, p. Io6, gives 50 cm instead of Reisner's 60 cm for the depth of the sarcophagus; see below under finds.
4 For the most likely more correct reading of the name, $n-s d r-k s=i$, "my ka does not sleep," instead of $n n-s \underline{d} r$ - $k_{3}=i$, see Edel, Altägyptische Grammatik, pp. 558-59, §io76; Junker, Gîza 2, p. III.
5 Ibid., p. IO4; no measurements or illustrations provided.
6 Junker, Gîza 2, pp. io6, fig. 6, inO; Donadoni-Roveri, Sarcofagi egizi, p. i26, (B 42); Junker, "Vorbericht 19I2," pp. 6-II; idem, "Vorbericht 1913," p. 182 (= p. 32 of separately printed version); Reisner, $G N$ I, p. 422.
7 Jones, Index of Ancient Egyptian Titles I, pp. 146-47, no. 572.
8 Kunsthistorisches Museum Vienna ÄS 8550; Junker, Gîza 8, pp. 174-76, fig. 9I, pl. 28a; Hölzl, Reliefs und Inschriftensteine des Alten Reiches 3, CAA 22 (in preparation). Images of this architrave are available on the Giza Archives Project Web site (www.gizapyramids.org): AEOS_8550_50458 (color), AEOS_I_5315 and o_neg_nr_oo39.
reed leaf) appears on the lower portion of the right (north) jamb of the northern false door in Nensedjerkai's interior chapel (see below).

## Architecture

This tomb is architecturally unlike any other in the entire Giza Necropolis. It is one of several that fall south of the HarvardMFA Expedition concession line, and thus was excavated and fully published by Junker. ${ }^{9}$ For this reason, merely a brief summary description will suffice here. Third and last in the Merib family tomb complex, Nensedjerkai's superstructure is built against the south end of Merib's mastaba (G 2100-I), with an exterior stone chapel, portico, and enclosed courtyard that is surrounded by round-topped walls, projecting eastwards (figs. 5.2-5.3, 5.6-5.7). As Junker determined, the tomb originally consisted of a small mastaba whose eastern face aligned with that of Merib's mastaba. ${ }^{10}$ Two asymmetrically placed false doors formed the tomb's original front, ${ }^{\text {II }}$ but these were later walled up by the eastern extension containing the chapel, portico, and courtyard.

Visible from outside the tomb is the exterior raised relief architrave beneath a cantilevered roof, and the decorated square pillars at the back (west end) of the portico. The architrave reaches to the edge of the north wall of the portico exterior on the north, but not to the edge of the wall at the south; here it meets two blocks (above and below each other) which then form the exterior southern wall. The cantilevered roof slabs are eight in number and run from east to west over the architrave. ${ }^{12}$ The upper surfaces of the cantilevered slabs are carved to slope downwards to the east, probably for water runoff and to protect decorated surfaces below (figs. 5.3, 5.6-5.7, 5.10). The cantilever is similar to that found over the portico of Qedfy (G 2135a) and the courtyard of Shepseskafankh (G 6040). ${ }^{13}$ Topping the edge of the cantilever is a mantle or shelf of small blocks running around the north, east, and south sides of the portico, joining the mastaba proper and enclosing the roof (fig. 5.7). Junker suggested this "trough" was filled with debris, for the worked faces of the adjoining blocks of the mastaba's west facade cease below this level. ${ }^{14}$ Small drainage holes, about Io cm high, are apparent at the north and south sides of the enclosing mantle wall.

Outside the vaulted wall of the courtyard, on the northern side, a thin corridor approximately 1.60 m wide runs between G 2120 and G 2100-II. It is lined with paving stones, one of which appeared to display the remains of a rectangular offering basin depression (fig. 5.9) seen (in a smaller version) on the paving stones

9 included G 2135 and G 2155 (Kaninisut I).
(o Junker, Gîza 2, pp. 97-98, fig. I.
iI The southern false door lay 2 m from the southern edge of the wall, while the northern false door was only about 1 m from the northern edge. Only the northern false door was completely shaped, measuring 90 cm wide (versus I m wide for the southern false door), with a base 25 cm high and 40 cm deep, a I. 5 m -high block with two pairs of jambs, and an architrave measuring 60 cm in height; cf. Junker, Gîza 2, p. 98.
I2 For purposes of photography, the architrave inscription was observed during the 1990s to catch direct sunlight, unblocked by the cantilevered overhang above, for only one to two hours in the early morning.
I3 For G 6040 (Shepseskafankh), which even includes similar round-topped walls, see Weeks, Giza Mastabas 5, pl. 53 a (and HU-MFA Expedition Photograph A7966 on the Giza Archives Project Web site, www.gizapyramids.org (March 28, 1938). For G 2135 a (Qedfy), see there aEOS_I_5292 and PDM_1993.022.2I.
14 Junker, Gîza 2, p. Io3.
of the chapel of G 2120 (see below, Chapter 7). ${ }^{15}$ In terms of the construction chronology of this area, G 2120 (Seshatsekhentiu) was built first during Khufu's reign. Then in early Dynasty 5, Merib created (extended?) and cased G 2100-I, immediately south of his mother's tomb, and inserted his interior chapel (now Berlin iIO7). Next, Merib's daughter Nensedjerkai constructed at first a modest mastaba aligned along the eastern face of her father's tomb. She ${ }^{16}$ then extended the mastaba eastwards with its unique imitation of domestic architecture. This created the narrow corridor westwards towards the street in front (east) of Merib's tomb. Although this corridor allows passage today, the large casing stones of G 2120, now quarried away, would have prevented access to Merib's chapel in the Old Kingdom, forcing visitors around to the north of G $2120 .{ }^{17}$ A rather grand boulevard, running east to west, once led to Nensedjerkai's impressive courtyard and facade, up until the Dynasty 6 additions of Kahif's (G 2136) and others' mastabas filled much of the space between G 2135 (to the south) and G 2140 (to the north). ${ }^{8}$ Subsequent to the final form of the Merib family mastabas and most likely also in Dynasty 6, the north-south street north of Nensedjerkai's and east of Merib's tombs became choked with the addition of minor mastabas G 2102, G 2103, G 2104, and G 2105. ${ }^{19}$ It is difficult to imagine that Merib's cult was still functioning due to the later occupation of the street in front of his chapel. As mentioned above, access to Merib's cult chapel was probably only possible from the north, not from the small passageway left between the tombs of Nensedjerkai and Seshatsekhentiu (G 2I20). ${ }^{20}$

The entrance to the courtyard, which measures $3.8 \times 2.6 \mathrm{~m}$, lies at the north end of its eastern enclosure wall. The wall itself forms an impressive enclosure, with smoothed nummulitic limestone blocks, slightly battered on both sides, and rounded at the top in imitation of mud-brick house walls. ${ }^{21}$ Corners appear "mitred," and joins between blocks have been filled throughout with mortar that has turned pink with exposure over time (fig. 5.1I). Just inside the doorway, on the north side, a socket stone for the door to pivot on is preserved, containing a socket hole of 10 cm diameter and 3 cm depth (fig. 5.12). On November 27, 1993, the courtyard floor inside the entrance, beneath the overhead door socket hole (on the north side of entrance) was cleared in search of the corresponding socket
is Comparative rectangular basins cut in the floor may also be found in front of the northern niche of G 2150 (Kanefer) (figs. 12.48-I2.50), and in the floor of the north chapel of G 2000 (Lepsius 23) (HU-MFA Expedition Photograph CIO28 on www.gizapyramids.org). For another view of Nensedjerkai's basin see PDM_1993.115.20.
16 Junker suggested that Nensedjerkai predeceased her father Merib, and that he was responsible for her tomb and its eastern extension, but it is not clear what evidence led him to this conclusion; cf. Junker, Gîza 2, p. ıo8.
17 A good view of this area may be seen on the Giza Archives Project Web site (www .gizapyramids.org) in image PDM_1993.026.24.
I8 On the Giza Archives Project Web site, see Vienna image aeos_I_5432 (= o_neg_ nr_0681), and Junker, Gîza 2, pl. 2. Some of these tombs are discussed in Part 2 of the present work.
19 In his discussion of the Merib family complex, Reisner states in $G N$ I, p. 422: " $\ldots$. the groups of shafts were numbered from south to north, G 2IO2, G 2103, G 2104, and G 2105, and G 2106 (at NE corner of G 2IOO)." Note, however, that there is no tomb numbered G 2106; most likely this is G 2II4, which occupies the space at the northeast corner of G 2100 .
20 See the reconstruction plans, with chapels added, of Cemetery G 2IOO in Jánosi, Giza in der 4. Dynastie, plans 2-3.
21 Junker, Gîza 2, p. IO9, comments on the intentional decision by the tomb's architects to smooth and dress certain walls and surfaces but leave others rough for reasons of maximum aesthetic contrast.
hole in the floor. The hole was located, confirming that the door once swung open to the north (fig. 5.103). ${ }^{22}$

A small mud-brick staircase, placed symmetrically relative to the two square pillars but asymmetrically ( 50 cm to the north) within the courtyard itself, leads into the portico. ${ }^{23}$ No decoration is present on the courtyard walls other than the front (east) and back (west) sides of the two square pillars of the portico (see below). But the entrance to the chapel corridor, placed asymmetrically to the south, bears a raised relief architrave and drum.

The portico is smaller than the courtyard, measuring 3.25 m wide $x$ 2.10 m deep. It, too, is asymmetrically located, closer to the north wall than to the south. One explanation for this positioning lies in the presence of a serdab ( $90 \times 80 \mathrm{~cm}$ ) set immediately south of the portico, although no serdab squint can be identified, due to damage to the portico's south wall. ${ }^{24}$ Junker associates an alabaster arm fragment from a female statue, found in the vicinity, with this serdab (see finds above). The south wall does, however, preserve some architect's guidelines in red paint, accompanied by mh 2 ("2 cubits"). These lines are barely visible today. ${ }^{25}$ The pillars measure $50 \times 50 \mathrm{~cm}$ and 2.5 m tall, and bear decoration solely on their east and west sides (see below).

At the end of the passage corridor entrance to the chapel, the door socket posthole is visible in the floor on the southern side of the door. Up above the door, however, the block is hollowed on both south and north sides, indicating double doors were originally intended, according to Junker, to take some stress off of the friable nature of limestone. ${ }^{26}$

The north-south corridor chapel contains two false doors with wide architraves, but no additional decoration. ${ }^{27}$ In contrast to the tomb's two exterior architraves, the drum over the chapel entrance, and the portico's square pillars, which are all carved in raised relief, the decoration inside the chapel is carved exclusively in sunk relief. This scenario is reversed compared to many mastabas, where sunk relief is preferred for exterior inscriptions, such as architraves. Junker rightly points out that in this case, the interior chapel's false doors appear to be in imitation of granite. On the thicknesses of the jambs one can see the speckled pink color intended to represent this more valuable stone, which is, of course, most often carved in sunk relief. ${ }^{28}$ In fact, the entire chapel displays a reddish color, probably gained as a result of the discoloration of a wash or coating covering the walls.

A window has been cut high on the south side of the chapel; its aperture widens as it reaches the chapel interior (fig. 5.18). ${ }^{29}$

22 Junker, Gîza 2, pp. 104-105, claims the doorway was painted with a white wash, but doubts that the courtyard walls were similarly colored.
23 No evidence of this stair was visible in recent years; it is either buried or completely deteriorated (see image pDM_1993.084.06 on the Giza Archives Project Web site, www.gizapyramids.org). It lay originally I .25 m from the north wall, and I .75 m from the south wall.
24 For a similarly placed serdab, see the tomb of Qedfy (G 2135a): Junker, Gîza 6, p. 8I, fig. 2I.

25 Junker, Gîza 2, p. IO3, fig. 5. For a more recent view, barely showing the red guidelines, see PDM_1993.084.IO on www.gizapyramids.org.
26 Junker, Gîza 2, p. IO2, fig. 4.
27 Junker's measurements differ slightly from those of Reisner listed above: ibid., p. 98: "6.10 x I. $30+2.90$ m." Somewhat similar north-south corridor chapels in Cemetery G 2100, with two false doors but no other chapel decoration, include the tombs of Qedfy (G 2135a) and Kaninisut II (G 2156); see below.
28 Ibid., pp. Ioo-Ior.
29 Measurements: 1.25 m long $\times 55 \mathrm{~cm}$ wide. For a recent view of a similar window in the tomb of Nefer, see Jánosi, Die Gräberwelt der Pyramidenzeit, p. 66, fig. 54 .

Flooring in the chapel consists of large slabs oriented east-west, and 50 cm -thick slabs make up the roof, with the same orientation. A serdab squint between the two false doors once led to a (now mostly destroyed) serdab measuring about I x. 75 m .

The two false doors still preserve details of color as well as the use of plaster sizing. Additional pigment survives on the south false door, particularly on the tablet scene (see below, figs. 5.37-5.38, 5.435.63 ). The various faces of Nensedjerkai are full of interior detail. The only exception is on the north false door, where the lower figures on the two jambs bear merely sunk relief outlines and no interior detail. Perhaps this area was once painted only. Junker details some of the surviving colors he saw at the time of tomb's excavation in 1912.30

Junker emphasizes several important points in his discussion of Nensejderkai's unique combination of mortuary and domestic architecture. ${ }^{31}$ While individual private villas are seldom preserved for purposes of comparison, Junker cites Petrie's collection of Middle Kingdom soul house models from his Gizeh and Rifeh. ${ }^{32}$ Moreover, Junker notes, as another parallel to domestic architecture, the rising floor levels in G 2IOO-I as one proceeds further westwards into the tomb. One must climb 40 cm higher in moving from the courtyard to the portico, and then another 26 cm higher in stepping from the portico to the interior chapel (figs. 5.17, 5,26).

A final point regarding the superstructure concerns the many asymmetries in the positioning of various elements. As Junker notes, these are partially due to the constraints imposed by the alreadyexisting structures in the area (G 2100-I, G 2120, etc.). A second explanation involves pure miscalculation and human error. But that leaves several otherwise avoidable asymmetries that are most likely intentional. Most of these may be ascribed to the desire to avoid direct, unimpeded access from entrances to important elements such as cult foci. This would explain the arrangement of the entrance to the couryard (northern corner), the ramp to the portico (north of center), and the entrance to the chapel (south of center). Similar protective measures were usually taken to separate chapel entrances (towards the north) from primary false doors (towards the south) in Giza L-shaped chapels. ${ }^{33}$

Two shafts were sunk in the core of the original mastaba, в to the west of the chapel's southern false door, and A , northeast of в, to the west of the northern false door. Shaft в is unfinished, while A contained the burial chamber and sarcophagus of Nensedjerkai (figs. 5.20-5.23). Junker's suggestion that b was the originally planned primary shaft may be correct. ${ }^{34}$ The normal arrangement was for a northern shaft, with a burial chamber leading off to the south, relating the burial to the chapel's offering place. 35 In Nensedjerkai's chapel, neither false door seems to take priority over the other, and in fact a stronger orientation incentive was apparently in play here: Nensedjerkai's desire to relate her burial with that of her father Merib.

30 Junker, Gîza 2, p. IoI.
31 Ibid., pp. IO5-IO7.
32 Petrie, Gizeh and Rifeh, pl. 16, no. I16, and cf. P. Lacovara, in Mummies \& Magic, p. 108, cat. 4 (MFA 07.550).

33 See Jánosi, Die Gräberwelt der Pyramidenzeit, p. 57. A curious reversal of the typical Giza chapel arrangement occurs in Cemetery g 2IOO, where Nefer's chapel (G 2IIO) displays an entrance towards the south, but a false door towards the north (see below).
34 Junker, Gîza 2, p. Ioo.
35 See P. Jánosi, "Aspects of Mastaba Development: The Position of Shafts and the Identification of Tomb Owners," in Abusir and Saqqara in the Year 200I, pp. 337-50.

The solution was to lead the burial chamber uncharacteristically off to the north of the burial chamber. Shaft A was chosen for this purpose. Measuring, like shaft в, $\mathrm{I} .60 \times \mathrm{I} .60 \mathrm{~m}$, shaft A leads to a I m-long passage, I .30 m wide and I .70 m high, that ends in the burial chamber located under the precinct occupied by G 2 IOOi. Junker notes that the northwest corner of Nensedjerkai's burial chamber lies only 2 m from the southeast corner of Merib's shaft c (figs. 2.7, 3.1). ${ }^{36}$ However, if depth played a role in the Egyptians' concept of proximity, then we should note that Merib's shaft c burial chamber lies a good 9 meters deeper than that of Nensedjerkai.

The burial chamber of shaft a is a roughly hewn room with no attempt to dress the walls or even flatten out the floor area. The chamber contained scattered skeletal remains, ${ }^{37}$ and a thick, uninscribed, limestone sarcophagus with lugs ( $15 \times 15 \mathrm{~cm}$ ) on both small ends (figs. 5.22-5.23). The lid, slightly vaulted on both top and underside, was found removed and propped up against the west wall. This sarcophagus contrasts with the Khufu-era sarcophagi that tend to show fine Tura limestone, thin walls, and a flat lid. These features point to a date posterior to Dynasty 4. A canopic depression ( 50 x 50 cm ), partially hewn and partially built up with rougly cut blocks, appears in the southeast corner, near the entrance to the chamber from the passage.

If Shaft в was not an abandoned first attempt at a burial place for Nensedjerkai, but intended for another family member, individuals attested in Merib's chapel include Sednet, Merib Junior, and Khufumernetjeru.

## Shafts and Burials

Shafts in G 2100-II: two shafts, a on north and b on south, but a little farther to the west. There are a number of later, subsidiary shafts associated with the mastaba, particularly on the north side. While German-Austrian photographs exist, there is apparently little supplemental information about them preserved. ${ }^{38}$

G 2100-II A (figs. 5.22-5.23)
This is a mass of disarticulated human and other mammal bones. Identifiable bones include a large mammal scapula, two human femurs, human os coxa, human tibia, and some ribs. Sex and age indeterminate. No tomb card sketches.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. i: mid-Dynasty 5 . Reisner, "List of Finished Mastabas," p. 22: Dynasty 5.

Since Merib's mastaba has been dated to early Dynasty 5, it is clear that the tomb of his daughter, Nensedjerkai, must postdate that

[^11]of her father. A date in the first two or three reigns of that dynasty is therefore suggested. 39

## Decoration

Exterior Architrave (figs. 5.24-5.25). The architrave ${ }^{40}$ at the west end of the courtyard consists of two blocks, the longer one at the south, with the join occurring over the northern pillar, cutting through the $m$ of $m$ smyt imntt in the upper line and the $r k h$ of the bottom line. The blocks show several areas of plaster repairs with carving over the plaster, e.g., the first $t$ of the $d \underline{b} w t t$ festival, and the shoulder and face of the seated figure of Nensedjerkai herself at the far left (south). She faces right, seated on a bull-legged stool before a table of eight half-loaves of bread. She wears a tripartite wig and a close-fitting dress held up with shoulder straps. Under the table is an ideographic list, and to the right are two lines of inscription in raised relief, reading right to left. ${ }^{11}$


Text: (I) htp dí nswt htp (dí) Inpw nb tz-dsr bnty sh ntr krs.t(i)=s (m)
 $t$ im=s nfrt (2) pr n=s brw wp rnpt ${ }^{42}$ dhwtt tpy rnpt wig hb Skr ${ }^{43}$ hb wr rkh whbh ch prt Minw 3bd ss이 tpy 3bd tpy smdt ${ }^{44}$ hb nb re nb n sit nswt bkert

Translation: ( I ) A gift which the king, and a gift which Anubis, lord of the necropolis, foremost of the divine booth, give, that she may be buried (in) the necropolis in the western desert, having achieved a very great old age, that she might travel upon the beautiful ways upon which a revered one travels well. (2) May invocation offerings be made for her (on) the new year's festival, 45 the festival of Thoth, the first of the year festival, the wag-festival, the festival of Sokar, the great flame festival, the festival of the brazier, ${ }^{46}$ the procession of Min festival, the monthly sadj-festival, the beginning of the month festival, the beginning of the half-month festival, and every festival every day, for the king's daughter, the royal ornamented, Nensedjerkai. (3) A thousand alabaster vessels, a thousand pieces of cloth, (4) a thousand quantities of bread, beer, and cakes.

39 Compare PM III, p. 72: Dynasty 5; Baud, Famille royale et pouvoir 1, pp. 40-41; 2, pp. 473-74 [93]: second half of Dynasty 4; Harpur, Decoration in Egytian Tombs, p. 268 [147]: Sahure to Neferirkare; Junker Gîza 2, p. 39: Early Dynasty 5.

40 See Junker, Gîza 2, p. II5, fig. 7.
4I This text is translated by Miriam Lichtheim, Ancient Egyptian Literature I, pp. 15-16, and more recently by Strudwick, Texts from the Pyramid Age, pp. 38990 (text 287). See also Junker, Gîza 2, p. ify, fig. 7.
42 On the reading of $w p r n p t$ instead of $w p t r n p t$ for this festival, see Luft, Die chronologische Fixierung, pp. 152-53 (3.1.8).
43 Wb. I, p. 263. The deity's name is misspelled Srk. See in general ibid., pp. 179-81 (3.I.34); G.A. Gaballa and K.A. Kitchen, "The Festival of Sokar," Orientalia 38 (1969), pp. I-76; E. Wohlgemuth, Das Sokarfest (Göttingen: Ph.D. dissertation, 1957).

44 A better reading for this festival than smdt may be mddint, see above, Chapter 4, n. 40 .

45 Spalinger, The Private Feast Lists of Ancient Egypt, p. II2, ascribes this feast list to his "basic arrangement" category ("The core comprises the first eight events; nine [ $36 d n s s d]$ is infrequently added").
46 For comments on this ceremony, see Junker, Gîza 2, p. ıi7, and Hannig, Ägyptisches Wörterbuch I, p. 305 \{6620\}.

Exterior (East) Face of Southern and Northern Columns of Portico (figs. 5.27-5.28). Nensedjerkai stands facing right (southern column) and left (northern column) in a tripartite wig and a long, close-fitting garment, with anklets and bracelets. One hand is bent back across her breast while the other hangs by her side. ${ }^{47}$ In front of her is a vertical column containing her titles and name, with the name repeated horizontally over her head as well. The hieroglyphs are densely composed, particularly in the phrase nbt imsh br.

Since both northern and southern columns bear identical scene text, except for the reversed orientation, they are translated once only below:


Text: (I) sst nswt hart nswt nbt imshb br ntr $\mathrm{B}_{3}$ (2) Nn-sdr-k3i
Translation: (I) King's daughter, royal ornamented, possessor of veneration under the great god, (2) Nensedjerkai

Interior (West) Face of Northern Column of Portico (figs. 5.295.30 ). Nensedjerkai's father, Merib, stands (in raised relief) facing right, wearing a short wig, lector priest's sash, back flap, and kilt. He carries a staff in one hand and a handkerchief in the other. Above him is written one title plus his name, squeezed in the space before his face and above his bent elbow. Beneath his bent elbow stands a small figure of Nensedjerkai facing right and holding on to his staff while grasping a lotus blossom. She wears a tripartite wig and is similarly attired as on the exterior (eastern) faces of the pillars.


47 Note the similar scene, albeit showing Khamerernebty sniffing a lotus blossom, on the north face of the square pillar of Kapi in G 2091, dated to Niuserre to Izezi by Roth, A Cemetery of Palace Attendants, pp. IoI-IO2, pls. 43b, 46-47, fig. 16Ib.

Text: (1) ss nswt btmty ntr brw Mrib48 (2) sit=f mrt=f blkrt $^{\text {nswt }}$ (3) Nn$s d r-k i z$
Translation: (I) King's son, seal-bearer of the god of the fleet, Merib. (2) His daughter, whom he loves, the royal ornamented, (3) Nensedjerkai.

Interior (West) Face of Southern Column of Portico (figs. 5.295.30 ). Southern column: Merib is shown again, this time named more formally(?) Kapunisut, ${ }^{49}$ in raised relief facing left with a staff and handkerchief. He wears a long wig and a short kilt. Above him are two titles followed by his name, again squeezed into the available space. Nensedjerkai, this time with close-cropped hair and no lotus blossom, stands in front of him, holding onto his staff.


Text: (1) smr wrty sḥd bs ntrrw ${ }^{50} K_{3} p(w)-n s w t$ (2) sst=f mrt=f bkrt nswt (3) $N n-s d r-k 3 i$

Translation: (I) Sole companion, inspector of (the ship) "Might of the gods," Kapunisut. (2) His daughter, whom he loves, the royal ornamented, (3) Nensedjerkai.

Inner Architrave Over Chapel Entrance (figs. 5.31-5.35). ${ }^{\text {II }}$ Carved in raised relief, Nensedjerkai is seated on a bull-legged stool at the left end of the architrave before a second table of eight half-loaves. The major difference between this interior architrave and the portico's exterior architrave is the representation of solely the back $\operatorname{leg}(s)$ of the stool. Nensedjerkai's legs obscure the stool's front leg(s) here. Both architraves show a wide cushion visible beneath her seated figure. In front of her, the architrave is composed of two horizontal lines: $5^{2}$

 imntt isw(.ti) nfr wrt br ntr $\mathfrak{c}_{3}(2)$ pr $n=s$ brw wp rnpt dhwtt tpy rnpt wig hb nb n sst nswt hakrt nswt Nn-sdr-kiz (3) ̌̌s mnbt bh3 (4) thnnkt pit b3 Translation: (I) A giff ${ }^{33}$ which the king, and a gift which Anubis, foremost of the divine booth, give, that she might be buried (in) the necropolis in the western desert, having achieved a very great old age,

48 Note the spelling with the foot sign $b$, which never appears in Merib's own tomb (G 2100-I); cf. Junker, Gîza 2, p. II8.
49 Doubtless the same individual as Merib; see Junker, Gîza 2, p. II3-I4
so This title differs from that found in the tomb of Merib himself (G 2100-I); one expects btmty ntr bs ntrw.
$5_{1}$ See Junker, Gîza 2, p. 115, fig. 7, and Gîza 12, p. 76, fig. 6.ı8.
52 This text is also translated by M. Lichtheim, Ancient Egyptian Literature I, p. I6.
53 Lines I-2 are translated by Strudwick, Texts from the Pyramid Age, p. 390 (text 287).
before the great god. (2) May invocation offerings be made for her (on) the new year's festival, the festival of Thoth, the first of the year festival, the wag-festival, and every festival, for the king's daughter, the royal ornamented, Nensedjerkai. (3) A thousand quantities of alabaster, and cloth, (4) a thousand quantities of bread, beer, and cakes.

Drum Over Chapel Entrance (figs. 5.33-5.35). Two horizontal lines in raised relief, reading right to left, present the titles and name of Nensedjerkai, adding $b m-n t r$ Hufw and $h m-n t r y w t-h r$ to the titles of $s i t n s w t$ and $b \underline{k} r t n s w t$, which we have already encountered on the exterior architrave and eastern pillar faces.


Text: (I) sst nswt blkrt nswt ḥm(t)-ntrr Hewt-hr (2) ḥm(t)-ntrr Hufw Nn$s d r-k ; i$
Translation: (1) King's daughter, the royal ornamented, priestess of Hathor, (2) priestess of Khufu, Nensedjerkai

West Wall, South False Door Architrave (figs. 5.43-5.47).54 Both false doors in the chapel are carved in sunk relief. Of the four seated representations of Nensedjerkai inside the chapel, this is the only one to show the front $\operatorname{leg}(s)$ of her bull-legged stool. In the three other instances, Nensedjerkai's legs obscure the front of the stool. In both false door architraves, it is interesting that the seated figure does not extend to the top of the available space. Perhaps the standing female hieroglyphic determinative for $i s w . t(\bar{i})$ invades this area too much for a pleasing juxtaposition. But the space left free is somewhat striking, given the densely packed compositions on most of the other decorated surfaces with the tomb. The offering tables in both architraves show seven half-loaves, all of them facing to the right, instead of facing each other and meeting in the center of the table. 55
 smyt imntt isw.t(i) (2) nfr wrt not imzhb br ntr © ${ }_{3}$ sst nswt blart nswt Nn$s d_{r-k 3 i}(3)$ sss has mnbt b3 (4) thnkt b3 psn bu
Translation: (I) A gift which the king, and a gift which Anubis, foremost of the divine booth, give, that she might be buried (in) the necropolis in the western desert, having achieved a (2) very great old age, a possessor of veneration before the great god, the king's daughter, the royal ornamented, Nensedjerkai. (3) A thousand alabaster vessels, a thousand pieces of cloth, (4) a thousand quantities of bread and beer, and a thousand cakes

West Wall, South False Door Tablet (figs. 5.47, 5.49, 5.51-52). ${ }^{56}$ Nensedjerkai sits before a table of seven offering loaves, facing right. With her right hand she reaches towards the bread loaves, while her left hand is bent back across the breast. She wears a tripartite wig, a close-fitting garment, and anklets and bracelets. According to a watercolor reconstruction made by the German-Austrian

55 For a three-dimensional suggested "reconstruction" of the table scene, see Manuelian, Slab Stelae, p. 152, fig. 224.
56 Cf. Junker, Gîza 2, p. ı2O fig. io, and Gîza 12, p. 71, fig. 3.5.

Expedition, her jewelry was colored blue (see fig. 5.5I).


 b3 (5) tha hnkt has
Translation: (I) King's daughter, the royal ornamented, Nensedjerkai. (2) Incense, festival perfume, hekenu-oil, sefetj-oil, nekhnum-oil, tuatoil, best cedar oil, (3) best Libyan oil, green eye-paint, 2, (4) roll of cloth, a thousand greylag geese, a thousand white-fronted geese, a thousand suckled calves, a thousand alabaster vessels, a thousand (pieces of) cloth, ( 5 ) a thousand loaves of bread, a thousand jars of beer.

West Wall, South False Door, Lintel (figs. 5.43, 5.47-5.48, 5.5I5.52).

## 

Text: sit nswt bkrt nswt ham (t)-ntr Hwt-hr Nn-sdr-kiz
Translation: The king's daughter, royal ornamented, priestess of Hathor, Nensedjerkai.

West Wall, South False Door Drum (fig. 5.47).


Text: $\underline{h} k r t$ nswt $N n-s \underline{d} r-k_{3 i}$
Translation: The royal ornamented Nensedjerkai.
West Wall, South False Door, Left (South) Jamb (figs. 5.47, 5.52). Wearing the same costume as described above for her architrave and tablet, Nensedjerkai stands facing right, with her front arm bent at the elbow across her breast, and her rear arm hanging by her side.

 Translation:(I) The king's daughter, the royal ornamented Nensedjerkai, (2) The funerary priest $[\ldots]$-ankh..$^{58}$ (3) The funerary priest Rahotep.

57 Note the unusual spelling with the initial $m$, which also occurs on the north false door tablet.
58 On the difficulty of reading this cartouche, see Junker, Gîza 2, p. I2I, who eliminates Khufu, Djedkare, Khafre, Menkaure, and Sahure as candidates.

Chapter 5. The tomb of Nensedjerkai: Mastaba g 2ioo-iI

West Wall, South False Door, Right (North) Jamb (figs. 5.47, 5.52). Nensedjerkai's costume and pose here, facing left, are identical to those on the left jamb, described above.

 Translation:(I) The king's daughter, the royal ornamented Nensedjerkai, (2) The funerary priest Defi. (3) The funerary priest Niankhkhnum.

West Wall, North False Door 59 Architrave (figs. 5.52, 5.565.57). Except for the absence of the front leg of her bull-legged stool, Nensedjerkai's costume and appearance are identical to those on the south false door architrave described above.
 imntt isw.t(i) (2) nfr wrt nbt imish hr ntr ${ }_{3}$ sst nswt blert nswt $N n$-sdr-k3i

Translation: (I) A gift which the king, and a gift which Anubis, foremost of the divine booth, give, that she might be buried (in) the necropolis in the western desert, having achieved a (2) very great old age, a possessor of veneration before the great god, the king's daughter, the royal ornamented, Nensedjerkai. (3) A thousand alabaster vessels, a thousand pieces of cloth, (4) a thousand quantities of bread, beer, and cakes.

West Wall, North False Door Tablet (figs. 5.54, 5.58, 5.60-5.63). Nensedjerkai sits before a table of seven offering loaves, facing right. With her right hand she reaches towards the bread loaves, while her left hand is bent back across the breast. She wears a tripartite wig, a close-fitting garment, bracelets, and presumably anklets as well, though they are difficult to confirm. The upper-right third of the tablet has been lost; the reconstruction below is based on the tablet from the south false door.


 (5) šs bs mnbt ha (6) t hnk $\mathrm{h}_{3} h_{3}$

Translation: (I) [King's daughter, the royal ornamented], Nensedjerkai. ${ }^{62}$ (2) [Incense, festival perfume, bekenu-oil], sefetj-oil, nekhnum-oil, tuat-oil, best cedar oil, (3) [best Libyan oil], green eye-paint, ${ }^{63}$ 2, (4) a thousand pieces of cloth, a thousand greylag geese, a thousand whitefronted geese, a thousand suckled calves, ( $\varsigma$ ) a thousand alabaster vessels, a thousand pieces of cloth, (6) a thousand quantities of bread and beer.

## West Wall, North False Door, Lintel.

## 


Translation: The king's daughter, royal ornamented, priestess of Hathor, Nensedjerkai.

West Wall, North False Door Drum (figs. 5.6I-5.62).

## 

Text: $\underline{\text { blert nswt }} N n$-sdr-kzi
Translation: The royal ornamented Nensedjerkai.
West Wall, North False Door, Left (South) Jamb (figs. 5.52-5.55, $5.58,5.6 \mathrm{I}-5.62$ ). The pose, costume, and orientation of the standing figures of Nensedjerkai on this, and the right jamb translated below, mirror the representations on the south false door.


Text: (I) sst nswt ḥkrt nswt Nn-sdr-kzi (2) ḥm-k3 Mry (3) ḥm-ks Wr-k(3) Translation:(I) The king's daughter, the royal ornamented Nensedjerkai. (2) The funerary priest Mery. (3) The funerary priest Werka

60 Note the unusual spelling with the initial $m$, which also occurs on the south false door tablet.
6I The north false door shows one additional $b_{3}$ sign (six, versus five for the south false door), perhaps intended to apply to wnhw.
62 The $r$ in the personal name is written after the $k_{3}$ arms.
63 Note the unusual determinative of $w_{3} \underline{d}$, with the meat sign $\circ\left(\mathrm{F}_{5 \mathrm{I}}\right)$.


West Wall, North False Door, Right (North) Jamb (figs. 5.525.55, 5.58, 5.6I-5.62).

## 0 27 70 70 $i=0$ 100 <br> | 2 | 3 |
| :--- | :--- |
| $\square 7$ | 8 |
| 1 |  | <br> 

Text: (I) sst nswt hart nswt Nn-sdr-kzi (2) hm-kz Ni-pth (3) hm-kz Wr-bsw-pth
Translation:(I) The king's daughter, the royal ornamented Nensedjerkai.
(2) The funerary priest Niptah. (3) The funerary priest Werbauptah.

## Tomb Owner and Dependents

Despite their titles, it is clear that neither Nensedjerkai, nor her father Merib, were true members of the royal family. ${ }^{64}$

Titles of Nensedjerkai
(also in G 2100-I)
$m r y t=f$, beloved of him
nbt imshb br ntr 3 , revered under the great god

- mar $M$ prist (ess) of Hator
$\underline{b} k r t n s w t$, royal ornamented
$s s t=f$, his daughter
sst nswt, king's daughter
Family
father: Mrib (also owner of G 2100-I; also called $K_{3} p(w)-n s w t$, Kapunisut),
Merib

smr w y, sole companion
gods,"

Other People
Wr-bsw-pth, Werbauptah
m-k3, funerary priest
Wr-k(3), Werka
$m-k 3$, funerary priest
Mry, Mery
m-k3, funerary priest
Ni-nh-h $n n m$, Niankhkhnum
$m m-k 3$, funerary priest
Ni-pth, Niptah
$m-k 3$, funerary priest
R-h $t$ p, Rahotep
$m-k 3$, funerary priest
$D f i$, Defi
hm-k3, funerary priest
[...]-nh (in G 2100-II)

64 Junker, Gîza 2, pp. 132-33; Schmitz, Untersuchungen zum Titel S3-Njsiwt, pp. 28, II4-15.


Fig. 5.I. G 2100-II, portico emerging during excavation. Circa February 10, 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aEOs_I_526I.


Fig. 5.2. G 2100-II, general view, looking west. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aEOs_II_2590.


Fig. 5.3. Computer reconstruction of G 2100-II, looking northwest, with the contiguous mastabas G 2100-I (Merib) and G 2100 (Sedit) in the background. Courtesy Dassault Systèmes, 2009.


Fig. 5.4. G 2100-II, plan.



Fig. 5.6. G 2100-II, general view, looking northwest. March I2, 1993. Peter Der Manuelian, PDM_1993.026.25.


Fig. 5.8. Computer reconstruction of G 2100-II, chapel courtyard, looking west. Courtesy Dassault Systèmes, 2009.


Fig. 5.IO. G 2100-II, north face, with west face of G 2 I20 in foreground left, looking south. November 20, 1993. Peter Der Manuelian, pDM_1993.105.23.


Fig. 5.7. G 2100-II, chapel, courtyard, and pillared portico, looking south. November 2I, 1993. Peter Der Manuelian, pDM_1993.107.20


Fig. 5.9. Detail of reused(?) stone with rectangular offering basin depression in the space between G 2120, to the left (north), and G 2100-II to the right (south), looking east. November 2I, 1993.
Peter Der Manuelian, pdM_1993.IO7.I8.


Fig. 5.II. G 2IOO-II, chapel courtyard, east wall, looking east. November 17, 1993. Peter Der Manuelian, pdm_1993.084.04.


Fig. 5.I2. G 2IOO-II, entrance to chapel courtyard, in northeast corner, looking down to the east at the block with the door socket above the door. November 18, 1993. Peter Der Manuelian, PDM_1993.087.I2.


Fig. 5.I3. G 2100-II, north side of entrance to chapel courtyard, lower door socket hole, looking east. November 27, 1993. Peter Der Manuelian, PDM_1993.II9.03.


Fig. 5.I4. G 2100-II, general view, including excavations to the south, looking west. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aEOS_I_5278.


Fig. 5.15. G 2100-II, eastern half, general view, with excavations to the south, looking north. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_5260.


Fig. 5.16. G 2100-II, western half, general view, with excavations to the south, looking north. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_5259.


Fig. 5.17. G2100-II, west-east section, looking north; after Junker, Gîza 2, p. Io6, fig. 6.


Fig. 5.18. G 2100-II, south exterior face and window, looking north. March I2, 1993. Peter Der Manuelian, pdM_1993.029.03.


Fig. 5.19. G 2100-II A, mouth of shaft, looking north. November 4, 1993. Peter Der Manuelian, PDM_1993.065.07.


Fig. 5.20. Computer reconstruction of G 2IOO-II A, burial chamber with canopic niche and sarcophagus of Nensedjerkai, looking northwest from passage. Courtesy Dassault Systèmes, 2009.


Fig. 5.21. Computer reconstruction of G 2100-II A, burial chamber with canopic niche and sarcophagus of Nensedjerkai, looking south. Courtesy Dassault Systèmes, 2009.


Fig. 5.22. G 2100-II A, burial chamber with sarcophagus, looking northwest. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_5346.


Fig. 5.23. G 2100-II A, burial chamber with sarcophagus, looking west. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_5376.



Fig. 5.25. G 2100-II, chapel portico, drawing of exterior architrave; after Junker, Gîza 2, p. 115, fig. 7 .


Fig. 5.26. Computer reconstruction of G 2100-II, chapel portico with decorated west faces of pillars and serdab squint on south wall, looking south. Courtesy Dassault Systèmes, 2009.


Fig. 5.27. G 2100-II, chapel pillars, east faces, looking west. November 18, 1993. Peter Der Manuelian, PDM_1993.087.05, and PDM_1993.087.09.


Fig. 5.30. G 2100-II, chapel, drawing of pillars, west faces; after Junker, Gîza 2, p. iı7, fig. 8.

Fig. 5.29. G 2100-II, chapel pillars, west faces, looking east. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, AEOS_II_2516, and AEOS_II_2515.


Fig. 5.3I. G 2100-II, chapel, pillared portico, interior, looking southwest. November 17, 1993. Peter Der Manuelian, PDM_1993.084.II.


Fig. 5.32. G 2100-II, chapel, pillared portico, interior, looking northwest. November 17, 1993. Peter Der Manuelian, PDM_1993.084.09.


Fig. 5.33. G 2100-II, chapel, interior architrave and drum, looking west. November 17, 1993. Peter Der Manuelian, pDM_1993.084.18.


Fig. 5.34. G 2100-II, chapel, interior drum, looking west. November 17, 1993. Peter Der Manuelian, PDM_1993.084.20.


Fig. 5.35. G 2100-II, chapel, drawing of interior architrave and drum; after Junker, Gîza 2, p. 115 , fig. 7

Fig. 5.36. Computer reconstruction of G 2100-II, view of double doors from inside interior chapel, looking east towards west face of decorated south pillar of the portico. Courtesy Dassault Systèmes, 2009.


Fig. 5.37. Computer reconstruction of G 2100-II, interior chapel, looking southwest. Courtesy Dassault Systèmes, 2009.


Fig. 5.38. Computer reconstruction of G 2100-II, interior chapel, looking northwest. Courtesy Dassault Systèmes, 2009.


Fig. 5.39. G 2100-II, interior chapel, looking north. November 17, 1993. Peter Der Manuelian, pDM_1993.084.21.


Fig. 5.4I. G 2IOO-II, interior chapel, door sockets in floor. November 17, 1993. Peter Der Manuelian, PDM_1993.084.25.


Fig. 5.40. G 2100-II, interior chapel, looking south. November 17, 1993. Peter Der Manuelian, pdm_1993.084.22.


Fig. 5.42. G 2100-II, interior chapel, door sockets in ceiling above door. November 17, 1993. Peter Der Manuelian, pdm_1993.084.26.


Fig. 5.43. G 2100-II, interior chapel, south false door, upper half. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_oı28.

Fig. 5.44. G 2100-II, interior chapel, south false door, plan and section.



Fig. 5.45. G 2IOO-II, interior chapel, south false door, detail of seated figure on upper architrave. November 17, 1993. Peter Der Manuelian, PDM_1993.085.20.

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Fig. 5.46. G 2100-II, interior chapel, south false door, detail of standing figure on left (south) jamb. Circa February 1912. GermanAustrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_5330.


Fig. 5.47. G 2100-II, interior chapel, drawing of south
false door; after Junker, Gîza 2, p. 119, fig. 9.


Fig. 5.48. G 2100-II, interior chapel, south false door, upper half. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_5336.


Fig. 5.50. G 2100-II, interior chapel, south false door, looking southwest. November 17, 1993. Peter Der Manuelian, PDM_1993.084.23.


Fig. 5.49. G 2100-II, interior chapel, south false door, tablet. PDM_1993.085.03.


Fig. 5.5I. G 2100-II, interior chapel, south false door, painting of tablet and lintel by German-Austrian Expedition staff. Courtesy Institut für Ägyptologie, Universität Wien.


Fig. 5.52. Computer reconstruction of G 2100-II, interior chapel, south and north false doors, looking west. Courtesy Dassault Systèmes, 2009.


Fig. 5.53. G 2100-II, interior chapel, north false door, central portion. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aEOs_I_5873.


Fig. 5.54. G 2100-II, interior chapel, north false door, looking northwest. November 17, 1993. Peter Der Manuelian, PDM_1993.085.09.


Fig. 5.55. G 2100-II, interior chapel, north false door, lower portion. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_II_26io.


Fig. 5.56. G 2100-II, interior chapel, north false door, upper half, looking northwest. Circa February 1912. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_5878.


Fig. 5.57. G 2100-II, interior chapel, north false door, architrave. Most likely later than 1912, due to disappearance of sizing and paint. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, digital montage of aEos_I_5870+5877.


Fig. 5.58. G 2100-II, interior chapel, north false door, looking southwest. November 17, 1993. Peter Der Manuelian, pDM_1993.085.15.


Fig. 5.59. G 2100-II, interior chapel, north false door, detail of seated figure on architrave. November 17, 1993. Peter Der Manuelian, PDM_1993.085.2I.


Fig. 5.60. G 2IOO-II, interior chapel, north false door, detail of seated figure on tablet. November 17, 1993. Peter Der Manuelian, PDM_I993.085.22.


Fig. 5.6I. G 2100-II, interior chapel, drawing of north false door; after Junker, Gîza 2, p. I20, fig. io.



Fig. 5.63. G 2Ioo-II, interior chapel, north false door; tablet. November 17, 1993. Peter Der Manuelian, pDM_1993.085.II.

Fig. 5.62. G 2100-II, interior chapel, north false door. Circa February 1912.
German-Austrian Expedition photograph. Courtesy Kunsthistorisches
Museum, Vienna, digital montage of AEOS_1_5876 and AEOS_1_5875.

## Chapter 6 <br> THE TOMB OF NEFER:

Mastaba g 2IIO

## Summary of Reisner's Description

Mastaba: ${ }^{\text {I }}$ core of type II a; 21.6 x 12.0 m
area 259.0 sq. m; proportion $\mathrm{I} / \mathrm{I} .8 ; \mathrm{h} .4 .25 \mathrm{~m}$
average height of stepped courses 0.33 m
average width of steps 8.2 cm
casing: fine white x -masonry, dressed to smooth sloping surface $24.8 \times 14.4 \mathrm{~m}$
area 357.12 sq. m; proportion I/I. 72
Cased mastaba: type IX with two niches in east face; southern niche enclosed in exterior chapel
Chapel: type 2 b (exterior) of white limestone, built against the casing around the south niche ${ }^{2}$
$7.0 \times 2.8 \mathrm{~m}$ (outside)
area 19.6 sq. m; contains one room (a)
(a) $\mathrm{N}-\mathrm{S}$ offering-room $3.7 \times 1.15 \mathrm{~m}$
area 4.25 sq . m; proportion I/3.2I
face of cased mastaba in west wall exposed, with the south niche showing; entered from east by doorway in south end of east wall
Exterior crude brick chapel north of stone chapel; remains of crude brick walls but rooms not to be traced
Shaft A: sole shaft, north of middle; $2.1 \times 2.05 \mathrm{~m}$; -II.O5 m in rock (figs. 6.3, 6.33-6.39)
lined with drab masonry above, 4.25 m ; thirteen courses
portcullis groove on each side at south end of east and west wall: $0.5 \times 0.35 \mathrm{~m}$
groove on east not cut in the rock chamber
type 4 a (2) on south. $3.45 \times 3.8 \mathrm{~m}$; h. 2.05 m
area I3.II sq. m; capacity $26.87 \mathrm{cu} . \mathrm{m}$
passage: $0.9 \times \mathrm{I} .85 \mathrm{~m} ; \mathrm{h} .2 .05 \mathrm{~m}$
blocking: type I b (I); interior blocking of white blocks set in plaster partly preserved to height of 0.5 m portcullis slab, broken, original size: h. 2.25 m ; w. 2.3 m th. 0.4 m
coffin: fragmentary white limestone coffin with flat lid (type d) partly in shaft and partly in chamber ${ }^{3}$
Descriptions below are modified from the reis's diary pages; no Reisner summaries were located:
Shaft m: north of shaft N , near the northwest corner of the mastaba (fig. 6.IO3)
lined above with crude brick on three sides and with stones only on east; cut in bad rock below
total depth 2.25 m ; red debris, pebble and limestone debris
chamber on east, cut in bad rock; no blocking
Shaft n: south of m and north of o (fig. 6.IO4)

Reisner, $G N_{\text {I }}$, pp. 422-25.
2 Note that Reisner's plan of the decorated blocks and specifically how they overlap in this chapel ( $G N$ I, p. 20I, fig. IO9) is inaccurate.
3 Reisner, $G N \mathrm{I}$, pls. 34a-b.
lined above with crude brick on three sides and with stones only on east; cut in bad rock below
total depth 2.1 m ; red debris and pebble
chamber on east, cut in bad rock; no blocking
Shaft O: south of N and north of p (fig. 6.ios)
lined above with crude brick on three sides and with stone only on east; cut in bad rock below
total depth 2.55 m ; red debris and pebble
chamber on east; cut in bad rock; no blocking
Shaft P: south of D and north of Q (fig. 6.io6)
lined above with crude brick on three sides, and with stones only on east; cut in bad rock below
total depth 2.95 m ; red debris, dirty debris, and pebble, and limestone debris
chamber on east; cut in bad rock; no blocking
Shaft Q: south of P and north of R (fig. 6.107)
lined above with crude brick on three sides, only with stones on east; cut in bad rock below
total depth 2.7 m ; red debris, dirty debris, and limestone debris chamber on east; cut in bad rock; no blocking
Shaft R: south of Q and north of S (fig. 6.Io8)
lined with crude brick above on three sides, and with stone only on east; cut in bad rock below
total depth 2.65 m ; red debris, dirty debris, pebble, and broken mud-brick; in the chamber fragments of bones
chamber on west; cut in bad rock; no blocking
found in shaft debris: inscribed offering basin (38-2-2; fig. 6.18)
Shaft s: south of R and north of T (fig. 6.Io9)
lined above with crude brick on three sides, and with stones only on east; cut in bad rock below
total depth 2.45 m ; red debris, pebble and bones in the chamber
chamber on east; cut in bad rock, underneath mastaba casing no blocking
Shaft T: south of $s$ and north of $v$ (fig. 6.IIo)
lined above with crude brick on three sides and with stones on east; cut in bad rock below
total depth I .8 m ; limestone debris, rubble, and red debris
chamber on east; cut in bad rock, underneath mastaba casing no blocking
Shaft u: south of v and north of w (figs. 6.4I-6.42, 6.III)
lined above with crude brick on three sides and with stones only on east; cut in bad rock below
total depth I .5 m ; limestone debris, pebble, rubble, and red debris
chamber on east; cut in bad rock, underneath mastaba casing blocked with rubble and crude brick with traces of mud
body: head on north
Shaft v: south of T and north of U (fig. 6.II2)
lined above with crude brick on three sides only and with stones on east; cut in bad rock below
total depth 2.2 m ; red debris, pebble, and limestone debris
chamber on west; cut in bad rock; no blocking
Shaft w: south of $u$ and north of $x$ (figs. 6.II3, 6.II7)
lined above with crude brick on three sides and with stones only on east; cut in bad rock below
total depth 2.15 m ; limestone debris, rubble, red debris, and broken mud-brick
traces of bones in the chamber
chamber on east; cut in bad rock; no blocking
Shaft x: north of y, west of the casing of G 2 IIO and west of w (figs. 6.II4, 6.II7)
lined with masonry
total depth 2.4 m ; red debris, pebble, stones, and sand
chamber on east; cut in bad rock; no blocking
Shaft y: south of x and north of z (figs. 6.II5, 6.II7)
lined above with crude brick topped with one course of masonry and cut in bad rock below
total depth 2.05 m ; red debris, pebble, sand, and limestone debris
chamber on west; cut in bad rock; no blocking
Shaft z: south of $y$, near the southwest corner of the mastaba (figs. 6.II6-6.II7)
lined with crude brick above on three sides，and with masonry only on east；cut in bad rock below
total depth I．I5 m；sand and pebble
chamber on west；cut in bad rock；no blocking

## Excavation

Principal excavation of this mastaba took place under A．M．Lythgoe in 1905－1906．Unfortunately，no Expedition diaries are preserved from this season．The tomb was re－examined intermittently between 1932 and 1938．Diary entries kept by N．F．Wheeler and later by the reis are preserved for the following days：

April IO－I7，1932：clearance of the top of mastaba，under Wheeler， in a search for additional burial shafts．Shaft A was originally cleared， and the famous reserve head of Nefer（MFA 06．1886；see discussion below，and figs．6．39，6．90－6．100）had already been discovered during Lythgoe＇s 1905－1906 season．However，the reis＇s diary entries for December $12-23$ ， 1935 describe the reclearance of shaft a．No burial chamber photographs seem to have ever been taken．

January 8－9，1937：examination of the thin passage street area east of the chapel and west of the west side of G 2130 ．No additional inscribed stones were found．The reis＇s entry for January 9，however， notes that＂on the lower course underneath the lining of the room （＝chapel）of the mastaba appear mason＇s marks in red．＂

January 24，and 26－27， 1938 saw the excavation of the street west of G 2 IIO and east of mastaba G 2051 （fig．6．5）．Additional shafts were located along the west face of Nefer＇s mastaba，and an offering basin inscribed for a king＇s acquaintance（ $r b n s w t$ ），juridicial scribe （ $z \check{s} z 3 b$ ），and overseer of document scribes of Akhet－Khufu（imy－r $z s$ $m \underline{d} 3 t$ 3bt－Hwfw）Tjenti was unearthed（see G 2051，south niche）．${ }^{4}$ An important sketch of the area appears in the reis＇s Arabic diary for January 28， 1938 （vol．33，p． 2856 ＝English translation p．605），showing walls and shafts omitted from both published and unpublished plans of the area（fig．6．4）．${ }^{5}$ The row of subsidiary shafts m through z was excavated between February 6 and 9，1938．${ }^{6}$ February 16 and i9 saw the excavation of the burial chamber of G 2IIO U ，and the removal of its skeleton（figs．6．4I－6．42）．Finally，additional excavation back on the east side of the mastaba took place from March 24－28， 1938. Subsidiary mastaba G 2115 ，with shafts A，B，and C，was exposed （along with shafts X and y of G 22IO）and excavated on April 30．This activity marked the end of work done by the expedition on G 21IO， at least as far as described in the Expedition diaries．

On November 27，1993，limited excavation was undertaken in an effort to confirm which way the chapel door originally swung open．A small portion of the chapel floor inside the entrance was cleared，revealing a door socket hole on the southern side of the entrance（figs．6．6－6．7，6．62，6．70）．Reisner＇s excavation plans and records make no mention of this hole．Relief decoration on the chapel＇s south wall is set back from the entrance some 98 cm ，and it was conjectured that the door might swing southwards，covering

4 See Manuelian，＂Unfinished Business：The Giza Tablet of Tjenti（JE 72135），＂in Egyptian Museum Collections around the World，pp．777－90．
5 Arabic diary，vol．33，p． 2856 ＝English translation，p．605，retraced by Nicholas Melnikoff．I am grateful to Ramadan Hussein for his translations of the reis＇s Arabic diaries．
6 February 6， 1938 also marked the evening of the first international radio broadcast from the Giza plateau．The reis＇s diary records that at it：oo pm，Reisner，his daughter Mary，Selim Hassan，William Stevenson Smith，and Walter B．Emery all＂spoke to America from the base of the Great Pyramid．＂
only the undecorated part of the south wall when fully open．The door socket hole on the south side of the entrance confirmed the conjecture；the open door would not have obscured any of the decoration，covering only undecorated wall surface when open in the chapel．At the bottom of the socket hole was a dark（basalt？） stone still in situ，most likely placed to support the weight of the post，since limestone would have been too soft（fig．6．7）．${ }^{7}$ In the center of this basalt stone，an oval depression measures 8.5 cm in east－west diameter，and 7.5 cm in north－south diameter．

## Finds

MFA 07．1002（shipped to Boston 1906 or 1907）：block of smooth－grained limestone raised relief，originally from the north door thickness； standing figure of Nefer with left foot advanced and holding staff and scepter，three columns of skewed vertical inscription in front of figure，register of four scribes below；h． 95 cm ；w． 109.5 cm （figs．6．50－6．55）${ }^{8}$
36－12－2（part of MFA 31．780；shipped to Boston after April 26，1937）： fragment of white limestone raised relief with back of head of Wenankhes and part of title mitrt－r，originally from south wall of chapel；h． 55.5 cm ；w． 50 cm ；th． 16 cm （figs．6．63，6．65－6．66， 6．70－6．71）${ }^{9}$
36－12－3（MFA；shipped to Boston after April 26，1937）：limestone raised relief fragment with two hieroglyphs $\circlearrowright$ ，阿（ $r s s^{\prime}$ ）；h． 19 cm ； w． 24 cm ；th． 8.5 cm （fig．6．10）${ }^{10}$
38－2－I：limestone fragment from top of G 2IIO，with raised（？）relief hieroglyphs；1． 21 cm ；w．$=$ h． 9 cm ；th． 8 cm ；traces of four signs （fig．6．II）
38－2－3：limestone fragment of right edge of slab stela（？）linen list，bearing \＆， $\left\{, h\right.$ and $h_{3}(\mathrm{r}, 000)$ signs； $\mathrm{h} .6 .5 \mathrm{~cm} ; \mathrm{w} .5 \mathrm{~cm}$ ；th． 1.2 cm ；originally ascribed to G 5236 but now newly assigned to G 2IIO（fig．6．I2；see below，Architecture）
No numbers：Six fragments of raised relief；no further information provided；large relief with $f$ inh and $\cap s$ signs completing name of Wenankhes，from the West wall；head of standing male offering bearer connecting to torso fragment with three signs（first sign uncertain），$\cap$ ，and $ד$ or $\searrow$ ；two fragments with portions of看 epr signs；one fragment with part of 路 sš and one other sign （figs．6．13－6．17）

From g 2ilo r：
38－2－2：limestone offering basin of royal acquaintance Muti，h． 27 cm ； w． 39 cm ；th． 13.5 cm ；d． $2.3+2.7 \mathrm{~cm}$（fig．6．18）

7 On door construction，see Koenigsberger，Die Konstruktion der altägyptischen Tür，esp．pp．24－40．The distance from the top of the surviving south entrance thickness platform block（upon which the relief fragment Louvre B si once stood）to the bottom of the basalt door－post stone is 103 cm ．For a parallel with stones intact on either side，indicating double doors，and a support stone set in the base of the socket hole，see Hassan，Gîza 3，pl．is（I－2），mastaba of Kay．For door terminology，see P．Posener－Kriéger，＂Noms des parties de portes dans les documents d＇Abousir，＂in Fs．Ricke，pp．75－85．
8 Reisner，$G N$ I，p．423，pl．30b．
9 Ibid．，p．423，pl． 33 a．
IO Ibid．，fig．24I after p． 424.

Right side
(e)

Text: (I) rbb ${ }^{\text {II }}$ nswt Mwti (2) htp di nswt htp (did) Inpw bnty sh ntr prt brw <n>=s r(r) nb(?)
Translation: (I) Royal acquaintance, Muti. (2) A gift which the king gives, and a gift which Anubis, foremost of the divine booth, (gives), (consisting of) invocation offerings <for> her, every day(?)

## Top:

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Text: (3) rbbinswt Mwti n=s prt-hrw re nb tpy rupt [tr.]
Translation: (3) Royal acquaintance, Muti. Invocation offerings for her(?) every day, on the first of the year festival, [tr.].

Bottom:

Text: (4) prt brw m wp rnpt dhwtt wig
Translation: (4) Invocation offerings on the new year's festival, the festival of Thoth, the wag-festival. ${ }^{13}$

From g 2 IIo U:
36-2-9: Bones of human skeleton, from burial chamber (figs. 6.42, 6.III)
From shaft A:
MFA 06.1886: white limestone reserve head, found in debris at bottom of shaft; h. 27.2 cm ; neck at base II. $5 \times 10.5 \mathrm{~cm}$ (figs. 6.39, $6.90-6.100)^{14}$
35-I2-39: bones of human skeleton, from burial chamber of shaft

## Architecture

Nefer's mastaba represents one of the few in the Western Cemetery to receive its final exterior casing. Strudwick calls it "perhaps the first chapel... after that of hm-iwnw... to have been fully decorated." ${ }^{\text {Is }}$ The portcullis grooves on the burial shaft (figs. 6.33, 6.35-6.38) place the tomb in the elite company of five original mastabas-all in Cemetery g 2100-to exhibit this "archaic" burial shaft feature. ${ }^{16}$ Even more interesting is the unusual layout, whereby the chapel entrance occurs at the southern end of the east wall, with the false door at the northern end of the west wall (figs. 6.1-6.3, 6.19). Most often this situation is reversed; if the priority was to prevent direct access/exposure or alignment between chapel entrance and false door, then either arrangement would fulfull the purpose. But Nefer's unusual arrangement must be related somehow to the addition of the mastaba core's exterior casing, the conversion of its exterior

II Misspelled $b r n s w t$. For an example of the reverse misspelling, $r b$ in place of $b r$ in the phrase $i m 3 h(w) h r n t r P n-m r w$, see the triad of Penmeru (MFA I2.1504) from G 2197; Simpson, Mastabas of the Western Cemetery, p. 25 with n. 6 and pl. 50 (not discussed by Simpson; a line drawing of this text, inadvertently omitted from Mastabas of the Western Cemetery, may be found in Manuelian, Fs. Edward Brovarski, forthcoming).
I2 Misspelled br nswt.
13 On the subject of feast lists, see Spalinger, The Private Feast Lists of Ancient Egypt.
I4 Reisner, $G N$ I, p. 425, pl. 34b-f. Correct Reisner's inaccurate height measurement from 17.2 cm to 27.2 cm .
I5 Strudwick, Administration, p. ino. Note that the chapel's north wall, however, was apparently never decorated; it remains the one blank chapel wall.
16 The other mastabas are G 2100, G 2120, G 2130, and G 2210. Note that the groove on the east side is not cut into the bedrock.
niche into an interior chapel false door, and the available space in the street between G 21IO and G 2130. The extremely constricted passage between the front of Nefer's chapel and the back (west) wall of mastaba G 2130 (Khentka) -about 130 cm -could not have been intended in the original layout of mastaba cores; it is thus additional evidence for Nefer's exterior chapel being a secondary development (figs. 6.22-6.24).

With its decorated false door tablet and exterior stone chapel, Nefer's mastaba is of particular significance for the evolution of slab stelae, false doors, and table scenes. Many scholars have argued that the funerary repast scene of the slab stelae and the accompanying offerings eventually evolved into the false door panel, and then beyond the false door itself onto decorated chapel walls. Haeny, however, preferred the reverse development, namely that false doors were the originally intended cult focus for the earliest Giza mastabas. ${ }^{17}$ His primary argument rests on the mastaba presently under discussion:

Es gibt jedoch, was Junker anscheinend übersehen hat, im Friedhofgelände von Giseh eine Mastaba, g 2iIO, deren Kalksteinverdkleidung am ursprünglichen Kernbau fertiggestellt und auch außen geglättet worden ist, bevor die Anlage um einen geschlossenen Kultraum erweitert wurde; dessen Anschlußwände sind ohne jeden Verband gegen die Außenfläche der Mastaba gesetzt. Hier aber ist die Opferstelle nicht-wie wir nach Junker erwarten müßten-durch die in Giseh übliche Grabtafel gekennzeichnet, sondern in traditioneller Weise durch zwei abgetreppte Scheintürnischen, die man im voraus beim Anlegen der Verkleidung einberechnet hatte. ${ }^{18}$

It is true, as Haeny notes, that no joins are apparent between the exterior stone casing and the exterior stone chapel, so the chapel did not break into the casing. However, this merely signifies that G 2IIO, unlike most of the tombs in the three nucleus cemeteries, actually did receive its final casing complete.

In an earlier study of the Giza slab stelae, I suggested that Nefer's mastaba could once have been uncased and contained a slab stela, only to be subsequently cased and provided with an exterior chapel with a false door (and another niche at the northern end of the east wall). Excavation photographs taken by the Harvard-MFA Expedition show the gap between the original core stones and the casing blocks (figs. 6.26-6.27). It would therefore not differ from other nucleus cemetery mastabas except by virtue of the completion of its casing. ${ }^{19}$

A clue to the early history of the mastaba may now be provided by the small fragment numbered $38-2-3 .{ }^{20}$ This tiny relief shows only two hieroglyphs, but clearly derives from the linen list of an as yet unrecorded slab stela (fig. 6.12). It was identified in 2007. Some confusion exists as to its provenance: the Expedition diary cites mastaba G 5236 , but that tomb number has been crossed out in the Object Register entry for the fragment (fig. 6.28). No replacement tomb number has been added to the Object Register,

I7 G. Haeny, " Zu den Platten mit Opfertischszene in Helwan und Giseh," in Fs. Ricke, especially pp. 158-59. See the useful summaries by Wiebach, Die ägyptische Scheintür, pp. 29-s1; Strudwick, Administration, pp. 9-52; Hassan, Gîza 5, pp. 65-180; and Piacentini, Les scribes, pp. 96-99.
I8 Haeny, Fs. Ricke, p. 158.
19 Reisner, $G N \mathrm{I}$, p. 417 , posits the order of completion of the cores of Cemetery G 2100 as follows: G 2100, G 2130, G 2120, G 2IIO, G 2210 .
20 Manuelian, "A 'New' Slab Stela for Nefer from g 2IIO? (Giza Archives Project Gleanings: I)," in Egypt and Beyond. Fs. Lesko, pp. 227-36.
but in a separate list of inscribed fragments written in Expedition staff member Mahmoud Said's hand, and housed in the Museum of Fine Arts's Expedition archives, the provenance is listed as "G 2IIO" (fig. 6.29). Even the diary entry listing G 5236 comes after several descriptions of shafts in and around G 2IIO. I am thus convinced that the origin of this fragment is not G5236, a post-Dynasty 4, multishafted mastaba in the Cemetery en Echelon, but in fact Nefer's mastaba, G 21Io. ${ }^{21}$ This reinforces the possibility of a preliminary decorative layout for the tomb consisting of a slab stela with exterior mud-brick chapel. The slab stela was then later walled up, removed, or destroyed by the addition of the exterior casing and exterior stone chapel. Whether the tomb's ownership changed hands at this time as well cannot be determined, but other tomb owners seem to have preferred preserving their slab stelae in their emplacements, hidden behind their newly added exterior chapels. ${ }^{22}$

In short, Haeny's argument-that the current appearance of G 2 IIO proves that the false door (and not a slab stela) was intended as the cult focus from the beginning-is not supported by the evidence.

The smooth-sloping casing blocks are well preserved on the mastaba's exterior north and east walls, but somewhat pitted on the west side. All that remains to be seen on the mastaba's north side are three, large, weathered blocks. The northern edge is buried, as part of the gradual rise in the terrain leading to the unexcavated areas west of G 22IO. In front of Nefer's north niche (figs. 6.30-6.31), just west of the southwest corner of G 2210, a wall can be seen that runs west, then turns south, most likely belonging to the next subsidiary mastaba in the street. The chapel remains open to the air as of this writing, and suffers from numerous children's and tourists' graffiti.

One of the more impressive areas of the cemetery is the tight corridor between the west wall of G 2130 and the east exterior wall of Nefer's chapel (figs. 6.22-6.24). The quality of the cut and polished blocks is on a par with the casing stones of Hemiunu (G 4000). The steep rise just south of the chapel appears to date posterior to the excavations of 1905-1906, but may come from shaft fill, either of G 2100 A or perhaps G 2130 A (fig. 6.31). Nefer's chapel rests on massive stone foundation blocks, several of which in recent years were exposed and visible, although they remain buried in many of the 1905-1906 Expedition photographs (figs. 6.22-6.23).

As far as the late nineteenth-century plundering of the tomb's decorated chapel is concerned, the same removal procedure is apparent on both the east wall (standing couple, heads now lost) and west wall (Copenhagen block ÆIN 819, above the slaughter scene; see below). Both blocks show a thick segment removed towards the top of the block, and then a shearing off and thinning out of the removed portion towards the bottom, nearer to the relief decoration still preserved in situ (figs. 6.67, 6.69, 6.79, 6.70, 6.78). In the case of the east wall, the robbers were clearly most interested in removing the heads of Nefer and his wife, Wenankhes (figs. 6.58, 6.60-6.6I).

We have noted above that the decoration on the south wall (standing headless couple; see below) does not begin until about I m into the wall (westwards) from the entrance. Otherwise the chapel's entrance door, swinging open southwards, would have covered and hidden the carved relief. In 1993 one could still see (from the chapel's south wall) a construction mark on the north-south abutting block

[^12](south side of the entranceway), pointing, in perfect alignment, to the inner edge of the east wall of the chapel on the north side of the entranceway. Another mark, containing the name of Nefer, was carved on a foundation block under the southwest corner of the chapel. ${ }^{23}$

Two small mastabas were added in the avenue between the south end of G 2 IIO and the north end of G 2IOO: G 2 II 3 on the west and G 2 III on the east. Further east of G 2 III stand three small mastabas, G 2II2a (abutting the southern exterior wall of Nefer's chapel), G 2 II 2 b , and G 2 II 2 c . To the west of G 2 IIO stood the mastabas of Senenuka (G204I) and of Tjenti (G 205I), along with a row of numerous subsidiary burial shafts all along the west face of Nefer's mastaba. Reisner numbered these shafts G 2IIO m through z, running from north to south (figs. 6.4, 6.2I, 6.II7). In the street to the east of G 21IO, only a single subsidiary tomb, G 2115 with three shafts, was recorded (figs. 2.5, 6.20, 6.3I).

## Shafts and Burials

The tomb's principal shaft, G 2IIO A contained no skeletal remains among the broken sarcophagus fragments. But the shaft remains of critical importance, not only for the presence of the T-shaped portcullis grooves mentioned above, but for the discovery of the famous reserve head of Nefer at the entrance to the burial chamber (MFA o6.1886; see discussion below). Unfortunately, no photography of the actual interior of the burial chamber has yet been identified.

G 2IIO, bones on floor of chapel, in northwest corner (fig. 6.40) Incomplete; cranium is in a corner against the wall; fragmentary left humerus, other unidentifiable bones. Age and sex uncertain. No tomb card sketch. This "chapel burial" is most likely intrusive.

G 2IIO U (fig. 6.42)
Articulated and largely undisturbed skeleton, lying on back, knees moderately bent and tilted to the left side. Visible elements include cranium and mandible, spine, both clavicles, right humerus, right ulna and radius, some right hand bones visible in the dirt, right femur with left visible under it, left and right tibiae lying parallel, foot bones, left ulna and radius and hand bones, right and left os coxae, ribs. Adult, possibly female. No tomb card sketch.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. I: early reign of Khufu (core); Khafre (mastaba). ${ }^{24}$

Many of the elements of Nefer's false door tablet, housed in the Museo Barracco in Rome (see below), seem to place the chapel in the reign of Khafre. ${ }^{25}$ These elements (form of the offering loaves, the

23 This inscription was published by Smith, "Inscriptional Evidence for the History of the Fourth Dynasty," JNES II (1952), fig. 5, mentioned on p. I26 (B4).
24 Compare PM III, p. 72: Khafre; Baer, Rank and Title, pp. 89-90 [250]: end of Dynasty 4-early Dynasty 5; Cherpion, Mastabas et hypogées, pp. II9-20: not later than Djedefre; Harpur, Decoration in Egyptian Tombs, p. 267 [I24]: Khafre; Jánosi, Giza in der 4. Dynastie, p. 124 and table 12: Djedefre or Khafre; Manuelian, Slab Stelae, p. 82: Khufu; El-Metwally, Entwicklung der Grabdekoration, p. 154: end of Dynasty 4; Reisner, GN I, pp. 306-307: Khafre; Smith, HESPOK, p. 163: Khafre; Strudwick, Administration, pp. I09-IIo [84]: Khafre or a little later;
25 Jánosi, Giza in der 4. Dynastie, pp. 123-24; Reisner, GN i, p. 306f.; Smith, HESPOK, p. 163.
expanded form of the offering lists, and the $h t p \underline{d i}$ nswt formula) have misled some scholars to date the piece as late as the Sixth Dynasty. ${ }^{26}$ The original core mastaba certainly dates to the reign of Khufu, with its T-shaped burial shaft, portcullis grooves (although they terminate on the east side at bedrock level), reserve head, and twostage chapel development, namely the original cult focus (possibly for a slab stela; see fragment 38-2-3) replaced by an exterior stone chapel. The appearance of a linen list on the false door tablet harks back to Khufu-era slab stelae, but the unusual pose of the deceased and the $h t p \underline{d} i z n i s w t$ formula there look forward in time. The high, occasionally coarse style of the raised relief postdates the fine, low style preferred under Khufu. ${ }^{27}$ A date for the final occupation of the mastaba in the reign of Khafre best fits the evidence.

## Decoration

Most, but not all, of the chapel's many decorated relief fragments were first reconstructed by W.S. Smith. ${ }^{28}$

Entrance (figs. 6.44-6.49). The architrave and drum over the chapel entrance were already missing when Lythgoe first cleared the area in 1905-1906. But two drums are known from elsewhere in the Western Cemetery that show the name Nefer and several of the same titles found in the reliefs described below. One of these drums, now Museum of Fine Arts 21.3080, was found much further west in mastaba G I46I (fig. 6.45): ${ }^{29}$

Text: imy-r sš bry sšt 3 3 $b t-H w f w n b$ im3b br nb=fimy-r pr-hd $N f r$
Translation: Overseer of scribes, master of secrets of Akhet-Khufu, possessor of veneration before his lord, overseer of the treasury, Nefer.

This relief most likely belonged to a different Nefer from the owner of G 2IIO. While the width of the drum $(83.8 \mathrm{~cm})$ would fit the G 2 IIO chapel entrance, there are palaeographical differences between the inscriptions, and the Nefer of G 2IIO does not bear the title hry ssts $3 b t-H w f w$. Strudwick has used the layout of the $p r-h \underline{d}$ group, with the mace completely enclosed by the $p r$ sign, as evidence for a Dynasty 5 date for the drum from G I46I. However, he also notes

26 Vandier, Manuel I, p. 764; for others who date it to Dynasty 6, see Cherpion, Mastabas et hypogées, p. I2O, n. 243; she herself prefers a date for Nefer no later than Djedefre.
27 Smith, HESPOK, p. 163, has compared these reliefs unfavorably with other "Chephren period" tombs: Ankh-haf (G 75io), and Akhethetep and Meretites (G7650). I would argue, however, following Jánosi, Giza in der 4. Dynastie, pp. 71, 92-93, 108-III, and Strudwick, Administration, pp. 42-43, 77-78, that the carving in these chapels is lower and finer precisely because they may well date to the reign of Khufu, rather than Khafre.
28 Additional fragments were identified after Smith's time; see his remarks on scattered fragments in HESPOK, p. $163 \mathrm{n} . \mathrm{I}$; idem, "The Origin of some unidentified Old Kingdom Reliefs," AJA 46 (1942), pp. 509-10. The chapel decoration is also discussed by El-Metwally, Entwicklung der Grabdekoration, pp. 154-62 (\$6.3.2).
29 Smith, HESPOK, p. 163 n. I; Markowitz, in Egypt in the Age of the Pyramids, p. 78, cat. 23 (illustrated in color). The drum is also mentioned without illustration by Ashton Sanborn in BMFA 20, no. II8 (April, 1922), p. 27; and cf. N. Strudwick, "Three Monuments of Old Kingdom Treasury Officials," JEA 7 I (1985), pp. 43-44, pl. III.I, with discussion of two variant forms of $p r$ - $h \underline{d}$ "treasury," based on whether the $\underline{b} \underline{d}$ sign is completely enclosed within the $p r$ sign or not (add $h r n b=f$ after $n b$ im3b to his translation); h. $20.3 \times \mathrm{w} .83 .8 \times$ th./diam. 20.3 cm . See also Piacentini, Les scribes, pp. 172-73 (E.Gi.I7). In situ discovery images available on www.gizapyramids.org in G I46I are HU-MFA Expedition photographs Ci2965_OS and Ci2965_OS.
that the only Dynasty 4 example of $p r-\underline{d} \underline{d}$ with this arrangement at Giza occurs in our Nefer's tomb, G 2IIO. ${ }^{30}$
C. Fisher discovered a second, larger drum, reused in G 3015 A, again further to the west than G 21IO. This drum is in the University of Pennsylvania Museum, Philadelphia (E i353I, figs. 6.46-6.49). ${ }^{31}$ It probably did derive from the chapel entrance to G 2110 . Smith rejected this identification with the Nefer of G 2IIO, contra Capart. ${ }^{32}$ As far as the measurements are concerned, the drum (w. 86 cm ) fits the entrance to Nefer's exterior stone chapel (ca. 75 cm ). The text reads:

## 

Text: (I) imy-r sš cprw brp ©pr nfr(w) (2) sš ¢nswt imy-r pr-hd Nfr
Translation: (r) Overseer of regiment scribes, controller of regiments of recruits, (2) royal document scribe, overseer of the treasury, Nefer.

In this case, the titles and palaeography match in perfect correspondence. One particular feature common to both monuments consists of the series of horizontal bands of feathers on the wings of the $m$ owls.

North Entrance Thickness (Boston, MFA 07.1002, figs. 6.506.55). ${ }^{33}$ At least two blocks originally made up the decorated surface, but only the lower block has survived, found by Lythgoe and Reisner in 1906. The top portion of the inscription is therefore missing. The right-hand edge of the relief reflects the batter of the exterior face of the chapel, and the inscription slopes accordingly, with all signs not vertical, but rotated slightly counterclockwise. A sloping inscription was not necessary on the counterpart northern jamb (now in the Louvre) since standing figures rather than text occur at the left (i.e., chapel exterior) edge of that block.

The large standing figure of Nefer is well modeled in fairly bold relief that is higher than the fine carving typical on the slab stelae of the reign of Khufu. The overfold of the plaited kilt is held in place by a long tab. Attention to detail is apparent in the fingernails, plastic eyebrow, and other facial features. Knee musculature is indicated, but the rest of Nefer's figure, with the exception of a concave depression above the navel, is devoid of modeling. The wig shows the long strands towards the crown that are common in Dynasty 4. ${ }^{34}$ But perhaps the most prominent feature of the relief is the unusually sharp nose given to Nefer. This has often been compared to the flattened, planed-down nose on his reserve head (MFA 06.1886; see below) as

30 Strudwick, Administration, pp. IO9 (83), 279-8o; idem, JEA 85, p. 49, n. I7.
31 The drum was published by Fisher, The Minor Cemetery, pp. 96, 147 (inscription), pl. 50.5 (no. 23); h. 17 cm ; w. 86 cm . The height of the carved text rectangle is 10.7 cm . See also Piacentini, Les scribes, pp. 99-10o (C.Gi.9).

32 Smith, HESPOK, p. 163, n. I; Capart, Documents 2, p. 23.
33 Reisner, $G N_{\text {I }}$, p. 423, pl. 30b; Capart, Documents 2, pl. 23; Roehrig, in Egyptian Art in the Age of the Pyramids, pp. 285-86, cat. 79; Dunham, Egyptian Department, p. I48, fig. I2I.

34 Cherpion critère 28; Mastabas et hypogées, p. 55; Fischer, "A Scribe of the Army in a Saqqara Mastaba of the Early Fifth Dynasty," JNES I8 (i959), pp. 238-39.
an example of portaiture in both two and three dimensions. ${ }^{35}$ Yet it must be noted that the other large-scale representations of Nefer display no such idiosyncratic nose. ${ }^{36}$ One could conceivably argue for the presence of multiple sculptors' hands on these various reliefs, instead of a conscious attempt to represent Nefer's actual likeness on both his entrance jamb and reserve head.

Three columns of text, plus one title and the name of Nefer in a fourth, horizontal line, are oriented in Nefer's direction, facing right, out of the tomb, eastwards. The hieroglyphs show an abundance of interior detail, and the sculptor has found a pleasing and undistracting balance in his alignment of the textual columns with the exterior batter of the outer chapel wall at right, and also with the straight verticality expected beside the tall standing human figure at left.


Text: (I) [... imy-r sš bry-] nswt imy-r blkrt-nswt nb $\operatorname{brp} \operatorname{cpr}(w) n f r(w)$ (2) $[\ldots]=f n b$, imy-r sti $d f(3 w)$ imy-r pr-ch3 (3) $[\ldots$ imsbw] br $n b=f r \subset n b$ wr mdw Šm‘w rb nswt Nfr (4) imy-r prwy-hbd Nfr
Translation: (I) [... overseer of scribes of port]folios of the king, ${ }^{37}$ overseer of every royal ornamented, controller of regiments of recruits, (2) all his [...], overseer of the double storehouse of provisions, overseer of the weapons house (armory?), (3) [...revered] under his lord every day, great one of the tens of Upper Egypt, royal acquaintance, Nefer; (4) overseer of the double treasury, Nefer.

In the lower register at right, separate inscriptions identify each of four scribes. The first scribe, Neferu, is shown writing, while the others march behind him, the tools of their trades in their hands. In order to indicate Neferu's right-handed orientation, the artist has twisted the shoulders and extended the right arm "behind" Neferu's

For a detail view of the standing figure, along with a comparison to the reserve head of Nefer, see Spanel, Through Ancient Eyes, pp. 35-37, with figs. 40-4I. See also Smith, Ancient Egypt, pp. 36-37, figs. 14-15; idem, HESPOK, pp. 23, 303, pl. 48e; idem, "Old Kingdom Sculpture," AJA 45 (1941), p. 528 and figs. 6-7; idem, Art and Architecture, p. 258, n. 41; W. Davis, "Canonical representation in Egyptian art," Res 4 (1982), p. 27, figs. II and 19; Junge, "Hem-iunu, Anch-ha-ef und die sog. 'Ersatzköpfe,'" in Kunst des Alten Reiches, p. IO4, pl. 36a-b; Assmann, "Preservation and Presentation of Self in Ancient Egyptian Portraiture," in Studies in Honor of William Kelly Simpson I, pp. 55-81, with fig. 7.
36 See, for example, the images of Nefer seated on the south entrance thickness (figs. 6.56-6.57), the west wall (figs. 6.72, 6.83) and false door tablet (figs. 6.76, $6.78,6.84$ ), and standing on the south wall (figs. 6.63, 6.65-6.66). For additional discussion, see O. Bates, "Sculptures from the Excavations at Giza, 1905-1906," BMFA 5, no. 26 (June 1907) p. 20; See also B.V. Bothmer, "On Realism in Egyptian Funerary Sculpture of the Old Kingdom," Expedition 24 (1982), pp. 34-35, fig. $20=$ Bothmer, Egyptian Art, pp. 384, 387, fig. 25.2I.

37 For this title, see Jones, Index of Ancient Egyptian Titles 1, p. 217, no. 808, following Fischer, Varia, p. 32, fig. 8 and p. I2O.
torso. Another interesting feature in the procession of scribes consists of the bivalve shells used as scribal equipment. ${ }^{38}$


Text: (5) sš Nfrw (6) sš pr hry-wdb Wni (7) sš Hnty-kzw=f(8) sš Snnw-kz Translation: (5) The scribe Nefru, ${ }^{39}$ (6) the scribe of the house of reversion offerings, ${ }^{40}$ Weni, (7) the scribe Khentykauef, (8) the scribe Senenuka. ${ }^{41}$

South Entrance Thickness (Paris B si; figs. 6.56-6.57).42 Like its northern counterpart, this entrance thickness was composed of at least two decorated blocks, but only the lowest one has survived. Here the scene contains a seated figure of Nefer at right, gazing beyond his offering table towards three registers of mortuary priests and officiants, and eastwards out of the chapel. The bull-legged stool with beaded drum contains a wide cushion visible beneath and behind Nefer's frame. He wears a long, striated wig, a closefitting garment that ends above the knee, and a shoulder knot. His fisted right hand is held back across the breast, while his left hand rests upon his lap; both wrists display elaborate bracelets. The small offering table and ceramic jar stand, stacked with six half-loaves to either side, does not extend above the height of the lowest register. Offerings, including duck and meat cuts on low tables, are listed above it, while the individuals present their own items (lower two registers), or perform the mortuary ritual or reversion offerings (top register).


38 Cf. Roehrig, in Egyptian Art in the Age of the Pyramids, p. 286 with n. 5; W. Wreszinski, Atlas zur altägyptischen Kulturgeschichte 3, pl. 66. S.A. Goudsmit notes the occasional occurrence of the rear view of the first figure in a procession, possibly indicating that he has already passed by the viewer; cf. "The Backview of Human Figures in Ancient Egyptian Art," JNES 40 (1981), pp. 43-46, fig. 3. For a parallel to the bivalve shell with inkwells, see the north wall of the chapel of Kaninisut I below (G 2155), and the seated scribal statue of Amenhotep from Karnak, CG 590 (tsty iry-prt bscty-c imy-r kswt nbt nswt, etc.).
39 This figure is illustrated in Simpson, The Literature of Ancient Egypt, p. xvii, fig. 4. Nefru appears again on the east wall fragment (Copenhagen ÆIN 937); see below.
40 For this title, see Junker, Gîza 2, pp. 65-66, 161.
4 I Doubtless the owner of mastaba G 204I, located immediately southwest of Nefer's tomb, and west of G 2100 (Sedit). The decorated west wall of Senenuka is MFA 07.1000-07.Iooi, 07.1003-07.I005: see PM III, pp. 24-25, 242; Capart, L'art égyptien. p. 20, pl. 438; Williams, Per-Neb, pp. 5, 16-17, pl. 5; Smith, HESPOK, p. 164, pl. 45b.
42 Louvre B 5 I; h. 95.5 cm ; w. 115 cm ; th. $23-24 \mathrm{~cm}$ (as displayed in Paris). The relief passed from the collection of Prince Napoléon (originally acquired by Mariette during the winter of $1857-58$ ) to that of Rousset Bey. It entered the Louvre collection by purchase in 1868, and bears the alternate numbers E 5599 and D 59; cf. Ziegler, Catalogue des stèles, cat. 26, pp. 167-71; Reisner, GN I, p. 423, pl. 30a; Capart, Documents 2, pl. 23; El-Metwally, Entwicklung der Grabdekoration, figs. 24, 96, I22, 137, 14I; Capart, Documents 2, pl. 23.

Text: (I) [...] imy-r pr-bd (2) [...] $\operatorname{brp} \operatorname{cpr}(w) n f r(w)$ (3) [...]imy-r sti $d f(3 w)^{43}$ (4) [...] rb nswt Nfr
Translation: (I) [...] overseer of the treasury, (2) [...] controller of regiments of recruits, (3) overseer of the double storehouse of provisions, (4) [...] the royal acquaintance, Nefer.

Above the offering table:


Text: (5) wt (6) h hm-ks $n h_{6}$ (7) ham-k3 Iy-mry (8) hm-ks Pr-sn (9) hm$k_{3} M s i$ (Iо) ic woy sntr bustt mrht msdmt ws $\frac{d t}{}$ (II) irp bt nb(t) bnrt $t$-rth $t$-wrt Translation: (5) Embalmer, (6) funerary priest Ankh, (7) funerary priest Iymery, (8) funerary priest Persen, (9) funerary priest Mesi, (ıо) implements for washing hands, incense, best ointment, black eye-paint, green eye-paint, (II) wine, every (kind of) sweet thing, baked bread, great loaf.

Beneath the offering table:

 iws bry-d br
Translation: (12) A thousand loaves of bread, (13) a thousand jars of beer, (I4) a thousand alabaster vessels, ( I 5 ) a thousand pieces of cloth, (16) crane, greylag goose, (17) oryx, ox, suckled calf.

East Wall (Giza, Copenhagen, figs. 6.60-6.63). At the leftmost (northernmost) edge of the wall stand large, headless figures of Nefer and Wenankhes, faced by more than two registers of scribes and provisions from the estate of the deceased. The lowest two registers are preserved on fragments of relief now in Copenhagen. 44 A few additional fragments, showing a procession of estates facing right, may come from the top of the wall, 45 but a perhaps more likely alternative would place them on the upper west wall, adjoining the false door. Although Nefer's scepter passes in front of his kilt on his right-facing, standing figure from the north entrance thickness, in this case, it passes behind his kilt. Wenankhes stands with her feet close together, and her right arm bent back across her breast. The lower registers facing the couple contain kneeling scribes in front, followed by male offering bearers with various types of livestock (fowl, calf, gazelle, crane, bull and oryx). Twelve men

[^13]are preserved in all, each displaying his own close-cropped hair and a kilt with elaborate belt tab. There were likely two additional registers and more figures (now lost) above. Inscriptions include the names and titles of some of the individuals:


Text: (1) [ḥm-ks Iy-mr]y(?) (2) ḥm-kz Pr-sn (3) ḥm-ks $H w($ (i)-n-pth (4) sš Nfrw-nds (5) sš < ...> (6) hem-ks
Translation: (I) The funerary priest Iymery(?), (2) the funerary priest Persen, (3) the funerary priest Khuenptah, (4) the scribe Nefru Junior, ${ }^{46}$ (5) the scribe $<\ldots>$ (6) funerary priest.

South Wall (Giza, Boston, figs. 6.64-6.66). Nefer and his wife Wenankhes stand facing into the tomb, to the right (westwards). The lower halves of their bodies are still in situ, while the heads and upper torsos are preserved in Boston (MFA 31.780, figs. 6.63, 6.66). ${ }^{47}$ Behind the figures, to the left (east), the rest of the wall has been left undecorated to avoid being obscured behind the chapel's swinging wooden door.


Translation: (I) Tally man of the judiciary, ${ }^{49}$ chief of the estate. (2) The miteret [Wenankh]es.

North Wall (figs. 6.8o, 6.82). This wall bears no carved decoration. It is possible that it once contained painted scenes that have since faded, but in light of the carved decoration scheme for the other three chapel walls, this is unlikely.

West Wall (Giza, Birmingham, Copenhagen, Rome, figs. 6.676.79, 6.81, 6.83-6.84, 6.88-6.89).50

The largest expanse of decoration is found on the west wall, and may be divided into three sections. At the southernmost end, still intact on the wall, Nefer and Wenankhes share a wide, bull-legged stool with a cushion. He holds a staff, while she embraces him with her left arm. Smith notes the correct representation of her right hand,

46 The bird hieroglyph taken here as nds might instead be the $s 3$ bird; see in general on the subject H.G. Fischer, "Epithets of Seniority," in Varia, pp. 8I-95. At any rate, the phrase seems to omit something towards the end, since the scribal title occurs twice.
47 Illustrated in Reisner, $G N$ I, pl. 33a, p. 423; N. Cherpion, "Sentiment Conjugal et Figuration à l'Ancien Empire," in Kunst des Alten Reiches, p. 33 and pl. 3a.
48 The restoration of Nefer's wife's name as Wenankhes is confirmed by the Birmingham fragment of the west wall. For remarks on the title mitrt and male examples of the title, see Fischer, "A Scribe of the Army in a Saqqara Mastaba of the Early Fifth Dynasty," JNES I8 (1959), pp. 262-63, fig. 24. The upper torsos are also discussed by N. Cherpion, "Sentiment Conjugal et Figuration à l'Ancien Empire," in Kunst des Alten Reiches, p. 33 and pl. 3 a.
49 Cf. Jones, Index of Ancient Egyptian Titles 2, p. 807, no. 2951.
50 Cf. Reisner, $G N_{\text {I }}$, fig. 24I, pl. 32b. For additional discussion of the scene preserved on the Copenhagen relief, see Fischer, Varia, pp 3I-32, fig. 8; ElMetwally, Entwicklung der Grabdekoration, pp. 159-62, figs. 97, 123, 138, 147, 151, 158, 163 .
outstretched with the thumb above. ${ }^{51}$ The inscription above them, including the adjoining Birmingham block discovered by H.G. Fischer, is the only example of Wenankhes's complete name. ${ }^{52}$ To the right (north) are several columns of names and titles of Nefer, now in Copenhagen. And further still to the right appears the simple false door, undecorated save for the raised relief tablet and lintel below, housed in the Museo Barracco in Rome.


Text: (1) [...] nfr $n b=f(2)[\ldots \quad$ brp $\quad$ p $] r(w) \quad n f r(w)$ imy-r sti $\quad d f(3 w)$ (3) imy-r š̌ bry-r nswt (4) hry-sšts nswt m swt nb (5) imy-r blart nswt nb imy-rpr cha (6) imsbb br nb=fmry $n b=f(7)$ [irr?] mrr $n b=f w r m d w ~ S ̌ m ‘ w ~$ (8) 54 imy-r prwy $h \underline{d}$ sšpr-ç (9) rb nswt Nfr (io) rbt nswt Wn-nhb=s Translation: (I)ss [...] (good?) his lord (2) [...] controller of regiments of recruits, overseer of the double storehouse of provisions, (3) overseer of scribes of port]folios of the king, (4) master of secrets of the king in every place, ( 5 ) overseer of every royal ornamented, overseer of the weapons house, (6) revered under his lord, beloved of his lord, [who does what] his lord loves, great one of the tens of Upper Egypt, (8) ${ }^{56}$ overseer of the double treasury, scribe of the palace, (9) the royal acquaintance, Nefer; (ıо) the royal acquaintance Wenankhes.

Upper register procession (Copenhagen):


Text: (п1) $h m-k 3 \quad W n-k s=f($ (12 ) $h m-k 3 \quad K(3)=i-i r r \quad$ (13) $h m-k 3 \quad N n-t n i$


51 Smith, HESPOK, p. 280, fig. I20.
52 Correct "Meresankh" to read "Wenankhes" in the following publications: Reisner, GNi, p. 422; Baer, Rank and Title, p. 146 [536]; Jánosi, Giza in der 4. Dynastie, p. I23; PM III.I, p. 72; Harpur, Decoration, p. 286 (table 2.3); Piacentini, Les scribes, pp. 97-98. The correct reconstruction of Wenankhes's name was first noticed by Fischer, Varia, pp. 31-32. bibliography); acquired in 1894 in Cairo; M. Mogenson, La Glyptothèque Ny Carlsberg, pl. 93, no. a 667; Klebs, Die Reliefs des Alten Reiches, p. 127 (detail). Correspondence between W.S. Smith and O. Koefoed-Petersen concerning these reliefs in the archives of the Museum of Fine Arts, Boston, dates to May, 1938.
54 From here to the end of the text, we rely upon the Birmingham relief fragment and the surviving west wall decoration.
55 Lines I-7 are contained on the fragment Copenhagen ÆIN 819.
56 Lines 8-Io are split between Birmingham 24I'57 and the west wall of the chapel at Giza. The Birmingham block measures: h. 34 cm ; w. 62.5 cm . According to Fischer, Varia, p. 31, n. 16, the fragment was acquired by the Birmingham Museum of Art in 1957 from Mrs. M. Sawdon of Croydon, whose father, Dr. R. Kingston Fox, obtained it in Egypt in 1892.

Translation: (iI) The funerary priest Wenkaef, (I2) the funerary priest Kairer, (13) the funerary priest Nenteni, (I4) the funerary priest Wenu, (I5) the funerary priest Iperi, (I6) the funerary priest Nefermeket.

Lower register procession

(17) [brp?] sḥ ‘nh (18) ḥm-ks Nfr-šmm (19) ḥm-ks srì (20) sšm Sšmw (2I) sšm Rri
Translation: (17) [controller] of the dining hall(?), 57 Ankh, (18) the funerary priest Nefershemem, (19) the funerary priest Ari, (20) the butcher Seshemu, (2I) the butcher Reri.

The false door bears decoration on the tablet and lintel beneath, the jambs below it remaining either unfinished or intentionally left blank. The decorated tablet was removed from the tomb before the arrival of the Harvard-MFA Expedition, and has been in the collections of the Museo Barracco in Rome (C.M.B. i), since it was acquired from the collection Bonaparte. $5^{58}$

## Text and Translation:

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(I) imy-r sš enswt imy-r pr-hd reb nswt Nfr
(I) Overseer of royal document scribes, overseer of the treasury, the royal acquaintance, Nefer.

(2) $h t p$ di i nswt kbbh ic $\subset w y$ bd tes snw
(2) A gift which the king gives: one container of cold water, hand washing utensils, two pellets of natron,

57 Jones, Index of Ancient Egyptian Titles I, p. 499, no. 1869 (hby/zhy(?)). Alternatively, the sign could simply be an error for $h m-k s$ "funerary priest."
58 The tablet C.M.B. I measures h. 83 cm by $w .87 \mathrm{~cm}$. My thanks are due Dr. Maresita Nota Santi, curator of the collections at the Museo Barracco, for permission to publish the relief, and for her hospitality during a collation visit to Rome in December, 1993. A second collation visit was made in 1998. For bibliography, see Reisner, GNi, fig. 24i, pl. 3Ic; L. Sist, Museo Barracco, pp. 20-25; Nota, and Cimino. Museo Barracco Roma, p. 46 and p. 47 fig. 29; Il "Nuovo" Museo Barracco, pp. 88-89 (with important bibliography), fig. 68 (color illustration). See also Haeny, " Zu den Platten mit Opfertischszene aus Heluan und Giseh," Fs. Ricke, esp. p. 158; Scheele, Die Stofflisten, fig. 9; Demel, Die Reliefs der Kultkammer des Kaninisut, p. 17, fig. Io; Weill, Des monuments et de l'histoire des IIe et IIIe dynasties, pp. 236-42, pl. 4; Vandier, Manuel I, p. 764, fig. 507; Junker, Gîza 2, pp. 79-80, 84 (text of offerings); and Manuelian, Slab Stelae, p. 234, fig. 303. A color illustration was recently published in L. GordanRastelli, "Egypt on the Tiber," $K M T_{\text {i9, no. }} 3$ (Fall, 2008), p. 60.

 $t-w t[t-] r t h$
（3）incense，best ointment，green eye－paint，black eye－paint，${ }^{60}$［？］，${ }^{61}$ $h\left[\right.$ etja］－bread（？），［royal］offering（？），${ }^{62}$ repast：a šns－loaf and a jug，${ }^{63}$ barley bread，baked bread，

## 

（4）dsrt hnkt－bnms ${ }^{64}$ šn［s］－c－f̧t šns－dwiw－šbw swt kbbb bd nhbr（w） 2
（4）ale，friendly beer，serving of bread，${ }^{65}$ food：a sus－loaf and a jug，${ }^{66}$ sut－meat，container of cold water，natron，neheru－bread， 2 loaves，

（5）（Two rows of items，each on its own table：haunch iwr，ribs，swt， and trussed fowl：ǐ̌d dbs nbs t－nbs w＇h
（5）persea fruit，figs，zizyphus，${ }^{67}$ loaf of zizyphus，${ }^{68}$ carob bean，${ }^{69}$

（6）irp istt
（6）wine，milk，

（7）$s h p t p\left[b_{3}\right]$
（7）sekhepet－drink，$p[e k h a]$－drink，

59 The traces of the determinative suggest that perhaps $h \underline{t g}$ bread is wanted here． Other alternatives include hknw，＂oil，＂or hnkt＂offerings．＂Weill，Des monuments et de l＇bistoire des IIe et IIIe dynasties，p．240，suggests either hnkt＂beer＂（but this word occurs further below in the list），or bwt，following the linen list of Khabausokar，Egyptian Museum，Cairo，CG i385；Murray，Saqqara Mastabas， pl．I；Borchardt，Denkmäler des Alten Reiches i，pp．44－47，pl．io；Smith， HESPOK，pl． 36 a （detail）；Kahl，Kloth，and Zimmermann，Die Inschriffen der 3．Dynastie，pp．188－93．
60 The $s \|$ sign of $m s d m t$ is extremely damaged，and resembles an $b\}$ ．
61 Weill，Des monuments et de l＇histoire des IIe et IIIe dynasties，p．240，suggests
 L．Sist，Museo Barracco，p．2I with n． 2.
62 This item occurs elsewhere in Cemetery G 2100 in the reused tablet of Tjenti， Cairo JE 72135，line 5；see Manuelian，Giza Mastabas 8，Part 2，mastaba G 2i13， and idem，＂Unfinished Business：The Giza Tablet of Tjenti（JE 72135），＂in Egyptian Museum Collections around the World，p． 784 （5）．
63 For the reading $b b w-r 3$（instead of $\left.i{ }^{c} w-r r_{3}\right)$ ，see De Meulenaere，Supplement to BIFAO 8I（1981），pp．87－89；Dorman，＂A Note on the Royal Repast at the Jubilee of Amenhotep III，＂in Hommages à Jean Leclant I，pp．455－70；Fischer， Varia Nova，pp． 33 （h）， 182 and n．62．For the translation＂a loaf and jug，＂see Fischer，Varia，pp．16－17．For a more abbreviated spelling of this item，see Simpson，Kayemnofret，p． 13 （no．19），oversize line drawing D．
64 Note the reversal of the k．For＂friendly beer＂see Hannig，Ägyptisches Wörterbuch I，p． 845 ［20998］．
65 Compare fit $n$ šns 「（ G 2370 ，Senedjemib Inti）；Brovarski，The Senedjemib Complex，p．80，no．（24．）
66 Simpson，Kayemnofret，p． 13 （no．25），oversize line drawing D．
67 Alternatively，＂nabq－fruit；＂see Emery，Hemaka，p． 52.
68 Alternatively，＂cake of nabq－fruit，＂see note above．
69 Alternatively，＂earth almonds；＂see Edel，Qubbet el Hawa II／I／2，p．22；Germer， Flora，pp．245－46．

（8）Cgwt bunfu 2 hbnnnwt 2 stt
（8）prepared grain，khenfu－bread，2，hebnenut－bread，2，setjet－bread，

（9）$\check{r} t w$ s $\underline{b} t ~ h \underline{d} d t(s \underline{h} t) w s \underline{d} t \underline{b} t n b(t) b n r t r n p w(t) n b t$
（9）shatu－bread，white 6 －row barley，${ }^{70}$ green 6 －row barley，everything sweet，all kinds of vegetables，

（⿺辶）$r n i w_{3} h_{3} r n m_{3}-h d \underline{d} b_{3} d_{3} t b_{3} r h_{3} t[r p] h_{3} s b_{3}$
（io）a thousand young oxen，a thousand young oryxes，a thousand cranes，a thousand greylag geese，a thousand white－［fronted］geese，a thousand teal ducks，

（II） $\operatorname{la}_{n} k t b_{3} t h_{3}$ mnbt $b_{3}$ ss $h_{3}$
（II）a thousand jars of beer，a thousand loaves of bread，a thousand pieces of cloth，a thousand alabaster vessels．

The Linen List

（12）idmi ifdw bus snwi bus，wr bussf bus
（I2）idemy－linen，a thousand of 4 （cubits wide），a thousand of 2 （cubits wide），a thousand of I（cubit wide），a thousand of width sezef，${ }^{71}$


（13）sesher－linen／fine linen／aa－linen：（I4）（sesher－linen）：a thousand of Ioo（cubits wide），a thousand of 90 （cubits wide），a thousand of 80 （cubits wide），a thousand of 70 （cubits wide），

（ I ）sisiw b b，dizw b b，ifdw bs，bmtw bs
（is）（fine linen）：a thousand of 60 （cubits wide），a thousand of 50 （cubits wide），a thousand of 4 （cubits wide），a thousand of 3 （cubits wide），

（16）snwi ba3，we blu，szf bus，$b_{r} r^{73} b_{3}$

70 Edel，Qubbet el Hawa II／I／2，p． 25 ［16］．
71 For an alternative reading，arguing for a redundant $s$ at the the beginning of the word，cf．J．Kahl，Das System der ägyptischen Hieroglyphenschrift in der o．－3．Dynastie，pp．66－70（zf，＂Stoff mit bekannten Abmessungen＂）．See also P．Posener－Kriéger，＂Les Mesure des étoffes à l＇ancien empire，＂RdE 29 （1977）， p．94；and Junker，Gîza i，p． 3 I．
72 The heading for these three different types of linen are grouped together in one register，but I have interpreted the following three registers of quantities as referring to a single linen type sšr，Šmet－nfrt and ${ }^{3} 3$ respectively．
73 This broken word is omitted from Scheele，Die Stofflisten，but is mentioned briefly by W．S．Smith，＂The Old Kingdom Linen List，＂ZÄS 7 （1935），pp．142， 147 ．
(16) (ad-linen): a thousand of 2 (cubits wide), a thousand of I (cubit wide), a thousand of width sezef, a thousand of width her,

(17) it Šm‘w it Mḥ bdt swt
(17) Upper Egyptian barley, grain of Lower Egypt, emmer, wheat,

(18) $b s_{3} d(w) \underline{d} w$ bnrwt w$w$
(I8) malt, meal, ${ }^{74}$ dates, carob beans. ${ }^{75}$

## Lower Lintel

## 

(19) imy-[r] sš cprw imy-r pr-ḥd Nfr
(i9) Over[seer] of scribes of the regiments, overseer of the treasury, Nefer.

The Reserve Head (figs. 6.90-6.1oo). Nefer's reserve head, one of the earliest to be found, was excavated at the bottom of shaft A during Lythgoe's 1905-1906 season. It appears in the excavation photographs to be surrounded by fragments of limestone sarcophagus lid lugs (fig. 6.39). One of the earliest descriptions of the head, written by Oric Bates, appears in the published Annual Report of the Museum of Fine Arts for 1906. While its hyperbole provides a somewhat quaint period piece, it nevertheless indicates how significant an acquisition the reserve head was for the Museum of Fine Arts in this nascent phase of building its Giza collection:

> 7. Portrait head of an unknown man, in limestone. Dynasty IV. Life size. This is pobably the most important piece of Egyptian sculpture in America. It represents a vigorous man in the prime of life. The face is rather thin, with a strong nose and chin, high cheek-bones, large eyes, and a fine forehead. There is an aristocratic poise to the whole head, which is thrown a trifle back, not in self-conscious pride, but with an unthinking dominance. The mouth is good and clean-lipped. The whole work is a forceful and energetic piece of realism.
> The examples of these heads can be numbered on the fingers of one hand. There are one or two in Egypt, and the Deutsche Gesellschaft excavated one in (or about) $19033^{76}$ The example in the Museum is in almost perfect condition: the Egyptian artist himself filled out part of the upper lip in plaster, either because of a flaw in the stone, or because he broke it in the cutting. It is probable that the nose was finished in the same way, as it has now the appearance of having been shaved down, possibly to prepare a surface for the plaster. The ears are somewhat battered,-in a

74 Cf. Hannig, Ägyptisches Wörterbuch I, p. 1483 \{39350\}; D. Faltings, "bš und $z w$-zwei ungeklärte Begriffe der Getreidewirtschaft im AR," GM 148 (1995), pp. 35-44. For a Giza parallel, see the Western Cemetery tomb of Nefri, AbuBakr, Excavations at Giza 1949-1990, p. 52, fig. 38, pl. 31.
75 Alternatively, "earth almonds;" see Edel, Qubbet el Hawa II/I/2, p. 22; Germer, Flora, pp. 245-46.
76 This is the reserve head of Kahetep, found by Borchardt at Abusir; Ägyptisches Museum Berlin 16455; cf. Tefnin, Art et Magie, pp. 98-99, pls. 2a-d; Wildung, "Technologische Bemerkungen zur Kunst des Alten Reiches. Neue Fakten zu den Ersatzköpfen," in Les critères de datation, pp. 399-406. Note that Bates's report predates the discovery of the majority of reserve heads at Giza, hence his reference to counting them on the "fingers of one hand."
way, however, that suggests that they too may have been treated like the upper lip. Height, $27.4 \mathrm{cms} .{ }^{77}$

The head tilts back slightly, and the angle between the neck (in profile) and the underlying jaw bone is about no degrees. The surface is relatively flat at the top of the head, while the skull widens laterally toward the back. The back of the skull curves symmetrically downwards towards the back of the neck. A scratched, uneven incision divides the skull, beginning roughly at the top of the crown and continuing, with some interruptions, all the way to the base. Viewed from the front, the face is compact, long but not particularly wide; it forms a U as it fans out upwards towards the top of the head.

Both ears appear rather neatly cut off, as if sliced with a knife; viewed from the front, one can just make out the jagged protrusions of the remains. Whether they were carved or modeled in plaster is not clear. On the proper left ear, two holes survive to penetrate just into the head where the normal ear cavity would appear. These holes are less evident on the proper right ear.

An incised hairline separates the face below from the scalp, but appears jagged and unfinished in places. It is much thicker and rougher on Nefer's right side, above the proper right eye. It is possible that a thin coat of plaster was added to the scalp just above the hairline, more pronounced on the proper left side. On the proper right side, a slightly raised area suggests that the hairline might originally have been intended to start at a lower level. The hairline curves down on either side towards the ears to form raised relief (sharply edged; not rounded) sideburns. However, a change of design is visible here, as the original cut protruded closer to the cheeks and further down the face. This first cut is more advanced on the proper right side, but both sides show the abandonment of the cut in favor of shorter, smaller, and rounder sideburns set closer to the ears. This feature is unique to this reserve head, but the closest parallels to such rough sideburn alterations occur on the heads from g 4940 в (MFA 21.329; Tefnin, Art et Magie, pls. 9d and iob), from G 4640 A (Cairo JE 46216; ibid., pl. 16c-d), and from west of G 4160 (Hildesheim 2158; ibid., pl. 24b-c). On the proper right side the hairline continues up around and down beyond the ear before fading out altogether. The cut here never progresses up and around the ear. Other reserve heads show this cut proceeding down around the back of the head and delineating the base of the hairline at the nape of the neck (see, for example, the head from G i203 A, Berkeley, Hearst Museum 6-19767, ibid., pl. Ia, d), but in Nefer's case no hairline traces at all are visible from a rear view.

The forehead continues in the same sloping plane as the hair above it. The change of plane begins at the level of the eyebrows, which are little more than incised lines around a raised surface, but do show some plasticity. They are fairly symmetrical in composition. Each brow shows a combination of rounded curves and sharpened corners at the bulbous inner ends, towards the bridge of the nose, and at the tapering, pointed outer ends, which extend farther outward towards the ears than do the eyes below. A small chip is missing at the tip of the left eyebrow. A change of plane below the eyebrows begins the descent into the eye sockets, but a solid space remains between the eyebrows and the tops of the eyelids.

There is no attempt to show the ocular portion of the eyelids. The orbital part is an incised line on top of the eye that forms a ridge

[^14]with the rest of the lid. The lids occupy a much higher plane than the actual eyeballs. The eyes are slightly large, horizontal, straight, and widely spaced to make room for the bridge of the nose. The orbital over the right eye is mostly invisible; it was either never finished or covered over with plaster. The eyes appear set high, quite deeply depressed at the sides of the nose. The left eye is slightly higher than the right. Both eyes show long inner canthi pointing downwards towards the nose. The outer canthi are more squeezed and pointed than their inner counterparts. No trace of cornea or pupil is preserved. The eyes fail to bulge as they do on some other reserve heads (such as the head from G 4440 A, MFA 14.719 , ibid., $\mathrm{pl} .8 \mathrm{~b}-\mathrm{c}$ ) because the area beneath the sockets is not as recessed as on other examples.

The flat and very long cheekbones protrude to their highest point about 3 cm beneath the eyes and are very widely spaced. They continue without transition down the long chin.

Nefer's nose is the dominant feature of his face. At the top, above the bridge, the area between the eyebrows forms a triangular space in a different, more vertical plan from that of the forehead. The front of the nose has been planed down in differentiated levels with no attempt to soften or round the resulting flatness. ${ }^{78}$ The drilled nostrils are very large and oval-shaped, forming curved hollows up and back into the face. Their large size and diagonal placement give a flared effect. The outer tops of the nostrils are differentiated from the rest of the nose by a cut and by sanding down of the area above the cut line. If not planed down, the nose would have protruded out of all proportion to the rest of the face.

The area between the nose and upper lip has been covered with plaster, some of which has likewise been applied to the upper lip. As a result, there is no distinct change of plane or ridge line to the upper lip itself. The plaster forms a rising surface on either side of the well-delineated philtrum. The corners of the mouth are drilled and rounded; the sharpest ridge belongs to the lower lip line, which protrudes far out in front of the recessed area beneath it, leading down to the chin. The lips form a sort of neutral "frown," but are asymmetrical; the center of the lower lip is placed further to Nefer's proper left side. Both lips are of ample size, and somewhat fleshy, with the upper lip the larger of the two.

The area beneath the lips bears no particular detail. The chin appears prematurely blunted in comparison to the mouth and nose. It is broad, soft, and rounded with no visible central point. The absence of a prominent chin lends a slightly flabby look to the jaw and neck below. Viewed in profile, only a gradual change of plane indicates the transition from jaw bone to neck proper. The head preserves no traces of polychromy.

Tefnin's volume eliminates the reserve heads in general from the realm of veristic, realistic portrait sculpture, citing them as ritualistic

78 See discussion above on the comparison of the nose of Nefer's reserve head (figs. 6.93, 6.97) with the relief nose carved on the north entrance thickness (fig. 6.50 and frontispiece).
objects. 79 He notes the supposedly intentional mutilation of the heads as part of the funerary ritual. The frequently cited resemblance of Nefer's nose on the reserve head is not similar in style, according to Tefnin, to the south jamb relief of Nefer, but is rather an afterthought, since the reserve head nose was planed down. But we might ask why we should not regard the reserve head as unifinished, and the planed-down nose as an attempt to match more closely the special nose of the south jamb relief? And if mutilation was so important, why are there scratches only? Why is the nose not completely broken off, or the eyes gouged out, to definitively "kill" the figure (if that was the intention)? As for damaged ears, being modeled in plaster, could they not simply have fallen off in most cases? In the last analysis, one cannot deny the extremely individualistic features of the reserve heads. There is of course no way to prove if Nefer's face actually resembled his reserve head, but there is definitely an attempt at uniqueness, different from any standardized imitation of the prevalent royal style, or generic face, as is so often seen in the wall reliefs. By way of comparison between Nefer's three-dimensional reserve head (figs. 6.90-6.100) and his five two-dimensional relief portraits in the chapel, figs. 6.85 through 6.89 provide detail views of the latter (along with two portraits of his wife Wenankhes, figs. 6.ioi-6.IO2). As noted above in the description of the standing relief figure of Nefer from the north entrance jamb, for all the comparisons made in the literature between that face and Nefer's reserve head, there are four other two-dimensional images of this man carved in a much more generic style.

Recent publications have suggested the discovery of an additional reserve head from Giza, ${ }^{80}$ and discussed the art historical intentions inherent in the sculptures. For example, F. Junge prefers to see the heads as sculptor's experiments in physiognomyintentionally resembling individual likenesses-culminating perhaps in the famous bust of Ankh-haf, ${ }^{8 \mathrm{I}}$ while Assmann emphasizes their role in functional self-preservation. ${ }^{82}$ Bolshakov has attempted to build on Tefnin's emphasis on the intentional damage to the heads. ${ }^{83}$ He takes the objects as substitutes for statues and superstructure

79 Tefnin, Art et Magie, pl. 3 for Nefer, MFA 06.1886, with a shorter summary by the same author in "Reserve Heads," in D.B. Redford, ed., The Oxford Encyclopedia of Ancient Egypt 3 , pp. 145-47. Tefnin's monograph has been reviewed by P. Jánosi in OLZ 88 (1993), cols. 492-96. On reserve heads in general from the Western Cemetery, see also H. Schmidt, "Zur Determination und Ikonographie der sogenannten Ersatzköpfe." SAKı8 (1991), pp. 331-48. H. Junker, "Vorbericht 1914," pp. 33-36; N.B. Millet, "The Reserve heads of the Old Kingdom," in Studies in Ancient Egypt, the Aegean and the Sudan (Fs Dunham), pp. 129-31. More recent comments are provided by P. Lacovara, "The Riddle of the Reserve Heads," KMT 8, no. 4 (Winter 1997-98), pp. 28-36; and D. Wildung, "Technologische Bemerkungen zur Kunst des Alten Reiches. Neue Fakten zu den Ersatzköpfen," in Les critères de datation, pp. 399-406; and M. Nuzzolo, "The Reserve Heads: some remarks on their function and meaning," paper presented at the "Old Kingdom Art and Archaeology conference," Cambridge, England, 20-23 May 2009 (forthcoming).
80 Z. Hawass, "A Group of Unique Statues Discovered at Giza II. An Unfinished Reserve Head and a Statuette of an Overseer," in Kunst des Alten Reiches, pp. 97-Ior. It is more likely that this head comes from a typical Egyptian statue.
81 F. Junge, "Hem-iunu, Anch-ha-ef und die sog. 'Ersatzköfpe,"" in Kunst des Alten Reiches, pp. 103-109, esp. p. 104, pl. 36a-b.
82 J. Assmann, "Preservation and Presentation of Self in Ancient Egyptian Portraiture," in Studies in Honor of William Kelly Simpson 1, pp. 55-81. Cf. also W. Kaiser, "Zur Büste als einer Darstellungsform ägyptischer Rundplastik," MDAIK 46 (1990), pp. 269-85.
83 A. Bolshakov, "New Observations on the Function of the so-called 'Reserve Heads," ${ }^{\text {in }}$ Seventh International Congress of Egyptologists, pp. 21-23. I am grateful to the author for sharing his then-unpublished manuscript with me.
wall decoration that had disappeared during the evolution of private tomb construction from Meidum and Dahshur to Giza. The heads were placed in the burial shafts, but sealed off from the actual burial, so as not to inflict any damage on the mummy. Bolshakov draws analogies between the severed heads of horned vipers in inscriptions, and the "severed" reserve heads. As for the damage, he ascribes broken ears (causing deafness) and occipital scratches (causing blindness) to ritually rendering the figures even less harmful to the deceased. His weakest point rests with the occipital scratches, a rather indirect method of causing blindness, for he feels the Egyptians had too much respect for the eyes proper to simply gauge them out. Most recently, N. Picardo discusses reserve heads in association with the Egyptian fear of decapitation, and Old Kingdom early conceptions of the non-royal ba. ${ }^{84}$

## Tomb Owner and Dependents

## Titles of Nefer

ims $b(w)$ br $n b=f(r r n b)$, revered under his lord (every day)
imy-r pr-chz, overseer of the weapons house
imy-r pr-hd, overseer of the treasury
imy-r prwy-bd, overseer of the double treasury imy-r $\underline{\text { k }} k r t-n s w t n b$, overseer of every royal ornamented imy-r sč r nswt, overseer of royal document scribes imy-r š̌ $\mathrm{c} p r w$, overseer of scribes of the regiments imy-r ss $\underline{b r y}$ - $n s w t$, overseer of scribes of the portfolios of the king imy-r sti $d f(3 w)$, overseer of the double storehouse of provisions [irr?] mor $n b=f$, [who does what] his lord loves $w r m \underline{d} w \check{S} m\ulcorner w$, great one of the tens of Upper Egypt $m r y n b=f$, beloved of his lord
rb nswt, royal acquaintance (originally iry-bt nswt, keeper of the king's property)
bry-šst nswt m swt nb, keeper of the secrets of the king in every place $h k_{3} b w t$, chief of the estate
$b r p \operatorname{pr}(w) n f r(w)$, controller of regiments of recruits
$s 3 b n b t$ brw, tally man of the judiciary
$s s{ }_{s} p r-3$, scribe of the palace

## Family

wife: Wn-ヶnb=s, Wenankhes ${ }^{85}$
mitrt, miteret
rbt nswt, royal acquaintance
Other People ${ }^{86}$
3ri, Ari
ha-k3, funerary priest

84 N. Picardo, "Semantic Homicide' and the So-called Reserve Heads: The Theme of Decapitation in Egyptian Funerary Religion and Some Implications for the Old Kingdom," JARCE 43 (2007), pp. 22I-52. For additional recent studies, see also N. Tacke, "Die Entwicklung der Mumienmaske im Alten Reich," MDAIK 52 (1996), pp. 307-36; and D. Bisping Die sogenannten, Ersatz- bzw. Portrï̈tköpfé des ägyptischen Alten Reiches: Gegenstand, Terminologie, Stand der Forschung, Ausblick, unpublished Masters thesis, Humboldt-Universität zu Berlin (Berlin 2001).
85 Note that Reisner, $G N_{\text {I }}$, p. 422, originally misreconstructed this name to read Meresankh, associating Nefer's wife with the Meresankh in the nearby tomb of Kanefer (G 2150). There is therefore no reason to associate the family of Nefer (G 21IO) with that of Kanefer ( G 2150 ), as has been done in the literature (see references above).
86 For the scribes listed in the tomb, see Piacentini, Les scribes, pp. 96-99.
'I $y$-mry, Iymery
hm-kz, funerary priest
${ }^{1} p r$ ri, Iperi
hm-kz, funerary priest
inh, Ankh
hm-k3, funerary priest
[ $h r p$ ?] sh, [controller] of the dining hall(?)
Wni, Weni
$s s ̌ p r b r y-w d b$, scribe of the house of reversion offerings
Wnw, Wenu
bm-k3, funerary priest
$W n-k s=f$, Wenkaef
hm-k3, funerary priest
Prsn, Persen
bm-kz, funerary priest
Mwti, (offering basin from G 2 IIo R, 38-2-2), Muti
$r$ h $n s w t$, royal acquaintance
Msi, Mesi
bm-k3, funerary priest
Nfru, Nefru
sš, scribe
Nfrw-nds, Nefru Junior
sš, scribe
Nfrokt, Nefermeket
$h m-k$, funerary priest
Nfršmm, Nefershemem
hm-kz, funerary priest
Nntni, Nenteni
hm-kz, funerary priest
Rri, Reri
sšm, butcher
Hw-n-pth, Khuenptah
hm-kz, funerary priest
Hnty-kzw=f, Khentykauef
$s$ š, scribe
Snnwkz Kki, (owner of G 2041), Senenuka Keki
imy-r $3 b t-H w f w$, overseer of the pyramid town Akhet-Khufu (G 204I) imy-r $k 3 t$, overseer of construction projects (G 204I) rd-mr, district administrator (G 204I)
© ${ }^{d} m r ~ g r g t$, district administrator of the foundation (G 204I) rb nswt, royal acquaintance (G 204I)
brp w'b nswt, controller of royal wab-priests (G2041)
sš, scribe (G 2IIO)
$s s^{c} \times n s w t$, royal document scribe (G 2041)
Š̌mw, Seshemu
ssm, butcher
$K(3)=i-i r r$, Kairer
bm-kz, funerary priest


Fig. 6.I. G 2IIO, chapel, looking northwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, c883 [= CI2497].


Fig. 6.2. G 21IO, chapel, looking northwest. November 2I, 1993. Peter Der Manuelian, pdm_1993.IO7.37.


Fig. 6.3. G 2IIO, plan.


Fig. 6.4. Plan of the subsidiary shafts lining the west face of G 21IO, along with g 205I-2054 further to the west. Drawing by Nicholas Melnikoff; redrawn by Ruth Bigio.


Fig. 6.5. G 2IIO, west and south faces, looking northeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B775 [= B7431].


Fig. 6.6. G 21IO, recleared door socket zones inside chapel entrance, looking east. November 27, 1993. Peter Der Manuelian, PDM_1993.119.05


Fig. 6.7. G 2IIO, south side of chapel entrance, north door socket hole with basalt stone at the bottom, looking south. November 27, 1993. Peter Der Manuelian, pDM_1993.119.07.


Fig. 6.8. Computer reconstruction of G 2iIO, looking southwest. Courtesy Dassault Systèmes, 2009.


Fig. 6.9. Computer reconstruction of G 2IIO, looking southeast. Courtesy Dassault Systèmes, 2009.


Fig. 6.Io. 36-I2-3, photograph (May 18, 2006) and line drawing of fragment of limestone relief from G 2IIO. Museum of Fine Arts, Sci72649.


Fig. 6.II. 38-2-I, fragment of limestone relief from g 2iIO, redrawn from sketch in HU-MFA Expedition Object Register, vol. 29, p. 1,482.


Fig. 6.I2. 38-2-3, relief fragment, redrawn from sketch in HU-MFA Expedition Object Register, vol. 29, p. 1,482.


Fig. 6.13. Photograph and line drawing of unnumbered fragment of limestone relief from G 21IO, west wall. July 8, 1933. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8335 (detail).


Fig. 6.I4. Photograph and drawing of two unnumbered fragments of limestone relief from G 21IO. July 8, 1933. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8335 (detail). photograph, Mohammedani Ibrahim, B8335 (detail).



Fig. 6.I5. Photograph and drawing of unnumbered fragment of limestone relief from g 2iro. July 8, 1933. HU-MFA Expedition

Fig. 6.16. Photograph and drawing of unnumbered fragment of limestone relief from G 2IIO. July 8, 1933. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8335 (detail).



Fig. 6.17. Photograph and drawing of unnumbered fragment of limestone relief from G 2110. July 8, 1933. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8335 (detail).


Fig. 6.18. 38-2-2, photograph and line drawing of offering basin of Muti from g 2IIO r. April 3, 1938. HU-MFA Expedition photograph, Mohammdani Ibrahim, B8948 (detail).


Fig. 6.19. G 2110, view of street and chapel, from the top of the mastaba core, looking east. November 20, 1993. Peter Der Manuelian, pdm_1993.095.19.


Fig. 6.20. View of street between G 2110 (right, west) and G 2130 (left, east), looking south towards the Khafre pyramid. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B957 [= B7437].


Fig. 6.2I. G 2IIO, northwest corner and west facade, looking southeast. November 15, 1993. Peter Der Manuelian, pdm_1993.076.20.


Fig. 6.22. Constricted passage between G 2110 (left, west) and G 2130 (right, east), looking north. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, c862 [= CI2475].


Fig. 6.23. Foundation blocks supporting the chapel of G 2IIO, looking south through the constricted passage between G 2 IIO (right, west), and g 2130 (left, east). November 15, 1993. Peter Der Manuelian, PDM_1993.076.04.


Fig. 6.24. G 2IIO, section, looking south, showing the constricted passage between G 2110 and G 2130. Drawing by Alexander Floroff, April I3, 1938; redrawn by Ruth Bigio.


Fig. 6.25. G 21IO, section, looking north; after Reisner, GNI, p. 423, fig. 240; redrawn by Ruth Bigio.


Fig. 6.26. G 2IIO, space between the core and casing along the east face, looking north. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B887 [= B7439].


Fig. 6.27. G 2IIO, space between the core and casing along the east face, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B953 [= B7438]


Fig. 6.28. HU-MFA Expedition Object Register, vol. 29, detail of p. 1,482, with entries for relief fragments 38-2-1, 38-2-3, and offering basin of Muti, 38-2-2 (housed in the Museum of Fine Arts, Boston).


Fig. 6.29. Detail of HU-MFA Expedition note card, written by Mahmoud Said Diraz, listing inscribed objects from G 2IIO, including the relief fragment 38-2-3.


Fig. 6.3I. G 2IIO, east face, north half with north niche, looking northwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, cI269 [= CI25I2].


Fig. 6.30. G 2110, north niche, looking west. November 20, 1993. Peter Der Manuelian, PDM_1993.IO5.oI.


Fig. 6.32. G 2iIO, plan of north niche; redrawn by Ruth Bigio.


Fig. 6.33. G 2110 A, plan and section.


Fig. 6.34. Computer reconstruction of G 2IIO, looking west and showing the relationship of the burial shaft to the superstructure. Courtesy Dassault Systèmes, 2009.


Fig. 6.35. G 2IIO A, mouth of the shaft, looking east. March I2, 1993. Peter Der Manuelian, pDM_1993.137.I5.


Fig. 6.36. Computer reconstruction of G 21 IO A , looking northwest down into the shaft, with reserve head of Nefer (MFA o6.1886) at the bottom. Courtesy Dassault Systèmes, 2009.


Fig. 6.37. G 2IIO A, view down the stone-lined shaft, with miscellaneous unidentified limestone blocks in view, looking south. 1905-1906. HUMFA Expedition photograph, A.M. Lythgoe, C1432 [= C12519].


Fig. 6.38. G 2IIO A, bottom of shaft, with sawn-off sarcophagus lid lug handles just visible in the upper right (southwest) corner (see image below); reserve head not yet revealed; looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, cI533 [= CI252I].


Fig. 6.39. G 2IIO A, shaft bottom with view of sawn-off sarcophagus lid lug handles and reserve head (MFA O6.1886), looking south (based on CI533). 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, CI469 [= C12524].


Fig. 6.40. G 21IO, intrusive burial inside the chapel, by the north wall, looking north. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, ci646 [= CI2506].


Fig. 6.4I. G 2 IIO U, plastered door blocking, looking east. February 5, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8932.


Fig. 6.42. G 2IIO U, burial (skeleton, 38-2-9) in chamber, looking east. February 17, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, ci4I2I.


Fig. 6.43. G 2IIO, unidentified shaft. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, cI256 [= CiI957].


Fig. 6.44. Computer reconstruction of the exterior stone chapel of G 2IIO, looking northwest towards the north entrance thickness (MFA 07.IOO2). Courtesy Dassault Systèmes, 2009.


Fig. 6.45. MFA 21.3080, limestone entrance drum of a man named Nefer (not the owner of G 2IIO), found in G I46I. February 6, 2002. Museum of Fine Arts, CR6572-DI.


Fig. 6.46. University of Pennsylvania Museum, Philadelphia, E 13531, limestone entrance drum of Nefer, found in G 3015 a but most likely originally from G 2IIO A. Courtesy University of Pennsylvania Museum, 31293.


Fig. 6.47. University of Pennsylvania Museum, Philadelphia, E 13531, limestone entrance drum of Nefer. May 27, 2009. Jennifer Houser Wegner. Courtesy University of Pennsylvania Museum.


Fig. 6.48. University of Pennsylvania Museum, Philadelphia, E 13531, limestone entrance drum of Nefer, detail of inscription. May 27, 2009. Jennifer Houser Wegner. Courtesy University of Pennsylvania Museum.


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| $\mid$ | $\mid$ | $\mid$ | $\mid$ | 1 |

Fig. 6.49. Uncollated drawing of limestone entrance drum of Nefer, University of Pennsylvania Museum, Philadelphia, E 1353r.


Fig. 6.50. MFA 07.I002, from g 2IIO, north entrance thickness. Museum of Fine Arts, Ei42iICR_di.


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Fig. 6.si. MFA 07.Ioo2, from G 21IO, north entrance thickness, face of Neferu. 1999. Peter Der Manuelian, PDM_1999.210.or.


Fig. 6.52. MFA 07.ioo2, from G 2iIO, north entrance thickness, face of Weni. 1999. Peter Der Manuelian, PDM_1999.210.02.



Fig. 6.56. Musée du Louvre, Paris Bi5ı, from G 2iIO, south entrance thickness. January 12,2008. Christian Décamps. Courtesy Réunion de Musées Nationaux, cdo20738 (O2 DAE IO99 NUCA).



Fig. 6.58. G 2ino, chapel, east wall, north half, standing figures of Nefer and Wenankhes, looking east. August 8, 1930. HU-MFA Expedition photograph, Mohammedani Ibrahim, A5794.


Fig. 6.59. G 2IIO, chapel, east wall, south half, scribes and offering bearers. Copenhagen ÆIN 937. May 2009. Ole Haupt/Ny Carlsberg Glyptotek.


Fig. 6.60. G 2IIO, chapel, east wall, digital montage of preserved relief on wall, AAW554 (Brian Snyder, April 25, 1999), and relief fragment, Copenhagen ÆIN 937, pDM_1993.138.15 (Peter Der Manuelian, July 14, 1991).

## Mastabas of Nucleus Cemetery g 2 Ioo



Fig. 6.6r. Drawing of G 21IO, chapel, east wall.


Fig. 6.62. Computer reconstruction of the chapel of G 21IO, east and south walls.
Courtesy Dassault Systèmes, 2009.

$\begin{array}{lll}\mathbf{0} & \mathbf{5} & \mathbf{1 0} \\ +H \mid H & \\ \end{array}$
PDM


Fig. 6.63. MFA 3I.780, from G 2IIO, chapel, south wall, upper half. May 15, 2008. Peter Der Manuelian, pDM_IMGoo699.


Fig. 6.64. G 2IIO, south wall, lower half, looking south, August 29, 1937. HU-MFA Expedition photograph, Dahi Ahmed, в8862.


Fig. 6.65. G 2IIO, chapel, south wall, looking south. Digital montage of HU-MFA Expedition photographs. Mohammedani Ibrahim, A575I (July 23, 1930) and B8777 (detail) (January 17, 1937).



Fig. 6.67. G 21IO, chapel, west wall, south half, looking west. November 2I, 1993. Peter Der Manuelian, PDM_1993.Io8.I2.


Fig. 6.68. G 2IIO, chapel, west wall, detail of slaughter scene still in situ (adjoins Copenhagen relief ÆIN 819), looking west. January 7, 2004. Peter Der Manuelian, pdm_oor79.


Fig. 6.69. G 2IIO, chapel, general view of west wall from above, looking south. November 20, 1993. Peter Der Manuelian, pDM_1993.IO5.Io.


Fig. 6.70. Computer reconstruction of the chapel of G 2IIO, looking south towards the south wall. Courtesy Dassault Systèmes, 2009.


Fig. 6.71. Computer reconstruction of the chapel of G 21IO, looking southwest towards the south and west walls. Courtesy Dassault Systèmes, 2009.


Fig. 6.72. G 2110, chapel, west wall, south half, looking west. July 23, 1930. HU-MFA Expedition photograph,
Mohammedani Ibrahim, A5753.


Fig. 6.73. Birmingham 24I/57, from G 2IIO, chapel, west wall, south half, raised-relief fragment preserving part of the only attestation of the name of Nefer's wife, Wenankhes. Courtesy Birmingham Museums and Art Gallery.


Fig. 6.74. G 21Io, chapel, digital montage of the west wall, composed from Pdm_1993.108.ir-12 (by Peter Der Manuelian, November 21, 1993), unnumbered fragment (by Mohammedani Ibrahim, July 28, 1933, HU-MFA Expedition photograph, B8335), Birmingham 24I/57 (courtesy Birmingham Museums and Art Gallery), Copenhagen ÆIN 819 (pdm_1993.138.17-18, July 14, 1991), and Museo Barracco, Rome C.M.B. i (by Dahi Ahmed, June 4, 1938, HU-MFA Expedition photograph, A8032).


Fig. 6.75. G 21IO, west wall, central portion, digital montage of Copenhagen ÆIN 819 (May, 2009) and lower right fragment still in situ (pdm_1999.0if.03; April 25, 1999). Photographs by Ole Haupt/Ny Carlsberg Glyptotek, and Peter Der Manuelian.


Fig. 6.76. Museo Barracco, Rome C.M.B. i, from g 2iro, chapel, west wall, north half, false door tablet. Rephotograph of Alinari photograph. June 4, 1938. HU-MFA Expedition photograph, Dahi Ahmed, A8032.


Fig. 6.77. G 2IIO, chapel, reduced overview line drawing of entire west wall.


Fig. 6.78. Museo Barracco, Rome C.M.B. i, from g 2iro, chapel, west wall, north half, false door tablet (detail). Photograph by G. Galazka, courtesy Museo Barracco.


Fig. 6.79. G 2IIO, chapel, west wall, north half, looking west. Museum Barracco C.M.B. I derives from the top of the niche (location of meter stick). November 2I, 1993. Peter Der Manuelian, pdm_1993.I08.ir.


Fig. 6.80. G 21Io, chapel, undecorated north wall, looking north. March 3, 1993. Peter Der Manuelian, pDM_1993.138.03.


Fig. 6.8I. Computer reconstruction of the chapel of G 2IIO, looking west towards the west wall. Courtesy Dassault Systèmes, 2009.


Fig. 6.82. Computer reconstruction of the chapel of G 21IO, looking north towards the (undecorated) north wall. Courtesy Dassault Systèmes, 2009.

Fig. 6.83. Drawing of G 2IIO, chapel, west wall.



Fig. 6.84. Drawing of G 2IIO, chapel, west wall, false door tablet.


Fig. 6.85. MFA 07.I002, from G 2110, chapel, detail of north entrance thickness. Museum of Fine Arts, CR735I_di.


Fig. 6.87. MFA 31.780, from G 2ino, chapel, detail of south wall, upper half. November I, 1937. Museum of Fine Arts, c8ios.


Fig. 6.88. G 2IIO, west wall, south half, detail. November 2I, 1993. Peter Der Manuelian, PDM_1993.108.08.


Fig. 6.86. Musée du Louvre, Paris BisI, from g 2IIO, chapel, detail of south entrance thickness. Courtesy Réunion des Musées Nationaux.


Fig. 6.89. G 21Io, west wall, detail of Nefer's face from false door tablet, Museo Barracco, Rome C.M.B i. pDM_1993.I33.or.


Fig. 6.90. MFA 06.1886, reserve head of Nefer from g 2iro A. April 7, 2003. Museum of Fine Arts, sc62136 [e7175cr-dr]


Fig. 6.91. MFA 06.1886, reserve head of Nefer from G 2IIO A, $3 / 4$ view proper right. 1991. Peter Der Manuelian, PDM_1993.I38.io.


Fig. 6.93. MFA o6.1886, reserve head of Nefer from g 2iIO A, profile proper right. 1991. Peter Der Manuelian, pdM_1993.138.09.


Fig. 6.92. MFA 06.1886, reserve head of Nefer from G 2IIO A, $3 / 4$ view proper left. 1991. Peter Der Manuelian, pdm_1993.138.06.


Fig. 6.94. MFA o6.1886, reserve head of Nefer from g 2IIO A, profile proper left. 1991. Peter Der Manuelian, pdm_1993.138.07.


Fig. 6.95. MFA 06.1886, reserve head of Nefer from G 2IIO A, $3 / 4$ view proper right. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в884 [= B7441].


Fig. 6.97. MFA o6.1886, reserve head of Nefer from g 2IIO A, profile proper right. February 1906. HU-MFA Expedition photograph, A.M. Lythgoe, BI588 [= B7865].


Fig. 6.96. MFA o6.1886, reserve head of Nefer from g 2 IIO A, $3 / 4$ view proper left. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в878 [= B7440].


Fig. 6.98. MFA 06.1886, reserve head of Nefer from g 2 IIO A, profile proper right. February 1906. HU-MFA Expedition photograph, A.M. Lythgoe, BI584 [ $=$ B786I].


Fig. 6.99. MFA o6.1886, reserve head of Nefer from G 2110 A, back. Museum of Fine Arts, ci7895.


Fig. 6.ior. G 2iro, west wall, south half, detail of Wenankhes. November 21, 1993. Peter Der Manuelian, pdm_1993.Io8.09.


Fig. 6.ioo. MFA 06.1886, reserve head of Nefer from g 2IIO A, back. 1991. PDM_1993.138.08.


Fig. 6.IO2. MFA 31.780, from G 2IIO, chapel, south wall, upper half, detail of Wenankhes. November I, 1937. Museum of Fine Arts, C8ios.


Fig. 6.IO3. G 2 IIO m, plan and section.


Fig. 6.ios. G 2 IIO o, plan and section.


Fig. 6.IO4. G 2IIO N, plan and section.


Fig. 6.io6. G 2IIO P, plan and section.


Fig. 6.Io7. G 2IIO Q, plan and section.


Fig. 6.iIo. G 2iIo t, plan and section.


Fig. 6.io8. G 2 IIO R, plan and section.


Fig. 6.III. G 2IIO U, plan and section.


Fig. 6.Io9. G 2IIO s, plan and section.


Fig. 6.II2. G 2IIO v, plan and section.


Fig. 6.II3. G 2IIO w, plan and section


Fig. 6.1I6. G 2IIO z, plan and section.

Fig. 6.ir7. General view of subsidiary shafts along the west face of G 21 I 0 , including shafts $\mathrm{w}, \mathrm{x}, \mathrm{Y}$, and z , looking south towards the Khafre pyramid. January 1906. HU-MFA Expedition photograph, A.M. Lythgoe, BI549 (detail).


Fig. 6.II4. G 2IIO x , plan and section.


## Chapter 7 <br> THE TOMB OF SESHATSEKHENTIU:

## Mastaba G 2 I2O

## Summary of Reisner's Description

## Mastaba: ${ }^{\text {I core }}$ of type II a; $28.0 \times 12.4$ m

area 347.2 sq. m; proportion $\mathrm{I} / 2.25$
average height of stepped courses of drab retaining wall 0.30 m
average width of steps 0.8 cm
height of mastaba as preserved 4.55 m
Casing: white limestone (partly y-masonry) begun but left unfinished
size of unfinished mastaba of type IX $-\mathrm{y} ; 30.4 \times 14.8 \mathrm{~m}$ area 449.92 sq. m; proportion I/2.05
lower courses of casing traced on south around southwest corner and on east behind chapel and northwards; partly preserved on north end and west
monolithic stela was in place in the west wall of the chapel
Chapel: emplacement for a slab stela at 6.45 m from southeast corner of east face of core-mastaba
stela emplacement: 8I x 53 cm , depth 10.5 cm ; fits fragments of slab stela of Seshatsekhentiu $(79.8 \times 5 \mathrm{I} .6 \mathrm{~cm} \text {; th. } 9.9 \mathrm{~cm})^{2}$ indicates that a crude brick exterior chapel of type ( 1 a) was designed, but sole evidence of possible construction is lower floor in later exterior crude brick chapel and wall fragment in floor of room (c)
Subsequent exterior stone chapel: ${ }^{3}$ type ( 2 b ), partly constructed
stone platform built about $7.6 \times 4.3 \mathrm{~m}$ against east face of southeast corner of core-mastaba (now partly destroyed on north and east)
on west were set casing stones of enlarged mastaba meant to form vertical west wall of offering-room (a) of exterior stone chapel
Room (a): one-niched N-S offering-room; floor marked by construction lines on foundation platform, but not dressed and room never completed
construction lines indicate a room, $3.55 \times 1.5 \mathrm{~m}$ area ca. 5.32 sq. m; proportion ca. I/2.36
monolithic southern stone in west wall; h. 3.1 m ; w. 1.65 m traditional false door cut in center: outer niche $0.85 \times 0.3 \mathrm{~m}$ inner niche $0.3 \times 0.2 \mathrm{~m}$
quarry mark in red paint on face of slab north of false door:

See Reisner, GNI, pp. 425-30.
MFA 06.1894; see below.
3 Reisner, $G N$ I, p. 427 also notes: "Around the walls of rooms (b), (c), and (d), both on the plastered crude brick walls and the sloping stone casing of the mastaba is a white stripe, 3.5 m cm (sic) high on the vertical wall and 3.5 cm wide on the floor; the stripe follows the slope down from the floor of (c) through the doorway to (d) and in (d) is on the lower level."
$h_{3}$ sp I2, month 2 šmw...; year 23 of Cheops ${ }^{4}$
doorway presumably in north end of east wall
this room probably completed with crude brick walls as part of later exterior crude brick chapel
upper floors in rooms (b) and (c) were level with top of platform exterior crude brick chapel north of the stone chapel
crude brick walls preserved against sloping face of unfinished
casing north of the slab stela, indicating about five rooms
connection with stone chapel destroyed
rooms (b) and (c) along sloping face of casing with floor level high
rooms (d), (e), and (f), east of (c) (b) with floor at lower level
Room (b): N-S room with southern end destroyed
as preserved $3.4 \times 2.05 \mathrm{~m}$; area 6.97 sq. m
at south end of western side, stone offering slab rests on low
brick platform against sloping casing; $0.8 \times 0.4 \mathrm{~m} ; \mathrm{h} .0 .2 \mathrm{~m}$
plain doorway to room (c), in west end of north wall; with two mud floors laid on packed limestone debris
lower floor 0.32 m above rock, upper floor 0.4 m above lower
Room (c): small N-S room north of (b)
$2.4 \times 2.1 \mathrm{~m}$; area 5.04 sq. m
doorway to (b) in west end of south wall
doorway to room (d) in south end of east wall
north of this doorway is fragment of older crude brick wall from older(?) construction; two floors like room (b) in doorway to room (d) upper floor slopes to east to floor level, matching lower floor in rooms (b) and (c)
Room (d): small N-S room east of room (c) and north of room (e)
2.15 x I.I m; area 2.36 sq. m
doorway to room (c) in south end of west wall
doorway with jambs, to room (e), in south wall
floor on lower level as in (b) and (c), with slope up to higher level through the doorway to (c)
Room (e): $\mathrm{N}-\mathrm{S}$ corridor south of (d)
I. $9 \times 1.07 \mathrm{~m}$; area 2.03 sq. m
doorway with jambs to room (d), in north end
on south side of doorway floor has step down of 5 cm from floor level of room (d)
floor on the lower level slopes gently downwards through rooms (e) and (f)
thin crosswall with plain doorway at the southern end of room (e) on the east side connecting rooms (e) and (f)
Room (f): south of room (e)
I. $6 \times \mathrm{x} .07 \mathrm{~m}$; area I .7 I sq . m; apparently continuation of corridor (e)
floor on lower level continues southwards slope of room (e)
doorway to (e), in separating wall at north end, on east entrance doorway from south at south end with doorjamb on east preserved
South of room (f) is a doorway from east, whose southern side is formed by $\mathrm{N}-\mathrm{S}$ wall 3.4 m long with beginning of crosswall on western side, but all walls in this area destroyed
Total area of (b)-(f): I8.II sq. m, to which is to be added the area of additional destroyed rooms
Total area, (a)-(f): 23.43 sq. $m$; to be increased as the area (b)-(f)
Shaft A: sole shaft, north of middle: $2.5 \times 2.5 \mathrm{~m}$ at top; $2.15 \times 2.15 \mathrm{~m}$ at bottom; -7.13 m in rock
lined above with drab masonry, 4.3 m , fourteen courses portcullis grooves in masonry but not cut in rock on east, $0.6 \times 0.25 \mathrm{~m}$; on west, $0.5 \times 0.2 \mathrm{~m}$
chamber: type i al, lined and paved; on south lined chamber, $3.1 \times 3.6 \mathrm{~m} ; \mathrm{h} .2 .55 \mathrm{~m}$ area, II.I6 sq. m; capacity, $28.45 \mathrm{cu} . \mathrm{m}^{5}$

4 This inscription was published by Smith, "Inscriptional Evidence for the History of the Fourth Dynasty," $J N E S_{\text {II }}$ (1952), fig. 6, translated on p. 127. Cf. A. Spalinger, "Dated Texts of the Old Kingdom," SAK 2 (1994), p. 285 (9).
5 The total of 28.45 cubic meters, found in Reisner, $G N_{\mathrm{I}}$, p. 428, and in Reisner's typed manuscript, conflicts with p. IO6 of the same publication, which lists $30.13 \mathrm{cu} . \mathrm{m}$.
rock chamber, $4.15 \times 4.65 \mathrm{~m}$ and 2.88 m high;
area, 19.29 sq. m; capacity, 55.55 cu . m
passage: in rock, 2.10 x 1.17 m and I .2 m high; lengthened by opening in lining to 2.55 m ; floor of passage on level with pavement step down from floor of passage to rock, 0.26 m
blocking: remains of interior masonry set in plaster
portcullis slab (outside); h. I. 65 m ; w. I. 55 m ; th. 0.3 m coffin: fragmentary white limestone coffin with flat lid (type d) with rebate around lid on underside along the edge; found partly in chamber and partly in shaft
canopic pit: in SE corner, $0.65 \times 0.5 \mathrm{~m}$; d. 0.68 m ( 0.35 m in rock)
lining preserved to about half its height except around SW corner of chamber; pavement not preserved
red construction lines on walls and ceiling
Descriptions below are modified from the reis's diary pages (Book 33, January 3 and 5, 1938); no Reisner summaries were located:
Shaft Y : south of z , on west side of G 2120
lined with mud brick on the casing of G 2120 , which forms its eastern wall; limestone chips, rubble, reddish gravel, and flint total depth I m
chamber on east, cut in red rock (bad rock), sealed with rubble, bound with mud mortar
Shaft z: north of y , lined with mud brick on top of one course of stone
blocks of G 2I20, which forms its eastern wall; lower sections of the wall are cut into the gebel (fig. 7.65 )
total depth 2.55 m ; limestone chips, flint, and reddish gravel chamber on east, cut in reddish gravel of the gebel; no blocking

## Excavation

The tomb was originally excavated by A.M. Lythgoe during the 1905-1906 season, for which no expedition diaries have survived. It was re-examined in 1932-37. Excavation photographs from 19051906 show the clearance of shaft a (figs. 7.1I-7.13) but do not include any images of the burial chamber. Most likely to rectify this situation, the reclearance of the shaft was undertaken by N.F. Wheeler from December 29, 1932 to January 8, 1933, and his description of the burial chamber quoted below should probably be understood as the first penetration by any modern expedition. On December 30, 1932, Wheeler noted in his diary that the portcullis grooves of shaft a end at rock level, and do not continue all the way to the bottom of the shaft. ${ }^{6}$ The shaft is described as filled with rubble and stone blocks, but this is probably intrusive fill since the initial clearance by Lythgoe in 1905. On December 31, 1933, the debris from the pit revealed an alabaster model vessel and potsherds (figs. 7.14, 7.29). Additional vessels turned up the following day. The bottom of the shaft was reached on January i, 1993, when a large broken portcullis stone was found to block the burial chamber on the south of the shaft (fig. 7.15). The most detailed and informative entry in Wheeler's diary was made for January 4, 1933:

Completed clearance of pit down to its rock floor,-on which were found: one alabaster "handled" jar complete, potsherds of small pots, and a basketful of white cement-the basket having completely vanished. ${ }^{7}$ The door blocking stone is in position,one large stone,-but has been broken through in the top eastern corner by robbers. The break is small. The chamber appears to

6 A similar situation occurs in the tomb of Nefer (G 2IIO; see above) where the portcullis groove on the east side was not cut in the rock chamber.
7 This object is 33-I-30; see line drawing in Reisner, $G N_{\mathrm{I}}$, p. 427, fig. 245 (= our redrawn fig. 7.52)
be nearly full of debris and well-cut blocks of stone as used for casing. The chamber seems to be cased.
The portcullis groove in the pit only descends in the masonry to rock level, below which point there is no groove. The doorblocking stone does not belong to this portcullis system. ${ }^{8}$ The fragments of sarcophagus and lid found in the pit debris, if they come from the chamber, must have come out piece by piece through the robber's hole. Depth II. 48 m . Found also in pit debris:-fragments of alabaster bowl. 9

The "basketful of white cement" that Wheeler mentions is noteworthy. The object was entered into the Expedition's Object Register as 33-I-30 (Eg.Inv. 13034; see below, figs. 7.14, 7.52). We might reconstruct an ancient scenario with a workman holding a basket filled with this mortar for purposes of sealing the casing stones in the burial chamber. (On January 7, 1933, Wheeler noted that many more of the fine white limestone blocks lining the burial chamber of shaft A were once in place: "The marks of cement on the walls show that the casing has been stripped since erection." ${ }^{10}$ ) Upon completion of his task, the workman simply dumped the remaining plaster out of his basket onto the floor and climbed out of the shaft. This would explain the absence of any basketry remains except for the impressions of the basket coils ${ }^{\text {II }}$ left in the plaster, which of course subsequently solidified. The object was deemed important enough to ship to Boston; for a 2007 analysis of its composition, see below, under Finds.

In recent years, examination of shaft a revealed that it was not only filled in again, but almost completely buried, leaving only the eastern half, with merely one portcullis groove, visible.

On the west side of the mastaba, a subsidiary shaft Y was cleared and the body removed during January 3, 5, and I2, 1938 (figs. 7.637.64). Then between March 3-13, and on April 7, 1938, the expedition focused on the street east of G 2120, that is, between G 2120 and G 2140 (figs. 7.I-3). Two fragments inscribed in sunk relief were unearthed on March 7, 1938 (fig. 7.19), mud-brick walls belonging to the mastaba itself were exposed, and the subsidiary mastaba G 2I2I with its two shafts A and b, was discovered on March I2, 1938. The entries describe sand, rubble, and limestone debris.

## Finds

MFA 06.1894: i4 fragments of limestone slab stela of Seshatsekhentiu; h. 51.6 cm ; w. 79.8 cm ; th. 9.9 cm ; two found in 1905-6 in debris east of foundation platform of stone chapel; others found in 1933 and 1938, including: $38-3-2,38-3-3$, and 33-2-187 (all 3 = MFA 06.1894; shipped to Boston May 1933; see below figs. $7.66-7.68)^{12}$
38-3-1I: Two of many fragments of red granite drum (lintel); two with incised hieroglyphs: one shows the $\mathbb{\square} \underline{b}$ sign; the other $\boldsymbol{P}^{9}$ bry $t p$ $[N b b ?]^{13}$ and $\left.h\right]$, part of the name $[S s s t-s b n] t y w$; h. of inscribed

8 One wonders if this "secondary" portcullis stone system indicates a later, post-Khufu, burial—or reuse-of the shaft than is generally assumed for Seshatsekhentiu.
9 Wheeler diary, p. i196, January 4, 1933. The diary mentions that the next day Reisner was forced to return to the hospital, most likely for problems with his eyesight. He returned to Harvard Camp on May 20, 1933.
ıо Wheeler diary, p. i197, January 7, 1933.
II On basketry types and patterns, see Wendrich, "Basketry," in Ancient Egyptian Materials and Technology, pp. 254-67, esp. p. 256, fig. Io.Ia.
I2 Reisner, GNI, p. 428 (also brief mentions on pp. 65, 67, III, 306); pl. 39a; Manuelian, Slab Stelae, pp. 76-82, pls. 17-18; PM III, p. 74; Leprohon, Stelae I, pp. 59-62.
13 See Jones, Index of Ancient Egyptian Titles, 2, p. 648, no. 2374.
fragment 27 cm ; w. of longest uninscribed fragment 38 cm ; inscribed fragment: 24 cm ; th. inscribed fragment: $10+\mathrm{cm}$; other fragments from drum and from the rectangular ends built in the two sides of the emplacement of the drum; original location uncertain, perhaps from doorway in the wall in front of the slab stela emplacement(?) (fig. 7.19) ${ }^{14}$

Filling of shaft: the debris at top was limestone rubbish and sand; under this were packed fragments of limestone reaching upwards from the top of the chamber for 4.3 m , consisting of broken lining blocks and pieces of sarcophagus; a hole in the southeast corner of the packing descended to the top of the blocking portcullis stone; beneath this packing, in the bottom of the shaft were found the following objects:
32-12-16 (shipped to Boston May 1933): alabaster model jar with pointed base and rim around mouth (damaged); perhaps type S-VIII; h. 8.0 cm ; d. of rim, top, 2.2 cm ; d. rim, bottom, 2.7 cm ; body, 3.6 cm (figs. $7.204 / 2,7.21)^{15}$

32-12-19: RW: fragments of one or more tubs; type D-LXXI a; h. c. 35 cm ; d. rim c. 68 cm ; d. base c. 32 cm (fig. 7.22) ${ }^{16}$

33-1-3 (MFA 33.1023; shipped to Boston May 1933): alabaster model basin, type S-X a (I); h. I. 5 cm ; d. rim, 5.1 cm ; d. base, 1.7 cm (figs. 7.20 $4 / 3,7.23)^{17}$
33-1-5 (MFA 33.1025; shipped to Boston May 1933): RP lower part of cylinder jar; type B-LVII; h. $6.2+\mathrm{cm}$; d. base, 5 cm (figs. 7.20 2/I, 7.24) ${ }^{18}$
33-1-6 (MFA 33.1026; shipped to Boston May 1933): alabaster fragments of two flat-bottomed bowls with contracted mouths; type S-X c; (a) h. ca. 12 cm ; d. ca. 40 cm ; (b) h. $7+\mathrm{cm}$; d. ca. 40 cm (figs. 7.20 4/I, 4/5, 7.26-7.28) ${ }^{19}$
33-I-7 (shipped to Cairo, September 29, 1933): one-handled alabaster jug; type S-XIV a (with ring stand of same piece); with domed lid; h. 29.8 cm ; h. of ringstand 5.8 cm ; d. rim II. 4 cm ; d. neck, 9.0 cm ; d. body, 16.8 cm ; d. ring base, on flat bottom of jar,

14 Reisner, $G N \mathrm{I}$, p. 428 suggests: "... in this place is a gap in the white casing, 2.5 m long ( $\mathrm{N}-\mathrm{S}$ ); the northern end of the stone on the south, the second vertical slab forming the west wall of room (a), was never dressed; but the southern end of the sloping casing stone on the north was smoothly dressed; the foundation course of the white casing was in place in this gap and the gap was actually in the second course of the casing; in the gap, on the top of the foundation course, is a layer of crude brick, 15 cm high but weathered; on the northern side of the gap a single white stone was found in place resting on the crude brick platform, 27 $x 65 \mathrm{~cm}$ and 15 cm high; it may be suggested that that stone was part of a wide deep niche built of small blocks but reaching above the slab stela, where it was crowned with the granite drum and perhaps with a cross-bar and tablet above it [cf. niche of G 7220, Hordjedef: HU-MFA Expedition photographs A5278; A8206; and pdM_1999.201.29 on www.gizapyramids.org]; in that case, the slab stela would have been visible in the back of the wide deep niche like the seated figure in G 7220; the doubt of this reconstruction is raised by the layer of crude brick below: but that fact is not decisive for in any case this construction would have been in the last stage of the chapel." There is, however, no precedent for a granite construction of this nature over a slab stela, one that was subsequently replaced by a monolithic limestone false door as part of the alteration to the tomb's exterior chapel area. The exact reconstruction of this inscribed granite drum remains unclear.
15 Reisner, $G N$ I, p. 426, fig. 245; p. 429; pl. 43d (4/2); Reisner and Smith, $G N 2$, p. 95: "The isolated example of a model with tapering body and roll rim around the mouth, found in G 2120 A , is curious but not particularly significant. It may be only the whim of some craftsman or even have resulted from the recarving of the top of a broken jar of Type XVb."
16 Reisner, $G N \mathrm{I}, \mathrm{p} .426$, fig. 245; p. 429.
${ }_{17}$ Reisner, $G N_{\text {I }}$, p. 426 , fig. 245; p. 429; pl. 43d (4/3); Reisner and Smith, $G N 2$, p. 100 .

18 Reisner, $G N$ I, p. 426, fig. 245; p. 429; pl. 43 d (2/r).
19 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; pl. 43d (4/I, 4/5).
4.8 cm ; d. upper roll rim of ringstand, 8.2 cm ; d. lower roll of rim of ringstand, $9.4 \mathrm{~cm}(\text { figs. } 7.14,7.29)^{20}$
33-1-9 (MFA 33.IO27; shipped to Boston May 1933): RBrW jar of type BXVII c; h. 12.6 cm ; d. rim, 7.6 cm ; d. neck, 6.6 cm ; d. body, 10. 8 cm ; d. base, 4.8 cm (figs. $7.202 / 3,7.30)^{21}$

33-I-IO (MFA 33.1028; shipped to Boston May 1933): RBrW model neckless shoulder jar; type B-LV a-m; h. 6.2 cm ; d. rim, 4.8 cm ; d. shoulder, 7.4 cm ; d. base, 4.2 cm (figs. $7.20 \mathrm{I} / 2,7.3 \mathrm{I})^{22}$
33-I-IIa-b (MFA 33.II55.I, 33.II55.2; shipped to Boston May 1933): Pottery model bag-shaped $d^{\prime}$ st offering jars ${ }^{23}$ and twelve fragments (ten fitting and mended) of another, type A LI a; RBrW; h. 7 cm ; diam. 8.8 cm (figs. $7.20 \mathrm{I} / 3-5,7.32)^{24}$
33-I-I2 (MFA 33.1156; shipped to Boston May 1933): RBrW model basin; type D-LXXIX a; i example and fragments of another; h. 4.4 cm ; d. rim, 10.4 cm ; d. base, 5.0 cm (figs. $7.20 \mathrm{I} / \mathrm{I}, 7.33)^{25}$

33-I-I3: RP: neck and rim of large jar; type A-II c (?); d. rim, 10.4 cm ; h. as preserved, $4+\mathrm{cm}(\text { fig. } 7 \cdot 34)^{26}$
33-1-14 (MFA 33.1029; shipped to Boston May 1933): RW small jar of type A-VI b-m; h. $1 \mathrm{I} .6+\mathrm{cm}$ (c. 13 cm ); d. of rim, 3.6 cm ; d. of neck, 2.6 cm ; d. of body, 8.4 cm (figs. 7.20 2/2, 7.35$)^{27}$
33-1-15 (MFA 33.1030; shipped to Boston May 1933): RBrW base of small jar; h. 7.2 cm ; d. max. 10.8 cm (figs. $7.202 / 5,7.36)^{28}$
33-I-16 (MFA 33.1031): RP base of small jar similar to type A-V or V1; h. IO +cm ; d. max. $10.6+\mathrm{cm}$ (figs. $7.39 \mathrm{I} / 3,7.37$ ) ${ }^{29}$

33-1-17 (MFA 33.1032): RP: fragment of rim of bowl with recurved rim; type C-XXXII or D-XXXVI; d. ca. 25 cm (fig. 7.38 ) ${ }^{30}$
33-1-18 (MFA 33.1033; shipped to Boston May 1933): mud ware (tubware) fragments of one or more tubs; type D-LXXI a; h. ca. 39 cm ; d. of rim ca. 72 cm ; d. of base, 28 cm (fig. 7.39$)^{31}$
33-1-19 (MFA 33.1034): RBrW base fragment of footed bowl; type E-XXI a; h. $4+\mathrm{cm}$; d. max. $14+\mathrm{cm}(\text { fig. } 7.40 \mathrm{I} / 5)^{32}$

33-I-20 (MFA 33.IO35): RBrW fragment from bowl with tubular spout; d. $20-25 \mathrm{~cm}$ (figs. $7.402 / 4,7.42$ ) 33

33-I-2I (MFA 33-1036; shipped to Boston after April 26, 1937): RW, red wash: three fragments of basin with short tubular spout and roll rim; type XXXV; d. ca. $30-5 \mathrm{~cm}$ (figs. 7.40 2/2,7.43) ${ }^{34}$
33-1-22 (MFA 33.1037): WSR fragments of two or more large jars of type A-II b; d. of rim, 10 cm (figs. $7.402 / 5,7.44$ ) 35
$33-\mathrm{I}-23$ to 26: large pottery jars of type A-II b: ${ }^{36}$ (33-I-23): WSR: d. of rim, II cm (fig. 7.45)

20 Reisner, $G N_{\mathrm{I}}$, p. 426, fig. 245; p. 429; pl. 43f; Reisner and Smith, $G N_{2}$ 2, pp. 9 I (number not provided; listed under OK XIV a), 96 (incorrectly listed as 33-1-77 instead of 33-I-7).
21 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; pl. 43d (2/3); Reisner and Smith, $G N_{2}$, p. 72. fig. 89.

22 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; pl. 43d (i/2); Reisner and Smith, $G N_{2}$, p. 76.

23 E. Brovarski, "Lexicographical Studies in Egyptian Pottery," in Ancient Egyptian Ceramics, p. ı.
24 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; pl. 43d (i/3-5); Reisner and Smith, $G N_{2}$, p. 7I, fig. 87.

25 Reisner, $G N_{\mathrm{I}}$, p. 426, fig. 245; p. 429; pl. 43d (I/I); Reisner and Smith, $G N_{2}$, p. 87, fig. I27.

26 Reisner, $G N_{\text {I, p. p. 426, fig. 245; p. 429; Reisner and Smith, } G N \text { 2, p. } 69 . ~}^{\text {. }}$
27 Reisner, $G N$ I, p. 426, fig. 245; p. 429; pl. 43d (2/2); Reisner and Smith, $G N_{2}$, p. 69, fig. 8I.

28 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; pl. 43 d (2/5).
29 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; Reisner and Smith, $G N 2$, p. 85 , fig. I23.
30 Reisner, $G N$ I, p. 426, fig. 245; p. 429.
3I Reisner, $G N$ I, p. 426, fig. 245; p. 429; pl. 43d (2/4); Reisner and Smith, $G N_{2}$, p. 69.

32 Reisner, GNi, p. 426, fig. 245; p. 429; Reisner and Smith, GN2, p. 87 (also incorrectly listed among Type D LXXI a. p. 85).
33 Reisner, $G N_{\text {I }}$, p. 429.
34 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; Reisner and Smith, $G N$ 2, p. 83.
35 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; Reisner and Smith, $G N 2$ 2, p. 69.
36 Reisner, $G N$ I, p. 426, fig. 245; p. 429; Reisner and Smith, $G N 2$ 2, p. 69.
(33-I-24 = MFA 33.1038): BrW: d. of rim, II cm (figs. 7.40 2/I, 7.46)
(33-1-25= MFA 33.1039): WSR: d. of rim, 10 cm (figs. $7.40 \mathrm{I} / \mathrm{I}$, 7.47)
(33-I-26): WSR: d. of rim, 10.5 cm (fig. 7.48)
33-I-27 (MFA 33.1040): RW fragment of a ringstand; type E-XXIV a; h. $4.5+\mathrm{cm}$; d. ca. 15 cm (fig. 7.49$)^{37}$

33-1-28 (MFA 33.1041): rim of traditional RW coarse offering jar of type AIV; d. of rim, Io cm (fig. 7.50 ) ${ }^{38}$
33-I-29: WSR and RW: four or more jars of type A-II b; see above, 33-I-23 to $26^{39}$
33-I-30 (formerly MFA Eg.Inv. I3034; shipped to Boston May 1933): plaster from inside decayed or removed basket, presumably once used for carrying plaster to seal the burial chamber; h. $14 \mathrm{~cm} \mathrm{d} .42 \mathrm{~cm} .{ }^{40}$ In July 2007, several portions of samples were analyzed by scanning electron microscopy/energy-dispersive X-ray spectrometry (SEM/ EDS). The largest sample showed a fairly soft white layer partially covering a harder, somewhat off-white material. The softer material consists of calcium sulfate. SEM images show the compound is present as fairly small, irregular, polygonal grains that are usually a few microns in size. In the sample that was examined, as well as in a few small pieces of the softer material that were also analyzed, other elements were sometimes detected, including aluminum and silicon, probably due to clay. Some crystals of chloride-containing salts (sodium and/or calcium) were observed. The harder substrate of the larger sample mainly contains calcium, and is probably a piece of limestone. Analysis of the softer material and one of the isolated softer bits by Raman microscopy specifically identified gypsum (calcium sulfate dihydrate), with a small amount of calcite (calcium carbonate). The conclusion is that the sample consists of gypsum plaster (figs. 7.I4, 7.52$)^{41}$

From northwest corner of mastaba:
38-3-16: fragment of limestone raised relief with $b t ;$ h. II cm; w. 33.5 cm ; th. 15 cm (fig. 7.5 I )
38-3-17: fragment of limestone raised relief with a tall $s$ sign; h. 17 cm ; w. 6 cm ; th. 6 cm (fig. 7.5 I )

## Architecture

One of the earliest and largest major mastabas of Cemetery g 2ıoo, the tomb of Seshatsekhentiu shows a number of interesting features. Like some of its counterpart Khufu-era mastabas, G 2120 shows a slab stela, then alterations to the chapel area, including the addition of a massive false door and multiple chambers in the street east of the superstructure's core (figs. 7.4-7.6, 7.8-7.10, 7.53). The mudbrick chapel area of G 2120 was replaced by a more elaborate stone chapel and partial completion of limestone casing blocks. Only scant traces of the underlying chapel survive, but a secondary series of mud-brick rooms was added slightly further to the north. ${ }^{22}$ The slab stela emplacement would have been walled up behind a series of large casing blocks, as the cult focus shifted to a monolithic false door further to the south along the east wall (figs. 7.53, 7.59-7.60).

Massive casing blocks surround portions of the mastaba, but the tomb was expanded primarily to the east. On the south side,

[^15]the sloping casing blocks abut (and predate) the north side of the vaulted courtyard of Nensedjerkai. The casing would have blocked access to the chapel of Merib (G 2100-I), forcing the visitor to walk around Seshatsekhentiu's tomb and approach Merib's mastaba from the north.

Reisner's reconstructed dimensions of the chapel are based on construction marks with slits in the limestone flooring stones, perhaps io -20 cm long, and separated by a meter or more, delineating the chapel area. The significance of the rough rise in the floor level in front of the false door, and extending northwards, is unclear. ${ }^{43}$ Within this area the limestone flooring shows an unsmoothed, roughly rectangular area. Immediately south of the massive false door, a rectangular small depression appears on one of the paving stones, resembling a sunken offering basin, with a groove nearby (fig. 7.56). A similar basin or depression was described above for the tomb of Nensedjerkai, in the corridor between G 2 I2O and G 2100-II. ${ }^{44}$

The false door, added secondarily to this exterior chapel addition, is unfinished. Rough chisel marks are visible on the inner two jambs, and an irregular boss protrudes below the niche at floor level. Reisner fails to indicate on his elevation ${ }^{45}$ that the door's north outer jamb (intentionally) stops partway up the door. Despite the unfinished state of the false door there was, however, a thin layer of plaster applied at least to the lower portions of the northern jambs (fig. 7.57), as well as to the monolithic block just to the north (the block containing the red painted date graffito listed above, figs. 7.6I-7.62).

The single burial shaft conforms to the group of earliest mastabas in Cemetery G 2IOO by virtue of its portcullis grooves at the east and west ends of the south side of the shaft (figs. 7.3, 7.II-7.13). ${ }^{46}$ Furthermore, the lined burial chamber and the canopic depression in its southeast corner further serve to rank the mastaba core among the earliest in the cemetery. However, G 2 I 20 A is unique in the sheer size of the shaft's mouth and of the burial chamber. Its closest parallel lies in G 2130, also displaying a large shaft mouth but, by contrast, a much smaller burial chamber. ${ }^{47}$

No intrusive structures appear in the space between G 2120 and G 2130, most likely due to the lack of available space, for the casings of G 2120 and G 2130 nearly touch at the level of their respective lowest courses. Reisner numbered a small mastaba as G 2I2I that was built against the east face of the casing of G 2120 (fig. 2.5). It is separated from the avenue running east-west between G 2120 and G 2130 by a low mud-brick wall running from the northeast corner of G 2120 eastwards for 5.4 m . In the middle of the avenue it turns south for 4.4 m until it joins the northwest corner of G 2I4O, thereby enclosing most of the space east of G 2 I 20 and north of its chapel. The wall is 0.3 m thick and $0.1-0.15 \mathrm{~m}$ high.

43 This rise is omitted from the chapel's section drawing in Reisner, $G N$ I, p. 424, fig. 243.
44 Comparative rectangular basins incised in the floor may also be found in front of the northern niche of G 2150 (Kanefer) (fig. 12.50), and in the floor of the north chapel of G 2000 (Lepsius 23 HU-MFA Expedition photograph CiO28_ns on www.gizapyramids.org).
45 Reisner, $G N \mathrm{I}, \mathrm{p} .424$, fig. 243.
46 The other tombs in this group consist of G 2100 (Sedit), G 2 IIO (Nefer), G 2130 (Khentka), and G 22IO (anonymous).
47 Cf. Jánosi, Giza in der 4. Dynastie, pp. I5I, I54

## Shafts and Burials

Two later shafts, y and z , hug the west face of G 2 I 20 (fig. 2.5). Shaft Z was unoccupied, (fig. 7.65) but shaft y contained a burial. G 2120 Y (figs. 7.63-64)
Apparently complete, articulated skeleton, lying on right side, legs moderately flexed at the knee. Visible elements include cranium and mandible, right scapula, right humerus, ulna and radius, ribs, right and left os coxae, right and left femora, tibiae and fibulae, and foot bones. Left humerus and forearm partially observable. Adult, sex uncertain (pelvis appears female, mandible appears male). No tomb card sketch.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. i: early reign of Khufu (core); Khufu (mastaba)..$^{48}$

Of critical importance to the dating of the mastaba was Lythgoe's discovery of the red-painted graffito with the date rapt-sp 12,2 $\check{s m w} .$. , "year of the twelfth occurrence, second month of shemu," on the face of the large casing block just north of the monolithic false door (figs. 7.6I-7.62). Assuming the biennial cattle count was still in effect in the early Fourth Dynasty, this would indicate year 23 of Khufu. ${ }^{49}$ It is difficult to assess the interval between construction of the mastaba core, the multiple alterations to the chapel, and the actual installation of the slab stela. Some have chosen to date the slab stela to the reign of Khafre. ${ }^{50}$ However, since the graffito appears on a secondary element, namely the limestone block of the stone chapel that replaced the original mud-brick building, we may be fairly certain that the slab stela, walled up behind this block, predates Khufu's twenty-third year. ${ }^{51}$

A number of factors place the tomb squarely within the reign of Khufu, among them the location of the core in the western (earlier) half of Cemetery G 2IOO; the T-shaped portcullis grooves on the burial shaft, the lined burial chamber, and the canopic depression in the southeast corner. We may posit the installation of Seshatsekhentiu's slab stela somewhere between years 15 and 22 of Khufu. The rest of the mastaba's alterations, including the possible addition of an inscribed granite drum, followed either later in the reign of the same king or perhaps during the reign of Djedefre. ${ }^{52}$

## Decoration

The Slab Stela (MFA 06.1894; figs. 7.66-7.68). Aside from the granite drum fragments, presumably bearing portions of Seshatsekhentiu's name and titles, the only decoration from this tomb is the fragmentary

48 Compare PM III, p. 74: middle or late Dynasty 4; Jánosi, Giza in der 4. Dynastie, p. 22I: alterations begun under Khufu or perhaps Djedefre, frozen in incomplete state perhaps under Djedefre; Kanawati, Egyptian Administration, pp. 117-18 [305]: Khufu; Manuelian, Slab Stelae, p. 82: Khufu.
49 Reisner, GNI, p. 427; W.S. Smith, "Inscriptional Evidence for the History of the Fourth Dynasty," JNES ${ }_{\text {II }}$ (1952), pp. II8, fig. 6, and $\mathrm{I}_{27}$ [3]. For more recent remarks, cf. A. Spalinger, "Dated Texts of the Old Kingdom," SAK2I (1994), p. 285, no. 9 .

50 See, for example, Strudwick, Administration, pp. 37-38.
51 Jánosi, Giza in der 4. Dynastie, pp. 218-225.
52 This follows recent arguments by P. Jánosi against completion of Western Cemetery mastabas as early as the first five years of Khufu's reign; Giza in der 4. Dynastie, pp. 218-25. For the Djedefre date possibility, see ibid., p. 22I.
slab stela, found east (and one fragment west) of the mastaba. ${ }^{53}$ Following the pattern layout scheme developed elsewhere, ${ }^{54}$ the slab stela decoration maybe be separated into four sections, a through D. This scheme is used for translations of all slab stelae in the present work (stelae from G 2120, G 2135, and G 2155 [?]).

Text and translation:
Section A:

(I) $[\ldots](2)[\ldots]$ Ssst-sbntyw
(I) $[\ldots]$ (2) $[\ldots]$ Seshatsekhentiu.

Section B :

(3) thb3, (4) hnkt $h_{3}$, (5) $\check{s} h_{3}$, (6) mnbtt $h_{3}$
a thousand loaves of bread, a thousand jars of beer, a thousand alabaster vessels, a thousand pieces of cloth.

Section c:

(7) kbh ir $w y, b d[\ldots]$
(7) container of cool water, implements for washing hands, natron [...].

(8) sntrr, wsd, msdmt, [ha3] $t[t]$ mrht, shat hd $d t\left[w_{3} d t\right],[t-w] r, t-r t h$,
$[n] b r[w], d[p t], s_{c}[t], t-n h r w, b s n[\ldots]$
(8) incense, green eye paint, black eye paint, best [oi]nt[ment], white 6 -row barley, green 6 -row barley, great loaf, baked bread, $[$ ne] her $[u]$ bread, de[pet]-bread, shat-bread, ta-neheru-bread, natron, [...].

(9) $s b p[t], p r w,[d] s r t,[\underline{h} n w]-\tau w y, i z t t, i r p, i_{s} d, d b 3, n b s, t-n b s, w \leftarrow \underline{h}$, bbnnwt, $\mathrm{c} g(w) t$, bt nbt $\operatorname{bnr}(t)$
(9) sekhepet-drink, peru-drink, ale, [khenu]-awy-drink, milk, wine, persea fruit, figs, zizyphus, 55 loaf of zizyphus, ${ }^{56}$ carob bean, ${ }^{57}$ hebnenutbread, prepared grain, every sweet thing.
(⿺辶) $[\ldots]$
(ıo) $[\ldots]$

 $[t r] p h 3, s h 3,[m] n w t h_{3}$

53 The discovery history is summarized in a letter from Reisner to E. Drioton, Director General of the Service des Antiquités, on March 14, 1938; see Manuelian, Slab Stelae, p. 78, fig. IoI (stela 9, pls. 17-18).
54 Sections A-D are described in Manuelian, Slab Stelae, p. I.
55 Alternatively, "nabq-fruit;" see Emery, Hemaka, p. 52.
56 Alternatively, "cake of nabq-fruit;" see note above.
57 Alternatively, "earth almonds;" see Edel, Qubbet el Hawa II/I/2, p. 22; Germer, Flora, pp. 245-46.
(iI) a thousand young oxen, a thousand bulls, a thousand large cows, a thousand suckled calves, a thousand young oryxes, a thousand cranes, a thousand greylag geese, a thousand white-fronted geese, a thousand teal ducks, a thousand [turtle]doves.

 [ $\left.b_{3}\right], \underline{d} s r\left[b_{3}\right], b_{3}-b_{t}\left[b_{3}\right]$, bn [bs]
(I2) a thousand panther-skin mantles, ${ }^{58}$ a thousand mantles of wild cow skin, ${ }^{59}$ a thousand [...], [a thousand ...], [a thousand beds ${ }^{60}$ ], [a thousand head]rests, ${ }^{61}$ [a thousand] caskets, ${ }^{62}$ [a thousand] boxes, ${ }^{63}$ [a thousand] chests. ${ }^{64}$

(13) ti3st [b3], nmtt ha, ms $\underline{t}\left[b_{3}\right],[\ldots][\ldots][\ldots][\ldots][\ldots][\ldots]$ (13) [a thousand] porphyry vessels, ${ }^{65}$ a thousand white quartzite vessels, ${ }^{66}$ [a thousand] granite jars, [...] [...] [...] [...] [...] [...].

58 Or Upper Egyptian panther-skin mantles; see Simpson, Kawab, Khafkhufu I and II, p. I4 n. 27 fig. 30; irs b3 Šm; R. Hannig, Großes Handwörterbuch ÄgyptischDeutsch, p. 238; and also the mastaba of Nisutnefer (G 4970) for an occurrence of $\overline{i s}$, Junker, Gîza 3, p. 184, fig. 28.
59 Cf. Junker, Gîza i, p. 258; Smith, "The Coffin of Prince Min-khaf,"JEA i9 (1933), pp. 155-57; E. Brovarski, "An Inventory List from 'Covington's Tomb' and Nomenclature for Furniture in the Old Kingdom," in Studies in Honor of William Kelly Simpson I, p. 122. , $-\infty$, this is most likely the wood sign in the group and Nomenclature for Furniture in the Old Kingdom," in Studies in Honor of William Kelly Simpson 1, pp. 141-42; Petrie, Medum, pl. 13, where st-(n)-bt precedes wrš. This represents a correction to my translation in Slab Stelae, p. 77. ÄS 7447): Manuelian, Slab Stelae, p. 88, pls. 2I-22.
62 Cf. E. Brovarski, "Inventory Offering Lists and the Nomenclature for Boxes and Chests of the Old Kingdom," in Gold of Praise: Studies on Ancient Egypt in Honor of Edward F. Wente, pp. 43-45.
63 Ibid., pp. 38-39.
64 Ibid., pp. 32-38.
65 Cf. Hannig, Großes Handwörterbuch Ägyptisch-Deutsch, p. 917. For "vessels of tiaat-stone," cf. Leprohon, Stelae I, p. 60, with references to publications by Hassan, Barta, Harris, and Meeks. On the stone in general, see R.S. Bianchi, "Porphyr," $L \not \ddot{A}_{4}$, cols. 1071-73; and Aston, Harrell, and Shaw, "Stone," in Ancient Egyptian Materials and Technology, esp. pp. 48-49. ("pits, ("pots of white quartzite"); Harris, Lex. Stud., pp. 88-89 ("white quartzite").

$[i d m y . .] s z. f b_{3}[\ldots]\left[b_{3} \ldots\right] b_{3}[\ldots] b_{3}[\ldots] b_{3}[\ldots] b_{3} h_{3}$
[idemy-linen $\ldots]^{67}$ a thousand of width sezef(?), ${ }^{68}$ a thousand [...], [...], a thousand [...], a thousand [...], a thousand [...], a thousand [...].
 sesher-linen, a thousand of width sezef, a thousand of 5 (cubits wide), a thousand of 4 (cubits wide), a thousand of 4 (cubits wide), a thousand of 3 (cubits wide), a thousand of 2 (cubits wide), a thousand of I (cubit wide).
 fine linen, a thousand of width sezef, a thousand of 5 (cubits wide), a thousand of 4 (cubits wide), a thousand of 4 (cubits wide), a thousand of 3 (cubits wide), a thousand of 2 (cubits wide), a thousand of I (cubit wide).
 aa-linen, a thousand of width sezef, a thousand of 5 (cubits wide), a thousand of 4 (cubits wide), a thousand of 4 (cubits wide), a thousand of 3 (cubits wide), a thousand of 2 (cubits wide), a thousand of I (cubit wide).
[...] it-Mhw bdt swt [...]
[...] ${ }^{69}$ Lower Egyptian barley, emmer, barley [...].7 ${ }^{70}$

67 On the choice of transliteration idmy instead of itiwy, see Manuelian, Slab Stelae, pp. 153-60 (section D, linen lists).
68 For an alternative reading, arguing for a redundant $s$ at the beginning of the word, cf. Kahl, Das System der ägyptischen Hieroglyphenschrift in der 0.-3. Dynastie, pp. 66-70 (zf, "Stoff mit bekannten Abmessungen"). See also P. Posener-Kriéger, "Les mesures des étoffes à l’ancien empire," RdE 29 (1977), p. 94; and Junker, Gîza I, p. 3r. Note also that each of the four occurrences of $s z f$ contains two $b_{3}$ signs beneath that seem otherwise unassigned.
69 Possibly once $i$ t-Šm'w, "Upper Egyptian barley;" compare the stela granaries of Setjihekenet (G I227), Meretites (G4140), Iunu (G4150), and the anonymous G 4860; Manuelian, Slab Stelae, pls. 13-14, 23-24, 25-26, and 29-30.
70 The traces preserve a tall vertical sign; if this is the $b$-foot for $b b_{s}^{3}$-fruit, the sign should perhaps be further to the left; see D. Faltings, "bs" und $z w t$ - zwei ungeklärte Begriffe der Getreidewirtschaft im AR," $G M_{\mathrm{I} 48}$ (1995), pp. 35-44.

Some confusion arose among the original Expedition members as to the provenance of this stela, and one often finds the tomb numbers G 2120 and G 2130 standing in for one another in various unpublished manuscripts. On January 5, 1932, Dows Dunham in Boston wrote to William Stevenson Smith at Giza concerning the stela, noting that he failed to find provenance information or mention of the piece in the division lists, most likely due to its fragmentary nature. ${ }^{7 \mathrm{I}}$ Dunham tried to reconstruct the area just above the tombowner's head. Smith has later written at the top of this letter, "The emplacement is $38 \times 58 \mathrm{~cm}$. WSS." But this cannot be accurate, for the stela itself measures almost 80 cm in width alone; my own measurements of the emplacement produced a width of 8 I cm . In fact, Smith's measurements are for the empty emplacement in G 2100 . Smith was misled by the discovery of the lower-left fragment of the Seshatsekhentiu stela, containing the lion-legged stool and legs of the tomb-owner, on the west side of G 2120 , near G 2100, hence his concern with the measurements of that tomb's empty emplacement. In his article on the linen lists, published in 1935, he notes the fragment as if it actually derived from the emplacement of G 2100, instead of from G $2120.7^{72}$ By the time of the publication of $G N_{\mathrm{I}}$ in 1942 (actual appearance year: 1946), the fragment had been correctly reassigned to G 2120, and Reisner's publication noted that "two large fragments were found in debris east of the foundation platform of the stone chapel." ${ }^{73}$ The photograph in fig. 7.67 shows the lowerleft fragment restored in place with the rest of the stela. Most of the fragments were set in a modern rectangular slab of cement or plaster, but the two best-preserved fragments, which were discovered in 1938, after this reconstruction, were added to MFA studio image C 8402 in an early example of photographic compositing. ${ }^{74}$ They are clearly distinguishable by their much darker color; they also show the most intricate and minutely detailed carving of the entire object. ${ }^{75}$ (At this writing, the stela remains in this condition, in three separate pieces, in the Museum of Fine Arts, Boston). ${ }^{76}$ Reisner wrote to Drioton on March 14, 1938, with an Explanation of the subsequent discovery of the two additional fragments, requesting permission to export them to Boston via the expedition artist Joseph Lindon Smith. ${ }^{77}$

Like some of the slab stelae from other parts of the Western Cemetery, ${ }^{78}$ Seshatsekhentiu's stela has suffered intentional damage. On other stelae, inscriptions have been chiseled away in specific areas. By contrast, Seshatsekhentiu's stela was smashed into at least fourteen

71 Reproduced in Manuelian, Slab Stelae, p. 78, fig. Ior.
72 W.S. Smith, "The Linen Lists of the Old Kingdom," ZÄS 7 I (1935), p. 135, no. 35; see also Manuelian, Slab Stelae, fig. Іо2.
73 Reisner, $G N$ I, p. 427.
74 Reproduced in Manuelian, Slab Stelae, p. 77, fig. 99.
75 Reisner, $G N$ I, pl. 39a, and commentary on p. 428.
76 Note that minor discrepancies and misalignments of this now seven- or eight-decades-old reconstruction have been adjusted in my epigraphic drawing in fig. 7.68.
77 Letter from Reisner to the Director General, Service des Antiquités, dated March 14, 1938: "Two fragments of a slab stela broken and scattered: in 1905-06, large fragments were found and assigned to the Boston Museum of Fine Arts: in 1933 another fragment was found in another place and assigned to the Boston MFA; the two new fragments were found in re-examining the foundation of the chapel of G 2120, March 6, 1938; (a) white limestone in relief, 21 x I8 cm; (b) 23 x Io cm . These fragments fit on the photographs made in the Boston Museum of the fragments found in 1905-06 and 1933. For fragments now in Boston Museum see Division List of 1906; Division List of 1933, pl. 6f."
78 For example, the stelae of Setjihekenet from G I227 and Meretites from G 4140; see Manuelian, Slab Stelae, pp. 64-68, pls. 14-15, and 92-97, pls. 23-24.
fragments. These fragments were subsequently either strewn all around the mastaba or became displaced in the course of later intrusive shaft construction, followed by millennia of plundering, sanding up, and reburial of the area. Among the areas permanently lost are Seshatsekhentiu's face, and the number and layout of the idmy falcons at the top of the linen list. The remainder of the list suggests, however, that the falcons were placed at the very top of the decorated surface, not underneath the horizontal band of identifying inscriptions.

Willful erasure has obliterated Seshatsekhentiu's administrative titles in this band of text, and his barely discernible name survives only because it was carved in a second line, just above Seshatsekhentiu's head. In fact, if the point of the intentional damage was indeed to obliterate Seshatsekhentiu's memory, then one has to question the literacy of the agent involved. If illiterate, he must have been told that the top line of each stela contained the name and titles, and was unaware that in this case the personal name was inscribed in a second line. ${ }^{79}$ Other motivations for the erasure could include postpharaonic vandalism, or the attempt to destroy the Horus falcons at the top of the linen list, as was done to the slab stelae of Setjihekenet (from G i227) and Meretites (from G 4140). Unfortunately, the fragment containing the falcons has not survived, and so it cannot be determined if they were intentionally destroyed or not.

Seshatsekhentiu's stela is one of five preserved "long-form" slab stelae, only two of which are preserved complete (Wepemnefret, G I2OI, and Meretites, G 4I40)..$^{80}$ The greatest affinities are with the stelae of Kaninisut I(?) (G 2155) and Meretites (G 4140), primarily in the addition of the furniture lists to the expanded area between the offering table and the linen list. ${ }^{8 \mathrm{I}}$ Reisner believed that no other slab stela was as large as that of Seshatsekhentiu. ${ }^{82}$ He did not take into account, however, some of the fragmentary stelae that, when restored, would surpass Seshatsekhentiu in size. The largest stela comes from G 4860. ${ }^{83}$

Seshatsekhentiu sits on a lion-legged stool (the only one preserved in the long-form group) with a large, elaborate papyrus umbel terminal and a flaring seat cushion protruding behind. Enough of his figure survives to show his hands in the traditional arrangement, right hand extended towards the offering table, left hand grasping the shoulder knot. However, his long, striated wig falling to his shoulder is only one of two preserved examples for the male stela owners, the other being on the Wepemnefret stela (G I2OI). Despite the damage to the offering table, it is clear that the table stand extends all the way up to the table's top, which must have held ten half-loaves, arranged symmetrically five to a side. The linen list shows a complexity not found in other slab stelae. Each linen section is separated by compartments for type plus the word $s z f$, then the mnbt signs, and finally the amounts ( $b_{3}$ ). Four out of five granaries are preserved at the bottom, although the products listed on only three can be read

[^16]with certainty. ${ }^{84}$ At the top of the list, I would reconstruct four $\grave{i d m y}$ falcons, but this number is based solely on proportional estimations.

Tomb Owner and Dependents
No individuals other than Seshatsekhentiu are named in the tomb.

84 Other slab stelae that contain granaries belong to Setjiihekenet (G I227), Meretites (G 4140), Iunu (G 4150), and the anonymous G 486o; see Manuelian, Slab Stelae, passim.

Titles of Seshatsekhentiu ${ }^{85}$
bry t , chief bry-[hb] ..., lector priest

85 Ranke, PNI, p. 320.4-5; vol. 2, p. 389. Could the better reading be Sbnty-(wi)Sšst, "Seshat advances me"? Cf. H.G. Fischer, "Three Old Kingdom Palimpsests in the Louvre," ZÄS 86 (1961), pp. 23, fig. 2, 29 (Shntyw-pth).


Fig. 7.I. G 2120, excavations along the east face, chapel area, looking southwest towards the Khafre pyramid. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, ci669 [= ci1945].


Fig. 7.2. G 2120, east face, looking south towards the Khafre pyramid. March 19, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, A799I.


Fig. 7.3. G 212O, plan.


Fig. 7.4. G 2120, chapel area, looking southwest. March 19, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7992.


Fig. 7.5. G 2120, plan of chapel, drawn by Nicholas Melnikoff, July 16, 1938; redrawn by Ruth Bigio.


Fig. 7.6. G 2120, section A-B of chapel area; redrawn by Ruth Bigio.


Fig. 7.7. G 2120, section C-D of chapel; drawing by Alexander Floroff; redrawn by Ruth Bigio.


Fig. 7.8. G 2120, chapel, looking northwest. March 16, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7953.


Fig. 7.9. G 2120, chapel, looking northwest. November 19, 1993. Peter Der Manuelian, aAwi594.


Fig. 7.IO. G 2I20, chapel and monolithic false door, looking west. March I2, 1993. Peter Der Manuelian, pDM_1993.026.23.


Fig. 7.II. G 2120 A , mouth of the shaft showing the T-shaped porcullis grooves, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, ci34I [= Ci2560].


Fig. 7.I2. G 2120 A , mouth of the shaft showing the T-shaped porcullis grooves, looking west. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, ci667 [= Ci256I].


Fig. 7.I3. G 2 I20 A, excavated shaft and blocking stones at bottom, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B879 [= B7446].


Fig. 7.I4. G 2120 A, alabaster jar (33-I-7), pottery model vessels, and cast of basket (33-I-30) in situ in shaft, looking northwest. January 4, 1933. HU-MFA Expedition photograph, Mohammedani Ibrahim, в8264.


Fig. 7.15. G 2120 A, portcullis slab, looking south. January 5, 1933. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7035.


Fig. 7.16. G 2120 A , reconstruction of sarcophagus from fragments found in shaft.


Fig. 7.17. G 2 I 20 A , plan and section.


Fig. 7.I8. G 2120 A, burial chamber, west wall, casing, looking west. January II, 1933. HU-MFA Expedition photograph, Dahi Ahmed, A7037.


Fig. 7.19. 38-3-1I, two red granite drum fragments from G 2120 A . Left: May I4, 1939. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI434OA. Right: drawing. Compare Reisner, $G N$ I, p. 427, fig. 246.


Fig. 7.20. Pottery and alabaster vessels from G 2120 A. Top row: 33-I-I2 (MFA 33.1i56, model bowl); 33-I-IO (MFA 33.1028, model jar); 33-I-II (one of two bag-shaped jars); 33-I-II (one of two bag-shaped jars); (the final jar in the top row is 33-I-33 = MFA 33.1043, from G 2180=4990). Middle row: [G 2120 A ] 33-I-5 (MFA 33.1025, base fragment); 33-I-I4 (MFA 33.1029, small jar); 33-I-9 (MFA 33.1027, small jar); 33-1-16 (MFA 33.IO31, base fragment); 33-I-I5 (MFA 33.IO30, base fragment). Bottom row: [G 2I2O A] 33-I-6 (MFA 33.1026, fragments of alabaster bowl); 32-12-16 (alabaster model jar); 33-I-3 (MFA 33.1023, alabaster model dish); additional objects from G 2160 and G 2170. March 16, 1933. Dahi Ahmed, HU-MFA Expedition photograph, B8300.


Fig. 7.22. 32-12-19, ceramic tub or bowl from G 2120 A, drawing.

## 0 10 $+\quad \mathrm{cm}$

Fig. 7.23. 33-I-3 (MFA 33.1023), alabaster model basin from

G 2120 A , drawing.


Fig. 7.24. 33-I-5 (MFA 33.IO25), lower part of cylinder jar from G 2 I2O A, drawing.


Fig. 7.25. 33-I-IO, model neckless shoulder jar from G 2120 A , drawing.


Fig. 7.26. 33-I-6 (= MFA 33.IO26), alabaster fragments of two flatbottomed bowls with contracted mouths from G 2I20 A. February 22, 2002. Museum of Fine Arts, SC27879.


Fig. 7.27. 33-I-6a (MFA 33.1026), alabaster flat-bottomed bowl with contracted mouth from G 2 I20 A, drawing.


Fig. 7.28. 33-I-6b (MFA 33.1026), alabaster flat-bottomed bowls with contracted mouth from G 2120 A, drawing.


Fig. 7.29. 33-I-7, alabaster one-handled jug with ringstand from G 2120 A. Left: March 16, 1933. HU-MFA Expedition photograph, Dahi Ahmed, ci3405. Right: drawing.


Fig. 7.30. 33-I-9 (MFA 33.1027), ceramic jar from G 2120 A , drawing.


Fig. 7.32. 33-1-1Ia and b (MFA 33.II55.1, 33.1155.2), two bag-shaped dšrt offering jars from G 2120 A. Left: drawing. Center: 33-I-IIa. May 15, 2008. Peter Der Manuelian, PDM_ imgoo609. Right: 33-I-Irb. May 15, 2008. Peter Der Manuelian, pdm_imgoo620.

Fig. 7.31. 33-1-10 (MFA 33.1028), model neckless shoulder jar from g 2120 A. Top: drawing. Bottom: May 15, 2008. Peter Der Manuelian, PDM_IMGOO593.


Fig. 7.33. 33-I-12 (MFA 33.II56), model basin from G 2120 A , drawing.


Fig. 7.34. 33-I-I3, neck and rim of large jar from G 2120 A , drawing.


Fig. 7.35. 33-1-14
(MFA 33.1029), small round jar with pointed base from G 2 I20 A, Left: May 15, 2008. Peter Der Manuelian, pDM_ imgoo6i2. Right: drawing.


Fig. 7.36. 33-I-15 (MFA 33.1030), base of small jar from G 2120 A . Left: May i5, 2008. Peter Der Manuelian,
pDM_IMGOO597. Right: drawing.



Fig. 7.37. 33-I-I6 (MFA 33.103I), base of small jar from G 2120 A . Left: May 15, 2008. Peter Der Manuelian, pdm_Imgoo6oo. Right: drawing.


Fig. 7.39. 33-1-18 (MFA 33.1033), fragments of large ceramic tub or bowl from g 2120 A. Top left: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, a7065 (detail). Top right: May 15, 2008. Peter Der Manuelian, pdm_imgoo654. Bottom: drawing.


Fig. 7.40. Fragments of ceramic jars and bowls with spouts from G 2120 A. Top row: 33-I-25 (MFA 33.1039, mended section of shoulder jar); number not known (mended section of jar), 33-I-16 (MFA 33.IO3I, base fragment of jar); number not known (two unidentified mended sections of jars); 33-I-19 (MFA 33.1034, base fragment of footed bowl). Bottom row: 33-1-24 (mended, incomplete shoulder jar); 33-I-21 (MFA 33.1036, fragment of spouted bowl); number not known (mended section of jar); 33-1-20 (MFA 33.1035, fragment of spouted bowl); 33-1-22 (MFA 33.1036, mended, incomplete shoulder jar with pot mark). June 15, 1936. Mohammedani Ibrahim, HU-MFA Expedition photograph, B8707.


Fig. 7.41. 33-1-19 (MFA 33.1034), fragments of round offering table(?) from G 2120 A , drawing.


Fig. 7.45. 33-1-23, fragment of large jar from G 2 I20 A, drawing.


Fig. 7.42. 33-I-20 (MFA 33.1035), fragment of bowl with tubular spout from G 2I2O A, drawing.


Fig. 7.46. 33-1-24 (MFA 33.IO38), fragment of large jar from G 2120 A , drawing.


Fig. 7.43. 33-1-21 (MFA 33.1036), fragments of basin with short tubular spout and roll rim from G 2120 A, drawing.



Fig. 7.44. 33-I-22 (MFA 33.1037, fragment of large jar from
G 2120 A , drawing.


Fig. 7.47. 33-I-25 (MFA 33.IO39),
fragment of large jar from G 2 I2O A.
Left: May 15, 2008. Peter Der
Manuelian, pdm_Imgoo605. Right: drawing.


Fig. 7.48. 33-I-26, fragment of large jar from G 2120 A , drawing.


Fig. 7.49. 33-I-27 (MFA 33.1040), fragment of ringstand from G 2120 A. Left: May 15, 2008. Peter Der Manuelian, pDM_IMG00626. Right: drawing.


Fig. 7.50. 33-I-28, fragment of coarse offering jar from G 2120 A , drawing.



Fig. 7.5I. 38-3-16 (left) and 38-3-17 (right), raised relief fragments from northwest corner of G 2120. Top: April 3, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8948. Bottom: drawings.


Fig. 7.52. 33-I-30, plaster basket cast from g 2120 a. Top left: May 15, 2008. Peter Der Manuelian, pdm_imgoo664. Top right: May 15, 2008. Peter Der Manuelian, pDM_IMGOO670. Bottom left: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, C13412 (detail). Bottom right: section drawing.


Fig. 7.53. G 2120, remains of exterior chapel, looking west. The arrow indicates the original location of the slab stela. November 20, 1993. Peter Der Manuelian, PDM_I993.IO4.IO.


Fig. 7.54. G 2120, chapel, section drawing of unfinished monolithic false door.


Fig. 7.55. G 2120, chapel, looking downward (east) from top of mastaba. November 20, 1993. Peter Der Manuelian, pDM_1993.IO4.18.


Fig. 7.56. G 2120, construction square(?) and groove depression in the floor stone just south of the false door in the remains of the exterior chapel, looking south. November 24, 1993. Peter Der Manuelian, pDM_1993.II5.20.


Fig. 7.57. G 2120, exterior chapel, different levels in rooms b, c, d, and e, with a thin layer of plaster applied, looking southwest. April 7, 1938. HUMFA Expedition photograph, Mohammedani Ibrahim, CI4I48.


Fig. 7.59. G 2120, chapel area, empty slab stela emplacement, looking west. March 19, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8956.


Fig. 7.6I. G 2120, graffito on monolithic block from chapel, looking west. December 23, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B9007.


Fig. 7.58. G 2120, remains of exterior chapel, floor of room b on debris section, and lower floor, looking north. April 7, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI4I47.


Fig. 7.60. G 2120, chapel area, empty slab stela emplacement, looking west. November 20, 1993. Peter Der Manuelian, pDM_1993.109.04.


Fig. 7.62. G 2120, graffito inscription (in reversed orientation from previous figure), after Smith, $J N E S_{\text {iI (1952), p. in8, fig. } 6 .}$


Fig. 7.63. G 2120 y , chamber constructed in shaft, looking east. January 7, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI4103.


Fig. 7.65. G 2120 Z, plan and section.


Fig. 7.64. G 2120 y , burial (skeleton) in chamber in shaft, looking northeast. January 14, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8917.


Fig. 7.66. MFA 06.1894 from G 2120, slab stela of Seshatsekhentiu. Colorized drawing showing the four decorative sections.



## Chapter 8 <br> THE TOMB OF KHENTKA:

Mastaba G 2130

Summary of Reisner's Description<br>Mastaba: ${ }^{\text {I }}$ core type II b, solid masonry filling and stepped retaining wall $30.8 \times \mathrm{I} 2.1 \mathrm{~m}$<br>area 372.68 sq. m; proportion $\mathrm{I} / 2.54$<br>average height of stepped courses 27.5 cm<br>average width of steps 5.5 cm<br>core lengthened by addition of masonry on north by 2.85 m before casing, $33.65 \times 12.1 \mathrm{~m}$;<br>area 407.I sq. m; proportion $\mathrm{I} / 2.78$<br>cased with white masonry ( x -masonry), dressed to a smooth sloping surface bonded with interior chapel<br>Final mastaba with subsidiary north niche $36.15 \times 15.1 \mathrm{~m}$ area 545.86 sq. m; proportion I/2.39<br>Chapel: interior chapel type 3 a built-in hole broken in original stepped core and bonded with the casing<br>one false door in south end of east wall $4.5 \times \mathrm{I} .6 \mathrm{~m}$ area 7.2 sq. m; proportion I/2.8I<br>Northern subsidiary false door, cut in casing; top partly destroyed outer niche $0.95 \times 0.3 \mathrm{~m}$; inner niche $0.3 \times 0.3 \mathrm{~m}$ niche floored to height of 0.72 m<br>large block set against it as an offering stone $1.5 \times 0.85 \mathrm{~m}$, widening upwards to fit the slope of the casing

Exterior crude brick chapel: nearly destroyed; apparently consisted of two separate chapels with an open court between them south chapel of type if around doorway to interior chapel north chapel around the subsidiary north niche
South chapel: south wall preserved, 1.3 .8 m long (E-W); th. 0.5 m part of east wall, from SE corner northwards, 12.8 m ; th. $0.5 \mathrm{~m} \mathrm{E}-\mathrm{W}$ w. of interior floor walls 3.2 m ; interior probably divided into three or more rooms entered from north from open court
North chapel: built around north subsidiary niche
north wall preserved $4.8 \mathrm{~m}(\mathrm{E}-\mathrm{W})$; th. 0.5 m
east wall, partly destroyed, ran from NE corner of crude brick chapel to NW corner of G 2150 (l. 12.0 m; th. 0.5 m ) inside was $\mathrm{N}-\mathrm{S}$ dividing wall built later, $1.1 .2+\mathrm{m}(\mathrm{N}-\mathrm{S})$; th. 0.3 m
w. of western room 2.2 m ; w. of eastern room I .8 m
chapel entered from east by doorway, 6.0 m from NE corner of chapel; doorway in destroyed south wall to open court and south chapel
open court contained an intrusive shaft, and the north chapel four other intrusive shafts
Shaft A: ${ }^{2}$ sole shaft, in medial axis, north of middle
$2.6 \times 2.55 \mathrm{~m}$ at top and $2.4 \times 2.35 \mathrm{~m}$ at bottom; -7.0 m in rock

I See Reisner, $G N_{\text {I }}$, pp. 430-33, and figs. I9 (shaft), II2 (chapel), 196 (north false door niche), 247 (section of mastaba), 248 (chapel reliefs), 249a-b (objects); pls. 35e-f, 36a-f, 39a.
2 Illustrated in Reisner, $G N$ I, p. 88, fig. 19, p. 430, fig. 247; and A. Badawy, $A$ History of Egyptian Architecture 1, p. 162, fig. Io6.
lined with drab masonry, 2.95 m , seven courses
portcullis groove in masonry and in rock at south ends of east and west walls
groove on east, $0.47 \times 0.22 \mathrm{~m}$ at top, $0.4 \times 0.25 \mathrm{~m}$ at bottom
western groove, $0.5 \times 0.25 \mathrm{~m}$ at top, $0.4 \times 0.3 \mathrm{~m}$ at bottom
chamber: type $\mathrm{I} \mathrm{al}^{3}$
lined and paved; on south
lined chamber 3.1 x 3.1 m ; h. 2.85 m ; area, 9.6 I sq. m
capacity $27.38 \mathrm{cu} \mathrm{m}^{4}$
rock chamber $4.25 \times 4.25 \mathrm{~m}$; h. 2.9 m area 18.06 sq. m; capacity, $52.37 \mathrm{cu} . \mathrm{m}$
passage: $2.6 \times$ I.I m; h. I. 25 m ; length through lining 3.2 m step from floor of passage to pavement, 0.35 m and to rock, 0.6 m
blocking: type Ib , interior blocking of white masonry set in plaster, preserved to height of 0.5 m
portcullis stone broken up; fragments found in shaft debris
coffin: broken white limestone coffin with flat lid (type d) fragments found in chamber; outside, $2.03 \times 0.8 \mathrm{~m}$ (height not preserved); inside, $1.84 \times 0.5 \mathrm{~m}$
no canopic pit; lining and pavement: both partly removed

## Excavation

The tomb was originally excavated by A.M. Lythgoe during the 19051906 season in Cemetery G 2100, for which no Expedition diaries have survived. One Expedition photograph (fig. 8.17) confirms that shaft A was at least partially cleared under Lythgoe during the 19051906 season, but detailed investigation of the burial chamber did not take place until 1912. Additional photography in the burial chamber even dates as late as December 31, 1932 (fig. 8.21). Four Expedition diaries document this later work on the tomb: those of Clarence Fisher (1912), George Reisner (1912), Noel Wheeler (1932-33), and reis Mohammed Said Ibrahim (1935-36).

January 2I, 23, 1912 (C.S. Fisher diary): only indirect mentions
March S, 1912 (Reisner diary): excavation of shaft A; "pit has been plundered and is now filled with sand as was Nefer pit (G 2110)."

March Io, I912: ("... reached entrance to chamber. Small hole broken in the masonry block. After passing through a layer of boulders bedded in dirt we came on nearly clean sand with only a few stones. It is clear that the pit was found by stone thieves and the upper courses of stone removed. The pit was probably entered in ancient times $\ldots$ as well as by the stone thieves").

March ${ }_{\text {I2-I3 }}$, 1912: The entry for March 12 mentions the completion of the excavation of shaft A. Curiously, Reisner notes that "the walls are cased with black granite and limestone. Ordered chamber cleared."5 The entry for March i3 reads: "Chamber cleared. Stone coffin broken. A few scattered bones. Casing intact except one stone in S.E. corner of pavement. Tombs of this date often had a concealed hole in floor containing a magical head. The next step is to look for this hole." ${ }^{6}$ However, no reserve head was ever discovered here, and work shifted to the exterior of the mastaba.

On March 16, 1912, Reisner directed the Expedition to investigate the northern addition to the mastaba core in a search of additional

3 The contradiction here between chamber type ial ("east-west chamber on south"), and Icl ("nearly square chamber on south") occurs in Reisner, $G N_{\mathrm{I}}$, p. 443 versus Reisner, $G N_{\text {I }}$ p. Io6 respectively.

4 The total of $27.38 \mathrm{cu} . \mathrm{m}$ is based upon the chamber dimensions given; Reisner, $G N$ I, p. 432, lists, apparently incorrectly, $26.42 \mathrm{cu} . \mathrm{m}$, while p. 106 has $2 \mathrm{I} .62 \mathrm{cu} . \mathrm{m}$. 5 Fischer diary, March I2, 19I2, p. 58.
6 Fischer diary, March 12, 1912, pp. 58-59.
burial shafts. While none were found, masons' marks on the northern face of the original core were located.

On March 19, 1912, Reisner noted the discovery of a large monolithic platform in front of the mastaba's northern niche (figs. 8.4-8.5, 8.8), along with an alabaster vessel in the debris and traces of a mud-brick chapel with a limestone bowl set into the floor (fig. 8.6). This chapel was cleared on March 20, 1912. The "surface of decay" (Reisner's term) had been exposed in 1905-1906 under Lythgoe's direction, but the chapel was never excavated. Reisner wrote on March 22, 1912:

The mud brick chapel of G 2130 is interesting. The walls are preserved to a height of $50-100 \mathrm{~cm}$. At x [fig 8.6] treasure hunters have broken through the stone masonry and gone on down into the rock. They have also broken a hole in the floor of the chapel [fig 8.II] which shows a double stone floor with a space ca. 30 cm between. ${ }^{7}$

The area was apparently left alone until 1932, when N.F. Wheeler supervised the fieldwork. On December 29, 1932, the focus again turned to the burial chamber of shaft A. Wheeler describes the fine quality of the chamber thus:

Whole chamber and passage lined with very smooth casing of fine white limestone, the only part missing being a small break in the floor. The room and pit are very accurately cut. Fragments of the sarcophagus and lid remain in the chamber, being of fine white limestone and plain with flat recessed lid. Found in pit debris: two flint knife fragments; part of a large mud sealing with parts of several impressions-one of a Horus name; fragments of alabaster. ${ }^{8}$

Sarcophagus fragments were removed on January I, 1933. Work continued in December of 1935, when the reis described the examination of the northern addition to the mastaba core. Only drift sand, limestone debris, and pebbles were revealed, with the exception of a large, irregular block with masons' marks $b$ and $n b$, discovered on December 30, 1935.

In January, 1936, the Expedition examined the area immediately north of the mastaba's northern addition. No additional tombs or shafts were discovered here, but on January iI, 1936, the area by the northeast corner of the mastaba revealed shafts $\mathrm{U}, \mathrm{v}, \mathrm{w}$, and z . On January I2, 1936, the subsidiary mastaba G 2133 came to light, along with a decayed architrave of Neferherenptah (see G 2133; sketch in reis's diary, January 12, 1936, p. 226). The diary entries for January I2-13, 1936 describe the clearance of shafts $\mathrm{U}, \mathrm{v}, \mathrm{w}, \mathrm{y}$, and z . The final diary entry for this mastaba was on April 9, 1936, when the top of the mastaba, between shaft a and the chapel, was examined one final time.

In 1993, the chapel floor inside the entrance was cleared in an effort to determine which way the chapel door originally swung open. On the south side, the white limestone floor was reached. On the north side was mostly loose debris, but some stone was protruding on the west side of the hole. Perhaps this corresponds to the original excavation photograph and diary entry quoted above, which seems to reveal a large section of the flooring stone missing here (figs. 8.II, 8.I3). One might logically expect the door to swing open to the north; if this were the case, the floor stone showing the

[^17]door socket hole is indeed missing. No features suggesting a door socket hole were located on the south side of the chapel entrance.

## Finds

Objects: found in debris of shaft of G 2130 A:
32-12-4 (shipped to Boston May 1933): flint razor with rounded ends; l. 7.9 cm ; w. 2.4 cm ; th. 0.5 cm (figs. 8.23, 8.25) ${ }^{9}$

32-12-5 (shipped to Boston May 1933): flint rectangular razor; 1.6 .5 cm ; w 2.7 cm ; th. 0.9 cm (figs. $8.24-8.25)^{\mathrm{IO}}$
32-12-6 (shipped to Boston May 1933): fine mud fragments of jar stopper with remains of four impressions of a cylinder seal containing a Horus frame; the name ends with $\ldots w$, restored by Reisner as $H_{r}$ $M \underline{d} d w$ (Khufu) (fig. 8.26) ${ }^{\text {II }}$
35-12-50 (shipped to Boston after April 26, 1937): large limestone block with red mason's marks; from G 2130 annex, casing; h. 65 cm ; w. 50 cm ; th. 27 cm (fig. 8.27)

36-I-5: fragment of architrave of Neferherenptah, ${ }^{12}$ from east of G 2I30; h. 29 cm ; w. 94 cm ; found in front of stela of G 2130 but belonging to a small mastaba east of it, most likely either G 2131 or G 2133 (fig. 8.28):


Text: (I) htp [di nswt] htp (dí) Inpw [nb t] dsr krs[t? m?] smyt [imntt] ${ }_{i 3} w[\ldots]$ (2) $[\ldots p r t ?] n=f[b r w] m$ wp rnpt tpy rnpt dhwtt wsg $h b$ (3) $^{(3)}[n b$ rr nb?] n sbsty nswt (4) [...] Nfr-br-n-pth (5) [trs.]
Translation: (I) A gift which the [king gives], and a gift which Anubis, [lord of the] necropolis, (gives) [consisting of] a burial [in] the western desert, having reached a [great?] old age [...]. (2) [...] May [invocation offerings be made] for him on the new year's festival, ${ }^{13}$ the first of the year festival, the festival of Thoth, the wag-festival and [every?] festival (3) [every day?], for the royal instructor (4) [...] Neferherenptah. (5) [trs.]

## Architecture

G 2130 may have belonged to one of the most important occupants in Cemetery g 2100, for this mastaba shows a number of features absent from other tombs. Most striking is the fact that the mastaba core is the only one to show cut stone blocks (Reisner's type II b), instead of merely debris filling (type II a). There is even evidence for roofing stones on G 2130 , towards the northern end. ${ }^{14}$ This represents

9 Reisner, $G N$ I, p. 432, fig. 249b.
Io Reisner, $G N$ I, p. 432, fig. 249b.
II Reisner and Smith, GN 2, p. 50 and fig. 48: "...jar sealing ... with impression of rim of jar. In Fig. 48 [= fig. 8.26 here] it is possible to give a somewhat better facsimile than was first presented in [Giza Necropolis] Vol. I, fig. 249a, but without being able to suggest the meaning of the signs outside the Horus frame. Only the $w$ of the Horus name of Cheops, $H r-m d d w$ is preserved. The tomb is one of the early mastabas. All its features, including the very fine low reliefs in the chapel, point to a Dynasty IV date. The Horus name of Cheops is the only one ending in $w$ in Dynasty IV. The rather complicated paneling of the base of the Horus frame seems to be characteristic of the earlier seals, resembling the Hetep-heres example rather than the later, more simple form...."
I2 Note that there is a Neferherenptah who appears on the south face of the mastaba of Kanefer (G 2150), just to the east of G 2130; see fig. 12.7I.
13 On the subject of feast lists, see Spalinger, The Private Feast Lists of Ancient Egypt.
I4 The presence of roofing stones would put the tomb in the company of Merib (g 2100-I), Kaninisut I (G 2155), Kasewedja (G 5340), and tombs in Cemetery g 6000. I am grateful to D. Faltings for this observation (personal communication, 1993).
a major expense in time and labor. Moreover, an interior stone chapel was later broken into the mastaba core, and an extension appended onto the northern end of the mastaba, presumably to provide for an additional burial shaft (which was never cut). The mastaba was cased with fine white Tura limestone blocks, and was fitted with an interior stone chapel. Despite the extremely fragmentary nature of the decoration, it is certainly carved in the finest low relief, typical of Khufu's reign.

The tomb is clearly one of the earliest of the cemetery, as it is constructed in the older, western half, and contains one of the five T-shaped burial shafts intended to house the portcullis stone at its southern end. It also contains a lined burial chamber, although no canopic depression is preserved in the southeast corner. The massive size of the shaft's mouth is paralleled by its counterpart in G 2I2O, but where that tomb contained an equally massive burial chamber, the chamber in G 2130 is one of the smallest, typical of smaller mastabas in Cemeteries G I200 and G 4000. ${ }^{15}$

The excellent quality of the limestone casing is best preserved on the west side of the tomb, opposite the chapel of Nefer (G 2IIO). Here it extends several meters high. More importantly the back of a casing stone on the west face preserves a graffito inscription $m p t$-sp $4(?), 3 b d \ldots$, , "year $4(?)$, month..." (fig. 8.32). ${ }^{16}$ While this graffito occurs on the casing, rather than on the interior core of the mastaba, and thus could relate more to its quarry of origin than to G 2130 , it is nevertheless most often associated with the 7th/8th years of Khufu's reign.

Viewed from the northwest corner, looking southeast, the mastaba reveals clearly the exterior casing, then the core blocks of the northern extension above it and set back (fig. 8.3). Above these and set further back are the core blocks of the mastaba's original northern edge. Very little of the fine white casing survives on the east side of the tomb, one or two courses at best. Even the top half of the northern niche is gone. The large blocks forming the interior chapel walls show perhaps the whitest color in all of Cemetery g 2100 in their deteriorated areas. Robbers gouged through the chapel's false door in search of a serdab; this hole appears on the original excavation photos (figs. 8.29-8.30, 8.48-8.49).

Just north of the chapel is a reused or patch stone that shows a wide, rectangular depression. The proportions appear all wrong for a slab stela emplacement, and yet there is plaster/mortar in the joins. Plaster sealing appeared all over the blocks of these courses as well, so the presence of the plaster alone means little. The dimensions of the "emplacement" stone are 19.5 high x 47.5 cm wide. ${ }^{17}$

I5 See Jánosi, Giza in der 4. Dynastie, p. 154.
16 This inscription was published by Smith, "Inscriptional Evidence for the History of the Fourth Dynasty," JNES II (1952), p. II8, fig. 6, translated on p. I27[4]; cf. Spalinger, "Dated Texts of the Old Kingdom," SAK2I (1994), pp. 283-84. See Reisner, $G N_{\text {I }}$, p. 432, fig. 249a, improved in Reisner and Smith, $G N_{2}$, p. 50, fig. 48, and Jánosi, Giza in der 4. Dynastie, p. 44I, table C2, with n. l.
17 For more on this unusual stone, see Manuelian, Slab Stelae, pp. 168-69, figs. 252-55 (note that it is marked on HU-BMFA Expedition pencil sketch plan EGOIOOI8 as if it were a slab stela (available on www.gizapyramids.org). Another stone, this time on the north exterior face of the mastaba's northern extension, is clearly a patch stone (Flickstein; fig. 8.3, and on www.gizapyramids.org see images AAW256, PDM_1993.054.IO, PDM_1993.055.09, and PDM_1993.055.10).

## Shafts and Burials

G 2130 U (fig. 8.35)
Articulated but somewhat disarrayed remains. Lying on left side, knees flexed. Visible elements include cranium, vertebrae, ribs, clavicles, right humerus, probably right ulna and radius, probable left ulna and radius, in shadow are pelvis, femur, tibia, etc. Probable adult, sex unknown. No tomb card sketch.

G 2130 v (fig. 8.38)
Disarrayed incomplete skeleton. Original orientation unknown. Visible elements include cranium and disarticulated mandible, ribs, vertebrae, right and left femora (right femur is beside cranium), pile of foot bones, articulated tibia and fibula, and os coxae slightly exposed under fabric(?). Adult, sex unknown. No tomb card sketch.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. i: early reign of Khufu (core); late reign of Khufu (mastaba). ${ }^{18}$

A number of factors place this tomb squarely within the reign of Khufu: the location of the core in the western (earlier) half of Cemetery g 2IOO; the seal impression with the possible occurrence of Khufu's Horus name, the casing stone graffito with the "fourth occasion of counting," the T-shaped portcullis grooves on the burial shaft, the lined burial chamber, and the fine, low-relief style of the (badly destroyed) chapel decoration. Jánosi notes that the relief style bears comparison with that of Hemiunu (G 4000), Ankh-haf (G7510), and G7650, ${ }^{19}$ but these tombs themselves are arguably datable to the reigns of Khufu or Khafre. It appears that the original construction and alterations (and occupation) all could have occurred within the reign of Khufu.

## Decoration

Reisner first suggested the reconstruction of the tomb owner's name as Khentka based on two fragmentary inscriptions on the chapel's west wall. The false door drum preserves two signs forming but (figs. 8.48-8.50) and the curving horizontal above the standing figure on the right (north) false doorjamb (figs. 8.50-8.52) resembles part of the upraised arms of the $\cup k 3$ sign. Baud has noted some of the possible spelling variations for $\mathrm{H} n t-k_{3} .{ }^{20}$

No decoration appears on the northern niche, at the north end of the east wall. But the chapel proper takes a typical Dynasty 4 form, with the entrance door towards the northern end of the chapel, and a single false door niche in the west wall at the southern end. ${ }^{2 \mathrm{I}}$ The

I8 Compare PM III, p. 74: probably Khufu; Baud, Famille royale et pouvoir I, p. 4I, 2, p. 557 [192]: end of Khufu-beginning of Khafre; Harpur, Decoration in Egyptian Tombs, p. 269 [194]: Khufu; Jánosi, Giza in der 4. Dynastie, p. 221: decoration of chapel not earlier than Khafre (or Djedefre); Kanawati, Egyptian Administration, pp. II3-I4 [257]: Khufu.
19 Jánosi, Giza in der 4. Dynastie, p. 221.
20 Baud, Famille royale et pouvoir 2, p. 557, illustration. In addition, a fragmentary false door tablet from east of G 2180 (= G 4990), MFA I2.1520, belongs to a \T hm k3 Hnt-k3; see image віо9о on www.gizapyramids.org.
21 Reisner, $G N$ I, p. 431, fig. 248, and pl. 36a-d. Smith relates the low-relief style of this chapel to both the slab stelae and several other tomb chapels: G 4000 (Hemiunu, reign of Khufu), and G 7510 (Ankh-haf), and G 7650 (Akhethetep and Meretites), which he dates to the reign of Khafre: Smith, HESPOK, pp. 160, 36I, including several royal fragments. The chapel's decoration is also discussed by El-Metwally, Entwicklung der Grabdekoration, pp. I18-19 (\$5.3.2.2), and Jänosi, Giza in der 4. Dynastie, p. 22I.
only departures from this standard layout involve two false doors on the west wall (G 2100-I, G 2150, G 2155, G 2220), or a door in the southern end of the chapel's east wall and a false door at the northern end of the west wall (G21IO).

Entrance (Architrave, Drum, etc.). All traces of an entrance architrave, or any facade inscriptions are destroyed.

South Entrance Thickness (fig. 8.43). Scant remains of low raisedrelief carving survive in situ above the base line. The tomb owner was seated at a table, facing eastwards out of the chapel. All that is preserved are the legs of his chair, his feet, and the head of a goose.

North Entrance Thickness. No trace of the decorated surface is preserved.

East Wall (figs. 8.44-8.47). All that survives is the bottom of the lowest register, showing men escorting livestock to the right (south) in a presentation scene with a large-scale figure of the tomb owner (missing), presumably on the right, facing out to the left (north).

South Wall. No trace of the decorated surface is preserved.
North Wall. No trace of the decorated surface is preserved.
West Wall (figs. 8.48-8.54). The false door at south end of west wall preserves low raised-relief carving on the drum, the right (north) thickness, and the north jamb. The drum shows merely the beginnings of three columns of inscription separated by vertical lines in relief (figs. 8.48-8.50).


Text: (I) ss nswt [n $\underline{b} t=f ?$ ? (2) smr [w‘ty?] (3) Hnt-[ks?]
Translation: (I) King's son [of his body?], (2) [sole?] companion, (3) Khent[ka?]

The central portion of the false door niche is punctured by a hole made by thieves who were most likely searching for a serdab (figs. 8.48-8.50). Reisner suggests the parallel tablet scene from the
chapel of Hordjedef ( G 7220 ) as a possible reconstruction for the missing decoration. ${ }^{22}$

The south jamb of the false door is destroyed. On the north jamb stands a man with a staff and sekhem scepter, facing inwards to the left (figs. 8.50-8.52). The scepter passes behind his body. Above the figure, Reisner suggested the following restoration, ${ }^{23}$ which would probably fit the available space:


Text: ( (1) [ss nswtn $\underline{h} t=f] m r(y)=f(2)[H n t]-k z(?)$
Translation: (I) [King's son of his body], whom he loves, (2) [Khent]ka

The thicknesses outside the jambs were also decorated. The south side is destroyed, but on the north side is the lower part of a standing female figure in a long garment, who faces inwards to the left (south; figs. 8.53-8.54). Her caption is destroyed, with only two possible hieroglyphs in evidence: the bread loaf $\circ t$ (visible to Reisner but gone today) and the city sign determinative $\geqslant$. The scene probably contained as many as three superimposed registers of personified estates.

## Tomb Owner and Dependents

Titles of Khentka ${ }^{24}$
$m r(y)=f$, whom he loves
$s 3$ nswt [ $n \underline{b} t=f$ ?], king's son [of his body?]
$\operatorname{smr}$ [ $\left.w w^{r t y} y^{2}\right]$, sole companion
Other People
Nfr-hr-n-pth (architrave fragment east of G 2130; 36-I-5), Neferherenptah sbsty nswt, royal instructor

22 See HU-MFA Expedition Photograph A5278_NS.
23 Reisner, $G N_{\text {I }}$, p. 432,
24 Ranke, $P N_{\text {I }}$, p. 273.6


Fig. 8.I. G 2130, southeast corner, with G 2120 in foreground left, looking northwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B722 [= B7456].


Fig. 8.2. G 2130, southwest corner, with the street between G 2100, to the west (left), and G 2130 and G 2120 to the east (right), looking northeast from the top of G 2100. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в720 [= B7350].


Fig. 8.3. G 2130, north face, looking south (with loose patch stone midway between the meter stick and the northwest corner at right). November $20,1993$. Peter Der Manuelian, digital montage of PDM_1993.IO4.23 and PDM_1993.IO4.24.


Fig. 8.4. G 2130, north niche, looking west. November 2I, 1993. Peter Der Manuelian, pdm_1993.107.Io.


Fig. 8.5. G 2130, north niche, plan.


Fig. 8.6. G 2130, plan ( $x=$ location described in Expedition Diary, vol. 3, p. 72, March 22, 1912.).


Fig. 8.7. G 2130, chapel area, looking west. November 2I, 1993. Peter Der Manuelian, pDM_1993.107.03.


Fig. 8.8. G 2130, northeast corner and north niche, looking southwest. March I2, 1993. Peter Der Manuelian, pdm_1993.026.I4.


Fig. 8.9. G 2130, section west-east, looking north.


Fig. 8.10. G 2130, chapel area, looking southwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, c943 [= CI2593].


Fig. 8.iI. G 2130, north half of chapel, looking north. 1905-1906. HUMFA Expedition photograph, A.M. Lythgoe, c860 [= CI2594].


Fig. 8.I2. G 2130, chapel area, from on top of the mastaba, looking east. November 3, 1993. Peter Der Manuelian, pdm_1993.053.20.


Fig. 8.13. G 2130, chapel, interior door socket area, with lower door socket hole on the south side, looking east. November 27, 1993. Peter Der Manuelian, PDM_1993.II9.Io.


Fig. 8.I4. G 2130 A, mouth of shaft, looking west. November 3, 1993. Peter Der Manuelian, PDM_1993.053.23.


Fig. 8.15. G 2130 A , mouth of shaft, looking down, west. November 3, 1993. Peter Der Manuelian, pdm_1993.053.25.


Fig. 8.16. G 2130 A, mouth of the shaft, looking south. November 3, 1993. Peter Der Manuelian, pDM_1993.053.21.


Fig. 8.I7. G 2130 A , mouth of shaft, looking down, northeast. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, ci282 [= CI2676].


Fig. 8.18. G 2130 A , hard stone (black granite and limestone) casing, east wall, looking east. March 16, 1912. HU-MFA Expedition photograph, Mohammedani Ibrahim, A653.


Fig. 8.19. G 2130 A , burial chamber, hard stone (black granite and limestone) casing, south wall, looking southwest. March 17, 1912. HU-MFA Expedition photograph, Mohammedani Ibrahim, A654.


Section


Fig. 8.20. G 2130 A , plan and section.


Fig. 8.21. G 2130 A , burial chamber, broken sarcophagus, looking southwest. December 31, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7029.


Fig. 8.22. G 2130 A , burial chamber, reconstruction of broken sarcophagus.


Fig. 8.24. 32-I2-5, flint razor from G 2130 A. March I6, 1933. HU-MFA
Fig. 8.23. 32-12-4, flint razor from G 2130 A. March 16, 1933. HU-MFA Expedition photographs, Dahi Ahmed, a7063-A7064. Expedition photographs, Dahi Ahmed, B8303-B8304.


Fig. 8.26. 32-I2-6, mud seal from g 2130 A . Top left: HU-MFA Expedition photographs, Dahi Ahmed, b83ir (April io, 1933), and B8312 (March 29, 1933). Top right: May 15, 2008. Peter Der Manuelian, pdm_imgoo643. Bottom: drawing.


Fig. 8.27. 35-12-50, fragment of limestone block with red mason's mark from G 2130, annex, casing. Left: February 8, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, C13664. Right: May 18, 2006. Museum of Fine Arts, sci71092.


Fig. 8.28. 36-I-5, limestone architrave of Neferherenptah with sunk-relief inscription, from east of g 2130. Top: March 14, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7532. Bottom: uncollated drawing.


Fig. 8.29. G 2130, general view of chapel, looking west. March I2, 1993. Peter Der Manuelian, pDM_1993.026.16.


Fig. 8.30. G 2130, chapel, false door, looking northwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, CI479 [= C12597].


Fig. 8.31. G 2130, chapel, south wall, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, CI265 [= CI2595].


Fig. 8.32. G 2130, date graffito from a casing stone; after Smith, JNES ${ }_{\text {II }}$ (1952), p. i18, fig. 6.


Fig. 8.33. G 2130 U, upper chamber, looking west. September 16, 1913. HU-MFA Expedition photograph, Mohammedani Ibrahim, C5220.


Fig. 8.34. G 2130 U, door blocking, looking south. September I7, 1913. HU-MFA Expedition photograph, Mohammedani Ibrahim, C5242.


Fig. 8.35. G 2130 U, burial, looking south. September 17, 1913. HU-MFA Expedition photograph, Mohammedani Ibrahim, C5251.


Fig. 8.36. G 2130 v , door blocking, looking northeast. March 23, 1912. HU-MFA Expedition photograph, Mohammedani Ibrahim, C4833P.


Fig. 8.37. G 2130 v , entrance to burial chamber, looking northeast. March 23, 1912. HU-MFA Expedition photograph, Mohammedani Ibrahim, C4834.


Fig. 8.38. G 2130 v, burial, looking east. September 16, 1913. HU-MFA Expedition photograph, Mohammedani Ibrahim, c5226.


Fig. 8.39. G 2130 U, plan and section.


Fig. 8.4I. G 2130, chapel, south entrance thickness, looking south. November 3, 1993. Peter Der Manuelian, pdm_1993.053.18.


Fig. 8.40. G 2130 v , plan and section.


Fig. 8.43. G 2130, drawing of south entrance thickness.

Fig. 8.42. G 2130, chapel, south entrance thickness, looking south. November 3, 1993. Peter Der Manuelian, pdm_1993.053.12.


Fig. 8.44. G 2130, chapel, east wall, looking east. November 3, 1993. Peter Der Manuelian, pDM_1993.056.20.


Fig. 8.45. G 2130, chapel, overview drawing of east wall.


Fig. 8.46. G 2130, chapel, east wall, looking east. November 3, 1993. Peter Der Manuelian, digital montage of pdm_1993.056.17, pdm_1993.056.18, and PDM_1993.056.19.



Fig. 8.48. G 2130, chapel, preserved decoration on false door lintel, looking west. March 25, 1931. HU-MFA Expedition photograph, Mohammedani Ibrahim, B7828.


Fig. 8.49. G 2130, chapel, preserved decoration on false door lintel, looking west. November 3, 1993. Peter Der Manuelian, pDM_1993.053.IO.


Fig. 8.50. G 2130, chapel, drawing of false door.


Fig. 8.5r. G 2130, chapel, false door, north jamb, looking west. January 14, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8918.


Fig. 8.53. G 2130, chapel, thickness of outer niche of false door, looking north. November 3, 1993. Peter Der Manuelian, pDM_1993.053.05.


Fig. 8.52. G 2130, chapel, false door, north jamb, looking west. November 3, 1993. Peter Der Manuelian, pdm_1993.053.04.


Fig. 8.54. G 2130, chapel, drawing of thickness of outer niche of false door.


Fig. 8.56. G 2130 x, plan and section.

## Chapter 9 <br> ANONYMOUS TOMB:

Mastaba g 22IO

## Summary of Reisner's Description

Mastaba: ${ }^{1}$ core type II a with retaining walls of stepped drab masonry 26.35 x II. 75 m ; area 309.6 I sq. m; prop i/2.24; h. 5.15 m average height of stepped courses 28.3 cm average width of steps 5.2 cm
Enlarged by addition of massive corework of type IV-iii on east and north $34.5 \times 17.4 \mathrm{~m}$; area, 600.3 sq. m; proportion I/土. 97
Chapel: either unfinished or destroyed; chapel recess in enlarged corework, $6.0 \times 4.0 \mathrm{~m}$; intended for interior chapel, probably of type (3 a) but possibly of type (4 a); probably intended to case enlarged core with white limestone and the chapel of same material bonded in construction
five small fragments in relief, of white limestone, found in debris around the chapel recess [see figs. 9.9-9.II, 32-9-2 to 32-9-6], but of doubtful origin ${ }^{2}$
Shaft G 22IO A: one shaft in old core north of middle, in position of shaft in one-shaft mastaba; $1.95 \times 2.15 \mathrm{~m} ;-21.65 \mathrm{~m}$ in rock
lined above with masonry/drab masonry, 5.15 m ; sixteen courses portcullis grooves in masonry and 9.6 m in rock to just
below upper chamber; groove on east $0.43 \times 0.35 \mathrm{~m}$ groove on west, $0.46 \times 0.38 \mathrm{~m}$; two chambers
chamber ( I ): at 7.85 m in rock; type $3 \mathrm{ar} ;^{3}$ on south; unfinished $4.4 \times 4.9 \mathrm{~m}, \mathrm{~h} . \mathrm{I} .85 \mathrm{~m}$; area, $2 \mathrm{I} .56 \mathrm{sq} . \mathrm{m}$ capacity, $39.88 \mathrm{cu} . \mathrm{m}$
passage: $\mathrm{I} .75 \times 0.8 \mathrm{~m}$; h. 1.15 m ; portcullis grooves end 0.8 m below floor of passage; open and empty; perhaps unused
chamber (2): at bottom of shaft; type $\mathrm{I} \mathrm{bl}, 4$ lined but not paved lined chamber, $4.25 \times 3.8 \mathrm{~m}$; h. 3.3 m ; area, 16.5 sq. m capacity, $53.29 \mathrm{cu} . \mathrm{m}^{5}$
passage: $2.0 \times 1.15 \mathrm{~m}$; h. I.I m; length through lining to

I See Reisner, $G N$ I, pp. 433-35, Map 5, figs. 72 (window), 250 (section of chapel), 251 (relief fragments), 252 (shaft), 253 (pot marks), pls. 37a-d,
2 Reproduced in Reisner, $G N_{\text {I }}$, p. 433, fig. 25I, and figs. 9.9-9.II here.
3 Reisner's type 3 ar: large, unlined chamber, always south of the shaft, entered by a long connecting passage at or near the east end of the north wall of the chamber; "a" stands for E-W chamber on the south, and "r" stands for opening at roof level with a deep drop from the floor of the passage to the floor of the chamber.
4 Reisner's type i bl: large, lined chamber, always south of the shaft, entered by a long connecting passage at or near the east end of the north wall of the chamber; chamber lined and paved with fine white limestone dressed smooth, but not roofed; "b" stands for $\mathrm{N}-\mathrm{S}$ chamber on the south, and "l" for opening low down in the north wall with a small step down from the floor of the passage to the floor of the chamber, and a high rise to the roof of the chamber. In $G N$ I, p. 106, Reisner lists this burial chamber in two different charts, once correctly calling type a bl, and once incorrectly tye Ibf (" f " indicating a passage opening at floor level),
5 Curiously, Reisner, $G N$ I, p. 433, lists additional measurements for this chamber: "chamber in rock, $4.95 \times 4.5 \mathrm{~m}$ and 3.3 m high; area, 22.27 sq. m; capacity, $73.49 \mathrm{cu} . \mathrm{m}$." The typewritten manuscript for $G N$ I also contains both sets of measurements.
inside lining, 2.4 m ; step down from floor of passage to rock floor of chamber 0.35 m
blocking: type II b(I); remains of masonry in passage penetrated by thieves
lining and pavement: the walls were in course of lining with white masonry but lining was left unfinished: lining of II courses designed, but 9 were built on south, IO on west, 7 courses and one block of eighth course in north wall, and 9 courses ( 5 complete and 4 nearly complete) in east wall
pavement was never constructed
"window:" construction window between south wall of shaft and north wall of rock cut chamber; near roof
$2.0 \times 0.9-0.7 \mathrm{~m}$; h. $0.85-0.65 \mathrm{~m}$; blocked with masonry; blocking of both door and window had been penetrated and the burial plundered but the chamber had not been stripped of its lining
coffin: fragments of decayed wood probably from coffin were scattered over the floor; mixed with scattered human bones

## Excavation

This tomb was not excavated by Lythgoe during the 1905-1906 season in Cemetery g 2100. This accounts in part for the number later assigned to the tomb in the 2200s, even though it clearly belongs, as Reisner later noted (see below), with the initial group of nucleus Cemetery g 2100 mastabas. Complete excavations around the perimeter of the mastaba core were never finished, and the map of the cemetery published in $G N_{\text {I ( }}$ (fig. 2.5) marks the streets both east and west of the mastaba as "unexcavated." ${ }^{6}$ Preliminary manuscripts for Appendix c in $G N_{\mathrm{I}}$ list the earliest work on G 22 IO as dating to January 18-April 2, 1912. However, no diary entries specfically mention the tomb until Reisner's entry of March 30, 1912: "Began work on face of 2210 . Gang now at work here, sixty-four men exclusive of guards and servants and photographic boys." ${ }^{7}$ But no Expedition photography of the tomb predates 1932. On April 2, 1912, Reisner noted, "The chamber of 2210 has been completely removed-to judge by the hardness of the drift sand-not in recent times." ${ }^{8}$ Reisner goes on to mention that "north of the chamber is a mastaba with a stela of wrb nswt $R \subset-w r$," 9 but no further information is at present available concerning this stela.

The next preserved diary entry to mention the tomb was penned by N.F. Wheeler on April 27, 1932, at which point the Expedition began clearing the north face of the mastaba for survey purposes. This clearance continued until May I, 1932, when work focused on clearing shaft A. Continuing each day, the Expedition eventually reached a first burial chamber on the south side of the shaft on May 16. ${ }^{10}$ Clearance of this chamber continued each day until June 5 ; it was measured and drawn by Hansmartin Handrick on June 20, 1932, so that debris from the continuing excavation of the shaft could be stored there. The Expedition continued clearing the shaft through June and into July 1932. Two blocking stones were found on July 23, 1932, in a window at a depth of 24.70 m (fig. 9.24).

6 Reisner's diary entries for April 2-3, 19I2, that describe work "between G 2210 and G 2220," must be referring solely to the area in front (east) of the chapel of G 2210 .
7 Reisner diary, March 28, 1912, p. 76.
8 Reisner diary, April 2, 19I2, p. 8I.
9 Ibid.
Io On Friday, May 6, the diary switches to the hand of Hansmartin Handrick until his departure for Germany on August 19, 1932.

The pit continued downward until the bottom was reached on August 4, 1932. Two rows of door blocking stones were found "but not in original position. Three of four stones bore one quarry mark each in black and one with one red and one black mark." ${ }^{\text {II }}$

The longest entry—August I2, 1932—for the burial chamber is initialed by both Handrick and Wheeler, but is written in Handrick's hand:

G 2210 a . After H. Handrick has drawn the second row of doorblocking stones, they are removed and two found to be with quarry marks also, i.e., the eastern one of the bottom layer with one black and the western one with two (red and black) quarry marks. After that the burial chamber is open. The debris of the door blocking, mud, smaller stones and chips of white limestone have partly fallen into the burial chamber, forming a small heap near the door. The ground of the chamber itself is covered with a layer of chips and white limestone dust, on top of which are lying the bones of one disturbed skeleton in the southwest corner, a few fragments of decayed wood around it and on top of the heap of debris inside the door. Potsherds and bits of straw, rope and other organic matter are scattered over the floor. Besides that are two square limestone blocks, either from the door blocking or from the casing, in the southeast corner, the southern one with a quarry mark on the upper side, both lying on bigger limestone chips. And several brown round flint stones.
All four walls have an unfinished casing of white limestone, south and west wall as high as one (west) or two (south) layers under the ceiling, north and east wall to be completed around the door from the fourth (east) and fifth (north) layer from the floor. Two stones of the ninth layer of the west wall have quarry marks ... and two of the second of the north wall in red [figs. 9.28, 9.37].
Cleared small passage along the east wall down to floor of the chamber, which is natural rock. The debris of white limestone chips is about $8-15 \mathrm{~cm}$ deep. Photograph taken from over the door looking south .... ${ }^{\text {I2 }}$

The final entry for 1932 came on August 15, when the floor of the burial chamber was cleared.

The reis's diary contains several entries for g 2210. On April 28, 1935, the search commenced for the corners of the mastaba. The northwest and southeast corners (figs. 9.1, 9.3, 9.16) were exposed. The northeast corner proved harder to locate, and was not reached until May 6, 1935. The southwest corner (fig. 9.3) was exposed on May 8-9, 1935. Excavations in the chapel on May 31 and June 3, 1935 produced no inscribed material.

Final confirmation that G 22IO really did belong to Cemetery G 2 IOO did not come until the winter of 1935. Reisner himself mentions the tomb in a $B M F A$ aticle published later that year:

In another case, G 2210, a small gang examining the interior of the mastaba found that it contained a core mastaba of the type built by Cheops and that this core was a part of the Cheops Cemetery G 2100 . Thus the rather puzzling combination of type forms was cleared up and the chronological problem presented by that mastaba completely elucidated. ${ }^{13}$

The final diary entry comes on May I, 1938, when shafts x and y at the southwest corner of the mastaba were cleared (figs. 9.6, 9.49-9.50).

II Handrick diary, August 6, 1932, p. II86.
I2 Handrick/Wheeler diary, August I2, 1932, pp. I187-88.
13 Reisner, "Report on the Egyptian Expedition during 1934-35," BMFA 33, no. 199 (October 1935), p. 72.

## Finds

32-9-r: upper part of roughly inscribed sunk relief limestone stela(?) fragment with both vertical and horizontal lines of inscription, and head of a figure in the center; h. 14 cm ; w. 35.8 cm ; th. 15 cm (fig. 9.8)


Text: (1) iry [p]st haty-r hm-ntr [...] (2) $m$ [...] $n b[\ldots] m[\ldots] \times n b-p 3-$ brd(?) (3) iry prt busty-r hm-ntr [...] (4) $m-r[\ldots]$
Translation: (I) hereditary nobleman and count, priest of [...], (2) [...] Ankhpakhered(?) [...] (3) hereditary nobleman and count, priest of [...] (4) in/with [...]

32-9-2: fragment of deep sunk limestone relief with horizontal lines and possible htp sign(?) (present location uncertain); h. 12 cm ; w. 18 cm ; th. 5 cm (fig. 9.9)

32-9-3: fragment of limestone relief; h. 3.8 cm ; w. 19 cm ; th. II cm (fig. 9.9) 32-9-4: fragment of limestone relief showing cord or belt loop(?) (present location uncertain); h. 12 cm ; w. 18 cm ; th. 4.6 cm (fig. 9.9)
MFA 32-9-5: fragment of limestone raised relief with curving diamond pattern; h. I2.6; w. 14.4 cm ; th. 5.2 cm (fig. 9.9-9.Io)
MFA 32-9-6: fragment of limestone raised relief with feather or wing pattern; h. 5.6 cm ; w. 9.4 cm ; th. I. 9 cm (fig. 9.9, 9.II)
32-9-7: fragment of limestone sunk relief part of a text column showing three hieroglyphs, $\varnothing$, $\omega$, and seated or standing man (present location not certain); h. 9 cm ; w. 13 cm ; th. 6 cm (fig. 9.12)
32-9-8: base fragment of alabaster jar (present location not certain); h. $5-1 \mathrm{~cm}$; w. at top: $8+/-\mathrm{cm}$; diam. at base 10.8 cm (fig. 9.13)

32-9-9: fragment of head of Old Kingdom limestone statue, right half, left quarter; top and face missing (present location not certain); h. IO cm; w. 5.6 cm ; th. 8.8 cm (fig. 9.I4)

Objects: found on floor of chamber of shaft A :
32-10-I: RP bowl with recurved rim, round bottom, type C-XXXII a; h. $6.0 \mathrm{~cm} ;$ d. $22 \mathrm{~cm}^{14}$

32-IO-2: RP bowl as $32-$ IO-I above; type c-xxxii a; h. 7.5 cm ; d. c. 25 cm ; smeared with plaster in and outside ${ }^{15}$
32-10-3: DbW or WSR fragments of jar of type A-II b; h. 35 cm ; d. ca. 23 cm ; potter's marks on shoulder; plaster inside ${ }^{16}$ (fig. 9.15)

32-10-4: RBrW jar of type A-II b; 20 fragments, all with plaster inside; h. 43 cm ; d. ca. $2 \mathrm{I} \mathrm{cm}^{17}$

32-IO-5: coarse RW offering jar of type A-IV b, with plaster inside; h. 28 cm ; d. $13.6 \mathrm{~cm}^{18}$

32-10-6: coarse RW jar of type A-IV b, with plaster inside; h. 31.6 cm ; d. $15 \mathrm{~cm}^{19}$

32-10-7: coarse RW jar of type IV b, without neck; h. 18.4 cm ; d. $12.2 \mathrm{~cm}^{20}$ 32-10-8: 3 RW fragments of base of large basin, type D-XXXV(?); d. of flat base, ca. 30 cm , d. of rim over 45 cm
32-IO-9: 3 fragments of mud-ware pottery bread mold, type F-XXV; h. $15+\mathrm{cm}$; d. $20 \mathrm{~cm}^{21}$

[^18]32-IO-IO, 32-IO-II: 23 fragments of large DbW jars of type A-II b; d. of rim, ca. 12 cm ; one with potter's mark (fig. 9.15) ${ }^{22}$
32-10-12: 5 coarse RW fragments from neck of at least two jars of type AIV b; d. of rim, ca. $12 \mathrm{~cm}^{23}$
32-10-I3: 3I BrW fragments from one or more large jars, type A-II b; h. 40 cm ; d. $22 \mathrm{~cm}^{24}$

32-10-14: BrW, RBrW or RW base fragments of four jars of type A-II b or similar, and fragments of at least eight others; mostly with white plaster inside; one with potter's mark ${ }^{25}$

## Architecture

This tomb, along with mastabas G 2140, G 2160, G 2170, and G 2220, belongs to the group of anonymous major mastabas of Cemetery G 2IOO. Taking into account its eastern and northern extension, it forms one of the larger mastabas of the cemetery, coupled with G 2120 and G 2I3O. It still cannot compete, however, against the massive size of G 2220 , located immediately to the east, and with which Reisner assumed an association based on proximity. ${ }^{26}$

G 2210 is the last of the earlier, western-half tombs in Cemetery G 2 IOO to be considered. It clearly belongs with this group by virtue of the T-shaped portcullis grooves on its burial shaft (figs. 9.229.23). However, it underwent drastic alterations, with the extension using massive boulders on the east and north. To the south, however, we see little or no trace of these massive casing stones. There was apparently little space to expand southwards, due to the northern extension of Khentka's mastaba (G 2130), a fact that proves that G 22 IO postdates G 2130 .

In viewing the mastaba from the northwest today, the friable, yellow undercolor of the deteriorating blocks of the northern side of the mastaba is still visible. On the west side, there is only one area where about six courses of the core blocks are visible through the debris and dumps from other excavation areas (fig. 9.6). Further to the north of the tomb, even more hills of debris dumps are visible, and this area was never excavated. The northern edges of G 2220 are particularly difficult to identify in this area. The massive core blocks on the east side of G 22IO, north of the chapel, have suffered extensive weathering, also revealing their friable, yellow undercolor.

It is impossible to determine the original shape and dimensions of the secondary chapel, located not within the original mastaba core but within the eastern extension (figs. 9.4-9.5). A large, rectangular recess is all that is visible in this area. The massive casing blocks forming the rear (west) wall of the chapel against the core are missing, revealing the core's east wall proper (compare figs. 9.4 and 9.20 with 9.5 and 9.2I). If there was a stela emplacement for G 2210 , the massive boulders for the stone chapel would most likely be covering its location. The same holds true for a possible north niche, such as appears in the tombs of Nefer (G 21IO), Khentka (G 2130), Kanefer (G 2150), and Kaninisut I (G 2155). The street between G 2210 and 2220 was never excavated; one small hill of debris may represent the fill from one of these two tombs' burial shafts.

There is ample evidence that this mastaba was never completed, and may only have been occupied secondarily. The burial chamber of the single shaft a was originally planned for a depth of 13 m , where a burial chamber was begun but only partly completed when

[^19]the work was halted. Later the shaft excavation was recommenced, ending in a much deeper second burial chamber (figs. 9.26-9.36). ${ }^{27}$ This "chamber II" is also far larger than most in Cemetery g 2100. It is possible, as Jánosi postulates, that the deepening of the shaft and the mastaba core's extension to the north and east took place simultaneously, but these tasks were not completed. ${ }^{28}$ The lining of the burial chamber also remained unfinished (figs. 9.28-9.29, 9.33-9.36). These features all confirmed for Reisner that the owner of G 2210 died prematurely. ${ }^{29}$ A mass of wood coffin fragments and disarticulated human bones was found in the second (lower) chamber of shaft A. ${ }^{30}$ Two other interesting features of chamber II include a "window" joining the shaft and burial chamber, located just above the passageway southwards from the shaft to the chamber (figs. 9.24, 9.30), ${ }^{31}$ and a number of mason's marks or quarry graffiti on the blocking and lining stones of chamber II (figs. 9.37-9.45).

## Shafts and Burials

G 2210 A (figs. 9.46-9.47)
Distant view of mainly disarticulated skeleton; vertebrae, ribs, and sacrum are articulated, but long bones, cranium, and pelvis are not properly associated. Visible elements include cranium (upside down), left os coxa, scattered ribs, tibia, fibula, right and left femora, several unidentified long bones, vertebral column, sacrum, and articulated ribs. Adult, sex uncertain. Tomb card sketch adds no further information; note that the sketch is not exact-several bones are incorrectly drawn or positioned, or are missing from the drawing.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. i: early reign of Khufu (core); Khafre (mastaba).
This tomb must postdate G2130. The mastaba core dates to Khufu's reign due to the burial shaft's T-shaped portcullis grooves, the original size of the core and its location in the (earlier) western half of Cemetery g 2100. But secondary alterations, including the uncharacteristically large, second burial chamber cut in shaft A, point to activity subsequent to the reign of Khufu. Reisner and Jánosi may be correct in assigning the mastaba as "finished" during the reign of Khafre. ${ }^{32}$

## Decoration

No decoration is preserved in the tomb.

## Tomb Owner and Dependents

Name: no name recovered.
The names of no other individuals are preserved in the tomb.

27 Reisner, $G N_{\text {I }}$, p. 434, fig. 252.
28 Jánosi, Giza in der 4. Dynastie, p. I54.
29 Reisner, $G N$ ı, p. 435.
30 Given the wood coffin fragments and scattered human bones, it is unclear why Jánosi suggests the tomb may never have been used, Giza in der 4. Dynastie, p. 222.

3 I Compare other shaft passages with similar "windows:" G I223 A, G I235 A, and G 7320 A; Reisner, $G N$ I, p. 164, figs. 70-73.
32 Cf. Jánosi, Giza in der 4. Dynastie, p. 219, table 12.

## Mastabas of Nucleus Cemetery g 2 Ioo

Other People
$R$ rwr (stela north of chapel of G 2210 ), Rawer wsb nswt, royal wab-priest
?nh-p3-ㅡrd, Ankhpakhered(?) (32-9-1)
iry $p \not \subset$, hereditary nobleman
haty-r, count
hm-ntr [...], priest of [...]


Fig. 9.I. G 22IO, southeast corner and chapel area, with G 2130 at left, looking northwest. March I2, 1993. Peter Der Manuelian, pdm_1993.026.I2.


Fig. 9.2. Street east of G 2210, showing G 2220 (to the left, east) and G 2210 (to the right, west), looking south towards the Khafre Pyramid. March II, 1993. Peter Der Manuelian, PDM_1993.004.19.


Fig. 9.3. G 2210, south side, looking north. November 15, 1993. Peter Der Manuelian, pDM_1993.075.13.


Fig. 9.4. G 22IO A, remains of chapel, looking west. May 20, 1935. HU-MFA Expedition photograph, Dahi Ahmed, A7279.


Fig. 9.5. G 2210 A, remains of chapel, looking west. March I2, 1993. Peter Der Manuelian, pDM_1993.026.II.


Fig. 9.6. G 2210, west face, from top of G 2000, looking east. November 19, 1993. Peter Der Manuelian, pDM_1993.ioo.I4.


Fig. 9.7. G 2210, plan.


Fig. 9.8. 32-9-I, fragment of limestone sunk-relief stela(?) from area of G 2210, reproduced from HU-MFA Expedition Object Register vol. 24, p. II48.


Fig. 9.9. 32-9-2, 32-9-3, 32-9-4, 32-9-5, 32-9-6, relief fragments found in the vicinity of G 22 IO , drawn from HU-MFA Expedition Object Register vol. 24, p. 1148 .


Fig. 9.10. MFA 32-9-5, fragment of limestone relief from area of G 2210 . May 18, 2006. Museum of Fine Arts, Sci72222.


Fig. 9.II. MFA 32-9-6, fragment of limestone relief from area of G 2210 . May 18, 2006. Museum of Fine Arts, SC172223.


Fig. 9.I2. 32-9-7, fragment of limestone sunk relief from area of G 2210, reproduced from HU-MFA Expedition Object Register 24, p. II49. Present location not certain.


Fig. 9.13. 32-9-8, base fragment of alabaster jar from area of G 2210, drawn from HUMFA Expedition Object Register 24, p. II49. Present location not certain.


Fig. 9.14. 32-9-9, fragment of limestone head from area of G 2210, reproduced from HUMFA Expedition Object Register 24, p. II49. Present location not certain.


Fig. 9.15. 32-IO-3, 32-IO-II, potter's marks on ceramics from floor of burial chamber of G 22IO A: after Reisner, $G N_{\text {I }}$ p. 435 , fig. 253.


Fig. 9.16. G 2210, southeast corner, looking northwest. March II, 1993. Peter Der Manuelian, pDM_1993.013.18.


Fig. 9.17. G 2210, chapel profile and street, looking south, with workman at north niche of G 2130. November 3, 1993. Peter Der Manuelian, PDM_1993.055.07.


Fig. 9.18. G 2210 chapel area, sketch plan. Drawing by Alexander Floroff, June 4, 1935 .



Fig. 9.20. G 2210, chapel area, sketch of west wall casing stones, looking west. Drawing by Alexander Floroff, June I, 1935. Compare figs. 9.4-9.5.

Fig. 9.19. G 22IO chapel area, section A-B looking north


Fig. 9.2I. G 2210, chapel profile and street, looking north. November 3, 1993. Peter Der Manuelian, pdm_1993.055.06.


Fig. 9.22. G 22IO A, mouth of shaft, looking south. November 3, 1993. Peter Der Manuelian, PDM_1993.055.03.


Fig. 9.24. G 2210 A, "window" above chamber II, looking south. July 25, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, A6988


Fig. 9.23. G 2210 A, mouth of shaft, looking east. November 3, 1993. Peter Der Manuelian, PDM_1993.055.04.


Fig. 9.25. G 2210 A, outer blocking of passage, looking south. August 5, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8247.


Fig. 9.26. G 2210 A, sections of chambers I and II.


Fig. 9.27. G 22IO A, plans of chambers I and II.


Fig. 9.28. G 2210 A , section $\mathrm{C}-\mathrm{D}$, looking north, and $\mathrm{B}-\mathrm{A}$, looking east, showing the lining of the burial chamber walls.


Fig. 9.29. G 2210 A, section C-D, looking south, casing of south wall of


Section E-F looking south $\quad \longrightarrow \mathrm{N}$


Fig. 9.30. G 2210 A, plan and section of "window" to chamber II.


Fig. 9.31. G 22IO A, looking south through passage into chamber. August I3, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8249.


Fig. 9.33. G 2210 A, burial chamber corner, casing of south wall, looking south. October IO, 1932. HU-MFA Expedition photograph, Dahi Ahmed, A7019.


Fig. 9.35. G 2210 A , burial chamber corner, casing of north wall, looking north. October Io, 1932. HU-MFA Expedition photograph, Dahi Ahmed, A7017.


Fig. 9.32. G 22IO A, inner blocking of passage, looking south. August 7, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8248.


Fig. 9.34. G 2210 A, burial chamber corner, casing of west wall, looking west. October Io, 1932. HU-MFA Expedition photograph, Dahi Ahmed, A7020.


Fig. 9.36. G 2210 A, burial chamber corner, casing of east wall, looking east. October Io, 1932. HU-MFA Expedition photograph, Dahi Ahmed, A7018.


Fig. 9.37. G 2210 A, north wall of chamber II, quarry marks on two casing stones. October io, 1932. HU-MFA Expedition photograph, Dahi Ahmed, B826I.


Fig. 9.38. G 22 IO A, limestone block from door blocking, first row, block no. III west. August I3, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, b82sI.


Fig. 9.39. G 22IO A, limestone block from door blocking, first row, block no. III west. August 13, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, в8250.


Fig. 9.40. G 2210 A , limestone blocks from lining of chamber II and from door blocking.


Fig. 9.4I. G 22IO A, limestone block from door blocking, second row, block no. V east. August 14, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8254.


Fig. 9.43. G 22IO A, limestone block from door blocking, first row, block no. III south. August I2, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8252.


Fig. 9.42. G 22IO A, limestone block from door blocking, second row, block no. V south. August I2, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, в8255.


Fig. 9.44. G 22IO A, limestone block from door blocking, second row, block no. V south. August I4, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, в8253.


Fig. 9.45. G 2210 A, limestone block from door blocking, first row, block no. II bottom. August I4, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8256.


Fig. 9.46. G 22IO A, floor of burial chamber, looking south. August I2, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7000.


Fig. 9.47. G 2210 A, burial chamber, remains of burial (skeleton) and debris on floor, looking west. August I4, 1932. HUMFA Expedition photograph, Mohammedani Ibrahim, A6997.


# Chapter io <br> ANONYMOUS TOMB: <br> Mastaba G 2135 (= VIInN = G 4770) 

## Summary of Reisner's Description

Mastaba: ${ }^{I}$ core type II a, used as mastaba with exterior crude brick chapel of type (I a) and slab stela emplacement: $23.45 \times 10.3 \mathrm{~m}$ (Junker's plan) area 24 I .53 sq . m; proportion $\mathrm{I} / 2.27$; h. 4.0 m
Chapel: exterior crude brick chapel of type (г a), built around emplacement for slab stela; partly obscured by later constructions; probably five rooms, (a), (b), on west, and (c), (d), (e), on east

Room (a): north-south offering room around slab stela emplacement set in south end of west wall; $5.4 \times 2.5 \mathrm{~m}$; area $13.5 \mathrm{sq} . \mathrm{m}$ proportion I/2.16
Room (b): magazine south of (a): $2.15 \times 2.5 \mathrm{~m}$; area 5.38 sq. m entered from (a) by doorway in east end of north wall
Room (c): vestibule east of (a), on north; destroyed
Room (d): room connecting (c) with (e); northern part destroyed width 2.0 m
Room (e): magazine south of (d): $2.15 \times 2.0 \mathrm{~m}$; area 4.3 sq. m; entered from (d) in west end of north wall
Total area, (a)-(e), estimated at 33.0 sq. m; relation I/7.3I Shaft A: one shaft north of middle; type 1 cm
lining unfinished; 2.I x 2.1 m at top and $1.8 \times \mathrm{I} .8 \mathrm{~m}$ at bottom 5.7 m (15 courses) lined with masonry; -7.0 m in rock
chamber on south, partly lined but not paved in rock $3.8 \times 3.06 \mathrm{~m}$; h. 3.05 m ; area 14.63 sq. m capacity $44.62 \mathrm{cu} . \mathrm{m}$
lined room $3.01 \times 3.06 \mathrm{~m}$; h. 3.05 m ; the lining was begun and built to a mean height of four courses pavement was never begun
area 9.2I sq. m; capacity $28.09 \mathrm{cu} . \mathrm{m}$
passage (including lining): $1.55 \times \mathrm{I} .3-\mathrm{I} .45 \mathrm{~m}$; h. I.I m) step down from passage to floor of chamber 1.2 m blocking gone
white limestone sarcophagus: plain box with flat lid, type d; now Hildesheim 305I; see description below, under Finds
canopic pit in southeast corner; $0.52 \times 0.5 \mathrm{~m} ;-0.43 \mathrm{~m}$

## Excavation

This tomb lay south of the dividing line separating the American concession on the north from the German-Austrian concession on the south. It was thus excavated by Hermann Junker in 1912 (see his Gîza I, pp. 227-31, numbered VII NN and G 4770), and will accordingly receive only the briefest of treatments here.

[^20]Finds
Fragment of limestone raised-relief slab stela: German-Austrian Expedition under H. Junker, 1912-13; found in the debris east of the chapel area of G 2135; current location: Kunsthistorisches Museum, Vienna, Inv. ÄS 7799; h. 24 cm ; w. 27 cm ; th. 8 cm ( see discussion below, figs. IO.I3-IO.15). ${ }^{2}$

From shaft A: ${ }^{3}$
Pelizaeus-Museum, Hildesheim 305ı: ${ }^{4}$ fragmentary white limestone sarcophagus (now restored): plain box with flat lid; outside $2.09 \times 0.82 \mathrm{~m}$; h. 0.62 m ; thickness of lid $7.5-8 \mathrm{~cm}$; rebate on outside of upper edge of box with corresponding ledge on coffin lid fitting down outside the rebate; two projecting lug handles on each end of lid; thickness of sides of sarcophagus 9.5 cm (figs. IO.IO-IO.I2)
Lower part of (limestone?) female seated statuette, from the debris of the shaft
Fragments of alabaster vessels
Fragments of Arabic lamp

## Architecture

Along with the tomb of Kaninisut I (G 2155), mastaba G 2135 forms the southward extension of Cemetery G 2100 (figs. 2.5, io.2). Whether the location of these two mastaba cores, out of alignment with the rest of the Cemetery G 2100 cluster, was forced by the existence of the large mastaba G 2220 further to the north, cannot be determined.

Reisner took G 2135 to be the first tomb of the later, eastern group of mastabas, contemporary with G 22 IO and dating towards the end of Khufu's reign. ${ }^{5}$ Junker, on the other hand, dated the tomb to the reign of Menkaure. ${ }^{6}$ Several features serve to link the tomb to the older, western half of the cemetery. Primary among them are the mud-brick exterior chapel, the remnants of a slab stela (although the location of its original emplacement can no longer be identified), and the lining of the burial chamber, which also includes a canopic depression in the southeast corner. The lack of T-shaped portcullis grooves in the burial shaft and the mastabas location in the eastern half of the cemetery are all that serve to postdate it slightly after the core construction of mastabas G 2100, G 2110, G 2120, G 2130, and G 2210 .

The core of G 2135 was never cased, nor were any alterations made to the exterior mud-brick chapel once surrounding the cult focus of the slab stela. Although the chapel was later destroyed by subsequent constructions to the north (figs. Io.I, io.3), it preserves at least three or four rooms. ${ }^{7}$ The entrance from the north led into a long, rectangular entrance room, connecting to a square room further south, and an offering room to the west, up against the mastaba and surrounding the slab stela emplacement.

The burial shaft occupies the position-north of center-in the core that is expected for a Khufu-era mastaba (figs. io.6-10.9).

2 I am grateful to Regina Hölzl of the Kunsthistorisches Museum, Vienna, for providing these corrected measurements, improving on those published by Junker, Gîza i, pp. 229, 230 fig. 53, pl. 37b. See also Manuelian, Slab Stelae, pp. 84-87, pls. 19-20 (stela Io).
3 Junker, Gîza i, p. 23 IC ("Liste der Kleinfünde").
4 PM III, p. 75; Junker, Gîza I, pp. 54-55, 23I, fig. 5, pl. iI; G. Roeder, "Neue Hildesheimer Denkmäler aus den Grabungen bei Gise," in Alt-Hildesheim (Eine Zeitschrift für Stadt und Stift Hildesheim) Io (1930), pp. 52-57 (for this reference I thank Bettina Schmitz); Kayser, Die ägyptischen Altertümer, p. II; DonadoniRoveri, Sarcofagi egizi, p. 122 [в 30]. The sarcophagus is at this writing in fragments in storage in the Pelizaeus-Museum, Hildesheim.
5 Reisner, $G N_{\mathrm{I}}$, pp. 1i2, 435-36.
6 Junker, Gîza i, pp. iı-12, I4.
7 Reisner reconstructed five rooms: $G N_{\mathrm{I}}, \mathrm{p} .435$. For a detailed plan of the area, see Junker, Gîza 6, p. 84, fig. 26, and overview plan at the end of the volume.

The layout of the burial chamber follows Reisner's type I cm. This consists of a lined chamber south of the shaft, entered by a connecting passage near the east end of the north wall of the chamber. The burial chamber is lined and paved with fine white limestone blocks but not roofed. Reisner's designation " $c$ " stands for a square or nearly square chamber on the south, and " $m$ " for an opening near the middle of the chamber wall, with a rise to the roof and a drop to floor of the chamber. While the lining of the walls appears incomplete, Junker notes that possible quarrying away of the blocks might explain their absence. ${ }^{8}$

A number of later intrusive shafts were sunk into the street east of the mastaba. Reisner omitted these from his general plan of Cemetery g 2100, and Junker only includes them on a small plan in his Gîza 6 (redrawn and augmented in figs. 2.5, IO.2). 9 Ten shafts seem to obscure the chapel area proper; they are numbered I37, 28oa-b, and 28ra-f. Another six shafts were located further north and numbered 275, 278a-d. Shaft 280a, one of the larger, more regular mud-brick shafts, was positioned directly behind a small false door (not illustrated in Gîza 6). Junker reproduces traces of the text as follows:

Text: [...]nfr ir. $n=f$ prt-brw t hnkt p3t [...]
Translation: [...] Nefer. May he make (or: may there be made for him) invocation offerings of bread, beer and cakes...

To avoid confusion, Junker named this individual Nefer III, although his name might be compounded with another element preceeding nfr that is not preserved. The other shafts, nos. 28I and 28rb-c, show merely rough stone walls and are thus likely to be later and intrusive.

## Shafts and Burials

Junker does not mention skeletal remains in the shaft, despite the presence of the fragmentary limestone sarcophagus. No photography of the burial chamber has yet been identified among the preserved Junker archives in Vienna and Hildesheim.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. I: late reign of Khufu (core), late reign of Khufu-Djedefre (mastaba). ${ }^{\text {IO }}$ Junker believed that G 2135 dates to the reign of Shepseskaf, but Jánosi has shown that there is no reason to posit such a late Dynasty 4 date for the tomb. ${ }^{\text {II }}$ Reisner's interpretation (Khufu) is preferred to that of Junker (Menkaure-Shepseskaf). Otherwise, it would be difficult to explain why, under Menkaure, G 2135 would have retained "just" a slab stela and mud-brick chapel, while elsewhere, during the same reign, entire decorated chapels with false doors were being constructed.

In the surviving decoration of the slab stela (figs. Io.13-10.15), the absence of vertical separators in the linen list (Section D), and the tall, but still flaring, shape to the offering loaves in the table scene (Section C), all speak for an early date in the dynasty. As one of the earlier of two groups of Cemetery G 2IOO mastabas, G 2135,

[^21]along with its companion tombs likewise (once) containing slab stelae (Sedit g 2100, Nefer g 2IIO[?], Seshatsekhentiu g 2I20, and Kaninisut I[?] G 2155), should be placed in the early to mid-reign of Khufu.

## Decoration

The Slab Stela Fragment. ${ }^{12}$
Text and translation:
Section A:
[...]

Section B:
[...]

[...], (I) msdmt, [w] $\underline{d}($ (?), (2) hastt mrht, irp, (3) is $d$, nbs [...], (I) black eye-paint, [green eye]-paint(?), (2) best ointment, wine, (3) persea fruit, zizyphus ${ }^{13}$

Section D:

idmy 4 bi, 3 b 3,2 h $3, I$ has
idemy-linen: ${ }^{14}$ a thousand of 4 (cubits wide), a thousand of 3 (cubits wide), a thousand of 2 (cubits wide), a thousand of I (cubit wide)

I2 Selected bibliography: PM III, p. 75, Junker, Gîza I, pp. 229-30, fig. 53b, pl. 37b; Manuelian, Slab Stelae, pp. 84-87, pls. 19-20 (stela io); Hölzl, Reliefs und Inschriftensteine des Alten Reiches 3, CAA 22 (in preparation).
13 Alternatively, " $n a b q$-fruit;" see Emery, Hemaka, p. 52.
14 On the choice of transliteration idmy instead of itiwy, see Manuelian, Slab Stelae, pp. 153-60, discussion of Section D (linen lists).

sesher-linen: a thousand of width $h,{ }^{15}$ a thousand of 100 (cubits wide), a thousand of 90 (cubits wide), ${ }^{16}$ a thousand of 80 (cubits wide), a thousand of 70 (cubits wide), a thousand of 60 (cubits wide)

Šmrt-nfrt št [...], [psdiww], [...]
fine linen: a thousand of ioo (cubits wide), a thousand of [90? (cubits wide)], [...]
[ $3 \ldots$...]
[aa-linen...]
Only the upper right-hand corner of this piece survives. Junker was unable to determine either the exact findspot for the fragment, or the emplacement area in the mastaba core wall. Recent examination of the tomb has only revealed that the area has since deteriorated further.

Extrapolating from the single fragment allows for the reconstruction of a "short-form" ${ }^{17}$ stela that bears much in common with slab stelae discovered by Reisner in Cemetery g i200. The linen list, containing four idmy falcons (Section D), reached to the top of the decoration. The offerings of Section c are arranged just to the

15 This word is written bton the Helwan stela from tomb 247; cf. Saad, Ceiling Stelae in Second Dynasty Tombs, pl. 30; Kahl, Kloth, and Zimmermann, Die Inschriffen der 3. Dynastie, p. 175(d); however, it never appears with a .ton any of the Giza slab stelae. The value is most likely more than Ioo or 200, but less than ı,ooo; cf. P. Posener-Kriéger, "Les mesures des étoffes à l'ancien empire," RdE 29 (1977), pp. 93-94.

16 Or possibly 90 cubits square? On the difference between vertical and horizontal linen units of measure, see Manuelian, Slab Stelae, p. 137, based on P. PosenerKriéger, "Les mesures des étoffes à l'ancien empire," pp. 86-96; Kahl, Kloth, and Zimmermann, Die Inschriffen der 3. Dynastie, p. 175ff.; Edel, "Eine althieratische Liste von Grabbeigaben aus einem Grab des späten Alten Reiches der Qubbet el-Hawa bei Assuan," NAWG 6 (1987), pp. 98, 104. On the large numbers, Vogelsang-Eastwood, "Textiles," in Ancient Egyptian Materials and Technology, p. 295 , notes that 845 square meters of cloth were found in the Middle Kingdom tomb of Meketre at Thebes (H.E. Winlock, "The Mummy of Wah unwrapped," BMMA 35 [1940], p. 257), and Tutankhamen's tomb produced 400 items of clothing.
17 For a discussion of short-form and long-form slab stelae, see Manuelian, Slab Stelae, pp. I, II7, fig. 176, and passim.
left of the list in vertical columns without any vertical dividing lines. This means that the identifying inscription (Section a) was a short one, possibly restricted to the area just above the head of the deceased, as with the slab stelae of Khufunakht (G I205), Nefer (G I207), and Nefretiabet (G I225). ${ }^{18}$ Oddly enough, however, each of these stelae displays some sort of dividing lines, either vertical or horizontal, to separate the offerings; those slab stelae that do not separate the offerings with lines tend to surmount them with a longer horizontal band of text with the identifying inscription (Section A). The present fragment, then, seems to combine elements from both traditions.

The linen list falcons hover just above the mnbt signs in an arrangement paralleled only on the slab stela of Kanefer from G I2O3 and on an anonymous stela from G 4860, although in the latter case the mnbt signs appear in front of each (reversed) falcon rather than behind. ${ }^{19}$ A final element that recalls slab stela examples from Cemetery G izOO is the absence of vertical dividers in the width and amount designations ( $b_{3}$ ) of the linen list. Parallels include the slab stelae of Wepemnefret (G I2OI), Kanefer (G I2O3), and Khufunakht (G I205)..$^{20}$ Nothing survives of the funerary repast (Section b) except for six left-facing and one right-facing half-loaves of bread.

## Tomb Owner and Dependents

Name: no name recovered.
The names of no other individuals are preserved in the tomb.

18 Ibid., pls. 5-8, II-12, pp. 46-53, 58-62.
19 Ibid., pp. 42-45, I08-III.
20 The stela of Nefretiabet (G I225) corrected this arrangement with the addition of vertical separators between the $h_{3}$ signs in red and yellow paint.


Fig. Io.I. Street and chapel area east of G 2135, looking north. Most likely March 1912. Courtesy Kunsthistorisches Museum, Vienna aeos_I_546r.


Fig. 10.2. G 2135, plan of mastaba and surrounding area, based on and augmented from Junker, Gîza I, p. 228, fig. 52; idem, Gîza 6, p. 8I, fig. 2I, and p. 93, fig. 26.


Fig. io.3. Street and chapel area east of G 2135 , looking south (= Junker, Gîza I, pl. 37a). Most likely March 1912. Courtesy Kunsthistorisches Museum Vienna AEOS_I_5284.


Fig. ı0.4. Street and chapel area east of G 2135 , looking south towards the Khafre Pyramid. November 20, 1993. Peter Der Manuelian, pDM_1993.103.07.


Fig. ro.5. Chapel area of G 2135, looking west. November 21, 1993. Peter Der Manuelian, PDM_1993.IO3.08.


Fig. 10.6. G 2135, north end, looking south towards shaft A. November 20, 1993. Peter Der Manuelian, PDM_1993.104.06.


Fig. io.7. G 2135 A, mouth of shaft, looking north. November 3, 1993. Peter Der Manuelian, PDM_1993.058.08.


Fig. i0.8. G 2135 A, mouth of shaft, looking south. November 3, 1993. Peter Der Manuelian, PDM_1993.058.09


Fig. 10.9. G 2135 A, plan and section, adapted from Junker, Gîza i, p. 228, fig. 52.


Fig. ı0.I2. Drawing of limestone sarcophagus from G 2135 A, Pelizaeus-Museum, Hildesheim 3051, after Junker, Gîza I, p. 55, fig. 5.


Fig. ıо.I3. Kunsthistorisches Museum, Vienna, ÄS 7799 from G 2135 (= VIInn, G 4770). Colorized drawing of the slab stela fragment, showing three of the four decorative sections.


Fig. ı0.I4. Kunsthistorisches Museum, Vienna, ÄS 7799 from G 2135 (= VIInn, G 4770), slab stela fragment. Courtesy Kunsthistorisches Museum.


Fig. 10.15. Drawing of slab stela fragment Kunsthistorisches Museum, Vienna, ÄS 7799 from G 2135 (= VIInn, G 4770).

## Chapter iI <br> ANONYMOUS TOMB:

Mastaba G 2140

Summary of Reisner's Description<br>Mastaba: ${ }^{\text {I }}$ old core of type II a of normal size; uncased altered by introduction of interior chapel of type (3 a) into uncased mastaba of type VI b (I); $23.2 \times 10.4 \mathrm{~m}$ area 24 I .28 sq. m; proportion I/2.23<br>retaining wall of z-masonry of drab limestone; h. 4.2 m<br>average height of stepped courses 39.7 cm<br>average width of steps 12.0 cm<br>Chapel type: white limestone interior, type (3 a), in hole broken in old core<br>2.65 x I.I m; h. 2.55 m ; area 2.9 I sq. m; proportion I/2.4 relation I/82.9I<br>single false door near south end of west wall<br>entered from east by doorway in north end of east wall Shaft A: sole shaft, north of middle<br>$\mathrm{I} .85 \times \mathrm{I} .85 \mathrm{~m}$ at top and $\mathrm{I} .6 \times \mathrm{r} .6 \mathrm{~m}$ at bottom; -2.9 m in rock<br>lined with drab masonry, 4.15 m ; eleven courses<br>chamber: low degenerate form of type 3 b<br>on south; $2.3 \times 2.1 \mathrm{~m}$; h. 1.45 m<br>area 4.83 sq. m; capacity, $7.0 \mathrm{cu} . \mathrm{m}$<br>passage: $1.05 \times 1.2 \mathrm{~m}$; h. 1.2 m ; step up from floor of passage to floor of chamber, 0.2 m<br>blocking: type II b (I); two blocks remained in place stone bench: an unfinished attached stone coffin; along<br>west wall beginning against south wall; $1.95 \times 0.6 \mathrm{~m}$ h. 0.5 m<br>chamber littered with rubbish, broken human bones and a large two-handled jar (MFA 32-I2-I8; see below, Finds)

## Excavation

Primary excavation of G 2140 took place under Lythgoe during the 1905-1906 season. No excavation diaries were preserved from this season. Additional concentration on this area took place from January 2I to February 5, 1912 (fig. II.4). Expedition photographs from 1905-1906 show the clearance of the area in front of the chapel, as well as the excavation of shaft A (figs. II.3, II.19-II.20). Diary entries mentioning this tomb are preserved from 1912, 1932-32, and 1938. Fisher's diary entry for January 2I, 1912 states that in the northeast corner of G 2140, "a broken sandstone figure of man standing" was found, and in the debris above the subsidiary burial pits between G 2140 and G 2150 were "a number of fragments of a fine large alabaster statue." The following days were spent clearing the area between G 2140 and G 2150 , but no further details are forthcoming from Fisher's notes, and the present location of said statue fragments is not certain. On January 28, 1912, the day of Reisner's return to

Giza, work began on the east face of G 2140 (fig. II.4). Fisher describes the chapel thus:

Here there is a simple beam lintel door-way opening into a plain unsculptured room. On the walls are Arabic inscriptions, evidence of the recent opening of the offering room. ${ }^{2}$

The only other mention made of the tomb in 1912 consists of the discovery of a fragment of a large alabaster jar between G 2140 and G 2160 (February 14, 1912; similar to one found near G 2184), and Reisner's statement on February 25, 1912, that G 2140, G 2160, and G 2180 "appear not to have been used."

The burial chamber of shaft a (fig. II.22) was examined for the second time, judging from the 1905-dated excavation photographs, on December 30, 1932. Wheeler notes in his diary that the "room is rough, with a 'mastaba' on the west side. Found in debris:-bones of body disturbed and broken, broken pot (large, handled)." ${ }^{3}$ On January I, 1933, a search on the top of the mastaba for a second burial shaft proved unsuccessful.

The final entries preserved for G 2140 came in March, 1938, in the reis's s diary. On March 19 , the crew searched for the lining of the mastaba's core on the north side, and the area between G 2140 and G 2150 was excavated (revealing subsidiary mastabas G 2I4I, G 2I43, and G 2144). Limestone debris, pebbles, and stones were mentioned, as well as an inscribed limestone fragment with a figure on it. On March 20-2I and 23, 1938, the work shifted east of G 2140 in the street, but no additional structures were exposed. 4

On November 27, 1993, the chapel floor inside the entrance was cleared in search of door socket holes. An empty rectangular emplacement is present above the door on the south side (see fig. II.I2). This indicates that the door was intended to swing open into the chapel (southward), partially obstructing access to the room itself, instead of to the north, covering only the north wall. No socket was located in the stone floor below this ceiling emplacement block. The chapel was, however, unfinished, and most likely no door was ever installed.

## Finds

Found in shaft A
32-12-18 (= MFA 47.166I; fig. i1.7): Special combed ware: two-handled Byblos oil amphora, type B-LIV, partly covered with thin plaster coat; incised with heavily combed horizontal lines, a few diagonal hatchings, and triangular pot mark at top towards one handle; sand and lime particle inclusions; complete except for chips from rolled rim; h. 43 cm ; diam. 39 cm ; d. rim 9.0 cm ; d. neck 6.0 cm ; d. body 20 cm ; w. with two stirrup handles 27.6 cm ; d. base Io. 0 cm ; 5 Reisner and Smith, $G N 2$, p. 75: "Reisner believed that the jars found at Giza were used as containers for olive oil or cedar oil. The jars from G 2140 A ( $32-\mathrm{I} 2-\mathrm{I} 8$ ) and G $2350 \mathrm{~L}(40-5-7$ ) ... both contained a dried resinous substance. Mr. Lucas analyzed a sample from the first of these jars (G 2140 A) and reported that the material was 'a fragrant resin, a true resin as distinguished from fragrant gum resins, such as frankincense and myrrh. It is almost

2 Fischer diary, January 28, 1912, p. 16.
3 Wheeler diary, December 30, 1932, p. I193.
4 The reis's diary for March 20, 1928, p. 634 contains the following addendum: "The Cocktail Day. An Exhibition of paintings by Joseph Lindon Smith was held at 4 p.m. at the Harvard Camp; the guests were 258 and the cars were Io5. The day was a grand day; everything was all right; Mrs. and Miss Reisner were looking [after] every body in the exhibition and also all the expedition staff."
5 Reisner, $G N_{\text {I }}$, p. 437, fig. 256; Reisner and Smith, $G N$ 2, pp. 74-76.
certainly from a coniferous tree, and from Western Asia, that is from Syria or Asia Minor.' In the same letter, dated in December 1939, Mr. Lucas went on to say: 'I would suggest, first, that the tree from which the resin was derived was either fir (possibly Cilician Fir, which grows both in Syria and Asia Minor: Abies cilicica) or pine (possibly the Aleppo pine, Pinus halepensis, which is the commonest pine in the Mediterranean region); second, that the material is what the Egyptians called "ach-resin."" ${ }^{\text {An }}$ analysis conducted at the Brookhaven National Laboratory in October-November 198r was summarized in 1986.7 Results from that analysis included the following details:

| Data Summary: | MFA 47.I66I |
| :--- | :--- |
| Technique: | cut off |
| Firing: | oxidized |
| Inclusions: | sand, lime particles |
| Rim: | rolled rim |
| Ware: | medium |
| Color (Munsell): | surface: ioR 6/4; |
| Variations of <br> section | gray core, red-yellow to pale red |
| Surface <br> treatment: | combed all over, deeply and heavily |
| Natural slip: | impressed; cord impressions on mid- upper <br> body; triangular pot mark at top of one <br> handle |
| Function <br> indications: | incrustations heavy all over exterior |

32-12-20: Bones and skull of human skeleton, from chamber of shaft A (fig. II.22)
38-3-20: White limestone sunk-relief fragment with leg of male figure; h. 36.5 cm ; w. $4 \mathrm{I} \mathrm{cm}^{8}$ (fig. II.8)

## Architecture

This tomb is located in the later, eastern half of Cemetery g 2100. It is an uncased mastaba core, with no north subsidiary niche. It received secondary alterations before it was ultimately left unfinished. The most significant change was the placement of an interior stone chapel, broken into the core of the original mastaba. The shaft is unusually short (less than 3 m below ground level), with none of the older, T-shaped portcullis grooves (fig. II.19). Moreover, the burial chamber is likewise uncharacteristically small ( 4.83 sq. m), with a raised platform on its western side (fig. II.22). Despite the unfinished nature of the chapel, there are skeletal remains in the burial chamber, including a skull found on the platform, although there is no way to demonstrate that it is contemporaneous with the chapel.

The chapel entrance consists of massive limestone blocks forming the architrave and entrance jambs (figs. II.2, II.IO-II.II).

6 In the third edition of his Ancient Egyptian Materials and Industries (1948), p. 370, Lucas again discusses the sample from G 2140 A. Here, although he states his conclusions somewhat more cautiously, he retains the same opinion: "Manifestly, therefore, it was a true resin from a coniferous tree and possibly ach-resin."
7 D. Esse and P.K. Hopke, "Levantine Trade in the Early Bronze Age," in Proceedings of the 24th International Archaeometry Symposium, pp. 34, 336, fig.31.4c. The authors mention a similar vessel excavated by $S$. Hassan in his "mastaba of shaft 294" (= G 8887), cf. his Giza 2, p. 146, fig. 173.
8 The only confirmation that this fragment belongs with this tomb's objects list is the original HU-MFA Expedition photographic register entry: "frag. of sunk relief 38-3-20 from 2140."

Reisner's section drawing correctly indicates the makeshift nature of the south entrance thickness (fig. II.9). ${ }^{9}$ The drum is set back deep within the entrance. None of these surfaces was ever inscribed.

Inside the chapel, the ceiling slabs are still preserved, as they are in the chapels of Nensedjerkai (G 2IOO-II), Kahif (G 2136), and Kaninisut II (G2156). Four intact roofing slabs, each measuring about 123 cm in length and from $75,65,88$, and 45 cm in width respectively, extend from south to north (figs. II.I4-II.I5). Pink plaster mortar is preserved in several of the roofing joints. The undecorated walls are intact but for a large hole broken into the east wall (fig. II.I4). The false door is prepared, with two pairs of jambs, but received merely the beginning of the offering formula, running right to left in vertical formation, on the architrave at the top of the door.

East of G 2140, the street was later occupied by small mastabas, G 2148 south of the chapel and G 2I45-G 2147 to the north.

## Shafts and Burials

G 2140 A (fig. il.22)
Disarrayed skeleton (32-12-20)—cranium and mandible are up on the stone bench at foot of the infracranium. Legs are mainly articulated—apparently lying on back, legs extended. Observable are both femora, tibiae, and fibulae. Age and sex uncertain. No tomb card sketch.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. I: late reign of Khufu (core); Khafre (mastaba). ${ }^{\text {IO }}$

Based on the surrounding mastabas and their alterations, Jánosi suggests that G 2140 received its secondary attention after the reign of Khufu. ${ }^{\text {II }}$ The lack of two false doors in the interior stone chapel and the form of the shaft (no T-shaped portcullis grooves, no lined burial chamber, or canopic depression) seem to support a final date in the reign of Khafre.

## Decoration

The only decorated surface clearly associated with G 2140 is the unfinished architrave over the false door at the southern end of the interior stone chapel's west wall (figs. II.I5-II.18). The text is carved in raised relief, roughly hewn, and barely continuing beyond the initial htp di inswt formula. The surface has been taken back all around the carved hieroglyphs, and this work has proceeded further in the lower half of the architrave. The layout seems to consist of several vertically arranged groupings, instead of two horizontally spaced lines. ${ }^{12}$ None of the signs bears rounded, smooth edges or interior detail. Smith discusses the unfinished hieroglyph $k$, and the small chisel strokes and pitting of the background. ${ }^{13}$


9 Reisner, $G N_{\text {I }}$, p. 436, fig. 255.
Io Compare: PM III, p. 77: late Dynasty 4 or Dynasty 5 .
II Jánosi, Giza in der 4. Dynastie, pp. 222-23.
I2 The drum of Khentka (G 2130, shows a similar vertical arrangement of short phrases, although they are separated by vertical dividers; see figs. 8.47-8.48). 13 Smith, HESPOK, pp. 247-48.

Text: (I) htp di nswt (2) Inpw bnty sh ntrr (3) krst (4) [uncarved] imntt Translation: (I) A gift which the king gives, and (2) Anubis, foremost of the divine booth, (3) (consisting of) a burial (4) [uncarved] the west...

Tomb Owner and Dependents
Name: no name recovered.
The names of no other individuals are preserved.


Fig. II.2. G 2140, east face, looking west towards the chapel entrance from the top of the mastaba G 2160. November 2I, 1993. Peter Der Manuelian, PDM_1993.107.I5.


Fig. II.3. Excavation of G 2140, chapel area, looking southwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, CII88 [= Cı26I3].


Fig. II.4. Street between G 2140 (Fisher's VIII.3) to the left (west) and G 2160 (Fisher's VIII.4) to the right (east), with shafts associated with G 2148 (foreground), G 2147 (middle of street), G 2146 and G 2145 (abutting east face of G 2140), looking north. February 16, 1912. HU-MFA Expedition photograph, photographer not listed, A635p.


Fig. II.5. G 2140, south face, looking north. November 15, 1993. Peter Der Manuelian, PDM_1993.073.20.


Fig. II.6. G 2I40, top of the mastaba, looking south. November I8, 1993. Peter Der Manuelian, pDM_1993.093.2I.


Fig. II.7. 32-I2-I8 (= MFA 47.166I), combed-ware amphora. Left: May II, 2005. Museum of Fine Arts, SCi39375. Center: June 18, 1942. HU-MFA Expedition photograph, photographer not listed, в9313 (detail). Right: drawing.


Fig. iI.8. Photograph and drawing of 38-3-20, limestone sunk relief from north of G 2140. April 3, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, B8948.


Section A-B Looking South
Fig. II.9. G 2140, chapel plan and section.


Fig. il.Io. G 2140, east face, looking south across the chapel entrance. November 2I, 1993. Peter Der Manuelian, pDM_1993.IO7.I6.


Fig. i..ir. G 2140, chapel entrance, looking west. November 17, 1993. Peter Der Manuelian, PDM_1993.083.I2.


Fig. II.I2. G 2140, chapel, entrance, blocks over the doorway with a rectangular cutout on the south (right) side for the upper door socket hole, looking east. November 17, 1993. Peter Der Manuelian, pDM_1993.083.24.


Fig. iI.I4. G 2140, chapel, north wall, looking north. November I7, 1993. Peter Der Manuelian, PDM_1993.083.23.


Fig. II.I3. G 2140, chapel, entrance, stone floor (no door socket holes), looking east. November 27, 1993. Peter Der Manuelian, pDM_1993.II9.II


Fig. if.I5. G 2140, chapel, south wall, and false door on west wall, looking southwest. November 17, 1993. Peter Der Manuelian, PDM_1993.083.2I.


Fig. II.16. G 2140, chapel, west wall, unfinished false door architrave, looking west. November 17, 1993. HU-MFA Expedition photograph. Mohammedani Ibrahim, A577I.


Fig. II.17. G 2140, chapel, west wall, detail of unfinished false door architrave, looking west. November 17, 1993. Peter Der Manuelian, PDM_1993.083.17.



Fig. if.I9. G 2140 A , stone-lined shaft, with entrance to burial chamber, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, c863 [= CI2622].


Fig. if.20. G 2140 A, entrance to burial chamber, looking southwest. 19051906. HU-MFA Expedition photograph, A.M. Lythgoe, B894 [= B7329].


Fig. II.2I. G 2140 A , plan and section.


Fig. II.22. G 2140 A, burial chamber, limestone blocks and skeleton (32-12-20) on floor, looking south. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в926 [= B7328].

## Chapter 12 <br> THE TOMB OF KANEFER:

Mastaba g 2150

## Summary of Reisner's Description <br> Mastaba: ${ }^{\text {I }}$ old core of type II a <br> $23.2 \times 10.4$ m <br> area 24 II .28 sq. m; proportion $\mathrm{I} / 2.23$; h. ca. 4 m <br> retaining wall of z-masonry of stepped courses, of drab limestone <br> average height of stepped courses 4 I .0 cm <br> average width of steps 10.5 cm <br> casing: gray nummulitic limestone in small stepped courses <br> (z-masonry); $25.2 \times$ I2.0 m; area 302.4 sq. m <br> proportion I/2.0 <br> average height of courses 46.0 cm <br> average width of steps 12.4 cm <br> Chapel: interior two-niched interior chapel of white limestone, in hole <br> broken in old core of type 4 a <br> $3.15 \times 1.05 \mathrm{~m}$; area 3.3 sq. m <br> proportion I/3.0; relation I/9I.63; h. 2.60 m <br> entered from east by doorway in north end of east wall, <br> opening in embrasure in east face of casing <br> Exterior crude brick chapel of type (lg), consisting of three rooms, (b), (c), <br> (d) from south to north <br> Room (b): magazine on south, entered from north from room (c) by doorway in east end of north wall; $\mathrm{I} .6 \times 2.25 \mathrm{~m}$ area 3.6 sq . m; thickness of south wall 1.75 m <br> thickness of east wall I .6 m ; thickness of north wall I.I m <br> Room (c): N-S hall around entrance to interior chapel; $4.0 \times 2.35 \mathrm{~m}$ area 9.4 sq . m; entered from north from room (d) by doorway in west end of north wall; doorway to room (a), near south end of west side; doorway to (b), in east end of south wall; thickness of east wall I .6 m ; of north wall, 1.15 m <br> Room (d): long N-S corridor extending to north end of mastaba, $15.0 \times 2.8 \mathrm{~m}$; area 42.0 sq . m; entered by doorway in north end of east wall, the walls forming room (d) were built later against the north face of the north wall of (c); thickness of east wall I.I2 m; thickness of north wall 0.85 m <br> total area, rooms (b), (c) I3.0 sq. m <br> total area, rooms (a), (b) (c) 16.3 sq. m <br> total area, rooms (a)-(d) $58.3 \mathrm{sq} . \mathrm{m}$ <br> Northern subsidiary niche: towards north end of east face, a monolithic framed stela inset in the stepped face of wall of z-masonry <br> width (north-south) 1.15 m <br> outer niche $0.76 \times 0.12 \mathrm{~m}$; inner niche $0.25 \times 0.14 \mathrm{~m}$ <br> Serdab: behind north false door of room (a) <br> lined with masonry $1.0 \times 0.7 \mathrm{~m}$ area, 0.7 sq. m <br> probably connected with false door by slot now destroyed; found filled with rubbish

Shaft A: chief shaft; 2.I x $2.07 \mathrm{~m} ;-8.5 \mathrm{~m}$ in rock
lined with drab masonry, 14 m ; ten courses
chamber type $4 \mathrm{~b}(\mathrm{I})$, on south. $4.0 \times 3.5 \mathrm{~m}$; h. I .65 m area 14.0 sq. m; capacity $23.1 \mathrm{cu} . \mathrm{m}$
passage: $1.15 \times 1.65 \mathrm{~m}$; h. 1.65 m
blocking: remains of masonry set in plaster, type II b (I)
coffin: red granite sarcophagus covered with plaster, found overturned on side; with flat lid type d (see below, Finds, 33-4-20)
canopic pit: in SE corner; $0.95 \times 0.6 \mathrm{~m}$ and 0.65 m deep slab lid displaced, $1.15 \times 0.65 \mathrm{~m}$; th. 0.15 m nearly completely plundered: scattered broken bones, and miscellaneous objects (see below)
Shaft B: secondary shaft in south end of mastaba, west of serdab
I. $6 \times \mathrm{x} .6 \mathrm{~m}$ at top; $\mathrm{I} .5 \times \mathrm{I} .5 \mathrm{~m}$ at bottom; -8.4 m in rock
lined with gray masonry, 3.15 m , 10 courses
chamber: type 6 a (3); on north; at 2.8 m in rock I.15 $\times 2.25 \mathrm{~m}$; h. 0.95 m area 2.58 sq. m; capacity $2.46 \mathrm{cu} . \mathrm{m}$
shaft descends 5.6 m below chamber but contains no second chamber; completely plundered: intrusive objects in debris
Shafts s through z estimated based on tomb card plans and sections only:
Shaft s: against east face of mastaba, north of north niche in exterior chapel room d; $0.93 \times 0.92 \mathrm{~m}$
0.90 m lined with crude brick (. 45 m on east side)
ends at rock; no chamber, pit empty
Shaft T: north of shaft $\mathrm{s} ; 0.90 \times 0.95 \mathrm{~m}$
I .53 m lined with crude brick ( I .10 m on east side)
ends at rock; no chamber, pit empty
Shaft U: against east face of mastaba, south of north niche; 1.65 x 1.40 m I.O m lined with masonry -2.0 m total to bottom of empty pit
Shaft v: east of shaft U; $0.97 \times 0.92 \mathrm{~m}$
I .24 m lined with crude brick ( 0.85 m on east side) ends at rock; no chamber, pit empty
Shaft x: in center of exterior chapel room d; $0.88 \times 0.87 \mathrm{~m}$ 0.93 m lined with crude brick ( 0.53 m on east side) ends at rock; no chamber, pit empty
Shaft y: north of shaft x ; $0.90 \times 0.85 \mathrm{~m}$
2.55 m lined with crude brick ( 0.54 m on east side) ends at rock; no chamber, pit empty
Shaft z: south of shaft U; $0.94 \times$ I. 0 m 0.46 m lined with crude brick ends at rock; no chamber, pit empty

## Excavation

Prior to the arrival of the Harvard-MFA Expedition, Flinders Petrie undertook some clearance operations in the area of G 2150 . $^{2}$ Málek quotes Petrie's entry in Sayce Mss. 24, top: "Uncovered about 16 April 1881, by order from the Bulak Museum. Much of the top of this and neighbouring tomb was stripped by the Arabs a few years ago."3 Petrie copied inscriptions on April 19, 1881. However, p. 363 of his notebook shows his transcriptions of portions of the chapel inscriptions in G 2150 , along with the note "Tomb of [KAnfr: $\left.\cup_{0}^{1}\right]$, opened in 1882 . Destroyed soon after" next to the hieroglyphs of personified estates from the east wall. 4 Petrie must have mistaken "r882" for 1881. Finally, it is also possible that Mariette was

2 J. Málek, "New Reliefs and Inscriptions from five Old Tombs at Giza and Saqqara," BSEG 6 (1982), pp. 47-52. Better known are Petrie's excavations to the south of Giza; cf. H.G. Fischer, "Old Kingdom Inscriptions in the Yale Gallery," $\mathrm{MIO}_{7}$ (1960), p. 3II, n. 26. For Petrie's letters from Giza, see now Drower, Letters from the Desert, esp. pp. 12-36.
3 Málek, BSEG 6 (1982), p. 51. The author has not seen this page.
4 Petrie notebook "0031," pp. 359-65 for G 2150, and esp. p. 363. All these documents are housed in the Griffith Institute, Oxford.
active in this area as well (see below), although he does not specifically mention the tomb in his Mastabas de l'Ancien Empire (1889).5

Like most of the other major mastabas in this cemetery, G 2150 was excavated primarily during the 1905-1906 season under Lythgoe, whose diary, if he kept one, has not survived. Numerous Expedition photographs from these years document the step-by-step clearance of the decorated chapel, but the two shafts a and в were not cleared until 1933. The decorated entrance thickness blocks found loose around the chapel (see figs. I2.4-I2.5, I2.II-I2.18) were stored at Harvard Camp until their shipment to Boston in May, 1933. ${ }^{6}$ For a reconstruction sketch of how the Boston reliefs once adorned the entrance, see fig. I2.65.

Fisher's diary mentions the tomb for the first time on January 2I, 1912, with the "surface masonry beginning to show" on the south side on January 23. The east face with the door to the chapel and decorated facade appeared the next day. But most of this area had already been cleared under Lythgoe in 1905-1906, as documented by Expedition photography. In his entry for January 28, 1912, Fisher describes the varied facing around the core, as it differs from that surrounding the chapel entrance (figs. 12.2-12.7), and the mud-brick extension to the chapel built in the street directly in front of it:

The mud chapel has walls 1.50 m thick; almost all the east side being gone, the line being traced by the beginning of the plastering at the floor. There is a door at north, and another at south, which appears to lead into a second room as the east wall continues to the south. Here there is a later mud brick pit sunk down through debris of upper walls. ${ }^{7}$

Fisher's entry for January 3I, 1912 is similarly lengthy:
A mass of debris over mud walls at southeast corner of mastaba G 2150 has been removed leaving a later mud brick pit against the face of the tomb and disclosing an additional room to south of chapel already cleared. ${ }^{8}$ The masonry of this tomb (G 2150) is very regularly cut and dressed. In the inner chapel the sculptures are in part unfinished but where finished are well done. Behind the north niche here is a small room in the masonry in which the statues had been placed. Thieves had broken through the niche to reach this and fragments of very fine alabaster and diorite statues were found in debris in front of tomb, probably from this room. ${ }^{9}$

The brick size of the mud-brick chapel is listed in the entry for February 6, 1912 ( $16 \times 33 \times 9 \mathrm{~cm}$ ) and the northern false door niche is mentioned on February 9. The fallen architrave of Kanefer was found in the street debris in front of this niche, at the north end of the mastaba's east face, (fig. 12.60). This later prompted Reisner to postulate its original position above the north niche. However, no other northern niche in the cemetery bore such an inscribed architrave, and the more likely reconstruction would place this architrave over the chapel proper's entrance, further to the south. Fisher's entry for February 9 also mentions what must be Junker's discovery of the chapel of Nensedjerkai (G 2100-II). The north niche of Kanefer's mastaba was cleared by February I4, I9I2 and Fisher noted that:

5 See Baud's reconstruction of early excavations around the tomb in his Famille royale et pouvoir 2, pp. 595-96.
6 See below, Finds, 32-12-7 (= MFA 34.58) and 32-I2-8 (= MFA 34.57). Note that other chapel reliefs were apparently stored on top of mastaba G 2170 and forgotten between 1906 and 1932; see below chapter 15 .
7 Fisher diary, January 28, 1912, p. I6.
8 "Already cleared" must be a reference to Lythgoe's 1905-1906 season.
9 Fisher diary, January 31, 1912, p. 17.

The fine masonry ends with niche and behind is clearly seen the masonry of the earlier mastaba.
The mud walls joining on to mud chamber of this mastaba seem to be a still later addition but the end of wall is not yet cleared. There are three masonry lined pits near niche and two others about centre of mastaba face, inside this later mud structure. ${ }^{10}$

Reisner took over the excavation after February 2I, 1912. On February 26-27, he searched without success for additional serdabs behind the chapel, and also noted that shaft в behind the chapel was "filled with sand (i.e., opened and plundered)."

Under Wheeler's supervision, the top of the mastaba was cleared on December 28, 1932. Shaft в was (re)located, and part of the right leg of an alabaster statuette came to light (see below, Finds, $32-$ I2-2, fig. I2.42). Shaft B was excavated from December 29, 1932 to January 2, 1933, revealing rubble and sand debris (figs. 12.55-I2.56). What resembled a "first" chamber was cut on the north side of the shaft, and a small fragment of a "fine alabaster statuette" was found (figs. I2.42-12.45). Continuing downward, the excavators reached clean rubble below the level of this (empty) chamber. Another statuette fragment was found at a depth of 10.2 m on January I , 1933, and shaft A was (re)located. The bottom of shaft в was reached the next day, but no additional chambers were found. Meanwhile, more statuette fragments turned up in the fill of shaft a. The burial chamber (on the south) of shaft a was reached on January 7, 1933; part of the rubble door-blocking was still in situ. Clearance ended the next day, and on January 9 and 12, 1933, Wheeler described the burial chamber of shaft A:

Removed debris from entrance to burial chamber and photographed chamber. A sarcophagus, plain, rectangular, lies overturned in the chamber; the lid being in a recess cut in the west wall. Sarcophagus looks like granite, with whitening material over the black stone.... ${ }^{\text {II }}$
...Sarcophagus is of red granite, with a coating of white plaster on many parts of the outside surface. The sarcophagus is empty and on its side; the lid being in a recess in the west wall of chamber on a built-up 'mastaba' of stones and cement. On the floor of the room are some fragments of wood, much decayed, fragments of white plaster from sarcophagus, scattered bones, and two pots. The sarcophagus is $193 \times 66 \times 66 \mathrm{~cm}$, and the lid flat above and below. ${ }^{\text {I2 }}$

This sarcophagus was later removed to Boston (33-4-20), and still bears some of the plaster coating, most likely used as "padding" to protect it during its precarious descent to the burial chamber in ancient times (figs. I2.4I, 12.52-12.53). The chamber was cleared on January 13, 1933, when additional objects, including alabaster model vessels, copper implements, and carnelian fragments, turned up. The limestone lid of the canopic pit lay partly displaced over the empty pit. January I4, I933 was the final day of work in the chamber. Among the finds on this day were thirty-two alabaster model vessels, additional copper utensils, a polishing stone, and scraps of gold leaf.

The reis's diary takes over on March 14, 16, and 18 of 1938, mentioning the clearance of the area immediately south of the mastaba, and focusing primarily on subsidiary mastaba G 2143 .

[^22]On November 8, 1993, the floor of the chapel was re-cleared, revealing a rectangular door socket hole just inside the chapel entrance on the north side (fig. 12.9). This allowed the door to swing open to the north, against the north wall, providing unobstructed access southwards to the rest of the chapel. ${ }^{13}$

Finds
MFA 06.1889: Fragment of flat alabaster round-bottomed bowl; diam. 35.3 cm ; precise findspot not recorded (fig. I2.IO)
32-12-7 (MFA 34.58; shipped to Boston May 1933): limestone doorjamb and thickness; from debris between G 2150 and G 2170 (in 1905-1906 buried on top of G 2170), originally from G 2150 , south entrance thickness; three fragments: a) h. 117 cm ; w. 22 cm ; th. 45 cm ; b) h. 110 cm ; w. 23 cm ; th. 30 cm ; c) h. 87 cm ; w. 67 cm ; th. 50 cm (figs. I2.II, I2.13-I2.I4, I2.65-I2.69) ${ }^{14}$
32-12-8 (MFA 34.57; shipped to Boston May 1933): limestone doorjamb; from debris between G 2150 and G 2170 (in 1905-1906 buried on top of G 2170), originally from G 2150, north entrance thickness; h. IIO cm; w. 17 cm ; th. 36 cm (figs. I2.12, 12.77) ${ }^{\text {I5 }}$

32-I2-9 (shipped to Boston May 1933): block of limestone raised relief with four sarcophagi and one male offering bearer, along with door socket recession and hole on left (north) underside for chapel door; from debris between G 2150 and G 2170 (in 1905-1906 buried on top of G 2170), originally from G 2150 , inner chapel, east wall, north end, over door, top course; h. 30.4 cm ; w. 142 cm ; th. 37.5 cm (figs. I2.16, 12.79-12.80) ${ }^{16}$
32-I2-IO (shipped to Boston May 1933): block of limestone raised relief with heads of Kanefer and Meresankh (his mother?) facing left, from debris between G 2150 and G 2170 (in 1905-1906 buried on top of G 2170), originally from G 2150, outer chapel facade, north of entrance; h .4 I cm ; w. 70 cm ; th. 32 cm (figs. 12.15, $12.72-12.73$, I2.77) ${ }^{17}$
32-I2-II (shipped to Boston May 1933): block of limestone raised relief fragment with one standing male figure facing right, šmsw' ' $h b t-$ [...], "the retainer Ikhet-[...]," from debris between G 2150 and G 2170 (in 1905-1906 buried on top of G 2170), originally from G 2150, chapel, west wall, north false door(?); h. 67 cm ; w. 28 cm ; th. 20 cm (figs. 12.17, 12.87, 12.97) ${ }^{18}$
32-I2-I2.I-2 (shipped to Boston May 1933): two fragments of limestone raised relief with lower portion of standing female figure (of Shepsetkau) facing right, from debris between G 2150 and G 2170 (in 1905-1906 buried on top of G 2170), originally from G 2150, chapel north wall; h. 39 cm ; w. 31 cm ; th. 13 cm (figs. I2.18, I2.83I2.85) ${ }^{19}$
MFA 06.1878: granite hammer, very shallow "necking," abrasion hollow on one side, opposite side smoother, edge blunt; h. 19.5 x w. 9.5 cm ; (fig. 12.19) ${ }^{20}$

Found in the burial chamber of G 2150 A
33-1-4 (shipped to Boston May 1933): fragment of alabaster statue, part of base including toes of left foot; h. $8.2 \mathrm{~cm} ;$ w. $7.4 \mathrm{~cm} ; 1.13 .6 \mathrm{~cm}$; (fig. 12.20)

13 Compare G 2140, where the ceiling socket is on the south side, indicating the door would open "into," and thus obstruct, access to the chapel. One would have to open the door, enter, then swing the door shut to gain access to the rest of the room.
I4 Reisner, $G N$ I, fig. 262, pl. 39b.
15 Reisner, $G N_{\mathrm{I}}$, fig. 26I.
16 Reisner, $G N$ I, fig. 26o.
17 Reisner, $G N$ I, fig. 263.
I8 Reisner, $G N_{\mathrm{I}}$, fig. 257.
19 Reisner, $G N$ I, fig. 258.
20 Illustrated in Seipel, Gott Mensch Pharao, p. 457; Berger et al., Der Entwurf des Künstlers: Bildhauerkanon in der Antike und Neuzeit, p. 20, fig. I4.

33-I-34 (shipped to Boston May 1933): RP: neckless shoulder-jar, type BLV; h. 22.6 cm ; d. shoulder 18.6 cm ; d. base 9.0 cm (fig. I2.2I) ${ }^{2 \mathrm{I}}$
33-1-35 (MFA 33.1044; shipped to Boston May 1933): alabaster model cylinder jar, type S-I d; h. 5.8 cm ; d. rim 4.3 cm ; d. base 3.4 cm ; dummy (fig. I2.22) ${ }^{22}$
33-I-36 (MFA 33.1045; shipped to Boston May 1933): eight alabaster model basins; type S-X b; h. 2.3-3.0 cm; d. rim $4.0-4.6 \mathrm{~cm}$; d. base ca. 2.4 cm (fig. 12.23) ${ }^{23}$
33-1-37 (MFA 33.1157; shipped to Boston May 1933): FRW: two jars with tapering base, short neck and roll rim; type A-VI b; one complete shoulder jar (type A II b) with hieratic inscription on shoulder and fragments of another; h. 22.4 cm ; d. rim 6.0 cm ; d. neck, 5.2 cm ; d. max. 13.0 cm ; the fragments of a second jar have a hieratic ink inscription on shoulder (fig. 12.24) ${ }^{24}$
33-I-38 (MFA 33.1046; shipped to Boston May 1933): two copper model chisels; spear-head blade with square haft; length, 8.8 cm ; w. blade, 0.7 cm ; thickness, 0.4 cm ; haft $0.3 \times 0.3 \mathrm{~cm}$ (figs. 12.25, 12.27) ${ }^{25}$

33-1-39 (MFA 33.1047; shipped to Boston May 1933): copper model chisel; length 6.5 cm ; w. 0.75 mm ; th. 2 mm (figs. $12.25,12.27)^{26}$
33-1-40 (MFA 33.1048; shipped to Boston May 1933): copper model chisel with pointed end; length, 8.8 cm ; w. I.O cm ; th. 5 mm (figs. I2.25, 12.27) ${ }^{27}$

33-1-4I (MFA 33.1048; shipped to Boston May 1933): copper fragments of two or more implements (figs. 12.25, 12.27) ${ }^{28}$
33-1-42 (shipped to Boston May 1933): copper model neckless shoulder jar; h. 4.0 cm ; d. rim I .6 cm ; d. shoulder 2.7 cm ; d. base 2.3 cm (figs. 12.26-12.27) ${ }^{29}$
33-1-43 (shipped to Boston May 1933): copper cover(?) or lid; h. I.o cm; d. 4.5 cm (figs. $12.27-\mathrm{I} 2.28)^{30}$

33-1-44 (shipped to Boston May 1933): carnelian: disk; d. 3.0 cm ; th. 0.5 cm in middle decreasing to edges (figs. I2.27, I2.29) ${ }^{31}$
33-1-45: faded green glazed faience disk; d. 3.0 cm ; thickness, 0.5 cm (figs. I2.27, I2.30) ${ }^{32}$
33-1-46 (shipped to Boston May 1933): gold: small sheet of leaf gold and four bits; 1.4 .5 cm ; w. 3.2 cm (fig. 12.27) ${ }^{33}$
33-I-47+33-1-66 (= MFA 33.1053; shipped to Boston May 1933): RBrW: fragments of a jar with slender neck and slightly flaring mouth; type A-VII; h. 22 cm ; d. rim 6.6 cm ; d. neck 5.2 cm ; d. body $9.6 \mathrm{~cm}(\text { fig. } 12.3 \mathrm{I})^{34}$
33-1-48 (MFA 33.1054; shipped to Boston May 1933): BrW: fragments of large jar; type A-II b; h. 19 cm ; d. rim, 10.4 cm ; d. body, ca. 29.5 cm (fig. 12.32) ${ }^{35}$
33-1-49: RBrW: fragments of jar of type A-II b; d. rim ca. 7 cm (fig. 12.33 ) ${ }^{36}$ 33-I-50 (MFA 33.IO 55): copper model dished rectangular razor; 1. 4.7 cm ; w. 2.7 cm ; th. o.I cm (fig. 12.34) ${ }^{37}$
${ }_{21}$ Reisner, $G N_{1}$ I, p. 443, fig. 267; p. 444; pl. 43b (3/2); Reisner and Smith, $G N_{2}$, p. 77.

22 Reisner, $G N_{\mathrm{I}}$, p. 443, fig. 267; p. 444; pl. 43b (2/7); Reisner and Smith, $G N 2$, p. 93 .

23 Reisner, $G N_{\mathrm{I}}$, p. 443, fig. 267, p. 445; pl. 43b (2/I-4); Reisner and Smith, $G N_{2}$, p. iof.

24 Reisner, $G N_{\text {I }}$, p. 443, fig. 267; pl. 43b (3/3); Reisner and Smith, $G N_{2}$ 2, p. 69, fig. 81.
25 Reisner, $G N$ I, p. 443, fig. 267; p. 445; pl. 43 C (2/6-7).
26 Reisner, $G N$ I, p. 443, fig. 267; p. 445; pl. $43 \mathrm{c}(2 / 5$ )
27 Reisner, $G N_{\text {I }}$, p. 443, fig. 267; p. 445; pl. 43c (2/5). Note that both 33-I-40 and 41 are now numbered MFA 33 .IO48.
28 Reisner, $G N_{\mathrm{I}}$, pl. 43C (2/4).
29 Reisner, $G N$ I, p. 443, fig. 267, p. 445; pl. 43c (2/4).
30 Reisner, $G N_{\mathrm{I}}$, p. 443 , fig. 267 , p. 445 ; pl. $43 \mathrm{C}(\mathrm{I} / \mathrm{I})$.
31 Reisner, $G N$ I, p. 443, fig. 267, p. 445; pl. 43C (I/4).
32 Reisner, $G N$ I, p. 443, fig. 267, p. 445; pl. 43c (I/2).
Reisner, $G N \mathrm{I}$, p. 445 ; pl. $43 \mathrm{C}(\mathrm{I} / 3$ ).
Reisner, $G N_{\text {I }}$, p. 443 , fig. 267, p. 445; pl. 43 b (3/I).
Reisner, $G N_{\text {I }}$, p. 443, fig. 267; Reisner and Smith, $G N 2$, p. 69.
Reisner, $G N$ I, p. 443, fig. 267; Reisner and Smith, $G N 2$, p. 69.
Reisner, $G N_{\text {I }}$, p. 443, fig. 267; p. 445; pl. $43 \mathrm{C}(2 / 2)$.

33-I-5I (MFA 34.48a-b; shipped to Boston May 1933): two fragments of carved wood with bound papyrus design, probably from a chair or a coffin; (a) $28 \times 5 \mathrm{~cm}$ and 6.4 cm thick; (b) $28 \times \mathrm{I} 3 \mathrm{~cm}$, th. 3.0 cm (fig. I2.35) ${ }^{38}$

33-I-52 (MFA 33.IO56): wood piece worked on all four sides; $27.4 \times 6 \mathrm{~cm}$ and 3.2 m thick (fig. I2.36) ${ }^{39}$
33-I-57 (MFA 33.IO57; shipped to Boston May 1933): white sandstone whet stone, copper stained on all sides; I2.2 x II.O x 5.4 (fig. I2.37) ${ }^{40}$
33-I-62 (MFA 33.IO6I; shipped to Boston May 1933): 33 alabaster mode basins of type S-X b; h. $2.4-3.4 \mathrm{~cm}$; d. 3.9-4.8 cm (fig. 12.38) ${ }^{41}$
33-1-63 (MFA 33.1062; shipped to Boston May 1933): alabaster model cylinder jar; type S-I d; h. 6.3 cm ; d. 4.6 cm (fig. I2.39) ${ }^{42}$
33-I-64 (MFA 33.IO63; shipped to Boston May 1933): alabaster model barrel belted jar; type S-V extra; h. 7.2 cm ; d. rim, 3.0 cm ; d. max. 4.4 cm ; d. base, 2.4 cm (fig. I2.40) ${ }^{43}$

33-4-20 (shipped to Boston May 1933): red granite sarcophagus, h. 80 cm ; w. 197.2 cm ; th. 66 cm ; h. of box: 70.3 cm ; inside of box: 175 x 48 cm ; interior depth 54 cm ; h. of lid: 13.3 cm ; w. of box lip/ walls at top: 7.6 cm ; th. of adhering plaster: 2.5 cm ; no rebate on underside of flat lid (figs. I2.4I, I2.52-I2.53) ${ }^{44}$

A few intrusive objects in debris of shaft в:
32-I2-2, 32-I2-3, 33-I-I (MFA 33.IO2I; shipped to Boston May 1933): three alabaster fragments from a standing male statuette: (a) from right leg: $13 \times 4.8 \times 6.8 \mathrm{~cm}$; (b) from left arm: $15.6 \times 4.0 \times 4.0 \mathrm{~cm}$; (c) from left shoulder: $14.0 \times 7.3 \mathrm{~cm}$; possibly thrown out from the serdab; on top of the mastaba at north end was found another fragment of a smaller statuette; these fragments could derive from another mastaba (figs. 12.42-I2.44). 45
33-I-2 (MFA 33.IO22): alabaster fragment of left shoulder of statuette, smaller than the fragments listed above; $8.8 \times 3.2 \mathrm{~cm} .{ }^{46}$ (fig. 12.45)

## Architecture

Kanefer's mastaba offers us some of the firmest dating criteria in Cemetery G 2100. First of all, the southern face of the tomb, as well as that of $\mathrm{G}_{2}$ 270, does not align with the original southern face of G 2130 (fig. 2.5). A better alignment only occurs with the southern casing blocks of G 2130; this implies that Khentka's mastaba (G 2130) was expanded before the casing of G 2150 was added. ${ }^{47}$ There are also chronological implications on the north face of the mastaba, where subisidiary mastabas, such as that of Senwehem (G 2132 ) abut the tomb directly and hence must postdate it (see Part II). Another subsidiary mastaba (G 2151; see Part II) to the north of Kanefer's tomb belongs to a man named Ptahwer, a funerary priest who also appears in Kanefer's chapel. We thus have one of our very few examples of a subsidiary tomb bearing a direct relation to a major mastaba in its immediate vicinity; another example is provided by the tomb of Nefer (G2IIO), in whose chapel Senenuka, owner of G 2041, appears (see above, Chapter 6). The rest of the area to the

38
( parallel to this motif, see D. Arnold, in Antike Welt 33.6 (2002), p. 625, fig. 9 (mastaba of Khnumhotep at Lisht), and P.P. Koemoth, "Osiris et le motif des deux papyrus liés," $D E_{46}$ (2000), p. 25.
39 Reisner, $G N$ I, p. 443, fig. 267; p. 445.
40 Reisner, $G N_{\mathrm{I}}$, p. 443, fig. 267; p. 445.
41 Reisner, $G N_{\mathrm{I}}, \mathrm{p} .445$; pl. 43 b (I/I-I2; 2/8-I2).
42 Reisner, $G N_{\text {I }}$, p. 443, fig. 267; p. 444; pl. 43b (2/5); Reisner and Smith, $G N_{2}$, p. 93 .

43 Reisner, $G N_{\mathrm{I}}$, p. 443, fig. 267; p. 445; pl. 43 b (2/6).
44 Reisner, $G N$ I, p. 444; pl. 38e.
45 Reisner, $G N$ I, p. 445.
46 Ibid.
47 See Jánosi, Giza in der. 4. Dynastie, p. I49.
north, between G 2150 and G 2220, was filled with several complexes of small mastabas, numbered G $2131-\mathrm{G} 2139$ and G $2151-\mathrm{G} 2159$.

None of the earliest features of Khufu-era mastabas is present here. There is no evidence of a slab stela, although one could argue that the subsequent interior stone chapel construction, broken into the mastaba's core, might have destroyed any stela emplacement. The burial shaft (A) shows no T-shaped portcullis stone grooves, nor is the burial chamber lined with fine limestone blocks (figs. 12.51-12.54). Even the casing stones show a unique pattern for this cemetery: Reisner's "z masonry," consisting of nummulitic limestone blocks set in lowstepped courses, instead of smoothly dressed sloping surfaces ( x or y masonry). $4^{8}$ This marks a sharp constrast around the chapel facade, where massive limestone blocks make up the panels north and south of the entrance. Kanefer joins Merib (G 2100-I) as one of only two mastabas in Cemetery g 2100 to show (preserved) facade decoration.

Kanefer was the only individual who added a secondary shaft to his mastaba core, the unfinished shaft B , directly west of the chapel area (figs. 12.55-12.56). ${ }^{49}$ The chapel itself contains two false doors, and a destroyed serdab west of the northern false door. A set of exterior mud-brick rooms complements the interior stone chapel, and runs the entire length of the east face of the mastaba. It even encloses the tomb's subsidiary north niche, which shows a tiny rectangular offering basin carved in its base (figs. 12.48-12.50).50

Thick mud-brick walls running north-south down the middle of the street between G 2150 and G 2170 make up three rooms of the exterior chapel (figs. I2.1-12.3). Within the precinct of the longest, northernmost room (d), seven subsidiary shafts were later sunk into the street (figs. I2.I-I2.3, I2.108-I2.II4). There are also later burials placed along the mastaba's western face (see below, Shafts and Burials).

Curiously, Cemetery G 2100 is almost devoid of preserved statuary. Perhaps the dearth of serdabs provides the explanation. Qedfy (G2135a) and Kanefer are among the few exceptions. Fragments of statuettes turned up on top and around the mastaba, most likely dispersed by tomb robbers who punctured the chapel's north false door in an effort to reach the serdab. None of the fragments is inscribed, so there is no way to discern whether Kanefer, Shepsetkau, or Meretites were represented, either singly or in group statuary (see above, Finds).

Shaft A was sunk in the traditional location, north of the center of the mastaba core (figs. 12.51-12.54). It takes the form of a typical post-Khufu shaft, with corridor and burial chamber to the south of the shaft, but no portcullis grooves or burial chamber lining. Relative to many of the other burial chambers in Cemetery G 2100, shaft A produced a large number of small artifacts. The most important item, however was the uninscribed red granite sarcophagus (with lid propped against the west wall), still coated with plaster "padding" to protect it during its descent to the burial chamber (figs. 12.41, 12.52-12.53).

48 Reisner, $G N$ ı, p. 178.
49 The other secondary or tertiary shafts in tombs in Cemetery g 2Ioo, such as Sedit (G 2100), Merib (G 2100-I), and the anonymous (G 2220), are probably later additions. The only true parallel to Kanefer, with two contemporary shafts, may be Nensedjerkai (G 2IOO-II).
so Cf. Reisner, $G N$ I, p. 375, fig. 206. Similar rectangular basins incised in the floor may also be found in the narrow passage between G 2120 (Seshatsekhentiu) and G 2100-II (Nensedjerkai) (PDM_1993.107.I8), perhaps in the stone flooring of Seshatsekhentiu's exterior stone chapel, G 2120 (PDM_1993.115.20), and in the floor of the north chapel of G 2000 (Lepsius 23) (CIO28).

Shaft в contained a small chamber with no connecting passage, placed uncharacteristically to the north of the shaft (figs. 12.55I2.56). $5^{1}$ This chamber was apparently deemed unsatisfactory, for the shaft was excavated further down for another 5.6 m , but no second chamber was ever hewn. Objects found in this shaft were considered by Reisner to be intrusive. Since both chapel false doors appear to be dedicated to Kanefer, no particular connection can be made between the two false doors and the two shafts a and в. ${ }^{52}$

Much of the interior chapel is carved in a thin plaster layer laid over the limestone slabs. The texts on the north wall are in much worse condition today than they appear in Reisner-era photography. Similarly, many of the estate names in the lowest register of the east wall, visible to Petrie in 188I, are now worn away. A modern concrete roof constructed over the chapel area has walled up the serdab area behind (west of) the north false door.

## Shafts and Burials

G 2150 was originally a one-shaft mastaba with chief shaft A, in a medial axis north of the center of the mastaba. Later a secondary shaft was dug south of A and west of the serdab (shaft в). In addition, several exterior burials were located in and around the mastaba complex:

G 2150 exterior burial by west wall (fig. 12.57)
Uninterpretable; no tomb card sketch.
G 2150 coffin of a different exterior burial by west wall (fig. 12.58)
A different "burial" from the above; some fragmentary bone visible, but uninterpretable. No tomb card sketch.

G 2150 exterior burial by west wall, (fig. I2.59)
Exterior burial; articulated skeleton, lying on back in extended position. Visible elements include fragmentary skull, ribs, vertebrae, right and left os pubis, right and left femora, tibiae and fibulae, some foot bones. Age and sex uncertain. No tomb card sketch.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. I: late reign of Khufu (core); Shepseskaf or later (mastaba).

While the mastaba core was constructed under Khufu's reign, a long interval elapsed between construction and the near completion of the chapel. Based on the repertoire of scenes, and the occurrence of cartouches of Khafre and Menkaure on the east wall, the reliefs were most likely carved at the beginning of Dynasty 5. Whether Kanefer was the original owner of the mastaba under Khufu is open to debate. ${ }^{53}$

A second burial shaft and two false doors in the chapel are features often ascribed to the reign of Menkaure and after. The finished mastaba cannot, of course, predate Menkaure, since a personified estate with that king's name appears on the chapel's east wall. Reisner dates the decoration to Shepseskaf or later. The reliefs are often compared to those of Seshemnefer I (G 4940) and
sI For examples of burial chambers placed other than south of the shaft in Cemetery G 2100, see G 2170 A (chamber on west), and G 2220 в (chamber on north).
52 On the relationship of shafts to tomb owner identity, see Jánosi, "Aspects of Mastaba Development: The Position of Shafts and the Identification of Tomb Owners," in Abusir and Saqqara in the Year 2001, pp. 337-50.
53 See Jánosi, Giza in der 4. Dynastie, p. 223.

Seshemnefer II (G 5080 = G 2200), between Shepseskaf and first half of Dynasty 5. Moreover, a statistical analysis by Seidlmayer, examining some of Cherpion's dating criteria, place the tomb in the reign of Userkaf. ${ }^{54}$ This is a logical date for the occupation of G 2150 by Kanefer. 55

An unpublished three-page manuscript in the archives of the Museum of Fine Arts, Boston, is entitled, "The Family of Kanofer of G 2150." Reisner assumes Kanefer is a great-grandson of Khufu, and dates the tomb to prior to the reign of Neferirkare based on the chapel form (4a) and decoration, and the red granite sarcophagus. Reisner states that Kanefer's son Kasewedja (G 5340) must have found all cores in Cemetery g 2IOO already occupied, hence the location of his tomb in the Cemetery en Echelon. ${ }^{56}$ He claims that G 5340 was "obviously later than" the mastabas of Duaenre (G 5iIO), Khnumbaef (G 5230), and Khemten (G 5210). Kasewedja is dated to post-Neferirkare, perhaps as late as Niuserre. ${ }^{57}$ Summarizing the tombs of the Seshemnefer family along with those of Kanefer and descendants, Reisner reconstructs a period of about 90 years for seven mastabas for individuals over four generations.

## Decoration

Smith relates Kanefer's chapel decoration to that of Seshemnefer I (G 4940) and Seshemnefer II (G 5080), calling them transitional tombs ranging from the reign of Shepseskaf to the first half of Dynasty 5. Of the relief carving in G 2150, Smith writes that:

The chapel of Kanofer (G 2150) was lined with white limestone, but the reliefs are very uneven in quality. The entrance jambs are well carved, bold in style although not very high, and with simple masses little broken by inner detail. The west wall has a large figure in high, bold relief, well modelled; but the other reliefs are hastily executed. The east wall has figures indicated by little more than incised outlines, roughly drawn and with uneven surfaces. Perhaps the work is unfinished, certainly the evidence points to a

54 Seidlmayer, Stephan J. "Stil und Statistik. Die Datierung dekorierter Gräber des Alten Reiches-ein Problem der Methode," in Internationale Archäologie 23 (1997), pp. 40, 45-46.

55 Compare PM III, p. 77: early Dynasty 5; Baer, Rank and Title, p. 146 [536]: early Dynasty 5; Barta, Opferliste, p. 156: early Dynasty 5; Baud, Famille royale et pouvoir $\mathrm{I}, \mathrm{p} .42$; 2, pp. 593-996 [239]: Menkaure-beginning of Dynasty 5; Cherpion, Mastabas et hypogées, p. 226: Menkaure; Harpur, Decoration in Egyptian Tombs, p. 270 [268]: Userkaf-Neferirkare; Jacquet-Gordon, Domaines funéraires, pp. 24I-42 [19G5]: early Dynasty 5; Kanawati, Egyptian Administration, pp. 12324, 155 [35I]: early Dynasty 5; Kaplony, Die Rollsiegel des Alten Reichs 2, pp. 49-50, pl. I6: not later than Menkaure; Piacentini, Les scribes, p. I48: end of Dynasty 4beginning of Dynasty 5; Reisner, GNI, pp. 2I4, 3II: post-Menkaure.
56 Junker, Gîza 7, pp. 158-84.
57 See Baer, Rank and Title, p. 148-49 [546]: "A large mastaba with an interior L-shaped chapel with two false doors and a northern niche. It is situated two rows to the east of the cemetery en échelon and was planned with an interior chapel from the beginning. An extension for a serdab was added on the south and a mastaba much like it on the north, against which were later built innumerable small, multishafted later tombs. This second mastaba, Giza G 5350, probably was built for the son of $K_{3}-s w d_{3}$, and against it was built the small mastaba of a $K_{3}-n f r$, perhaps a grandson. Junker shows that $K_{3}$-swd $d_{3}$ was almost certainly a descendant, probably the son of $K 3$-nfr [536, G 2150], who has a son with the name $K 3$-sd $d_{3}$ depicted in his tomb and who bore titles very similar to those in [546]. Date: mid-Dynasty 5." Smith, HESPOK, p. 165, dates the tomb to the transitional period from the reign of Shepseskaf to the first half of Dynasty 5.
hasty completion of decoration which had been begun with the carefully executed work of the entrance doorway. ${ }^{58}$

Chapel Entrance (figs. 12.63-12.69). The architrave found in the street east of the tomb was originally assigned by Reisner to the subsidiaary northern niche. ${ }^{99}$ But there is no precedent for an inscribed north niche in Cemetery G 2100; nor does the north niche appear constructed to receive an architrave. On the other hand, the architrave's measurement of about 1.85 m wide would fit well over the entrance to the chapel. The architrave bears one horizontal line of titles, with space left below for a second line of name(s) and title(s) that were never carved (fig. 12.60):

Text: imy r wpwt [smsw is] pr.wy hrp © w hary sťts bist nb smr
Translation: Overseer of commissions, [elder of the chamber] of the double administrations, controller of interpreters, ${ }^{60}$ master of secrets of every foreign land, ${ }^{61}$ companion (rest uncarved).

A false door drum, excavated by Mariette and given to the Musée du Louvre (C 155 ) by Prince Napoléon on February 15, 1964,
 imy-r wpwt K3-nfr, "King's son, overseer of commisions, Kanefer." ${ }^{62}$ The drum is currently set within the false door of Mery (Louvre B 49), with which it is unrelated. Some doubt has arisen as to which of the many Kanefers ${ }^{63}$ known in the Old Kingdom originally owned the drum. It preserves a height of 26 cm and, more importantly, a width of 67 cm . The available space at the entrance to the chapel of G 2150 is likewise about 67 cm , making for a possible fit. Mariette makes no mention of this tomb. ${ }^{64}$ Ziegler states that the only Kanefer to bear both titles (ss nswt and imy-r wpwt) was the Kanefer buried at Dahshur. ${ }^{65}$ However, a fragmentary text on the southern exterior facade of G 2150, restored by an additional block of currently unknown location and published by Málek (see below, south facade, figs. 12.70-12.71), does indeed provide our Kanefer with the title s3

58 Smith, HESPOK, pp. 165, 250.
59 Reisner, $G N_{\text {I }}$, p. 444, fig. 263.
60 The word $i_{3}(w w)$ means "interpreters" when applied to Egyptians, and "Egyptianized Nubians" when applied to foreigners; cf. L. Bell, Interpreters and Egyptianized Nubians in Ancient Egyptian Foreign Policy: Aspects of the History of Egypt and Nubia, Ph.D. dissertation (University of Pennsylvania, 1976), pp. 57 (for Kanefer, G 2150, and Kasewedja, G 5340), 74-76, 90-92, and Hans Goedicke, "The Title $\sqrt[\sim]{\square}$ in the Old Kingdom," JEA 46 (1960), pp. 60-64; Jones, Index of Ancient Egyptian Titles 2, pp. 702-703, no. 2569.
6I Note the full Old Kingdom spelling of bist for including the bs sign (Wb. 3, p. 234), in contrast to the abbreviated writing $\leadsto \sim$, on the chapel's west wall, above the large-scale standing figure of Kanefer.
62 Musée du Louvre C 155 (other number: E 3908); Ziegler, Catalogue des stèles, cat. 43, pp. 238-39; Donadoni-Roveri, and Tiradritti, Kemet, Alle Sorgenti del Tempo, cat. 264. The lintel is h. 26 cm ; w. 67 cm .
63 G i203, likewise an imy-r wpwt, and possibly an ancestor to the Kanefer of G 2150; Reisner, GNI, pp. 389-92, and Manuelian, Slab Stelae, stela 2, pp. 4245, with pls. 3-4; G 2184, steward (imy-r pr) Kanefer, attested in the tomb of Akhmeretnisut: A.M. Roth, in Mummies \& Magic, cat. I4, pp. 83-87; Kanefer, judge and district administrator $(s 3 b \subset \underline{d} m r)$, owner of a false door in the tomb adjacent to mastaba g 5350 ( $=$ S 846/847): Junker, Gîza 7, p. 19I, fig. 8I; G 4620, royal document scribe ( $s s^{\check{ }}(n s w t$ ), Kanefer (HU-MFA Expedition photograph C5703): Reisner, $G N$ i, pl. 67f. See also Junker, Gîza 7, pp. 162-63.
64 Mariette, Les mastabas, pp. 488-571 (Giza appendix)
65 Ziegler, Catalogue des stèles, "commentaire," p. 238. For the Dahshur Kanefer, see ibid., cat. 42, pp. 23I-37 (E II 286).
nswt. Thus both titles on the Louvre drum, ss nswt and imy-r wpwt, also occur in G 2150 . This fact, coupled with the alignment in the widths of the drum vis à vis the chapel entrance, and the similarities in the raised relief-carving style, seem to certify the assignment of the Louvre drum to G 2150. Baud came to this conclusion as well in 1999, and carefully reconstructed the likely 19th-century excavation history around Kanefer's tomb (Wilkinson, Mariette, Petrie). ${ }^{66}$ Excavations between 1850 and 1880, conducted either by Mariette or illicit diggers, thus most likely account for the discovery of the Louvre drum near the entrance to G 2150 .

South (Left) Entrance Thickness (figs. 12.63, 12.65-12.67). Kanefer is seated holding a staff, facing out (eastwards) of the chapel. Facing him is the scribe Wehemka presenting a document, while another scribe kneels behind him recording events. ${ }^{67}$ Two registers contain male bearers escorting livestock (oryx and calf) towards Kanefer's figure. The scene is divided today between the tomb itself and relief blocks in the Museum of Fine Arts, Boston ( $32-\mathrm{I} 2-7 \mathrm{a}=\mathrm{MFA}_{34} .58$ ).


Text: (I) imy-r wpwt (2) smr w'ty (3) ḥm-ntr Sbk Šdt (4) K3-nfr (5) š Whm-ks (6) it.t. hod
Translation: (I) Overseer of commissions, (2) sole companion, (3) priest of Sobek of Crocodilopolis, (4) Kanefer. (5) The scribe Wehemka. ${ }^{68}$ (6) Taking an oryx.

North (Right) Entrance Thickness (figs. 12.64-I2.65, 12.6812.69). Only the lower half of Kanefer's seated figure survives, along with most of the table of nine or ten half-loaves of bread. Only one additional male appears in the scene, the funerary priest Nakhtkai, who extends an ewer and basin towards Kanefer. Extending under the table is an ideographic list of offerings. In the fragmentary register above Nakhtkai are three different types of jars on stands, along with bread loaves resting on the ground line and in a basin respectively. As with the south entrance thickness, the scene is split between the tomb itself and Boston ( $32-12-8=$ MFA 34.57).


Text: (1) [imy-r] wpwt [...] (2) ham-k3 Nbt=k(3=i) (3) hnkth ha (4) th3 (5) $\check{s}$ $h_{3}(6) m_{n h t} b_{3}(7)$ iws $h_{3}(8) m_{3}-b_{d} b_{3}(9) ~ g h_{s} h_{3}$

66 Baud, Famille royale et pouvoir 2, pp. 593-96, with figs. 44-45.
67 This figure is reproduced on the title page of Cherpion, Mastabas et hypogées.
68 A man named Wehemka also appears in the nearby tomb of Kaninisut I (G 2155). As ss pr md ${ }^{2} t$ he is shown on the west wall, south of the south false door, and as imy-r pr whm- $k_{3}$ he appears on the west wall, central scene, and the north wall, presenting a document to the deceased; for the latter, cf. Manuelian, "Presenting the Scroll: Papyrus documents in tomb scenes of the Old Kingdom," in Studies in Honor of William Kelly Simpson 2, figs. 2 and 7. This man, and not the Wehemka in Kanefer's tomb, is the owner of $\mathrm{D}_{\text {II7 }}$, excavated by Steindorff, whose chapel is in Hildesheim (no. 2970): PM III, pp. II4-15, plans XI, XIV. Junker, Gîza 3, pp. 37-38 [22]; Steindorff and Hölscher, Die Mastabas westlich der Cheopspyramide, pl. 16; Kayser, Die Mastaba des Uhemka; Roeder, Die Mastaba des Uhemka im Pelizäus-Museum zu Hildesheim.

Translation: (I) [Overseer of] commissions, [...] (2) funerary priest, Nakhtkai. (3) A thousand jars of beer, (4) a thousand loaves of bread, (5) a thousand alabaster vessels, (6) a thousand pieces of cloth, (7) a thousand oxen, (8) a thousand oryxes, (9) a thousand gazelles.

South (Left) Facade (figs. 12.3, 12.70-12.71). The large standing figure of the deceased in this scene has been partially restored through Málek's discovery of a block, labeled "Amherst 185," containing Kanefer's head, name, and titles. ${ }^{69}$ Kanefer wears a short, valanced wig, and holds a staff in one hand and a handkerchief in the other. The central portion of his body is missing. Tucked underneath Kanefer's left elbow and holding onto his staff, a small naked figure of his son Kasewedja, owner of G 5340 , sports a sidelock and necklace, and holds a bird. At right are four vertical registers, each with one named male standing figure proffering (from top to bottom): a brazier, linen, a libation vessel and water jar, and three birds. Behind Kanefer, four very damaged vertical registers of funerary priests complete the scene, carrying additional items. All that can be confirmed are a bird in the hand of the second figure, and a situla and brush ${ }^{70}$ in the left hand and a bag over the shoulder of the fourth (lowest) figure (similar to that shown on the north facade, fig. 12.77).

#    

Text: (1) s3 nswt imy-r wpwt mdw $k_{3}-h \underline{d}$ (2) $K_{3}-n f r$ (3) $s_{3}=f$ [smsw? imy-r $w_{p} w_{t} K_{3}-5\left[w_{3}\right]$ (4) imy-r ham-k3 Ptḥ-wr (5) hm-k3 Rdìn-pth (6) hm-ks $\operatorname{Snb}$ (7) hm-ks Pth-wr (8) [...] Nfr-[hr]-n-pth (9) hm-k3 Hr-nfr(?)
Translation: (I) King's son, overseer of commissions, herdsman of the white bull, ${ }^{71}$ (2) Kanefer. (3) His [eldest?] son, overseer of commissions Kase[wedja]..$^{22}$ (4) Overseer of funerary priests, Ptahwer. ${ }^{73}$ (5) Funerary priest Redjienptah. ${ }^{74}$ (6) Funerary priest Seneb. ${ }^{75}$ (7) Funerary priest Ptahwer. (8) [...] Nefer[her?]enptah. (9) Funerary priest Hernefer(?)

69 J. Málek, "New Reliefs and Inscriptions from five Old Tombs at Giza and Saqqara," BSEG 6 (1982), pp. 47-50. Málek suggests that this relief was removed from the tomb between 1875 and 1921; ibid., p. 50 . This range could be narrowed to 1875-1905, since it was absent from the tomb when Lythgoe first cleared it during the 1905-1906 season. For this reference, I am grateful to E. Brovarski, and for the photograph reproduced in fig. I2.70 I thank Jaromír Málek. For the earliest reference to this fragment, see the London Sotheby's sale for June 13, 1921: Catalogue of the Amherst Collection of Egyptian and Oriental Antiquities, p. 18, no. 185: "Limestone Bas-Relief from the Pyramid plateau, 19 in. by 13 in., bearing a portrait head of an official, a fine example of Old Kingdom work."
70 On these spatulate utensils, see E. Brovarski, "The Priestly Title of Anubis: $\frac{30}{0}$," in Hommages à Fayza Haikal, pp. 67-78.
71 Jones, Index of Ancient Egyptian Titles I, p. 455, no. 170I, and compare the completely preserved title on the north wall, figs. 12.83-12.86.
72 For an almost identical (Saqqara) parallel of a son grasping his father's staff, standing naked with sidelock, amulet necklace, and bird in the rear hand, see Davies, Ptahhetep II, pl. 6.
73 Ptahwer appears several times in the tomb. He is also the owner of the small, subsidiary mastaba (G215I) with two partially inscribed false doors just north of G 2I50, marking one of the few clear-cut examples of a mortuary cult attendant's tomb in the vicinity of that of the deceased he served.
74 Cf. Ranke, PN I, p. 228.3. This may be the same individual represented on the chapel's west wall, although in that case the $r$ is not written.
75 The crack in the block line cuts right through this personal name; while Sni might be a viable alternative reading to $\operatorname{Sn} b$, note that a $\operatorname{Sn} b$ appears on the west of the chapel, just north of the southern false door.

North (Right) Facade (figs. 12.3, 12.72-12.77). Kanefer is embraced, presumably by his mother, the rbt nsw $t$ Meresankh. ${ }^{76}$ The scene is entirely preserved on the tomb wall but for the two heads and the identifying text for Meresankh, which is carved in plaster and preserved in the Museum of Fine Arts, Boston (32-r2-10). Both figures stand facing left, or southwards "into" the chapel entrance. Kanefer wears an elaborately striated kilt and a broad collar and holds an (almost completely) missing staff in his right hand and a handkerchief in his left. His wig bears only horizontal detail, rather than the individually articulated curls typical of most short wigs. Meresankh extends one hand over Kanefer's shoulder, and grasps his left wrist with her other hand. She wears a close-fitting garment extending from her shins to just below her breasts and held up by tapering shoulder straps, but no other carved accessories. In front of Kanefer, only the hand of a child, apparently named Nedjem, survives. One vertical column of hieroglyphs identifies the deceased at the extreme left edge of the scene.

Behind the large-scale figures of Kanefer and Meresankh, registers of men face inward to the left. The topmost register preserves merely the legs of one figure. In the second register, the first funerary priest carries a rectangular bolt of cloth with tabs, while the second bears a fan ${ }^{77}$ and bag. A box or chest is on the ground between them. In the third and lowest register, the first man carries a bag and probably had a situla coupled with a brush, the second possibly carries a scribal case(?) on his shoulder, and the third figure is a male dwarf carrying a monkey on a leash on his head..$^{8}$ The monkey wears an abbreviated garment tied at the back.

North facade panel:

76 The tombs of Nefer (G 2IIO) and Kanefer (G 2150) were originally associated by Reisner because of this Meresankh. Reisner incorrectly reconstructed the name of Nefer's wife as Meresankh, presumably the mother of Kanefer represented here. But in fact Nefer's wife was called Wenankhes (named on a relief fragment in Birmingham, England, discovered by H.G. Fischer (Varia, pp. 3I-32); see above, tomb of Nefer). "Meresankh" should be corrected to read "Wenankhes" in the following publications: Reisner, GNI, p. 422; Jánosi, Giza in der 4. Dynastie, p. I23; PM III.I, p. 72; Baer, Rank and Title, p. I46 [536]; Harpur, Decoration of Egyptian Tombs, p. 286 (table 2.3); Piacentini, Les scribes, pp. 97-98.
77 Similar representations of this type of fan appear in the tombs of Khafkhufu I (G 7130-7140), Simpson, The Mastabas of Kawab, Khafkhufu I and II, pl. 22b, fig. 33; Khuenre (MQ I), HU-MFA Expedition Photographs B2046 and B2о58 (east wall), B2O59 (south wall); and Kaemsekhem (G $7660=$ Lepsius 59), north wall (HU-MFA Expedition Photograph asi65). See also Beth Thompson, "Two Unusual Fans in Wall Scenes at el-Hagarsa," BACE 3 (1992), pp. 77-83.
78 This scene is reproduced in the study on dwarves by V. Dasen, Dwarfs in Ancient Egypt and Greece, pl. 18.2 (E 15), and see her discussion of Old Kingdom scenes on pp. 109-34. For additional scenes of dwarves and monkeys, see H.G. Fischer, "A Scribe of the Army in a Saqqara Mastaba of the Early Fifth Dynasty," JNES i8 (1959), pp. 243, fig. 8, and esp. pp. 251-52 with fig. 18; three examples with the monkey perched on the head of the dwarf, including the tombs of Kanefer (G 2150), Idu, in Junker, Gîza 8, p. 83, fig. 35, pl. I4a (= Hildesheim 2390, Martin, Reliefs des Alten Reiches und Verwandte Denkmäler I, CAA Hildesheim 3, p. 89), and Ankhmahor, in Kanawati and Hassan, The Tomb of Ankhmahor, pls. 8, 42, and Capart, Une rue de tombeaux, pl. 41. The Saqqara tomb of Kaaper described by Fischer has now been published by M. Bárta, The Cemeteries at Abusir South I, esp. p. 156, fig. 4.II, p. 16I, fig. 4.13, and pl. 55a. See also Elizabeth Thompson, "Dwarfs in the Old Kingdom in Egypt," BACE 2 (1991), pp. 91-98 (with pl. 16). A catalogue of dwarf scenes was collected by G. Pieke, Der Zwerg im Flachbild des Alten Reiches (MA thesis, Munich, 1994). On the subject of dwarves and pygmies in general, see H.G. Fischer, "Some Titles Associated with Dwarfs and Midgets," GM 187 (2002), pp. 35-39; O. el-Aguizy, "Dwarfs and Pygmies in Ancient Egypt," ASAE 7 I (1987), pp. 53-60; and D. Silverman, "Pygmies and Dwarves in the Old Kingdom," Sarapis I (1969), pp. 53-62.


Text: (1) [imy]-r wpwt mdw rhyt smsw is pr.wy imy-ib n ntrr=f K3-nfr (2) [...] smr79 wrt(t) rb(t) nswt Mr=s-nhb (3) [...]m... rb [nswt] $N d m(?)^{80}[\ldots](4) \quad h m-k 3 N(i)-k(3)-r^{8 \mathrm{rI}}(5) g f$
Translation: (I) [Over]seer of commissions, staff of the subjects, elder of the chamber of the double administrations, favorite of his god, Kanefer. (2) [...] sole companion, royal acquaintance, Meresankh. (3) $[\ldots$ king's] acquaintance Nedjem(?) [...]. (4) funerary priest Nikare. (5) Monkey

East Wall (figs. 12.78-12.80). Over the chapel entrance is a long architrave block with representations of four $k r s(w)$-sarcophagi; these take the place occupied by boating scenes in the tombs of Merib (G 2100-I) and Kaninisut I (G 2155). To the right (south) of the entrance, the wall is composed of three registers of personified estate offering bearers, a single slaughter scene, and in the upper right (southmost) corner, a menu list with 24 compartments. The righthand entry in each row is ideographic and does not conform to the normal sequence of offerings. ${ }^{82}$ These four compartments contain, from top to bottom: a destroyed item, an offering table(?), and two tall loaves of bread. Since no large-scale figure of Kanefer appears on this wall, the offering bearers should probably be understood to be marching "around the corner" towards Kanefer's seated figure on the south wall. The carving here is among the crudest in the entire chapel, and damage had already rendered much of the lowest register less readable by the time of Lythgoe's excavations (1905-1906) than in Petrie's time (188I).

Five individuals occupy the topmost register, each with a basket of offerings on his or her head. They march in alternating arrangement: male-female-male-female-male. This is not true of the second register below, where a male named Iymery offers a fowl with both hands at the front of the procession, followed by eight females. The third and lowest register begins with a man with both arms upraised holding bread loaves, ${ }^{83}$ with a haunch and containers before him. Just behind, two butchers remove the foreleg of an ox, and behind them follow four individuals whose gender is uncertain due to the damage. Based on Petrie's 188ı hand copy of this scene, we can reconstruct some of the estate names. The final figure, clearly

79 Note the reversal of the $s$.
8o The initial $m$ of this column, missed by Reisner ( $G N_{\text {I }}$ fig. 263), is located above Kanefer's outstretched arm bearing a staff. No other signs survive in the vicinity; perhaps $i m y-r[\ldots]$ was written here. Below Kanefer's elbow the text continues, with the final three signs visible being $n, m$, and either $\underline{d}$ or $f$. The name may be $N \underline{d} m$, but it is spelled $N m d$, and no $n d m$ pod ( (Sign List M 23) can be confirmed. There is no $N m \underline{d}$ in Ranke, but $N \underline{d} m$ is, of course, attested: PN i, p. 215.8, and Junker, Gîza 5, p. 2I, no. 22 (official of Seneb). Sndm might be another alternative, but the spelling would still be flawed. While this text appears on the facade still preserved at Giza, part of Kanefer's staff and the hand of his son or daughter survives on the connnecting relief now in Boston, MFA 34.58 .
8I Note the reversal of the $k$, most likely due to the hieratic Vorlage for the text. For the name, see Ranke, $P N_{\text {I }}$ p. 180.16.
82 See Hassan, Giza 6.2, pls. 17-19. The omitted items are $h m s i t$ and $h n k t$, and the final two damaged compartments are difficult to identify.
83 Reisner calls these wine jars, $G N_{\mathrm{I}}$, p. 444.
preserved, is a male with a basket on his head and a calf on a leash before him.

The critical elements for purposes of dating the tomb appear in the second and third registers, where cartouches of Khafre and Menkaure appear in the names of the estates. We thus have at least a terminus a quo, Menkaure's reign, for the chapel decoration.

| Row A | Translation | Remarks |
| :---: | :---: | :---: |
| (ai) | libation |  |
| (A2) $\stackrel{\cap}{\sim}$ | incense |  |
| (A3) | festival perfume | reversal of $s$ and $\underline{t}$ |
|  | hekenu-oil |  |
|  | sefetj-oil |  |
| (A6) | nekhnum-oil |  |
| Row B | Translation | Remarks |
| (B7) Ef) <br> twswt | tuaut-oil |  |
|  | best cedar oil |  |
|  <br> bstt ț thnw | best Libyan oil |  |
| (BIo) A8 | green eye-paint |  |
| $\text { (віл) }{ }^{\text {hill }}$ | black eye-paint |  |
| wnhw 2 | two pieces of cloth |  |
| Row C | Translation | Remarks |
| kbhw ts 2 | two drops of cool water |  |

84 For the Dynasty 5 pattern followed here, see Barta, Die altägyptische Opferliste, pp. 47-56, 181, fig. 4; and Junker, Gîza 3, pp. 99-IO2.

|  | offering table |  |
| :---: | :---: | :---: |
| $\text { (ci5) } \begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 11 \\ & 10 \end{aligned}$ <br> htp－nswt 2 | two royal offerings |  |
|  | two royal offerings of the broad hall | hamsit often appears after this item |
| $(\mathrm{cr7}) \underset{\geqslant \theta}{\geqslant}$ <br> šns dwiw sbw－rs | repast：a shenes－loaf and a jug | De Meulenaere， Supplement to BIFAO 8i（198r）， pp．87－89；Dorman， in Hommages à Jean Leclant I，pp．455－70； Fischer，Varia Nova， pp． 33 （h）， 182 and n． 62 |
| $\begin{array}{ll} \text { (ct8) } & 0.0 \\ & \text { Ull/I, t-wt } \end{array}$ | barley bread | The $t$ and $w$ are much clearer than drawn in Reisner，$G N$ I，fig． 260 |
| Row D | Translation | Remarks |
|  | baked bread |  |
| $\text { (D20) } \stackrel{\leftrightarrow}{8} \stackrel{0}{\square} d s t$ | ale | ḥkt often appears after this item |
|  | friendly［beer］ | reversal of $s$ and $m$ |
|  | a serving of shenes－bread |  |
| $\begin{gathered} (\mathrm{D} 23) \mathrm{y} / \mathrm{l} / 1, \\ 100 \\ \text { šns daiwsbw(?) } \end{gathered}$ | food：a shenes－loaf and a jug（？） |  |
| $\text { (D24) } / W_{[s w t ?]}$ | ［sut－meat？］ |  |

East wall，funerary estates：${ }^{85}$

| Register i figure No． | m／F | Text | Translation | Remarks |
| :---: | :---: | :---: | :---: | :---: |
|  | 通 | $n f w$ | the captain［．．．］ | barque <br> determinative <br> instead of a <br> mast |

85 Jacquet－Gordon，Les noms des domaines funéraires，pp．241－42（no．19G5）；Reisner， $G N$ I，p．444；Junker，Gîza 3，p． 37.

| （2） | 用 | grgt Her mddw | foundation of Horus Medjedu |  |
| :---: | :---: | :---: | :---: | :---: |
| （3） | 通 | thnw | the obelisk |  |
| （4） | 込 | idb Hr mddw | bank of the Horus Medjedu |  |
| $\stackrel{\square}{8}$ | 通 | $i w{ }^{\text {c }}$ r $w$ | the island of reeds |  |


| Register <br> 2 FIGURE <br> No． | M／F | Text | Translation | Remarks |
| :---: | :---: | :---: | :---: | :---: |
|  | ，${ }^{\text {a }}$ | grgt Kinfr | foundation of Kanefer | preceding <br> male： <br> PA外 <br> Iymery |
| （7） | ，${ }^{\text {a }}$ | $h t p$ Mn－ksw－re | offering of Menkaure |  |
| （8） | ，${ }^{\text {a }}$ | grgt hdn | foundation of Heden |  |
| （9）［．．．］ | ，${ }^{\text {a }}$ | destroyed | destroyed |  |
| （io） $\underset{2}{4}$ | ，${ }^{\text {a }}$ | grgt mri | foundation of Meri |  |
| （iI） | ，${ }^{\text {a }}$ | grgt Her mddw | foundation of Horus Medjedu |  |
| （I2） | ，${ }^{\text {a }}$ | $\ldots t .$. | ．．．tet．．． |  |
| （13） $\begin{gathered}20 \\ 0 \\ 0\end{gathered}$ | ，${ }^{\text {a }}$ | inwt | foundations of inet |  |


| Register <br> 3 figure <br> No. | m/F | Text | Translation | Remarks |
| :--- | :--- | :--- | :--- | :--- |
| (I4) |  |  |  |  |

a) Málek relates this estate (no. i5) to a parallel in the tomb of Sekhemkare (Lepsius 89); Jacquet-Gordon, Les noms des domaines funéraires, p. 224, no. 12; for the tomb in general, see PM III, pp. 233-34; Junker, Gîza 3, p. 49 [46]. Lepsius, Denkmaeler Text I, pp. I08-III; Mariette, Les mastabas, pp. 546-47; Hassan, Giza 4, pp. IO3-I23, figs. 53-70, pls. 33-35; Reisner, GNI, pp. 223-24, fig. I28.

South Wall (figs. 12.81-I2.82). A single, large-scale figure of Kanefer occupies almost the entire wall as preserved. ${ }^{86}$ He sits before a table of mixed offerings, upon a high-backed chair with solid arms and bull's legs, resting on plain drum frustrum-shaped supports. By facing to the left, Kanefer is probably intended to receive all the offering bearers marching towards him on the east wall. He holds a brachiomorphic fly whisk in his bent left hand, ${ }^{87}$ while his right stretches out towards the offering table. Above the table appear at least three registers of food and drink offerings. ${ }^{88}$

South wall, traces above the main seated figure of Kanefer:

Text: (1) [... imy-r wp] $w t$ [...]
Translation: (I) [... Overseer of comm]issions, [...].

[^23]South wall, beneath the offering table:
$2 \overbrace{6}^{0} 3 \theta]_{0}^{0}$
Text: (2) th3 (3) hnkt bus
Translation: (2) a thousand loaves of bread, (3) a thousand jars of beer.
North Wall (figs. 12.83-12.86). ${ }^{89}$ The carving on the north wall ranged midway in quality between the finely carved portions of the entrance jambs and the roughly incised scenes on the south wall. Kanefer and his wife Shepsetkau stand facing right, eastwards out of the chapel towards the entrance. Kanefer holds a staff and sekhem scepter. At a much smaller scale, his daughter Meretites stands on her own register line and grasps his staff. Kanefer wears a long kilt with a belt sash, a broad collar, and a short valanced wig that appears unfinished, for most of the vertical "curls" are left uncarved. Shepsetkau holds him in a close embrace, with her hands on his shoulder and torso. The lower half of her figure, except her legs, is on a loose block housed in the Museum of Fine Arts, Boston (MFA $32-$ r2-12). Traces of red pigment survive on Kanefer's right arm and hand preserved on this block. The rest of the scene was reconstructed in place and remains in situ in the tomb. Above the couple, six vertical columns of text identify them with name and titles.


Text: (1) imy-r wpwt (2) smr w‘ty (3) mdw ks-hd (4) brp ‘w brp tmstyw (5) K3-nfr (6) rb(.t) nswt ḥt=f ḥm(.t)-ntrr Hewt-hr (7) hm(.t)-ntr $N t$ Špst-kzw
Translation: (I) Overseer of commissions, (2) sole companion, (3) herdsman of the white bull, (4) controller of interpreters, controller of bowcase bearers, ${ }^{9 \circ}(5)$ Kanefer. (6) The royal acquaintance, his wife, priestess of Hathor, (7) priestess of Neith, Shepsetkau.

Below, by the representation of Kanefer's daughter, are two horizontal lines:

Text: (8) sst=f $\underline{k r t-n s w t ~(9) ~ M r t-i t=s ~}$
Translation: (8) His daughter, royal ornamented, (9) Meretites.
West Wall, South of South False Door (figs. 12.87, 12.89, 12.92). Two registers, each with two figures, are squeezed into the space between the south false door and the corner joining the south wall. In the upper register, two men stand facing to the right, the first carrying a haunch and the second several live birds. No inscription was carved to accompany them, but the word $d r y t$ appears above the two women in the lower register. ${ }^{91}$ Each woman wears a tight garment with shoulder straps, has close-cropped hair, and balances a box on her head. The first woman hold a jar by the handle while the

[^24]second carries a bird.


Text: dryt
Translation: djeryt-mourners. ${ }^{92}$
West Wall, South False Door, Architrave (figs. 12.87-12.88, 12.90, 12.92). Petrie saw more of the inscription here in 1881 than was preserved by 1905-1906. The beginning of the offering formula relies on his hand copy. ${ }^{93}$

 (4) $m$ nb imshb br ${ }^{94}$ ntr ${ }_{3}$ (5) isw nfr wrt (6) imy-r wpwt smr (7) smsw is brp ch $K_{3}-n f r$
Translation: (I) A gift which the king gives, and a gift which Anubis, (2) lord of the necropolis, foremost of the divine booth, gives, (3) (namely) a burial in the west, (4) as a possessor of veneration before the great god, (5) having achieved a very great old age, (6) the overseer of commissions, companion, (7) elder of the chamber, controller of the palace, ${ }^{95}$ Kanefer.

West Wall, South False Door, Tablet (figs. 12.91-12.92). Kanefer is seated at a table of summarily carved half-loaves of bread, with an abbreviated ideographic list surrounding the table. His bull-legged stool shows a papyrus umbel and cushion behind him. His name and titles fill the rest of the tablet in both vertical, then horizontal, arrangement.


Text: (1) imy-r wpwt (2) smr w‘ty (3) K3-nfr (4) t h3 (5) hnkt ba3 (6) mnbt $h_{3}(7) i w s ~ m 3-h \underline{d} g h s s(8) r \underline{d} 3 t$
Translation: (I) The overseer of commissions, (2) sole companion, (3) Kanefer, (4) a thousand loaves of bread, (5) a thousand jars of beer, (6) a thousand pieces of cloth, (7) oxen, oryx, gazelle, (8) greylag(?) goose, crane.

92 On this word, denoting a professional mourning service provided by women at certain funeral rites, see Fischer, Varia, pp. 45-49, with the scene from G 2150 illustrated on p. 45, fig. iI. The Djeryt-mourners appear again in Cemetery G 2100 on the false door of Senwehem $(S n(=i)$-whm $)$ from minor mastaba G 2132 (MFA 27-444); see Part 2.
93 The beginnings of columns I-3 have been restored following Petrie's transcription in Sayce Mss. 24, middle, at the Griffith Institute; cf. Málek, BSEG 6, p. 50, fig. I.2.
94 The two $b$ signs of $i m 3 b$ and $b r$ have been telescoped to one in haplography, as is common for this phrase.
95 For this title see, M. Bárta. "The Title Inspector of the Palace during the Egyptian Old Kingdom," Archív Orientální 67, no. I (1999), pp. 1-20, citing this tomb on p. 5 .

West Wall, South False Door, Lintel (figs. 12.91-12.92).

Translation: The sole companion, controller of the palace, Kanefer.
West Wall, South False Door, Drum (figs. 12.91-12.92).
与
Text: smr K3-nfr
Translation: The companion, Kanefer.
West Wall, South False Door, Left (South) and Right (North) Jambs (figs. 12.91-I2.92).


Text: K3-nfr
Translation: Kanefer.
West Wall, Between False Doors (figs. 12.92-12.98). In one of the most detailed (and highest) raised relief scenes in the chapel, Kanefer stands between the two false doors, facing left (southwards). He is dressed in his most elaborate costume, a kilt with overlap, a wig with long striations, a beaded šnw-collar, ${ }^{96}$ and a leopard skin with shoulder tie. The linen belt of his kilt is fastened by a double loop and the overfold is held in place by a long tab. Since he faces left, his sekhem scepter passes behind his body. ${ }^{97}$ In his right hand he grasps a staff, onto which the little figure of his naked son Kasewedja holds, while gazing back towards his father with a finger raised to his mouth. Kasewedja's figure appears unfinished, but the large, bold hieroglyphs above him, listing his name and titles, are extremely detailed. In front of Kanefer are two registers, each with two men who march right (northwards) facing the tomb owner. Above, the first man is censing, while his partner, a scribe, follows behind in a respectful attitude. In the register below, the first man bears two pieces of linen, while the second holds a spouted jar and a live bird. All four of these men are named; two of them are listed as Ptahwer, doubtless the owner of subsidiary mastaba G 2151 , just slightly to the north of Kanefer's mastaba. Six columns of vertical text surmount the entire scene, identifying Kanefer.


Text: (1) imy-r wpwt smr we(ty) (2) smsw is m pr.wy brp mrwy nswt (3) imy-r pḥw (4) hry-sšts $n$ hast nb (5) brp © w hrp tm3tyw (6) K3-nfr (7) $s 3=f s s^{〔} \subset n s w t ~ i m y-r w p w t ~ K 3-s w \underline{d} d_{3}$

Translation: (I) Overseer of commissions, sole companion, (2) elder of the chamber in the double administrations, controller of the two

96 See E. Brovarski, "Old Kingdom Beaded Collars," in Ancient Egypt, the Aegean and the Near East. Studies in Honour of Martha Rhoads Bell, Volume I, pp. 137-62. 97 Cf. the line drawing in Smith, HESPOK, p. 277, fig. III, noting the properly reversed hands, but the staff passing behind the figure.
canals of the king, ${ }^{98}$ (3) overseer of the marshlands, (4) master of secrets of every foreign land, ${ }^{99}$ ( 5 ) controller of interpreters, controller of bowcase bearers, ${ }^{\text {, }}{ }^{100}$ (6) Kanefer. (7) His son, the royal document scribe, overseer of commissions, Kasewedja. ${ }^{\text {IOI }}$

West wall, facing main figures:
AR \&
Text: (1) imy-r hm(w) ks Ptḥ-wr (2) sš hm(w) ks Snb ${ }^{102}$ (3) (R)di-nPt $\underline{p}^{103}$ (4) hm-ks Pth-wr
Translation: (I) Overseer of funerary priests, Ptahwer, (2) scribe of funerary priests, Seneb, (3) (Re)dienptah, (4) funerary priest Ptahwer.

West Wall, North False Door (figs. I2.97, I2.99-I2.Ior). Thieves have broken through this false door in a search for serdab treasure behind (figs. I2.75, 12.88). The only decoration preserved is at the bottom of the two outer niches. The left (southern) jamb preserves more text, and a complete figure of Kanefer standing with a staff and sekhem scepter. The right (northern) jamb preserves just the lower half of a similarly posed figure of Kanefer.

West wall, north false door, left (south) jamb:


Text: imy-r wpwt K3-nfr
Translation: Overseer of commissions, Kanefer.
West Wall, North of North False Door (figs. 12.17, 12.97). One male figure is preserved on a loose fragment (MFA 32-I2-II), facing right and carrying large case(?) or unrolled linen. His orientation, however, may speak against his restoration to this false door, despite Reisner's reconstruction. ${ }^{\text {I04 }}$


Text: shsw 1 bt-[...]
Translation: The retainer, Ikhet-[...].

## Tomb Owner and Dependents

At least 16 individuals are named in the tomb.
Titles of Kanefer
imy-ib n ntr=f, favorite of his god
imy-r wpwt, overseer of commissions

98 For this controversial title, see Jones, Index of Ancient Egyptian Titles 2, p. 717 no. 2615.
99 Note the abbreviated spelling of bist $\sim \sim$ here, in contrast to the full writing, including the $d_{d}^{a} b 3$ sign, on the chapel's exterior architrave: $\left\{_{x}\right.$
ıoo Cf. Fischer, JNES I8 (1959), pp. 267-68 (22); Jones, Index of Ancient Egyptian Titles 2, pp. 753-54, no. 2746-2747.
IoI Of this figure, Smith, HESPOK, p. 249, writes that it "shows along the back of the figure a sharp outline which slopes a little in section, but the front lines of the figure are smoothly rounded off to the background. The inner line of the thigh has been drawn and partly modelled, but the head remains in one plane.
IO2 The same individual appears on the chapel's facade, south of the entrance.
Io3 Although in this case the $r$ is not written, this may be the same individual represented on the chapel's facade, south of the entrance.
IO4 Reisner, $G N$ I, fig. 257.
imy-r phw, overseer of the marshlands $m d w$ rbyt, staff of the subjects $m d w k_{3}-h \underline{d}$, herdsman of the white bull $h m-n t r=\dot{S} b k \check{S} d t$, priest of Sobek of Crocodilopolis hry-ssts $n$ hast $n b$, master of secrets of every foreign land brp ' $w$, controller of interpreters hrp mrwy nswt, controller of the two banks of the king brp tmityw, controller of bowcase bearers ss nswt, king's son
smr w'ty, sole companion smsw is $m$ pr.wy, elder of the chamber in the double administrations

## Family

wife: ك̌pstkzw, Shepsetkau
$h m-n t r N t$, priestess of Neith
hm-ntr $H w t-h r$, priestess of Hathor
b $m t=f$, his wife
son: $K$ 3-swd ${ }^{2}$, Kasewedja ${ }^{\text {ros }}$
imy-r wpwt, overseer of commissions $s 3=f$, his son
sš ¢ nswt, royal document scribe
mother(?): Mrs $n$ hb, Meresankh
rbb $n s w t$, royal acquaintance smr $w$ rty, sole companion
daughter: Mrtit=s, Meretites
blkrt nswt, royal ornamented $s s t=f$, his daughter

Other People ${ }^{106}$
'Iy-mry, Iymery
I $b$ bt-[...], Ikhet-[...]
šmsw, retainer
Whm-ks, Wehemka
$s$ š, scribe
Pthwr (also owner of G 215I), Ptahwer imy-r ham-kz, overseer of funerary priests rb nswt, royal acquaintance
hm-kz, funerary priest
Ni-kz-rr, Nikare
hm-kz, funerary priest
$N f r-[b r]-n-p t h$, Nefer[her]enptah ${ }^{107}$
Nmd(?), Nemedj? (more likely Nedjem: see under $N \underline{d} m$
$N b t-k_{3}(=i), N a k h t k a(i)$
hm-kz, funerary priest
$N d m(?)$ (son of Kanefer(?)), Nedjem(?)
[i] $m[y-r(?) . .$.$] , nswt, over [seer ...?'$
rbt nswt, royal acquaintance
ios For Kasewedja's tomb ( $\mathrm{G} 5340=$ Lepsius 37), see Junker, Gîza 7, pp. 158-84.
ro6 For those bearing scribal titles, see Piacentini, Les scribes, pp. 147-48.
107 Could this individual be the owner of an architrave found east of the north niche of G 2130, and possibly deriving from G 2131 or G 2133? See above, Chapter 8, object no. 36-I-5 (fig. 8.28).

Rdinpth, Redjienptah
hm-kz, funerary priest
$H r-n f r(?)$, Hernefer hm-k3, funerary priest

Snb, Seneb
hm-kz, funerary priest sš, scribe



Fig. 12.2. Street between G 2150, to the west (right) and G 2170, to the east (left), showing the east face and exterior mud brick chapel of G 2150 , looking south from top of G 2220. March 23, 1912. HU-MFA Expedition photograph, Mohammedani Ibrahim, C4817.


Fig. 12.3. G 2150 (= Fisher's IX.3), entrance to interior chapel and exterior chapel at south end of east face after removal of mud-brick debris down to floor level, looking west. February 4, 1912. HU-MFA Expedition photograph, photographer not listed, a63r.


Fig. I2.4. G 2150, chapel, looking southwest. February 1906. HU-MFA Expedition photograph, A.M. Lythgoe, B1570 [ $=$ B788I].


Fig. 12.5. G 2150, chapel area, looking northwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, b960 [= B7459].


0
1
2
Fig. 12.6. G 2150, section of core and casing blocks, looking west.


Fig. 12.7. G 2150, south face, looking north. November 15, 1993. Peter Der Manuelian, PDM_1993.073.24.


Fig. 12.8. G 2150, section and plan of chapel and serdab..


Fig. 12.9. G 2150, chapel entrance, door-socket hole on left (north) side, looking east out of the chapel. November 18, 1993. Peter Der Manuelian, pDM_1993.087.19.


Fig. 12.Io. MFA 06.1889, fragments of alabaster bowl from G 2150. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, C820 [= CI2668].


Fig. 12.II. 32-I2-7C (MFA 34.58), from G 2150, south entrance thickness fragment. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в92I $[=$ B7463].


Fig. 12.12. 32-12-8 (MFA 34.57), from G 2150, north doorjamb (quarter view). 1906. HU-MFA Expedition photograph, A.M. Lythgoe, B750 [ $=$ B7464].


Fig. 12.13. 32-12-7a (MFA 34.58), from G 2150, south doorjamb (quarter view). 1906. HU-MFA Expedition photograph, A.M. Lythgoe, в743 [= B7465].


Fig. 12.I4. 32-12-7b (MFA 34.58), from G 2150, south facade, adjoining south doorjamb. December 28, 1932. HU-MFA

Expedition photograph, Mohammedani Ibrahim, A703I. (detail).


Fig. 12.15. 32-I2-IO, G 2150, north facade of chapel entrance. April 5, 2006. Museum of Fine Arts, sci7036I.


Fig. 12.16. 32-I2-9, from G 2150, chapel, east wall, relief over interior entrance doorway. October I4, 2005. Museum of Fine Arts, sCI56677.


Fig. I2.17. 32-I2-II, from G 2150, relief fragment from chapel (north false door?). April 5, 2006. Museum of Fine Arts, sci70362.


Fig. 12.I8. 32-I2-I2.I-2, from G 2150, chapel, north wall, two connecting relief fragments with legs of Shepsetkau. April 5 and May 18, 2006. Digital montage of Museum of Fine Arts scr69018 and sci7io8o.


Fig. i2.19. MFA 06.1878, from G 2150, granite hammer. Left: December 2, 2002. Museum of Fine Arts, E7184CR_DI (detail). Right: 1905-1906. HUMFA Expedition photograph, A.M. Lythgoe, c992.


Fig. 12.21. 33-I-34, neckless shoulder jar from G 2150 A. March 15, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B8299 (detail).


Fig. 12.22. 33-I-35 (MFA 33.1044), alabaster model cylinder jar from G 2150 A. Left: March 15, 1933. HU-MFA Expedition photograph, Dahi Ahmed, b8299 (detail). Center: May 15, 2008. Peter Der Manuelian, PDM_IMGOO48I. Right: drawing.


Fig. 12.24. 33-I-37a (MFA 33.1157), complete shoulder jar with hieratic inscription on shoulder, from G 2150 A. Top left: March 15, 1933. HU-MFA Expedition photograph, Dahi Ahmed, 88299 (detail). Top right: March II, 2005. Museum of Fine Arts, sci39359. Bottom left: drawing.


Fig. 12.25. Copper model chisels from G 2150 A. February 27, 2004. Museum of Fine Arts: 33-1-38 (MFA 33.1046, two copper chisels), sc92884; 33-I-39 (MFA 33.1047, chisel), sc92885; 33-I-40 (MFA 33.1048, chisel with pointed end), sC92886; 33-I-4I (MFA 33.104I, broken chisel and tip fragment of another), sC92886.


Fig. I2.26. 33-I-42, drawing of copper model neckless shoulder jar from G 2150 A (compare fig. 12.27 2/I).


Fig. I2.27. Objects from g 2150 A. Top row: 33-I-43 (MFA 33.1049, copper model lid), 33-1-45 (MFA 33.1051, faience disk), 33-1-46 (MFA 33.1052, gold foil), 33-I-44 (MFA 33.1050, fragments of carnelian disk). Bottom row: 33-I-42 (copper model neckless shoulder jar), 33-I-50 (MFA 33.1055, copper razor), 33-I-39 (MFA 33.1047, copper chisel), 33-I-4I (broken copper chisel and tip fragment of another), 33-I-40 (copper chisel), 33-I-38 (MFA 33.1046, two copper chisels). March 16, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B830I.


Fig. I2.28. 33-I-43, drawing of copper cover(?) or lid from G 2150 A (compare fig. $12.27 \mathrm{I} / \mathrm{I}$ ).


Fig. 12.29. 33-I-44, drawing of carnelian disk from G 2150 A (compare fig. $12.27 \mathrm{I} / 4$ ).


Fig. 12.30. 33-I-45, drawing of faded green-glazed faience disk from G 2150 A (compare fig. $12.27 \mathrm{I} / 2$ ).


Fig. 12.31. 33-I-47+33-1-66 (MFA 33.1053), fragments of a jar with slender neck and slightly flaring mouth, from G 2150 A. Left: March 15, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B8299 (detail). Center: drawing. Right: May 15, 2008, PDM_IMGOO63I.


Fig. 12.32. 33-1-48 (MFA 33.IO54): fragments of large jar from G 2150 A. Top left: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, a7065 (detail). Top right: May 15, 2008, PDM_IMGOo633. Bottom: drawing.


Fig. 12.33. 33-I-49, drawing of jar fragments from G 2150 A .


Fig. 12.34. 33-I-50 (MFA 33.1055), copper model dished rectangular razor from G 2150 A . Top: February 27, 2004. Museum of Fine Arts, SC92887 (compare fig. 12.27 2/2). Left: drawing.


Fig. 12.35. 33-I-5I (MFA 34.48a-b), two fragments of carved wood, probably from a chair or a coffin, from G 2150 A. Top: March 15, 1933. HUMFA Expedition photograph. Dahi Ahmed, ci3402. Center: July 16, 2008. Peter Der Manuelian, pdm_IMGO2397. Bottom: drawing.


Fig. 12.36. 33-1-52 (MFA 33.1056), wood piece worked on all four sides, from g 2150 a. Top: July 16, 2008. Peter Der Manuelian, pdm_imgo2427. Bottom: drawing.


Fig. 12.37. 33-1-57 (MFA 33.1057), white sandstone whetstone, copper-stained on all sides, from G 2150 A. Left; March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, ci34I2. Center: September I, 2005. Museum of Fine Arts, sCI54007. Right: drawing.



Fig. 12.38. 33-I-62 (MFA 33.106I): 33 alabaster model basins from G 2150 A. Above: March 15, 1933. HU-MFA Expedition photograph, Dahi Ahmed, b8299 (details from rows I/12 I/I-I2; 2/8-I2). Right: May 15, 2008. Peter Der Manuelian, PDM_IMGOO470.


Fig. 12.39. 33-I-63 (MFA 33.I062), alabaster model cylinder jar from G 2150 A. Left: March 15, 1933. HU-MFA Expedition photograph, Dahi Ahmed, 88299 (detail, 2/5). Right: May 15, 2008. Peter Der Manuelian, PDM_IMGOO497.


Fig. 12.40. 33-I-64 (MFA 33.ro63): alabaster model barrel belted jar from G 2150 A. Left: March 15, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B8299 (detail, 2/6). Center: May 15, 2008. Peter Der Manuelian, pDM_IMGOO499. Right: drawing.


Fig. 12.41. 33-4-20, red granite sarcophagus from G 2150 A . Top left (east side and south end): April 05, 2006. Museum of Fine Arts, sci69952. Remaining images: March 15, 2006, Peter Der Manuelian. Center left (south end): PDM_06353. Center right (north end): PDM_06356. Bottom left (west side): PDM_06355. Bottom right: drawing.



Fig. 12.42. 32-I2-2, alabaster fragment from right leg of a standing male statuette, from debris of G 2150 в. Left: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, ci34II (detail). Right: March 2I, 2005. Museum of Fine Arts, sci29916.


Fig. 12.44. 33-I-I (MFA 33.1021), alabaster fragment from left shoulder of a standing male statuette, from debris of G 2150 b. Left: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, ci34II (detail). Right: March 21, 2005. Museum of Fine Arts, sCI29918.


Fig. 12.43. 32-12-3, alabaster fragment from left arm of a standing male statuette, from debris of G 2150 b. Left: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, ci34II (detail). Right: March 2I, 2005. Museum of Fine Arts, sCi29917.


Fig. I2.45. 33-1-2, alabaster fragment from left shoulder of a statuette, from debris of G 2150 b. Left: March 22, 1933. HU-MFA Expedition photograph, Dahi Ahmed, ci34II (detail). Right: March 2I, 2005. Museum of Fine Arts, sci29919.


Fig. 12.46. G 2150, general view, looking southwest. November 15, 1993. Peter Der Manuelian, pdM_1993.077.19.


Fig. 12.47. G 2150, general view, looking northwest. March I2, 1993. Peter Der Manuelian, pdM_1993.026.04.


Fig. 12.48. G 2150, north niche, looking west. November 4, 1993. Peter Der Manuelian, PDM_1993.6I.22.


Fig. 12.50. G 2150, north niche, rectangular offering basin, looking down westwards. November 4, 1993. Peter Der Manuelian, pdm_1993.6I.25.


0 | 0 | 1 | 2 m |
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Fig. 12.49. G 2150, north niche, plan and section.


Fig. I2.51. G 2150 A, mouth of shaft, looking south. November 4, 1993. Peter Der Manuelian, pdm_1993.062.05.


Fig. 12.52. G 2150 A, burial chamber, with sarcophagus 33-4-20, looking south. January II, 1933. HU-MFA Expedition photograph, Dahi Ahmed, A7036.


Fig. I2.53. G 2150 A, burial chamber, sarcophagus 33-4-20 in situ, looking southwest. April 20, 1933. HU-MFA Expedition photograph, Dahi Ahmed, A7073.


Fig. 12.54. G 2150 A, plan and section.


Fig. 12.55. G 2150 b, mouth of shaft (filled in), looking west. November 4, 1993. Peter Der Manuelian, pdm_1993.062.I4.


Fig. 12.56. G 2150 b, plan and section.


Fig. 12.57. G 2150, intrusive burial by west face, looking east. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, cio80 [= C12628]


Fig. 12.58. G 2150, intrusive burial by west face, looking northeast. 19051906. HU-MFA Expedition photograph, A.M. Lythgoe, ci150 [= CI2627].


Fig. 12.59. G 2150, intrusive burial by west face, looking north. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, cii90 [= CI2630].


Fig. 12.60. G 2150, architrave found in the street east of the mastaba, looking west. Top: November 4, 1993. Peter Der Manuelian, digital montage of PDM_1993.059.2I + PDM_1993.059.23. Bottom: drawing..


Fig. 12.61. Musée du Louvre, Paris B 49: false door and tablet of Mery (not from Giza), upper part, with drum lintel of a Kanefer (C 155 ) inserted, possibly from g 2150. June 4, 1936. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7619.


Fig. 12.62. Musée du Louvre, Paris C 155, drum lintel of a Kanefer, possibly from G 2150, set into false door and tablet of Mery (B 49, not from Giza). Courtesy Réunion des Musées Nationaux.


Fig. I2.63. G 2150, chapel, south entrance thickness, looking southeast. November 18, 1993. Peter Der Manuelian, PDM_1993.087.2I.


Fig. 12.65. G 2150, reconstruction sketch of chapel entrance, showing MFA reliefs 34.57 and 34.58 outlined in red.


Fig. 12.64. G 2150, chapel, north entrance thickness, looking northeast. November 18, 1993. Peter Der Manuelian, pdm_1993.087.20.


Fig. I2.66. G 2150, chapel, reconstruction of south entrance thickness: digital montage of MFA 34.58 with portions still in the mastaba. December 19, 2002. Museum of Fine Arts, CR4237_di (detail). November 18, 1993. Peter Der Manuelian, pdm_1993.090.17 through pdm_1993.090.2I.



Fig. 12.68. G 2150, chapel, reconstruction of north entrance thickness: digital montage of MFA 34.58 with portions still in the mastaba. December 19, 2002. Museum of Fine Arts, CR4237_di. November 18, 1993. Peter Der Manuelian, pdm_1993.090.I4 through pdm_1993.090.16.


Fig. I2.69. G 2150, chapel, drawing of north entrance thickness.


Fig. 12.70. G 2150, reconstruction of facade south of chapel, looking west. Digital montage of Museum of Fine Arts, CR4240_di
(December 19, 2002), unnumbered photograph courtesy Jaromir Málek, and pdm_1993.061.ir by Peter Der Manuelian (November 4, 1993)


Fig. 12.7I. G 2150, chapel, drawing of south facade.

Fig. I2.72. G 2150, chapel, reconstruction of north facade, looking west, including the two heads on MFA 32-12-10.
Digital montage of PDM_1993.059.0I by Peter Der Manuelian (November 4, 1993), and SCI7036I by Museum of Fine Arts (April 5, 2006).


Fig. I2.73. G 2150, chapel, reconstruction of north facade, looking west, detail, including the two heads on MFA 32-12-10. Digital montage of pDM_1993.060.08 by Peter Der Manuelian (November 4, 1994) and sCi7036i by Museum of Fine Arts (April 5, 2006).


Fig. 12.75. G 2150, chapel facade, looking west. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, B88I [= B7460] (detail).


Fig. 12.74. G 2150, chapel, north facade, detail, looking west. November 4, 1993. Peter Der Manuelian, pdm_1993.061.02.


Fig. 12.76. G 2150, chapel, north facade, detail of dwarf and monkey, looking west. November 4, 1993. Peter Der Manuelian, PDM_1993.06I.O5.


Fig. 12.77. G 2150, chapel, drawing of north facade.



Fig. 12.78. G 2150, chapel, east wall, looking southeast. July 23, 1930. HU-MFA Expedition photograph, Mohammedani Ibrahim, A5750.





Fig. 12.8ı. G 2150, chapel, south wall, looking south. July 20, 1930. HU-MFA Expedition photograph, Mohammedani Ibrahim, A5736.



Fig. 12.83. G 2150, chapel, reconstruction of north wall, including MFA 32-I2-12, looking north. Digital montage of HU-MFA Expedition photographs b157I [= B7882] by A.M. Lythgoe (February, 1906), and A7030 by Mohammedani Ibrahim (December 28, 1932).


Fig. 12.84. G 2150, chapel, drawing of north wall.


Fig. 12.85. G 2150, chapel, general view of north wall, looking north. November 18, 1993. Peter Der Manuelian, pDM_1993.087.17.


Fig. 12.86. G 2150, chapel, north wall, top half, looking north. April 24, 1999. Peter Der Manuelian, pdm_1999.009.05.


Fig. 12.87. G 2150, chapel, reduced overview drawing of entire west wall.


Fig. 12.88. G 2150, chapel, view of west wall through entrance, looking southwest. 1905-1906. HU-MFA Expedition photograph, A.M. Lythgoe, в877 [= B7458].


Fig. 12.89. G 2150, chapel, west wall, south of south false door, looking west. Digital montage of HU-MFA Expedition photographs A5746p (July 23, 1930), and A5747 (December 28, 1930), both by Mohammedani Ibrahim.


Fig. 12.90. G 2150, chapel, west wall, architrave above south false door, looking west. Digital montage of HU-MFA Expedition photographs A5739 and A5740 (July 21, 1930), both by Mohammedani Ibrahim.


Fig. 12.91. G 2150, chapel, west wall, south false door, looking west. July 21, 1930. HU-MFA Expedition photograph, Mohammedani Ibrahim, a5738.



Fig. 12.93. G 2150, chapel, west wall, area between the two false door, looking southwest. July 23, 1930. HU-MFA Expedition photograph, Mohammedani Ibrahim, A5748.


Fig. 12.94. G 2150, chapel, west wall, area north of south false door, looking west. Digital montage HU-MFA Expedition photographs a5755 (July 26, 1930) and A5756 (July 27, 1930), both by Mohammedani Ibrahim.


Fig. 12.95. G 2150, chapel, west wall, between the false doors, detail of standing figure of Kanefer, looking west. April 24, 1999. Brian Snyder, AAW529.


Fig. 12.96. G 2150, chapel, west wall, detail of inscription between the two false doors, looking west. November 18, 1993. Peter Der Manuelian, PDM_1993.090.07.

Fig. 12.97. G 2150, chapel, drawing of west wall, north half, with destroyed north false door, and fragment MFA 32-I2-II.



Fig. 12.98. G 2150, chapel, west wall, detail of leopard skin face on Kanefer's standing figure between the two false doors, looking west. November 18, 1993. Peter Der Manuelian, pdm_1993.091.07.


Fig. 12.99. G 2150, chapel, west wall, north false door, left (south jamb), looking west. November 18, 1993. Peter Der Manuelian, pdM_1993.090.oI.


Fig. 12.100. G 2150, chapel, west wall, fragmentary north false door, looking west. November 18, 1993. Peter Der Manuelian, pDM_1993.089.22.


Fig. i2.IoI. G 2150, chapel, west wall, north false door, right (north) jamb, looking west. November 18, 1993. Peter Der Manuelian, pdm_1993.090.04.


Fig. 12.102. G 2150, detail of head of Kanefer from facade, south of chapel entrance. Unnumbered photograph courtesy Jaromir Málek.


Fig. 12.104. G 2150, detail of head of Kanefer from north wall, looking north. November 18, 1993. Peter Der Manuelian, pdm_1993.091.or.


Fig. 12.IO6. G 2150, detail of head of Kanefer from south entrance thickness; MFA 34.58. December 19, 2002. Museum of Fine Arts, CR4237_ di (detail).


Fig. 12.103. G 2150, detail of head of Kanefer from west wall, looking west. November 18, 1993. Peter Der Manuelian, pdm_1993.091.06.


Fig. 12.IO5. G 2150, detail of head of Kanefer's wife Shepsetkau, from north wall, looking north. November 18, 1993. Peter Der Manuelian, pDM_1993.091.04.


Fig. I2.IO7. G 2150, detail of scribe from south entrance thickness; MFA 34.58. December 19, 2002. Museum of Fine Arts, CR4238_di (detail).


Fig. I2.108. G 2150 s, plan and section.


Fig. I2.IO9. G 2150 T, plan and section.


Section

$\begin{array}{lll}0 & \text { Plan } & 1 \\ & \\ & \\ & \end{array}$
Fig. I2.IIO. G 2150 U , plan and section.


Fig. 12.II3. G 2150 y, plan and section.


Fig. 12.1I2. G 2150 x , plan and section.


Fig. I2.II4. G 2150 Z , plan and section.

## Chapter 13 <br> THE TOMB OF KANINISUT I:

Mastaba G $2155(=$ VIIInn $=$ G 4870)

I See Reisner, GNi, pp. 446-49; Junker, Gîza 2, pp. 135-72; idem, "Vorbericht 1912-1913," pp. 163-69, pl. 4 (= pp. 13-19 of separately printed version); Baud, Famille royale et pouvoir 2, p. 48o; Piacentini, Les scribes, pp. 225-27. On the name Kaninisut, see Ranke, PNI, p. 340.9, "mein ka ist der des Königs," and p. 340, n. 3.

## Excavation

This tomb lay south of the dividing line between the American and German-Austrian concessions. Despite Reisner's tomb summary above, the HU-MFA Expedition was not involved in its excavation in any way, except for the discovery in the American concession zone of a displaced offering slab inscribed for Kaninisut I's son Kaninisut II (MFA 12.1513 ). H. Junker discovered the tomb during his second season on January 9, 1913. On January 27, 1914 he completed the purchase of the decorated chapel, and its dismantling began on March 17, 1914. By April 16, 1914, the crates containing the reliefs were removed to Cairo, and departure for Vienna took place on April 23, 1914. During Junker's fourth season, he discovered the related mastabas of Kaninisut III and Irienre (January 29, 1926), and Kaninisut I's burial chamber was cleared on March 20, 1926. ${ }^{2}$

Excellent, in-depth publications of the tomb, and especially the chapel in Vienna, have been produced by Junker, Satzinger, Demel, and most recently by Hölzl. ${ }^{3}$ For this reason, only a cursory description will be provided below. The only item omitted from these publications is the slab stela fragment in Vienna ( $\mathrm{A} S$ 7447) that may derive from this tomb, prior to the construction of the tomb's extension and interior stone chapel (see below).

Finds
Hildesheim 2431: mud seal, type VI-4. h. I. 5 cm ; w. max. 6.I cm; excavated by Junker in 1914 (more likely from G 2156, Kaninisut II) ${ }^{4}$
Text: (I) bry-hb [...] (2) $H r$ [...] (3) [...] bry-[h]b (4) [ Hr ...]
(5) $[$ nswt-bit $] m r y[S k] r$

Translation: (I) Lector priest [...] (2) Horus [...], (3) [...] lector priest, (4) [Horus ...], (5) [king of Upper and Lower Egypt], beloved of [So]kar Hildesheim 2502: mud seal, type VI-I. h. 2.5 cm ; w. max. 5.8 cm ; containing the Horus name of Niuserre (Isetibtawy); excavated by Junker in $1914^{5}$


Translation: (I) [Horus] Iset-ib-[tawy], (2) lector priest, master of [se]crets of [...] (3) Horus Isetibtawy, (4) lector [pr]iest, master of [se]cr[ets], (5) Horus Iset[ibtawy], (6) [lector priest], ma[ster of secrets]

2 Junker, "Vorbericht 1912-1913," pp. 63-69 (= pp. 13-19 of separately printed version); idem, Gîza 2, pp. 135-70; idem, Die Kultkammer des Prinzen Kanjnjswt, pp. 6-7. idem, The Offering Room of Prince Kaninisut, pp. 7-9. Baer notes in Rank and Title, p. IO2, that the tomb number was changed to G 4870 by the time of the publication of Junker's Gîza 12, map 4.
3 In addition to Junker's publications in Gîza 2 and his "Vorbericht 1912-1913," cited above, see idem, Die Kultkammer des Prinzen Kanjnjswt; idem, The Offering Room of Prince Kaninisut, Demel, Die Reliefs der Kultkammer des Kaninisut; Satzinger, Das Kunsthistorische Museum Wien, pp. 90-93; Hölzl, Ka-ni-nisut, and idem, Reliefs und Inschriftensteine des Alten Reiches 2, pp. 33-87.
4 P. Kaplony, in Martin, Reliefs des Alten Reiches und Verwandte Denkmäler 3, pp. 34-35 (Hildesheim 2431; compare 2502); Junker, Gîza 3, p. 150; idem, Gîza 7, p. 240; idem Gîza 8, p. 178d and n. 3; Kaplony, Die Rollsiegel des Alten Reichs 2, pp. 4II-I2, K(önig) u(nbekannt) 13, pl. II6. See in general Wolfgang Boochs, Siegel und Siegeln im Alten Ägypten.
5 Kaplony, in Karl Martin, Reliefs des Alten Reiches und Verwandte Denkmäler 3, pp. 42-43 (Hildesheim 2502); Junker, Gîza 3, p. i50; idem, Gîza 7, p. 240, fig. 99; Kaplony, Die Rollsiegel des Alten Reichs 1, pp. $55 \$ 21$, 179 \$68; idem, Die Rollsiegel des Alten Reichs 2, p. 244, K(önig) u(nbekannt) 13, pl. 73.

Kunsthistorisches Museum, Vienna, Inv. ÄS 7447: limestone anonymous slab stela fragment in raised relief; h. 52 cm ; w. 53 cm (as restored: ca. 80 cm ); th. Io cm ; possibly from G 2155 (?) (see below; figs. 13.2I$13.25)^{6}$

## Architecture

Since both G 2135 and G 2155 extend Cemetery g 2100 to the south, connecting to Cemetery G 4000 , it seems clear that the large mastaba G 2220 must already have been in existence at the northern end of this cemetery, filling the logical area for additional cores of "normal" size. In response, Kaninisut I and the owner of G 2135 had to extend the cemetery southwards. Kaninisut's original core presents no particular anomalies, but the secondary additions severely altered the tomb's appearance on all four sides. Until recently, there was no evidence for an original slab stela or stela emplacement (see below). Subsequent to the core construction under Khufu, the mastaba received extensive casing and a southern extension that houses the interior stone chapel. A mud-brick anteroom with an entrance on the north side fronts the entrance to the interior chapel, which shows a long entrance corridor, two false doors in the west wall, and a serdab behind (west of) the primary southern false door. No secondary shaft was added in the southern extension.

The casing extends all the way around the mastaba, and is particularly well preserved, although some areas reveal blocks that were never finished and smoothed. A subsidiary north niche was cut in the east facade. The tomb is one of five major mastabas in Cemetery g 2100 to show a north niche, the others belonging to Merib (g 2100-I), Nefer (G 2IIO), Khentka (G 2130), and Kanefer (G 2150). Roofing slabs are also in evidence. ${ }^{7}$ The chapel area, and indeed the southern facade of the mastaba extension, are at this writing (2008) completely obscured by fill sand. This differs from the situation with the other removed and relocated chapel: Merib's chapel area (G 2100-I) still shows traces of the foundation blocks and an instructive section view of the surrounding mastaba fill, despite the fact that his chapel was dismantled by Lepsius in 1845, while Kaninisut's came down much later, in March-April, 1914.

Another feature among the tomb's many alterations is the addition of the small chapel of the owner's son, Kaninisut II, directly to the east facade of mastaba G 2155 . That tomb contains two chapel false doors and a menu list between them on the west wall (see Part II). But beyond this addition, there is a clear reduction in the resources and influence of Kaninisut I's family. Additional family members-Kaninisut III, Irienre, and Ankhmare-all have relatively unimpressive structures, either abutting or in close proximity to G $2155 .{ }^{8}$ In fact, much more impressive is the decorated chapel of Kaninisut I's butler (imy-rpr) and library scribe ( $s s{ }^{\prime}$ pr md $3 t$ ) Wehemka, who appears in prominence throughout his master's tomb. Wehemka's tomb (D II7), located west of Cemetery G 2Ioo,

[^25]was excavated by Steindorff in 1906 and removed to the PelizaeusMuseum, Hildesheim (no. 2970). ${ }^{9}$

## Shafts and Burials

The shaft and burial chamber show all the hallmarks of post-Khufuera construction. The shaft continues down beneath the level of the passage and burial chamber, located to the south. Several attempts to cut the southern burial chamber are in evidence, but most were abandoned, probably due to the friable nature of the bedrock. The burial chamber shows uneven walls, and a rough ceiling and floor. The orientation of the chamber is also asymmetrical, with the west wall angling too far westwards at its northern corner, and the southern wall too far southwards at its western corner. Presumably to compensate for the misaligned west wall, several courses of rough blocks were erected in front of it. A canopic pit, also off axis, was set into the southeast corner.

Junker reports that the shaft and chamber were already open at the commencement of his excavations here in 1912. He was not able to confirm rumors that the antiquities authorities had already cleared G 2155 A themselves and removed an alabaster sarcophagus. No skeletal remains were found by Junker's crew, ${ }^{\text {10 }}$ and no ancient attempt had been made to sink a second burial shaft, or orient shaft A in closer proximity to the interior stone chapel added to the mastaba's southern extension.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. I: late reign of Khufu (core); early Dynasty 5 (mastaba). ${ }^{\text {II }}$

Jánosi has noted that the only tomb in Cemetery G 2100 that seems "complete" is G 2155, a fact he attributes, not to Khufu's early death, but to a decline in royal administration support for private mastaba construction towards the end of Dynasty $4 .{ }^{\mathrm{I2}}$ There is much evidence to date the occupation of the mastaba by Kaninisut I in the early reigns of Dynasty 5 . First, the possibility of a primary, prechapel phase for the tomb, with a slab stela as sole decoration, cannot be discounted. Second, the addition of the southern annex and interior stone chapel with two false doors tends to suggest Menkaure or later in all but the largest Giza mastabas. The extensive repertoire of the chapel's decoration, similar to that in Merib's chapel, speaks for a Dynasty 5 date. The burial shaft shows no T-shaped portcullis

9 Junker, Gîza 2, p. 164. For D ir7, see PM III, pp. II4-I5, plans XI, XIV. Junker, Gîza 3, pp. 37-38 [22]; Steindorff and Hölscher, Die Mastabas westlich der Cheopspyramide, pl. 16; Kayser, Die Mastaba des Uhemka; Roeder, Die Mastaba des Uhemka im Pelizäus-Museum zu Hildesheim; P. Piacentini, "Les scribes dans la société égyptienne de l'Ancien Empire: Une enquète en cours, "in Proceedings of the Seventh International Congress of Egyptologists, p. 867.
Io Junker, Gîza 2, p. I41.
II Compare PM III, p. 78: early Dynasty 5; Baer, Rank and Title, p. I45 [531]: early Dynasty 5 ("Junker dates to the earlier Fifth Dynasty, basing his argument for the lower limit on an independent dating for the adjoining mastaba of $K_{3}$ -n-nswt's son..."); Baud, Famille royale et pouvoir I, pp. 42-43; 2, p. 480 [IO2]: Khufu-Djedefre; Cherpion, Mastabas et hypogées, pp. 118-19, 224: not later than Djedefre; Demel, Kaninisut, p. 13: Niuserre; Harpur, Decoration in Egyptian Tombs, p. 270 [265]: Userkaf-Neferirkare; Jacquet-Gordon, Domaines funéraires, pp. 247-50 (22G5): early Dynasty 5; Junker, Gîza 2, pp. 15, 39, 137: early Dynasty 5; Kanawati, Egyptian Administration, pp. 19, 123-24, 155 [345]: Sahure or later; Reisner, GN I, pp. 2I4, 3II: late Menkaure-post-Neferirkare; Schmitz, Untersuchungen zum Titel S3-Njśwt, p. 26; early Dynasty 5.
I2 Jánosi, Giza in der 4. Dynastie, p. 219.
grooves, and the burial chamber is uneven and unlined-all later period features of Western Cemetery tomb construction. There is general scholarly agreement on this date, with the exception of N . Cherpion, who prefers an earlier date of Khufu-Djedefre. ${ }^{13}$ It is unlikely that Kaninisut I was an actual son of Khufu, contrary to his titular claims. We should not expect in that case to find his mastaba located here in the Western Cemetery.

Date of the Slab Stela. The mastaba belongs to the second group constructed in Cemetery g 2100, and the decoration of the subsequently added chapel is clearly post-Khufu, most likely early Dynasty 5. If Kaninisut I were an actual king's son (of Khufu), we might ask why his tomb is not located in the Eastern Cemetery. ${ }^{14}$ This raises the question of how many years and reigns might have passed between the completion of the slab stela and the later construction of the annex with interior stone chapel. Kaninisut I could not have lived from Khufu's reign all the way into the early reigns of Dynasty 5 . If the slab stela does not represent a first phase of Kaninisut's tomb decoration, then perhaps it should be taken as the only surviving object of the previous/original owner of G 2155 , before it was finally assigned to and altered by Kaninisut I.

## Decoration

Slab Stela of Kaninisut I? In his original publication of several slab stela fragments (fig. 13.21-13.25), Junker noted that they were "an bestimmtes Grab nicht mehr zuweisbar." ${ }^{\text {Is }}$ From this point forward, the larger fragment had no secure provenance at Giza. Junker was unable to assign it to a particular tomb by the time he published GîzaI in 1929 (for his suggestions, see Gîza I, p. 258). Recent examination of Reisner's excavation records in the Museum of Fine Arts, Boston, however, produced a manuscript in which G 2155 is clearly listed as the findspot for the fragments. In this manuscript, entitled, "The Development of the Tablet Scene," Reisner describes the slab stela fragment thus on p. 18:

G 2155 Prince Ka-ny-nswt:
I) A small fragment from the top with $n b[s]$ and a hawk from the top of the linen list.
2) A large fragment of the bottom of the stela from a little to the left of the table to the right border. No remnant of figure, and no indication of his titles and name. Beneath the table, ideographic list: on left, ointment, $\mathrm{I}, \mathrm{O} 0$, and $n f r$ (from ikhet nbt nfrt ?): on right, bread, beer, 2,000 and rnpwt nbt. At the extreme right, a linen list, remains of two kinds of linen, but the upper one is curiously arranged with two sets of $\mathrm{I}, \mathrm{ooo}$ signs separated by the sub-headings. Between the table and the linen list, a large compartment list occupying all the space preserved (to a height a little above the base of the bread on the table). Two registers remain, each with a register of $\mathrm{I}, \mathrm{O}$ oo signs beneath: i) (above) two garments, bed, headrest, and three boxes; 2) (below) stone vessels.

On pp. 19-20 of this unpublished manuscript, Reisner classifies the slab stelae, and refers to the fragment as "stela of unknown provenience (G 2155 ?)." Finally, in the published $G N_{\mathrm{I}}$, he describes the fragments as "near G 2155, two fragments, one from the top of a linen list and the other, larger, from the lower edge of the slab

13 Cherpion, Mastabas et hypogées, pp. I18-19. This position has been convincingly refuted by Jánosi, Giza in der 4. Dynastie, pp. 223-24.
14 See Jánosi, Giza in der 4. Dynastie, pp. 123-24, 218-25.
${ }^{15}$ Junker, Gîza I, p. 230, fig. 53; Manuelian, Slab Stelae, p. 91, fig. 129.
from the table to the right border." ${ }^{16}$ He does not mention these fragments in his brief summary of G $2155 .{ }^{17}$

Some doubt certainly remains as to a secure provenance for these fragments. I have nevertheless accepted Reisner's assignation here, albeit with some reservation. ${ }^{18}$ I base this acceptance on the assumption of Reisner's continued presence at Giza versus Junker's forced absence from the site between the time just after the discovery of the fragments (1912-13 season) until his return to Giza well after World War I. ${ }^{19}$ In other words, Reisner's notes may accurately reflect the situation as he learned it from Junker and recorded it, whereas Junker lost track of the stela's provenance due to German-Austrian expedition's "exile" from Giza between I9I4 and 1925. ${ }^{20}$

If true, this revelation may revise our interpretation of the tomb of Kaninisut I (G2155), whose decorated chapel is on display in the Kunsthistorisches Museum, Vienna (ÄS 8006). His mastaba would have held an emplacement for the slab stela, and then received the most elaborate and complete expansion of any tomb in Cemetery G 2100. An annex was appended to the southern end of the core mastaba, and the new limestone chapel was broken into the interior of the superstructure. At a later time, the small mastaba of his son Kaninisut II was added to the eastern side of G 2155, converting the exterior east wall of the larger tomb into the decorated interior west wall of the smaller one (figs. 13.3, 13.5, I3.16). ${ }^{21}$ All of this subsequent construction activity has obscured the area of the southern end of the core mastaba's east wall. The result is our present inability to determine any emplacement or original location of a slab stela. The situation is similar to that of Nefer (G 2IIO, figs. 6.I, 6.26-6.27), whose exterior stone chapel has covered what might once have been a slab stela emplacement. ${ }^{22}$

In terms of the decoration of the slab stela fragment itself, there is probably little use in a stylistic comparison with Kaninisut's chapel, for the two monuments must be quite separated chronologically. If our fragment belongs with other slab stelae from Giza, it should date to the reign of Khufu, whereas Kaninisut's chapel in Vienna is traditionally dated to early Dynasty $5 .{ }^{23}$ There are a number of possible scenarios, once again assuming that we have the correct provenance for the slab stela fragment in the first place:

- the mastaba originally belonged to someone else in Khufu's reign, when the slab stela was prepared, and was subsequently "usurped" by Kaninisut I, who added his chapel in the southern extension
- both the stela fragment and decorated chapel belong to Kaninisut I, and the mastaba dates not to Dynasty 5 but to Dynasty 4, as N. Cherpion has argued ${ }^{24}$

I6 Reisner, $G N_{\mathrm{I}}$, p. 306.
17 Ibid., p. 446 (Appendix C).
18 It is true that in other places within these unpublished manuscripts, Reisner mixes up some tomb numbers, e.g. G 2120 and G 2130.
19 Cf. Jánosi, Österreich vor den Pyramiden, p. 91.
20 No mention of the Junker fragments is made in the Harvard-MFA Expedition Diaries for 1912-1914.
21 For the tomb of Kaninisut II, cf. Junker, Gîza 3, pp. I45-56; Manuelian, Slab Stelae, p. 90, fig. I28 (= PDM_1993.96.33 on www.gizapyramids.org).
22 Cf. Manuelian, "A ‘New' Slab Stela for Nefer from g 2IIo? (Giza Archives Project Gleanings: I)," in Egypt and Beyond. Fs. Lesko, pp. 227-36, and see above for the mastaba of Nefer (G 2IIO).
23 Cf. PM III, p. 78; Hölzl, Reliefs und Inschriftensteine des Alten Reiches 2, p. 33, Satzinger, Das Kunsthistorische Museum Wien, p. 90; Y. Harpur, Decoration in Egyptian Tombs, p. 270; Strudwick, Administration, p. 43 (end of Dynasty 4 to early Dynasty 5); Baer, Rank and Title, p. 145 [53I].
24 Cherpion, Mastabas et Hypogées, pp. II8-19, dates the tomb to Khufu-Djedefre, which is followed by M. Baud, Famille royale et pouvoir 2, p. 48o [IO2].

- the stela fragment is an archaism and dates not to the reign of Khufu, but perhaps even into Dynasty 5, closer to the date of the chapel itself. ${ }^{25}$

No determination can be made on the pose, costume, or even gender of the missing seated figure; and only traces survive of the offering table and stand, without any visible bread loaves. A unique addition to the usual items listed beneath such offering tables is the phrase $[b t n b(t)] n f r(t) r n p w(t) n b(t)$, represented only by the top of the $n f r$ sign, the $r n p t$-hieroglyph, quail chick, and $n b$-basket. No other Giza slab stela contains these words, and if the text is to be read horizontally, that is, on either side of the table stand, the word arrangement, too, is unique.

This is the only Giza slab stela that layers three rows together without the separation of a different type of linen. Other slab stelae show a specific linen type, then its widths in one row, and the corresponding amounts in another. The Kaninisut list shows, from top to bottom, amounts ( $b_{3}$ ), widths, and amounts again ( $b_{3}$ ), before switching to $\sqrt{3}^{3}$, a new type of linen. The situation would be clearer if more of the linen list had survived above. Perhaps there was a split in an upper row between two types of linen, such as we find in the stela from G 4860, where $s_{m}{ }^{〔} t-n f r t$ and $s s ̌ r$ share the same row. ${ }^{26}$

Text and Translation:
Section A:
[...]
Section B:

(1) [mnbt has šs has:] (2) t baj, ḥnkt b̧3, [bt nb] nfr rnpw nb
(I) "[a thousand pieces of cloth, a thousand alabas] $\operatorname{ter}^{27}$ [vessels], (2) a thousand loaves of bread, a thousand jars of beer, and everything good and all kinds of vegetables" ${ }^{28}$

Section C:

(3) $[\ldots] b_{3},\left[\ldots b_{3}\right],[\ldots] b_{3},[\ldots] b_{3},[\ldots] b_{3},\left[\ldots b_{3}\right],\left[\ldots b_{3}\right]$
(3) "a thousand [...] [a thousand ...] a thousand [...] a thousand [...] a thousand [...] [a thousand ...] [a thousand ...]"

25 In Slab Stelae, p. 91, I opted to accept Kaninisut as the owner of both the slab stela fragment and the subsequent decorated chapel, thus dating both to some time after Khufus reign. But the somewhat suspect nature of the stela fragment's provenance, based solely on Reisner's unpublished notes, leaves us without a definitive solution for the present.
26 See Manuelian, Slab Stelae, pls. 29-30.
27 Junker, Gîza I, p. 258, assumes that the šs sign is upside down, $\ell$ for $\gamma$. It is perhaps more likely that the tiny corner preserved is a different sign altogether For upside-down examples at Giza, see the false door tablet fragment from G 4260; Junker, Gîza I, pl. 29a (image o_neg_nr_O565 on www.gizapyramids org), and the north (wife's) false door of the tomb of Kapunisut Kai (G 174I).
28 Following Junker's restoration, Gîza i, p. 258, and based on a similar phrase on the false door panel of Wenshet, ibid., p. 252, fig. 63, p. 253; Manuelian, Slab Stelae, p. 107, figs. 162-63.

(4) is $h_{3} h_{3}, i_{3}$ mist h3, $3 t t h_{3}$, wrs $h_{3}$, dsr $h_{3}$, ha-ht hb, hn ha (4) "a thousand leopard-skin mantles, ${ }^{29}$ a thousand mantles of wild cow skin, ${ }^{30}$ a thousand beds, ${ }^{31}$ a thousand headrests, ${ }^{32}$ a thousand caskets, ${ }^{33}$ a thousand boxes, ${ }^{34}$ a thousand chests" 35


(5) "a thousand lug-handled porphyry vessels, ${ }^{36}$ a thousand lughandled white quartzite vessels, ${ }^{37}$ a thousand lug-handled vessels of $k a$-stone, ${ }^{38}$ a thousand alabaster (cylinder) vessels, a thousand nemsetvessels, a thousand cooking pots, ${ }^{39}$ a thousand shamu-basins" 40

Section D:

$[\ldots] b_{3},[\ldots] b_{3},[\ldots] b_{3},[\ldots] b_{3}$
"a thousand [...], a thousand [...], a thousand [...], a thousand [...]"
C. Junker, Giza 1, p. 258, W.S. Smith, The Coffin of Prince Min-khaf, JEA 19 (1933), pp. 155-57; Simpson, Kawab, Khafkhufu I and II, p. 14, n. 27, fig. 30, ir3 bs Stm?
30 See Junker, Gîza i, p. 258; Smith, JEA 19 (1933), pp. 155-57; E. Brovarski, "An Inventory List from 'Covington's Tomb' and Nomenclature for Furniture in the Old Kingdom," in Studies in Honor of William Kelly Simpson i, p. 122.
31 Cf. Junker, Gîza i, p. 258, n. i; Brovarski, in Studies in Honor of William Kelly Simpson I, pp. 130-33, 155 (item no. 13).
32 Ibid., pp. 133-34, 155 (item no. 13); Junker, Gîza i, p. 258, n. 2.
33 Cf. E. Brovarski, "Inventory Offering Lists and Nomenclature for Boxes and Chests in the Old Kingdom," in Gold of Praise: Studies on Ancient Egypt in Honor of Edward F. Wente, pp. 43-45, 49 (item no. 13); Junker, Gîza i, p. 259, n. i.
34 Brovarski, in Gold of Praise: Studies on Ancient Egypt in Honor of Edward F. Wente, pp. 38-39, 49 (item no. 13).
35 Ibid., pp. 32-38, 49 (item no. 13).
36 Cf. Hannig, Großes Handwörterbuch Ägyptisch-Deutsch, p. 917. For "vessels of tiaat-stone" cf. Leprohon, Stelae I, p. 60 with references to Hassan, Barta, Harris, and Meeks. On the stone in general see R.S. Bianchi, "Porphyr," $L \ddot{A} 4$, cols. ro7I73, and in Ancient Egyptian Materials and Technology, esp. pp. 48-49.
37 Wb. 2, p. 272.3; Hannig, Großes Handwörterbuch Ägyptisch-Deutsch, p. 415 ("Topf, Krug"); Junker, Gîza I, p. 259 ("roter Granit?"); Leprohon, Stelae I, p. 59 ("pots of white quartzite"); Harris, Lex. Stud., pp. 88-89 ("white quartzite").
38 Wb. 5, p. 93.10; Hannig, Großes Handwörterbuch Ägyptisch-Deutsch, p. 873.

Faulkner, CDME, p. 66 ("cauldron"); Hannig, Großes Handwörterbuch ÄgyptischDeutsch, p. 209 ("Kochkessel").
Wb. 4, p. 4 II. 2 ("großer Krug"); Junker, Gîza I, p. 259
snwi $b_{3}, w_{c} b_{3}, t m 3 b_{3}, s z f b_{3}$
[...]-linen: a thousand of 2 (cubits wide), a thousand of I (cubit wide), a thousand of width tema, a thousand of width sezef ${ }^{41}$
$C_{3}$ št ha, psdiw [h3], bunniw bas, sfbiw b3
a $a$-linen: a thousand of 100 (cubits wide), a [thousand] of 90 (cubits wide), ${ }^{42}$ a thousand of 80 (cubits wide), a thousand of 70 (cubits wide)

Decoration of Chapel. 43 The raised-relief entrance thicknesses and four chapel walls of G 2155 contain the most complete, best preserved, and overall consistently highest-quality relief sculpture in all of Cemetery G 2100. By comparison, Merib's chapel (G 2100I), though similar in date and extensive thematic repertoire, is far coarser in style. Nensedjerkai's chapel (G 2IOO-II) bears only pillar, architrave, and false door decoration. Kanefer's chapel (G 2150) shows four decorated walls, but again with a very varied range in quality. The exterior chapel of Nefer (G 21IO) lacks the amount and diversity of wall scenes, but shows occasional examples of masterly craftsmanship. The only other chapel to bear extensive decoration belongs to Kahif (G 2136), a much later Dynasty 6 intrusive structure at the southern end of the cemetery (see Part II). Kahif's craftsmen, too, lacked the skills evident on the walls of Kaninisut I's chapel.

Smith relates Kaninisut I's chapel to a general group including the chapels of Merib (G 2100-I), Nensedjerkai (G 2100-II), Seshathetep (G 5150), Nisutnefer (G 4970), Seshemnefer III (G 5I70), Setju (G 47IO), Tjenti (G 4920), G 50IO, G 5030 (= Lepsius 46), Khemten (G 5210), and Kasewedja (G 5340). These chapels are characterized by "reliefs of medium height and mediocre execution, and some of them show evidence of a use of plaster washes to give a smoother finish to the relief for the laying on of the color..." 44 Contrary to Smith's assertion, the execution of Kaninisut I's relief work seems superior to that of most, if not all, of these chapels.

South Entrance Thickness (figs. 13.26-13.28, 13.30-13.33). Kaninisut I sits at a table of ir half-loaves of bread (six facing five) facing out of the chapel to the left (east). Both hands are extended towards the table. He wears a long, striated wig, bracelets, and a leopard skin with shoulder tie. He sits on a bull-legged stool with a papyrus umbel and cushion. To the left of the table, four figures face him to the right, into the chapel. The first two kneeling figures resemble their counterparts on the north entrance thickness. The first holds a vessel and conical bread loaf; the second is a gesturing $w t$-priest.

4 F For an alternative reading, arguing for a redundant $s$ at the the beginning of the word, cf. Kahl, Das System der ägyptischen Hieroglyphenschrift in der o.-3. Dynastie, pp. 66-70 (zf, "Stoff mit bekannten Abmessungen"). See also P. Posener-Kriéger, "Les Mesures des étoffes à l'ancien empire," RdE 29 (1977), p. 94; and Junker, Gîza i, p. 3 I .

42 Or possibly 90 cubits square? On the difference between vertical and horizontal linen units of measure, see Manuelian, Slab Stelae, p. 137, based on PosenerKriéger, "Les mesures des étoffes à l'ancien empire," pp. 86-96; Kahl, Kloth, and Zimmermann, Die Inschriften der 3. Dynastie, p. I75ff.; E. Edel, "Eine althieratische Liste von Grabbeigaben aus einem Grab des späten Alten Reiches der Qubbet el-Hawa bei Assuan," NAWG 6 (1987), pp. 98, 104. On the large numbers, Vogelsang-Eastwood, "Textiles," in Ancient Egyptian Materials and Technology, p. 295, notes that 845 square meters of cloth were found in the Middle Kingdom tomb of Meket-re at Thebes (H.E. Winlock, "The Mummy of Wah unwrapped," BMMA 35 [1940], p. 257), and Tutankhamen's tomb produced 400 items of clothing.
43 See Junker, Gîza 2, p. 142; idem, Die Kultkammer des Prinzen Kanjnjswt, Hölzl, Ka-ni-nisut, pp. 39-55; Demel, Die Reliefs der Kultkammer des Kaninisut.
44 Smith, HESPOK, p. I66.

The third figure stands reciting reversion offerings, and the fourth carries a haunch. ${ }^{45}$


Text: (I) wdpw bnty wr (2) snmt 3b wt (3) di bt (4) hry wdb (5) imy-sbr (6) $t h_{3}(7)$ ḥnkt $h_{3}(8) m n h_{t} h_{3}(9) \check{s}_{s} h_{3}$

Translation: (I) The butler of the great hall. ${ }^{46}$ (2) Supplying the akb [by] the embalming priest. (3) Placing the offerings. (4) Chief of reversion offerings. (5) Imysekher. (6) A thousand loaves of bread, (7) a thousand jars of beer, (8) a thousand pieces of cloth, (9) a thousand alabaster vessels.

Further into the chapel, the south rebate of the door embrasure may relate to the fourth (lowest) register on the east wall. Two short registers above display ideographic offerings, while the primary, third register below contains three men proceeding to the right. The first carries cuts of meat, while the two following behind him escort an oryx. One man glances backwards, grasping the animal by the horns, while his assistant holds it by the tail and brandishes a stick. All three men wear their hair close-cropped. The leader wears a kilt with a belt tie, while the two followers simply wear waistbands with three straps hanging down in front. ${ }^{47}$ In addition to the identifying inscriptions, painted traces of hieroglyphs (presumably concerning the $\underline{d} t$ "funerary estate") appear above the third male figure.

$$
\begin{aligned}
& \begin{array}{l}
\stackrel{D_{s}}{\square} \\
\underline{\square}
\end{array}
\end{aligned}
$$

$$
\begin{aligned}
& \text { 軍 } 84^{4}
\end{aligned}
$$

Text: (I) ws.h wdhw mbt nb nfrt re nb (2) int rn hod m ndt-hr nt pr $\underline{d} t$

Translation: (I) Laying the offering table with every good thing every day. (2) Bringing a young oryx as a presentation of the funerary estate. $4^{8}$ (3) Hetep, (4) the funerary priest, Ankhhaf, (5) controller of the kitchen, Niankhhathor.

North Entrance Thickness. In a very similar pose-but for the long, striated wig-to his figure on the south entrance thickness, here Kaninisut I sits before a table of I2 bread-loaves, facing out to the right. Before him four men kneel and stand facing him. The two kneeling figures resemble their south thickness counterparts, but it is interesting to note that the second figure, the gesturing $w t$-priest, has reversed his arm positions. It is his rear arm that reaches towards his

45 Illustrated in Junker, Gîza 2, p. 147, fig. 16, and Gîza i2, p. 77, fig. 6.20, and Staehelin, Untersuchungen zur ägyptischen Tracht, pl. 28, fig. 27.
46 See Junker's discussion, Gîza 2, p. 64, no. i; Jones, Index of Ancient Egyptian Titles I, p. 407, no. 1497.
47 For a discussion of this item of apparel, see Brovarski, The Senedjemib Complex, Part I, pp. 44-45.
48 The concluding phrase $-\underset{b r}{ } n t p r-\underline{d} t$ is merely painted, not carved, but only $p r-\underline{d} t$ has been drawn on Junker's line drawing, Giza 2, p. 149, fig. 17. Compare the Mlinar drawing in Hölzl, Reliefs und Inschriftensteine des Alten Reiches 2, p. 68. For this genre of scene, see H. Altenmüller, "Presenting the $n \underline{d} t$ - $b \underline{r}$-offerings to the tomb owner," in The Old Kingdom Art and Archaeology, pp. 25-35.
forehead, while his front arm extends outward. The third figure stands behind holding aloft an ewer and basin, and the final figure stands with his right arm extended in a reversion-offering pose, twice as tall as his fellows. Before him is a lightly incised vertical text, presumably applying to him, although the hieroglyphs face towards him, that reads组仍 $h m-k 3 K(3)-m-k d$, "the funerary priest, Kaemked." ${ }^{49}$

Text: (I) s3 nswt K3-n-nswt (2) wdpw hnty wr (3) snmt 3 b [i]n wt (4) hry wdb (5) sntrr [hastt mrhty(?)] [...] [wsd] msdmt i[r]p wsh nbs (6) dbs dpt
 bs $h r y-d b r i w z$
Translation: (I) King's son Kaninisut. (2) The butler of the great hall. (3) Supplying the $a k b$ by the embalming priest. (4) Chief of reversion offerings. (5) Incense, [best of two ointments(?)], [...], [green eyepaint], black eye-paint, wine, carob beans, ${ }^{50}$ zizyphus, ${ }^{51}$ (6) figs, depetbread, loaf of(?) zizyphus, baked bread, parched wheat, white 6 -row barley, green 6 -row barley. (7) a thousand jars of beer, a thousand loaves of bread, cakes, (8) a thousand pieces of cloth, a thousand alabaster vessels, suckled calves, oxen.

East Wall, over the Doorway. Two boats proceed to the right (southwards). ${ }^{52}$ The composition shows remarkable similarities to (and some significant differences from) the only other boating scene from Cemetery g 2100, in the tomb of Merib (G 2100-I). ${ }^{53}$ The boat in the upper register shows its sails unfurled with a hedgehog-headed

49 What appears to be a $t$ under the $d$ in the Mlinar drawing, Hölzl, Reliefs und Inschriftensteine des Alten Reiches 2 p. 66 (reproduced here in fig. 13.37), may in fact be the circular determinative of $k d$. This text is omitted from Junker's drawing, Gîza 2, p. 146, fig. 15, and Gîza 12, p. 77, fig. 6.19. The scene also occurs in Staehelin, Untersuchungen zur ägyptischen Tracht, pl. 29, fig. 28.
50 Alternatively, "earth almonds;" see Edel, Qubbet el Hawa II/I/2, p. 22; Germer, Flora, pp. 245-46.
5 I Alternatively, "nabq-fruit;" see Emery, Hemaka, p. 52.
52 This scene is illustrated in color in Hölzl, Ka-ni-nisut, p. 8, and Satzinger, Das Kunsthistorische Museum in Wien, pp. 91, 93; cf. also, Junker, Gîza 2, p. 156, fig. 22; Hölzl, Reliefs und Inschriftensteine des Alten Reiches 2, pp. 69, 79; Abubakr and Mustafa, "The Funerary Boat of Khufu," in Aufs̈̈tze zum 70. Geburtstag von Herbert Ricke, p. 14, fig. II. On the subject of boats in general, cf. Haldane, Ancient Egyptian Hull Construction; Jones, Boats, pp. 36-45; and Dürring, Materialien zum Schiffbau im alten Ägypten.
53 Decoration over the entrance to the chapel of Kanefer (G 2150) consists of four sarcophagi, and the beginnings of a procession of funerary estate offering bearers.
prow. ${ }^{54}$ Kaninisut I stands in the center, leaning on a staff, with a long, striated wig and a kilt extending below the knees. A crew of seventeen men fills the craft. At the stern, one man controls the sail ropes, three others hold large steering oars, and a lookout towards the prow surveys the way ahead. One individual perches atop the deckhouse, probably relaying navigation instructions between the prow and stern staff. 55 In front of the boat, two subregisters are squeezed in above the hedgehog prow, each with two running men. Above, they carry a coil of rope on a pole, and below, the first man holds a paddle, while he seems to support another coil of rope around his neck. ${ }^{56}$ All four men wear the waistband with three strips of linen hanging down in front.

Text: (1) iwt m Dp skdwt 57 r sht htp nfr wrt (2) sm K3-n-nswt (3) Htp-spit (4) W3b-ib (5) Pnw (6) Pr-ndw (7) H.ry-mrw Translation: (I) Returning from Dep, sailing to the very beautiful field of offerings. ${ }^{58}$ (2) The sem priest, Kaninisut, (3) Hetepsepit, (4) Wahib,59 (5) Penu, ${ }^{60}$ (6) Pernedju, ${ }^{61}$ (7) Herymeru.

In the lower register, a papyrus boat is paddled. Once again, Kaninisut I stands in the center, leaning on a staff and wearing a short valanced wig. He also shows a folded-up cloak (less likely a "life preserver") wrapped around one shoulder. ${ }^{62}$ Around him, a crew of 13 men handle the oars. The deckhouse shows no poles in this case, but does contain forked supports and a single man once again perched on top. ${ }^{63}$ Where Merib's papyrus boat required only

54 For a study on the significance of the hedgehog-headed night-boats (Henet) versus the papyrus-prowed day-boats (Shabet), see H. Altenmüller, "Funerary Boats and Boat Pits of the Old Kingdom," in Abusir and Saqqara in the Year 200I, pp. 269-90. On the hedgehog-headed prow itself, see von Droste zu Hülshoff, Der Igel im alten Ägypten, pp. 96-97 (cat. no. 47, fig. 38), with extensive bibliography, and on hedgehogs in general, idem, "Igel," in $L \ddot{A}_{3}$, col. 124 .
55 A very similar arrangement occurs in the upper and lower boats in both the tombs of Kaninisut I (G 2155) and Merib (G 2100-I). Kaninisut's deckhouse resembles the actual one reconstructed on Khufu's boat at Giza; cf. Landström, Ships of the Pharaohs, pp. 26-34. Kaninisut's hedgehog-prowed ship is illustrated on p. 36, fig. 97.
56 Illustrated in Klebs, Die Reliefs des alten Reiches, pp. IO4-IO5, fig. 86; Landström, Ships of the Pharaohs, p. 36, fig. 97; Demel, Die Reliefs der Kultkammer des Kaninisut, pl. I.
57 On the writing of this infinitive, see Wb. 4, 309.9-15.
58 This passage is discussed by Jürgen Settgast, Untersuchungen zu altägyptischen Bestattungsdarstellungen, p. 72; see also Junker, Gîza 2, pp. 67, 156 fig. 22, 169, and idem, Giza 3, p. 185
59 Ranke, PN i, p. 72.27.
60 Ranke, $P N_{\text {i, p. p. 133.6. }}$
6i Ranke, PNi, p. 133.29.
62 Compare the similar item in the Eastern Cemetery rock-cut tomb of Khafreankh, g 7948: Lepsius, Denkmaeler 2, pl. 9 (top), and image A7391 on www .gizapyramids.org.
63 Landström, Ships of the Pharaohs, p. 36, fig. 97, suggests the forked corners of the deckhouse served to support the mast when it was lowered.
two steering oars（figs．4．37－4．39），there are three on Kaninisut＇s boat．


Text：（1）skd．tw ${ }^{64} r{ }^{\prime} I w n w(2) s m K 3-n-n s w t ~(3) ~ K 3-m-h ̣ s t t^{65}(4) W_{3} h-$ ib（s）Stb
Translation：（I）Sailing to Heliopolis．（2）The sem priest，Kaninisut， （3）Kaemheset，（4）Wahib，${ }^{66}$（5）Seteb．

East Wall，Presentation Scenes（figs．13．38－13．39，13．42－13．44）． The rest of the east wall bears no large－scale figure of the tomb owner． Presumably，the four registers of processions should be understood as oriented either towards the large，standing figure of Kaninisut I on the north wall，or to his（now missing）seated figure before an offering table on the south wall．The east wall figures march in both directions；this arrangement is found on Merib＇s east wall as well （G 2100－I），but in that case there are large－scaled figures to face them at either end of the same wall．On Kanefer＇s east wall（ G 2150 ），all the figures face right（south）towards Kanefer＇s seated figure on the south wall．

For detailed descriptions of the many individuals represented on this wall，and the various items they carry，the reader is referred to the publications of Junker and Hölz1．${ }^{67}$ A brief summary will suffice here．In the topmost register，fourteen female personified estates march left（northwards），each wearing a tripartite wig and a long garment with shoulder straps．The primary distinction among these figures is the diaphanous nature of the dresses of the first four women，where leg details are carved and visible beneath the garment， versus the remaining nine women，whose dresses completely hide their legs．Only two figures are male：the third from the end of the procession，and the final（damaged）figure at the far right（south） end of the wall．＂Masculine＂estate names are，of course，represented by male offering bearers，and＂feminine＂estates by females．In the two topmost registers，a total of 30 estates are shown．Three of these are called＂the foundation of Kaninisut，＂two contain the cartouche of Snefru，and one the cartouche of Khufu．This represents by far the longest procession of funerary estates in all of Cemetery g 2100 ．

| Register <br> I FIGURE <br> no． | M／F | Text | Translation | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| （1） | ，${ }^{\text {a }}$ | grgt K3－n（y）－nswt | foundation of Kaninisut |  |

[^26]|  | \％ | grgt K3y | foundation of Kay |  |
| :---: | :---: | :---: | :---: | :---: |
| （3） | ง | grgt W $W$－$b$－sw | foundation of Wabsu | reversal of the $s$ |
| （4） | ， 1 | grgt Nfr－smm | foundation of Nefer－shemem | there is a <br> Nefer－shemem in the tomb of Nefer（G 2IIO） |
| （5）$y$ | \％ | grgt $M r$－iw．$n=f$ | foundation of Meriuenef |  |
| （6） 8 | 込 | wst | the way |  |
| (7) 答毛 | 3 | grgt Nfr－nh | foundation of Neferankh |  |
| $\text { (8) } \underset{\text { min }}{\text { min }}$ | \％ | snsnt | the burnt |  |
| （9） | \％ | bwt ffyw | the house of brewers |  |
| (io) | 込 | grgt Ry | foundation of Ray |  |
| （ii） | 19 | int $W^{\prime} p$ | valley of Inet－wep |  |
| (i2) | 迆 | grgt s3－ib | foundation of $\mathrm{Za}-\mathrm{ib}$ | G 2092＋2093： <br> male Za －ib <br> （Izezi）；cf． <br> Roth，$A$ <br> Cemetery <br> of Palace <br> Attendants， <br> pp．IO6－II3 |


| (13) | 通 | iwntyw | the bowmen |  |
| :---: | :---: | :---: | :---: | :---: |
| $\text { (14) } \sum_{2}^{8}$ | 込 | hnd ${ }^{2} t$ | ？ | reversal of 3 |
| （I5） $\frac{8}{8}$ | 通 | $m r$ Re Heffu | Re loves Khufu |  |


| Register <br> 2 FIGURE NO． | M／F | Text | Translation | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| $\text { (ㄷ) } 10$ | ，${ }^{3}$ | sht hd ${ }_{\text {d }}$ r | the field of the hedjeret－animal |  |
| (2) | 通 | s3w | the satisfied | reversal of the $s$ |
| （3） | 通 | nbs Snfrw | the zizyphus／nabq－ fruit of Snefru | reversal of the $s$ |
| (4) | ，$\frac{1}{}$ | $\begin{aligned} & \operatorname{grgt} K 3-n(y)- \\ & n s w t \end{aligned}$ | foundation of Kaninisut |  |
| $\begin{gathered} \text { (s) } 1 \\ \text { D } \\ 2 \\ 2 \\ 2 \end{gathered}$ | 込 | grgt ish3h | foundation of Iskhakh | reversal of the $s$ |
| （6） $\begin{gathered} \int_{-\infty}^{1} \\ 0 \\ 0 \end{gathered}$ | 通 | bst | panther＇s head（？） | cf．Fischer， Varia Nova， p．36（e） |
| （7） | 込 | grgt pher | foundation of Pekher |  |


| （8） | 通 | pr hm | house of the servant／majesty |  |
| :---: | :---: | :---: | :---: | :---: |
| （9）～～～ | \％${ }^{\text {a }}$ | smywt | the desert hills |  |
| (io) | ง19 | $\begin{aligned} & \operatorname{grgt} K_{3}-n(y)- \\ & n s w t \end{aligned}$ | foundation of Kaninisut |  |
| (ii) | 込 | grgt Snfrw | foundation of Snefru |  |
|  | งิ่ | int Nbi | foundation inet of Nebi | reversal of the $b$ and the $i$ |
| (ㄴ) | 込 | tsrwt | the granaries |  |
|  | งิ | $p n \subset t$ | the（place of） capsizing |  |
| (15) | ，${ }^{\text {a }}$ | grgt Sšmw | foundation of Seshemu |  |

Register 3 consists of men escorting two oxen and one cow on leashes（left），and butchery scenes（right）．Nine men in all are depicted；three bring animals to the left（north），and on the right are two groups of three men removing the forelegs of two trussed oxen．


Text：（1）int ndt－hr nt niwt nt pr d $t$（2）$H_{s i}$（3）iws mdt（4）K3ngì（5）rhs $n$ sšm（6）$H r-i b$（7）sšm ITi－nfrt（8）Ini－išstf（9）wdpw Sšmw（10）sšm Imy－ $s b r$（II）ssm＇ $1 s i$

Translation：（I）Bringing the presentation of the towns of the funerary estate．（2）Hesi．（3）Oxen from the stall．${ }^{68}$（4）Kanegi．${ }^{69}$（5）Slaughtering by the butcher（s）．（6）Herib，${ }^{70}$（7）the butcher Iinefret，（8）Ini－ishetef， （9）the butler Seshemu，（Io）the butcher Imysekher，（II）the butcher Isi．

Register 4 at the bottom of the wall contains thirteen male offering bearers，all with short kilts，belt ties，and close－cropped hair， and all marching to the right（south）bearing various offerings for the funerary meal．Their names and occasional titles are provided， but these are not personified estates．

| Register <br> 4 FIGURE <br> No． | m／F | Text | Translation | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| （1） | 通 | $b r p s h \underline{T} n t i$ | controller of the kitchen，Tjenti |  |
| （2）若 | 通 | wdpw Kiriri | butler Kairi |  |
| （3）䙵而 | 通 | wdpw Ni－snh－ <br> hwt－hr | butler <br> Niankhhathor |  |
| （4） $\stackrel{\Theta}{\overbrace{\mathrm{m}}^{\rho}}$ | 通 |  | butler Ankhi |  |
| （5） | 通 | $w d p w$ Snb | butler Seneb |  |
| （6）$\stackrel{\Delta}{\square,}$ | 通 | $r$ th $N(y)-m r t$ | baker Nimeret | Junker，Giza 2，p．I66： otherwise unattested |
| $\text { (7) } \underset{\sim}{\square}$ | 通 | $r t \underline{~ T}$ Thti | baker Tjenti |  |
| （8） $\begin{aligned} & \text { fin } \\ & \text { min } \\ & \text { mos } \end{aligned}$ | 通 | fsw Wnbw | cook Wenkhu |  |
|  | 通 | Mdw | Medu |  |
| （ı） | 通 | $B 6 i$ | Bebi |  |

[^27]| （II） | 通 | $\begin{aligned} & \text { hm-k3 } \underline{H} w f w-m r- \\ & \text { ntrw } \end{aligned}$ | funerary priest Khufumernetjeru | Also Merib？ |
| :---: | :---: | :---: | :---: | :---: |
|  | 通 | hm－k3 Smr－k3 | funerary priest Semerka |  |
|  | 通 | btmty Prsn | seal－bearer Persen |  |

South Wall（figs．13．45－13．48）．Most of the figural decoration on this wall has been lost．Beneath six wide registers filled with an offering list，a seated figure of Kaninisut I at table originally faced left（east）． All that remains is his outstretched right hand，which touches the offering table laden with thirteen half－loaves of bread．${ }^{71}$ Further to the left，the face of one of the officiating priests is barely preserved．

The menu list reads from right to left and lacks any vertical separators between the individual items．${ }^{72}$ At the upper－left corner of the wall，a window provided the only source of light into the chapel．${ }^{73}$

 （4）$t b_{3}(5)$ šs $h_{3}(6) m n b t\left[b_{3}\right]$
Translation：（I）The sem priest，controller of kilts，stolist of Horus， （2）king＇s son of his body，［Kani］nisut．（3）A thousand jars of beer， （4）a thousand loaves of bread，（5）a thousand alabaster vessels，（6）［a thousand pieces］of cloth．

Offering list：

| Register A | Translation | Remarks |
| :---: | :---: | :---: |
|  | Libation | $S \underline{\text { is }}$ typically expected |
| （A2） | roll of cloth | See Junker，Gîza 2，p．171， commentary to no． 3 |

71 In the center of the table，where the two central half－loaves face each other，no vertical divider seems to have been carved，separating the two．The differentiation was perhaps indicated in paint．
72 Junker notes that vertical dividers were not yet prevalant at this stage of Dynasty 5：Gîza 2，p．156．See the arrangement on the west wall of the chapel of Senenuka（G 204I），which similarly lacks vertical dividers（PDM＿06872 on the Giza Web site，www．gizapyramids．org）．On the possibly archaic nature of missing vertical separators on Dynasty 4 slab stela linen lists，see Manuelian， Slab Stelae，pp．155－56．
73 Junker，Gîza 2，pp．138－39，and for the offering list，pp．170－71．The division into lettered registers follows the pattern laid out by Hölzl，Reliefs und Inschriftensteine des Alten Reiches 2，pp．43－46．

| (A3) $\overbrace{\square}^{n}$ | basin(?) | First sign a mistake for $\Delta \sim$ ? |
| :---: | :---: | :---: |
| $\text { (A4) } \xlongequal[\substack{\text { ( } \\ 000 \\ 11 \square \text { sntr } 2}]{ }$ | two pellets of incense |  |
|  | festival perfume |  |
|  | hekenu-oil |  |
|  | best ointment |  |
| $$ | green eye-paint |  |
| (A9) | black eye-paint |  |
| (AIO) | burnt offering of incense |  |
|  | royal offering |  |
| (AI2) <br> [htpt] imy wsht | offering of the broad hall | Junker's restoration, Giza 2, p. I71, commentary to no. II (damaged due to proximity with window) |
| Register B | Translation | Remarks |
| $\begin{array}{rlll} (\mathrm{BI}-2) & 0 & \Delta & 8 \\ 0 & 0 & 1 & 1 \\ 1 & 0 & 0 \end{array}$ <br> thnkt rbw-rs | bread and beer for breakfast | Or: "repast" |
| (в3) | barley bread |  |
| $\text { (в4) } \stackrel{\square}{\square}_{\frac{0}{\square}}^{t-r t h}$ | baked bread |  |
| (B5) | ale |  |
| $f_{3 i}$ - šbw šns dwiw | serving of portion of shenes-bread and jug |  |
| (B8) (4)! $\qquad$ | sut-meat | For parallels to $s w t$ with $\prod_{s}$ instead of $\not \approx s w$, see Junker, Gîza 2, p. 171, commentary to no. 20 |


| kbhw 2 | two cups of cool water |  |
| :---: | :---: | :---: |
| $\text { (віо) } \underbrace{\&}_{1}$ | I loaf of hetja-bread |  |
|  | I jug of beer |  |
| (BI2) ロ | two cups of wine |  |
| Register C | Translation | Remarks |
| $\begin{aligned} & \text { (cI) } 3 \\ & 110 \\ & 110 d p t 4 \\ & \\ & \hline 100 \end{aligned}$ | four loaves of depet-bread |  |
|  | four loaves of neherubread |  |
|  | four loaves of psn-bread |  |
| $\text { (c4) } \prod_{\substack{\text { IIII }}} \mathrm{O}$ | four loaves of shenesbread |  |
| (c5) $\underbrace{\& 0}_{0}$ <br> \|11| t-imy-ts 4 | four loaves of imy-tabread | Cf. Brovarski, The Senedjemib Complex, p. 8I, n. f |
|  | four loaves of khenfubread |  |
| (c7) <br> bbnnwt ${ }^{4} 4$ | four loaves of hebnenutbread |  |
| (c8) E90 $\\| \Pi 10 p_{3} 3 t_{4}$ | four loaves of paut-bread |  |
|  | four loaves of qemehu-qema-bread |  |
| $\text { (cio) } \cos _{\substack{0}} 0$ | four loaves of cooked bread |  |
|  | four cups of onions |  |


|  | foreleg |  |
| :---: | :---: | :---: |
| (ci3) | thigh |  |
| $\text { (CI4) } \prod_{0}^{-\infty}{ }_{0}^{\infty} \text { sbn }$ | kidney |  |
| Register D | Translation | Remarks |
|  | four ribs |  |
| (D2) $\stackrel{\ominus}{\sigma_{0}^{\infty}}$ | liver |  |
| $\text { (D3) } \underset{1}{\pi} \varlimsup_{0} \varlimsup_{n n s m}$ | spleen |  |
| $\text { (D4) } \underbrace{}_{1 \underset{i w f}{\rho_{i}}}$ | meat |  |
|  | breast meat |  |
| ${ }^{(\mathrm{D} 6)} \underbrace{\infty}_{i}$ | greylag goose |  |
| ${\underset{i}{\text { IL }}}_{\text {(D7) }}^{\substack{\mathrm{t}}}$ | white-fronted goose |  |
|  | smen-goose |  |
| $\text { (D9) } \sum_{1}^{-\infty}$ | pintail duck |  |
|  | teal duck |  |
| (DII) | turtledove |  |
| $\text { (DI2) } \underset{1}{\underset{\sim}{f}} \underset{\substack{\infty \\ 0}}{0}$ | sif-bread |  |
| Register E | Translation | Remarks |
| (EI) | two pellets of natron |  |
| (E2) | four loaves of idat-bread |  |


|  | four shaut-cakes |  |
| :---: | :---: | :---: |
|  | two loaves of nepautbread |  |
|  | two loaves of mesutbread |  |
|  | two cups of milky ale |  |
|  | two cups of sekhepetdrink |  |
|  | two jugs of sesher-drink |  |
| Register F | Translation | Remarks |
| $\text { (FI) } \frac{\square}{\square}=\stackrel{\leftrightarrows}{11}$ | two cups of fig (wine?) |  |
| (F2) <br> irp bss 2 | wine in 2 abesh-vessels |  |
| $\begin{aligned} & \text { (F3) } \square \\ & \text { irp mh } 2 \end{aligned}$ | two cups of Lower Egyptian(?) wine | See note on south false door, and Barta, Opferliste, p. 62 |
|  | two cups of pekha-drink |  |
|  | [two] persea fruit |  |
| (F6) <br> $s \underline{b}\left[t \underline{h} \underline{d} w_{3} \underline{d}\right]$ | [white and green] 6-row barley |  |
| Register G | Translation | Remarks |
| Sgt swt 2 it 2 | two cups of parched wheat and of prepared barley | Cf. Junker, Giza 2, pp. 172-73, nos. 66-67 |
|  | babaut-fruit |  |
| (G4) [nbs?] | zizyphus? | Alternatively, "nabq-fruit;" see Emery, Hemaka, p. 52 |


| (Gs) [t-nbs?] | [loaf of zizyphus?] |  |
| :---: | :---: | :---: |
| Register H | Translation | Remarks |
| $\begin{gathered} \text { (HI) } \\ 0 \\ \\ =1 / 1 / 11 \\ \text { t-wr } \end{gathered}$ | great loaf |  |
| $\begin{array}{cc} (\mathrm{H} 2) & \hat{\mathrm{f}} \\ \\ & / / / / / /_{t-13} \\ \hline \end{array}$ | large (loaf?) of bread | Junker, Gîza 2, p. 172, no. 72: otherwise unattested; Hannig, Ägyptisches Wörterbuch I, p. 1385 \{36214\} |
|  | bread of the Two Lands(?) | $t p$ sign behind sbt belongs to a priest (Junker, <br> Giza 2, p. 172, no. 73); cf. Nisutnefer, Junker, Gîza 2, p. 89, idem, Gîza 3, p. 89, and Barta, Opferliste, p. 57 |

North Wall (figs. 13.49-13.52). $7^{74}$ The dominant figure of Kaninisut $\mathrm{I}^{75}$ occupies almost half the width of the wall. He faces right (east) towards the chapel entrance. Holding a staff and a sekhem scepter, Kaninisut wears a leopard skin, shoulder tie, ${ }^{76}$ pleated kilt, and belt tie, along with bracelets to complement the long, striated wig that covers his ear. Just before his face, grid lines are indicated in paint, presumably left over from either the original canon of grid squares or from copyists of later ages. Instead of standing in front of the deceased and holding onto his staff, Kaninisut's naked son Horwer stands behind him, reaching up to touch the back of his father's thigh.

Kaninisut I faces three registers containing the presentation of accounts. Eleven scribes face their master. Most kneel, inscribing papyrus documents, and show multiple styli tucked behind their ears. Scribal kits are in their hands as well, some of which are bivalve shells, which we have also seen in the tomb of Nefer (G 21IO; fig. $6.50,6.53$ ). Both the first scribe in the topmost register $I$ and his counterpart below in register 2 (damaged) extend their papyrus texts towards Kaninisut in a gesture I have elsewhere described as "presenting the scroll." 77 Bound documents, cases, and bags rest on the floor in between several of the scribes.
artations of this wall may be found in Holzl, Meisterwerke der Agyptisch Orientalischen Sammlung, pp. 32-33, cat. no. 3; Satzinger, Das Kunstbistorische Museum in Wien, pp. 90-92; Vandersleyen, Das alte Ägypten, fig. 245; Satzinger, Ägyptische Sammlung Wien, pp. 112-13 (color view of the north and part of the west walls); Schlott, Schrift und Schreiber im Alten Ägypten, fig. 2; p. 150. fig. 80 (describing the various methods of writing on rolled and unrolled papyrus).
75 For discussion of this figure of Kaninisut facing right, with scepter passing in front of his body, in contrast to his west wall representation (facing left) where it passes behind him, cf. Fischer, L'Ecriture et l'art de l'Egypte ancienne, pp. 69-71, figs. 24-25.
76 This accessory appears in faint painted traces just above the sekhem scepter
77 Manuelian, "Presenting the Scroll: Papyrus documents in tomb scenes of the Old Kingdom," in Studies in Honor of William Kelly Simpson 2, pp. 561-88.


Text: (1) [...] ©d mr Dp rs pyw nbw hry sstz pr dwst bry-tp Nbb ss nswt smr
动 rmtw (4) imy-r pr Whm-ks (5) ss mddst
 (12) sš Mnh-ks (13) sš Ph-r-nfr (i4) sš $R c-h t p$

Translation: (I) [...] district administrator of Dep, mouth of all the people of Pe , overlord of el-Kab, king's son, sole companion, Kaninisut. (2) The royal acquaintance, his son of his body, Horwer. (3) Presenting the document of the towns of [the funerary estate, and the li]st of the census of people. ${ }^{79}$ (4) Steward Wehemka, (5) scribe of the archive, Tjeset, (6) Im[y-sekher], (7) steward Kaemnefret, (8) scribe Khnumhetep, (9) archivist Tjenti, (Io) archive scribe Qedmerer, (iI) scribe Sahi, (I2) scribe Menkhka, (Iз) scribe Pehernefer, (I4) scribe Rahetep.

West Wall (figs. 13.53-13.60). As is the case with the chapel of Merib (G 2100-I), Kaninisut I's west wall shows the most complex arrangement, with two false doors and several important figures at various large scales in the presentation scenes between them. ${ }^{80}$ Four faces belonging to major figures on this wall have been defaced, and both false doors show evidence of attempts to puncture them in search of plunder behind. The southern (primary) false door contains a very wide offering platform on the floor before it. The architraves over both false doors extend asymmetrically towards the center of the wall.

West Wall, South of South False Door (figs. 13.53, 13.55, 13.57). Two thin registers each contain a standing man facing right towards the false door. The upper register shows the scribe Wehemka, with

78 The container with scribal equipment in front of the third scribe in this register is discussed by P. Schienerl, who claims such containers were the forerunners for amulet cases, "Der Ursprung und die Entwicklung von Amulettbehältnissen in der antiken Welt," Antike Welt 15 (1984), fig. I and p. 48.
79 On sšiprmtcf P. Andrassy, "Die $m r t$-Leute. Überlegungen zur sozialstruktur des Alten Reiches," in Texte und Denkmäler des ägyptischen Alten Reiches, pp. 45-46, with fig. 2.
8o In addition to the full treatment in the Junker and Hölzl publications, portions of the west wall are also illustrated in Hölzl, Ka-ni-nisut, pp. 49-54, figs. 27-31; Schlott, Schrift und Schreiber im Alten Ägypten, fig. 2; p. 155, fig. 85; Fischer, L'écriture et l'art de l'Egypte ancienne, p. 71, fig. 25.
scribal equipment and long kilt. Below, a partially destroyed figure of Iduneferhetep holds out two strips of linen.


Text: (1) sš pr md ${ }^{3} t$ Wḥm-k3 (2) idw nfr Htp
Translation: (I) The library scribe, Wehemka. (2) The page and recruit, Hetep. ${ }^{81}$

West Wall, South False Door, Architrave (figs. 13.53, 13.55, 13.57).

 br ntre $\Im_{3}$ isw nfr wrt sm brup šndwt K3-n-nswt
Translation: (I) A gift which the King, and Anubis, foremost of the divine booth, give, that he might be buried in the necropolis (as) a possessor of veneration before the great god, having attained a very great old age, the sem priest, controller of kilts, Kaninisut.

West Wall, South False Door, Tablet (figs. 13.53, 13.55, 13.57). The seated figures of Kaninisut I on the tablets of both false doors are nearly identical: short, curled wig; a long, close-fitting garment with shoulder tie; a bull-legged stool with a papyrus umbel and cushion; and a table with six left-side, and five right-side half-loaves of bread. The central half-loaves on the southern false door tablet have not been separated; see the similar treatment on the south wall. Another distinction between the two tablets is the placement of the southern false door's jar stand on its own register line, above Kaninisut's feet. The northern false door tablet uses Kaninisut's ground line, allowing his rear foot to overlap in front of the jar stand.
(

8i Fischer, "The Inspector of Youths Nfr-n-Hwfw," OMRO 4I (1960), p. 9, corrects Junker (Gîza 2, p. 167, no. iI) and Ranke (PN I, p. 416.15) in reading Iduneferhetep as actually two titles, $i d w$ and $n f r$ side by side, preceding the personal name Hetep. Hölzl, Ka-ni-nisut, p. si, reads "der Jüngling Neferhotep."
82 One wonders if some confusion has crept in here between $t$ for $h t p$ and $r$ for $r \underline{d} \underset{\sim}{c}$. For another example of $h r p$ for $h t p$, see Leprohon, Stelae I, p. 145 (false door tablet of Mestju and wife Nebuhetep), once written Nebuherep, from shaft G 7248 A; (26-4-206 = MFA 27.III7).

Text: (1) smr w‘ty hrp ch sm s3 nswt K3-n-nswt (2) sntr (3) w3 $\underline{d}$ (4) msdmt (5) išd (6) irp mbw(?) (7) irp (8) idst 4 (9) sㅐㅏ $\underline{h} \underline{d}(t) w_{3} \underline{d}(t){ }_{2} 2$ (10) nbs (11) $d b_{3}$ (12) $t-n b s$ (13) $h n k t h_{3}$ (14) $t h_{3}$ (15) šs $h_{3}$ (16) mnbt h3

Translation: (I) Sole companion, controller of the palace, ${ }^{83}$ sem-priest, king's son, Kaninisut. (2) Incense, (3) green eye-paint, (4) black eyepaint, (5) persea fruit, (6) Lower Egyptian wine(?), ${ }^{84}$ (7) wine, (8) 4 loaves of idat-bread, (9) white and green 6-row barley, 2 portions, (IO) zizyphus, ${ }^{85}$ (II) figs, (I2) loaf of zizyphus, (I3) a thousand jars of beer, (I4) a thousand loaves of bread, (I5) a thousand alabaster vessels, (16) a thousand pieces of cloth.

West Wall, South False Door, Lintel (figs. 13.53, 13.55, 13.57).

Text: (I) sm hrp šndِwt sm3 Hr smr w'ty s3 nswt n $n$ ht=fKK-n-nswt Translation: (I) The sem priest, controller of kilts, stolist of Horus, sole companion, king's son of his body, Kaninisut.

West Wall, South False Door, Drum (figs. 13.53, 13.55, 13.57).

Text: (I) sm burp šndwt smz $\operatorname{HCr}_{r} K 3-n-n s w t$
Translation: (г) The sem priest, controller of kilts, stolist of Horus, Kaninisut.

West Wall, South False Door, South Jamb (figs. 13.53, 13.55, 13.57). One offering figure appears above, and one below. The top figure apparently offers a beaker; the title and item(s) held by the lower figure are obscured by damage.


Text: (I) imy-r sšrw Pr-ndw (2) [...]i
Translation: (I) Overseer of linen, Pernedju. (2) [...]i.
West Wall, South False Door, North Jamb (figs. 13.53, 13.55, 13.57). The upper figure of Herymeru presumably carries a papyrus document. The lower figure, bearing a sack, has lost his inscription due to the damage inflicted to the false door.


Text: (I) Hry-mrw
Translation: (I) Herymeru.

83 For this title, see M. Bárta, "The Title Inspector of the Palace during the Egyptian Old Kingdom," Archív Orientální 67 no. I (1999), pp. I-20, citing this tomb on p. 5.
84 This item first occurs, according to Barta, with Unas, along with other specific types of wine: $\operatorname{irp} m b ̣ w(A / 72$; Pyr. 92b), see Barta, Opferliste, p. 62. Hölzl, Reliefs und Inschriftensteine des Alten Reiches 2, p. 47, takes the mb sign as part of $n b s$.
85 Alternatively, "nabq-fruit;" see Emery, Hemaka, p. 52.

West Wall, Between the Two False Doors (figs. 13.53-13.56). The presentation scene here is divided into three sizes of figures, doubtless to indicate their importance. Primary among them are, of course, Kaninisut I and Neferhanisut, standing at the right (north) end of the scene, and facing left. ${ }^{86}$

The second tier of importance is indicated by the smaller figures of two sons, Horwer and $\mathrm{Ka}(\mathrm{ni})$ nisut Junior, and one daughter (Wadjethetep) who directly face the larger couple. Each is set off by a vertical separator dividing their names and titles. $\mathrm{Ka}(\mathrm{ni})$ nisut Junior appears as a naked child, with hand to mouth. Wadjethetep wears a full-length, tightly fitting garment with shoulder straps and a closecropped wig. Horwer holds a rolled papyrus(?) in his right hand, nothing in his left, and wears a typical short pleated kilt with belt tie.

The scene moves to yet a third scale for representing the rest of the (all) male figures. Behind the three children, two registers fill the space. Above are four scribes. The first inscribes his document; the second two carry their scribal equipment, and the fourth and final man shows the unusual pose of grasping one hand with the other behind his back in a gesture of respect, ${ }^{87}$ while clenching his scribal kit under his arm. ${ }^{88}$ The lower of these two registers depicts five men presenting two vessels, and three fowl. Fifteen short columns of vertical hieroglyphs, reading left to right (i.e., oriented with the large-scale standing couple) containing the name and titles of Kaninisut I, fill the space above, nestled between the two false door architraves. ${ }^{89}$


Text: (I) smbrp šndwt smr (2) sm3 $\operatorname{H} H r(3) \stackrel{d}{d}-m r D p$ (4) rs $p y w n b w(5) s m r$ wrty (6) hry ssts ${ }^{\circ \circ}$ (7) n pr dwst (8) hry tp Nbb (9) hry wdb hwt-inb
 bt $H_{3}(\mathrm{I} 4)$ wr (m) wrw hb (15) K3-n-nswt
Translation: (I) The sem priest, controller of kilts, companion, (2) stolist of Horus, (3) district administrator of Dep, (4) mouth of all the people of $\mathrm{Pe},(5)$ sole companion, (6) master of secrets (7) of the robing room, (8) overlord of el-Kab, (9) chief of reversion offerings of the house of life, (ıo) ruler of Bat, controller of the black jar,, ${ }^{91}$ (iI) priest of the lord of Buto, ( I 2 ) son of the north, lector priest, ( I 3 ) follower of Ha , (I4) one (among) the great ones of the festival, (is) Kaninisut

86 For three comparative line drawings of the panther head on Kaninisut's garments (west and north walls), see Smith, HESPOK, p. 320, fig. 190 (= Junker, Gîza 2, figs. 16, 18-19). The figure of Kaninisut facing left, with scepter passing behind him, in contrast to his north wall representation (facing right) where it passes in front of his body, is noted by Fischer, L'Ecriture de l'art de l'Egypte ancienne, pp. 69-71, figs. 24-25.
87 See Dominicus, Gesten und Gebärden, pp. 6-9, fig. 2.
88 For a line drawing of the final scribe, with one arm behind his back, see Smith, HESPOK, p. 312 fig. 174 a .
89 All four tall $s$ signs in this inscription (lines I [twice], 5 , and 6 ) are reversed. The only other reversal of this sign on the west wall occurs (at least three times) on the tablet of the north false door.
90 Note the reversal of the word sstz.
91 Following Junker, Gîza 2, pp. 159 (no. 14), 161-62, and see R.O. Faulkner's review of Junker's volume in JEA 27 (1941), p. 167; Jones, Index of Ancient Egyptian Titles 2, pp. 725-26, no. 2642; Fischer, Egyptian Titles of the Middle Kingdom, p. 67, no. I136.

## Kaninisut's wife: <br> 16 7 0 0 0 0 0

Text: (16) Nfr( $t$--b3-nswt
Translation: (16) Nefre(t)hanisut.

Above the three figures of Kaninisut's children:


Text: (17) $s 3=f n \underline{h} t=f(18) r b n s w t H r-w r$ (19) sit=fn $\underline{h} t=f(20) W_{3} \underline{d} t-h t p$ (21) $s s=f n \underline{b} t=f(22) K_{3}-n-n s w t-n \underline{d} s$

Translation: (17) His son of his body, (I8) royal acquaintance Horwer. (19) His daughter of his body, (20) Wadjethetep. (21) His son of his body, (22) Kaninisut Junior. 92

Accompanying the four scribes:


Text: (23) sš m33 (24) imy-r pr Wḥm-k3 sš K3-m-whm sš Msy sš Tntí Translation: (23) Viewing the document. ${ }^{93}$ (24) The steward Wehemka, 94 the scribe Kaemwehem, the scribe Mesy, the scribe Tjenti.

Accompanying the five male offering bearers below the scribes:


Text: (25) hm-ks Pnw (26) ham-ks W3b-ib (27) hm-ks Itf (28) hm-ks Hufw-snb (29) hm-ks Ity
Translation: (25) The funerary priest Penu, (26) the funerary priest Wahib, (27) the funerary priest Itjef, (28) the funerary priest Khufuseneb, (29) the funerary priest Ity.

The lowest register of this composition fills the entire space available between the two false doors, even extending underneath the standing figures of Kaninisut I and Neferhanisut. Ten male offering bearers in short kilts march rightward (north). From first to

[^28] tomb of Kanefer (G 2150).
last, they bear two haunches, two geese, a duck, a gazelle, a skewered fowl and a fan, a tray with meat, a goose and a wickerwork frail, and a bowl of fruit. 95

|  |  |  |  | 召 年 |
| :---: | :---: | :---: | :---: | :---: |
|  | $\underbrace{35}$ | $\pm \operatorname{man} \\|$ | 18 | bl 33 |
|  |  |  |  |  |

Text: (30) wdpw N(y)-enh-ḥwt-hr (31) wdpw K3-iri (32) hrp ist Hywfw$m r-n t \underline{r} w$ (33) imy-r sšr Sšmw (34) wdpw Snb (35) sšm(?) Iİ-nfrt (36) hm$k_{3} \check{S}(n) \underline{d} w(37) h m-k_{3} N(y)-n_{n} b-h w f w(38) h m-k_{3} S n b-\underline{d} \bar{i}-s w$
Translation: (30) The butler Niankhhathor, (31) the butler Kairi, (32) controller of the crew, Khufumernetjeru, (33) the overseer of the bag Seshemu, (34) the butler Seneb, (35) the butcher Iynefret, (36) the funerary priest She(n)dju, (37) the funerary priest Niankhkhufu, (38) the funerary priest Khufumernetjer[u], (39) the funerary priest Senebdisu.

West Wall, North False Door, Architrave (figs. 13.53, 13.55, 13.58, 13.60).


Text: (I) htp di nswt Inpw hnty sḥ ntr krrs.t(i)=fm hrrt-ntr nb imsh prt-hrw $n=f r<n b$ ss nswt K3-n-nswt
Translation: (I) A gift which the King, and Anubis, foremost of the divine booth, give, that he might be buried in the necropolis (as) a possessor of veneration, and that invocation offerings might be made for him every day, the king's son, Kaninisut.

West Wall, North False Door, Tablet (figs. 13.53, 13.55, 13.58, 13.60).


Text: (I) sm s3 nswt K3-n-nswt (2) sntr (3) widw (4) msdmt (5) issd (6) nbs
 Translation: (I) The sem-priest, king's son, Kaninisut. (2) Incense, (3) green eye-paint, (4) black eye-paint, (5) persea fruit, (6) zizyphus, ${ }^{96}$ (7) loaf of zizyphus, (8) great loaf, (9) baked bread, (io) a thousand jars of beer, (II) a thousand loaves of bread, (I2) a thousand alabaster vessels, (I3) a thousand pieces of cloth.

West Wall, North False Door, Lintel (figs. 13.53, 13.55, 13.58, 13.60).

 Translation: (I) The sem priest, controller of kilts, stolist of Horus, district administrator of Dep, sole companion, Kaninisut.

West Wall, North False Door, Drum (figs. 13.53, 13.55, 13.58, 13.60).

$$
\pm \therefore f_{1}
$$

Text: (I) $K_{3}-n-n s w t$
Translation: (I) Kaninisut.
West Wall, North False Door, South Jamb (figs. 13.53, 13.55, 13.58, 13.60). Unlike the south false door, with two registers on each jamb, the north false door shows only a single figure on each jamb. Each bears a libation $h s$-vase, and wears a short kilt and has closecropped hair.


Text: (1) Pnw
Translation: (I) Penu.
West Wall, North False Door, North Jamb (figs. 13.53, 13.55, 13.58, 13.60).
? $80 \rightarrow \infty$
Text: ( I ) $1 \mathrm{I}-\mathrm{k}_{3}-\mathrm{Pt}$ th
Translation: (I) Ibkaptah.
West Wall, North of Northern False Door (figs. 13.53, 13.55, 13.58, 13.60). Two thin registers fit into this area. Above, a larger figure of Neferhanisut faces northwards, away from the false door and towards the standing figure of Kaninisut I on the north wall. She wears a long, slender garment with shoulder straps, and a tripartite wig. One arm folds back across her breast, the other hangs straight by her side. The lower figure is a male funerary priest, oriented back towards the west wall and adjacent (north) false door. He extends a ewer and basin.

West Wall, North of North False Door.

$$
\begin{aligned}
& 0
\end{aligned}
$$

Text: (I) rbbt nswt $N f r(t)-h b 3-n s w t$ (2) $\quad h m-k 3$ Imy-shr
Translation: (I) Royal acquaintance, Nefre(t)hanisut. (2) The funerary priest, Imysekher.

95 The sixth man, carrying a gazelle, is represented in Smith, HESPOK, p. 363, fig. 236 (= Junker, Gîza 2, fig. 18).
96 Alternatively, "nabq-fruit;" see Emery, Hemaka, p. 52.

## Tomb Owner and Dependents

Jánosi and others have noted the similarities between the titles of Kaninisut I and Snefruseneb (G 4240), including many honorary titles that only princes bear. ${ }^{97}$ He was a high palace official ( $b r p \stackrel{c}{ }$, $h_{k} b_{3} t$, whose titles involved personal attendance on his sovereign
 service of the king (hry-wdb hwt-rnb, ${ }^{98}$ brp bists km). But according to the inscriptions, Kaninisut was no prince of royal blood, and his origins remain unknown. 99

Titles of Kaninisut I ${ }^{100}$
(imy)-bt $H_{3}$, follower of Ha
〔d-mr Dp, district administrator of Dep
$w\ulcorner(m) w r w h b$, one (among) the great ones of the festival
wdpw bnty wr, butler of the great hall
$n b i m s b$ ( $b r n t r \xi_{3}$ ), revered before the great god
${ }^{r 3}$ pyw nbw, mouth of all the people of Pe
hm-ntr nb imt, priest of the lord of Buto
hry wdb hwt-nh, chief of reversion offerings of the house of life
hry sist ( $n$ ) pr dwsit, master of secrets of the robing room
hry to $N b b$, overlord of el-Kab
$h_{h} k_{3} b_{3} t$, ruler of Bat
$b r p c h$, controller of the palace
brp hists km, controller of the black jar
$b r p$ šnd ${ }^{2} w t$, controller of kilts
bry-hb, lector priest
$s 3$ mbtt, son of the north
s3 nswt, king's son
ss nswt n $\underline{b} t=f$, king's son of his body
sm, sem priest
sms Hr , stolist of Horus
$s m r$, companion
$s m r w^{\wedge} t y$, sole companion

## Family

wife: $N f r(t)-h 3$-nswt, Nefre $(\mathrm{t})$ hanisut
rbt nswt, royal acquaintance
sons: H r -wr, Horwer
rb nswt, royal acquaintance
$s s=f n \underline{b} t=f$, his son of his body
$K_{3}-n-n s w t n d s$, Kaninisut Junior
$s s=f n \underline{h} t=f$, his son of his body
Daughters:
W $3 \underline{d} t-h t p$, Wadjethetep
$s s t=f n \underline{b} t=f$, his daughter of his body
Other People ${ }^{\mathrm{iol}}$
Ii-nfrt, Iynefret
sšm, butcher
Ib-ks-Pth, Ibkaptah
Imy-sbr, Imysekher
hm-k3, funerary priest

In-istsf, Ini-ishetef
$1 s i$, Isi
sšm, butcher
Ity, Ity
hm-kz, funerary priest
${ }^{1} t t$, Itjef
bm-kz, funerary priest
?nbえ̌, Ankhi
$w d p w$, butler
? $n b-h b=f$, Ankhhaf
hm-kz, funerary priest
W 3 h-ib, Wahib
bm-kz, funerary priest
Wnhw, Wenkhu
fsw, cook
Whm-kz, Wehemka
imy-r pr, steward ss pr md $3 t$, library scribe

Bbi, Bebi
Pnw, Penu
ba-ks, funerary priest
Pr-ndw, Pernedju imy-r sšrw, overseer of linen

Prsn, Persen
btmty, seal-bearer
Ph-r-nfr, Pehernefer
sš, scribe
Mnh-kz, Menkh-ka sš, scribe

Msy, Mesy
ss, scribe
$M d w$, Medu
$N(y)-r n h-b w t-b r$, Niankhhathor, wdpw, butler
brp sh, controller of the kitchen
$N(y)-$-nh-bwfu, Niankhkhufu
hm-k3, funerary priest
$N(y)$-mrt, Nimeret
$r$ th, baker
$R c-h t p$, Rahetep
ss, scribe
$\mathrm{Hr}-\mathrm{i} b$, Herib
Hry-mrw, Herymeru
Hsì, Hesi
$H t p$, Hetep

| Htp, Hetep | Kd-mrr, Qedmerer |
| :---: | :---: |
| idw, page | $s s{ }^{\text {s }}$ md $3 t$, archive scribe |
| $n f$, recruit |  |
| Htp-spit, Hetepsepit | K3-irı, Kairi $w d p w$, butler |
| Hwfw-mr-ntrw, Khufumernetjeru hm-k3, funerary priest | K3-m-whm, Kaemwehem $s s_{\text {, }}$ scribe |
| $b r p$ ist, controller of the crew | Ki-m-nfrt, Kaemnefret |
| Hufw-snh, Khufuseneb | imy-r $p r$, steward |
| hm-k3, funerary priest | K3-m-hst, Kaemheset |
| $\underline{H} n m-h t p$, Khnumhetep $s$ š, scribe | $K(3)-m-k d$, Kaemked hm-k3, funerary priest |
| $S_{3} h i_{2}$, Sahi sš, scribe | Kıngi, Kanegi |
| Smr-k3, Semerka hm-kz, funerary priest | Thtì, Tjenti iry $m d_{3}$ t, archivist |
| Snb, Seneb wdpw, butler | Thti, Tjenti <br> bup sh, controller of the kitchen |
| Snb-diz-sw, Senebdjisu bm-kz, funerary priest | Thtì, Tjenti $r t h$, baker sš, scribe |
| Sšmw, Seshemu $w d p w$, butler | Thti, Tjenti $s$ š, scribe |
| Sšmw, Seshemu imy-r stiz, overseer of the bag | $\underline{\underline{T}} s t$, Tjeset <br> $s_{s} m \underline{d}$ d $t$, archive scribe |
| Stb, Seteb |  |
| $\check{S}(n) d w$, She $(\mathrm{n}) \mathrm{dju}$ hm-k3, funerary priest |  |



Fig. 13.I. G 2155, chapel area during excavation, looking west. Circa January 1913. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aeos_I_5419.


Fig. 13.2. G 2155, east face, north half, looking west. November 20, 1993. Peter Der Manuelian, pdm_1993.096.32.


Fig. 13.3. G 2155, plan.


Fig. 13.4. General view looking north towards the southeast corner of G 2155 , with G 4860 to the left (west) and G 4970 to the right (east). German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aEOs_I_5424.


Fig. 13.5. Computer reconstruction of G 2155 , showing exterior mud-brick chapel and G 2156, looking northwest. Courtesy Dassault Systèmes, 2009.


Fig. 13.6. Computer reconstruction of G 2155 , southwest corner, looking northeast. Courtesy Dassault Systèmes, 2009.


Fig. 13.7. Computer reconstruction of G 2155 and G 2156a, northwest corners, looking southeast. Courtesy Dassault Systèmes, 2009.


Fig. I3.8. Narrow passage south of G 2155 , with G 4860 to the left (south), looking west to tomb of Nefer (G 476I). November 20, 1993. Peter Der Manuelian, PDM_1993.103.02.


Fig. I3.9. G 2155, north niche, looking west. November 20, 1993 Peter Der Manuelian, PDM_1993.096.30.


Fig. 13.10. G 2155, west face, looking east. November 15, 1993. Peter Der Manuelian, PDM_1993.073.05 and PDM_1993.073.06, with pDM_1993.073.07 at right.


Fig. 13.1I. G 2155, chapel area, reburied, looking west. November 20, 1993. Peter Der Manuelian, pdm_1993.096.36.


Fig. 13.12. G 2155, north face, looking south. November 20, 1993. Peter Der Manuelian, PDM_1993.096.28.


Fig. 13.13. G 2155, southeast corner and chapel entrance during excavation, looking northwest. Circa January 1913. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_0531.


Fig. 13.14. G 2155, dismantling the chapel, looking north. Circa January 1913. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, AEOS_I_5723.


Fig. 13.15. G 2155, dismantling the chapel (for shipment to Vienna), looking north. Circa January 1913. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aEOS_I_5704.


Fig. 13.16. Computer reconstruction of G 2155, looking southwest. Courtesy Dassault Systèmes, 2009.


Fig. 13.17. Computer reconstruction of the subterranean layout of G 2155 , looking northwest, showing chapel (top center) and shaft A (right). Courtesy Dassault Systèmes, 2009.


Fig. I3.18. G 2155 A, mouth of shaft, looking north. November 3, 1993. Peter Der Manuelian, pdm_1993.058.16.


Fig. 13.20. G 2155 A, plan and section.


Fig. 13.19. Computer reconstruction of the burial chamber of G 2155 A (with sarcophagus restored), looking southwest. Courtesy Dassault Systèmes, 2009.


Fig. 13.2I. Kunsthistorisches Museum, Vienna, ÄS 7447 from G 2155(?). Courtesy Kunsthistorisches Museum, Vienna.


Fig. 13.22. Drawing of Kunsthistorisches Museum, Vienna, ÄS 7447 from G 2155(?).

Fig. I3.23. Additional slab stela fragment, after Junker, Gîza i, p. 230, fig. 53a; present location not known



Fig. 13.24. Kunsthistorisches Museum, Vienna, ÄS 7447 from G 2155 (?). Colorized facsimile drawing showing three of the four decorative sections.


Fig. 13.25. Kunsthistorisches Museum, Vienna, ÄS 7447 from G 2155(?). Courtesy Kunsthistorisches Museum, Vienna, AEOS_I_53I2_ÄS 7447.


Fig. 13.26. Computer reconstruction of entrance facade to chapel of G 2155, looking west. Courtesy Dassault Systèmes, 2009.


Fig. 13.27. Computer reconstruction of entrance tbicknesses to chapel of G 2155 (with wood door restored), looking west. Courtesy Dassault Systèmes, 2009.


Fig. I3.28. G 2155, chapel, south entrance thickness, looking southeast. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, AEOS_I_5484.


Fig. 13.29. G 2155, chapel, north entrance thickness, looking northeast. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aEOs_I_5479.


Fig. 13.30. Kunsthistorisches Museum, Vienna, ÄS 8006, detail of south entrance thickness from G 2155 . Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_O220.


Fig. 13.31. Kunsthistorisches Museum, Vienna, ÄS 8006, detail of south entrance thickness from G 2155. AEOS_8006_sw_beiderTuer. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_or9i.


Fig. 13.32. Kunsthistorisches Museum, Vienna, ÄS 8006, detail of south entrance thickness from G 2155. Courtesy Kunsthistorisches Museum, Vienna, AEOS_8006_36542.


Fig. 13.33. Kunsthistorisches Museum, Vienna, ÄS 8006, detail of south entrance thickness from G 2155. Drawing by Christa Mlinar.


Fig. 13.34. Kunsthistorisches Museum, Vienna, ÄS 8006, detail of south entrance thickness from G 2155. Courtesy Kunsthistorisches Museum, Vienna, AEOs_8006_sw_beiderTuer.


Fig. 13.35. Kunsthistorisches Museum, Vienna, ÄS 8006, detail of south entrance thickness from G 2155. Drawing by Christa Mlinar.


Fig. 13.36. Kunsthistorisches Museum, Vienna, ÄS 8006, detail of north entrance thickness from G 2155. Courtesy Kunsthistorisches Museum,
Vienna, AEOS_80o6_36534.


Fig. 13.37. Kunsthistorisches Museum, Vienna, ÄS 8006, detail of north entrance thickness from G 2155. Drawing by Christa Mlinar.


Fig. 13.38. G 2155, chapel, east wall, still in situ, looking east. Circa January 1913. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, AEOS_I_5493.


Fig. 13.39. Computer reconstruction of the chapel of G 2155 (with wood door restored), looking east towards the east wall. Courtesy Dassault Systèmes, 2009.


Fig. 13.40. Kunsthistorisches Museum, Vienna, ÄS 8006, from g 2155, detail of east wall, above the entrance. Courtesy Kunsthistorisches Museum, Vienna, AEOs_8006_36525.


Fig. 13.41. Kunsthistorisches
Museum, Vienna, AS 8006, from G 2155, detail of east wall, above the entrance. Drawing by Christa Mlinar.


Fig. 13.42. Kunsthistorisches Museum, Vienna, ÄS 8006, east wall from G 2155. Courtesy Kunsthistorisches Museum, Vienna, AEOS_8006_36528.

Fig. 13.43. Kunsthistorisches Museum, Vienna, ÄS 8006, detail of east wall from G 2155. Drawing by Christa Mlinar.


Fig. 13.44. G 2155, Kunsthistorisches Museum, Vienna, ÄS 8006, detail of east wall. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, AEOS_I_5477.


Fig. 13.45. G 2155, chapel, south wall in situ, looking south. Circa January 1913. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, aEOS_I_5478.


Fig. 13.46. Computer reconstruction of the chapel of G 2155, looking south towards the south wall. Courtesy Dassault Systèmes, 2009.


Fig. 13.47. Kunsthistorisches Museum, Vienna, ÄS 8006, south wall from G 2155. Courtesy Kunsthistorisches Museum, Vienna, aeos_8006_35395.


Fig. 13.48. Kunsthistorisches Museum, Vienna, ÄS 8006, south wall from g 2155. Drawing by Christa Mlinar.


Fig. I3.49. Kunsthistorisches Museum, Vienna, ÄS 8006, north wall from G 2155. Courtesy Kunsthistorisches Museum, Vienna, AEOs_8006_35392.


Fig. 13.50. Kunsthistorisches Museum, Vienna, ÄS 8006, north wall from G 2155. Drawing by Christa Mlinar.


Fig. 13.5I. G 2155, chapel, north wall, still in situ, looking north. Circa January 1913. Courtesy Kunsthistorisches Museum, Vienna, aEos_I_5494.


Fig. 13.52. Computer reconstruction of the chapel of G 2155, looking north towards the north wall. Courtesy Dassault Systèmes, 2009.


Fig. 13.53. Kunsthistorisches Museum, Vienna, ÄS 8006, west wall from G 2155. Courtesy Kunsthistorisches Museum, Vienna, aEOs_8006_35389.


Fig. 13.54. Kunsthistorisches Museum, Vienna, ÄS 8006, west wall from G 2155, between the two false doors. Courtesy Kunsthistorisches Museum, Vienna, Digital montage of AEOS_8006_35402 and AEOS_8006_35408.


Fig. 13.55. Kunsthistorisches Museum, Vienna, ÄS 8006, west wall from G 2155. Drawing by Christa Mlinar.



Fig. 13.56. Computer reconstruction of the chapel of G 2155 , looking west towards the west wall. Courtesy Dassault Systèmes, 2009.


Fig. 13.57. Kunsthistorisches Museum, Vienna, ÄS 8006, west wall from G 2155, south false door. Courtesy Kunsthistorisches Museum, Vienna, AEOS_8006_35399.


Fig. 13.58. Kunsthistorisches Museum, Vienna, ÄS 8006, west wall, north false door from g 2155. Courtesy Kunsthistorisches Museum, Vienna, aEos_80o6_35405.


Fig. 13.59. G 2155, chapel, west wall, detail in situ of area between the two false door, looking west. Circa January 1913. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_or94.


Fig. 13.60. G 2155, chapel, west wall, detail in situ of northern half, looking west. Circa January 1913. German-Austrian Expedition photograph. Courtesy Kunsthistorisches Museum, Vienna, o_neg_nr_oi64.

# Chapter I4 ANONYMOUS TOMB: Mastaba g 2160 

Summary of Reisner's Description<br>Mastaba: ${ }^{\text {I }}$ old core of type II a uncased<br>$23.6 \times 10.4 \mathrm{~m}$; area 245.44 sq. m; proportion I/2.26; h. 4.1 m<br>average height of stepped courses 45.5 cm<br>average width of steps 13.2 cm<br>Chapel: probably originally of type ( I ), but all remains have been destroyed or obscured by later constructions in street<br>Shaft A: sole shaft, north of middle; I. $9 \times 2.05 \mathrm{~m}$ at top; I. $7 \times 1.55 \mathrm{~m}$ at bottom; -8.0 m in rock<br>lined with drab masonry, 4.I m; ten courses<br>chamber: type 4 a (2) x , unfinished, on south $2.7 \times 2.65 \mathrm{~m}$; h. I .5 m<br>area ca. 7.15 sq. m; capacity $10.73 \mathrm{cu} . \mathrm{m}$ chamber floor not completely excavated<br>passage: I. $2 \times \mathrm{I} .4 \mathrm{~m}$; h. I. 5 m on shaft side over the doorway, a rebate to take top<br>of blocking, h. 0.95 m ; d. $0.4-0.6 \mathrm{~m}$ found open and empty

## Excavation

This tomb was not one of those originally excavated under Lythgoe's supervision in 1905-1906. The first Expedition photograph to show work in this area dates to January 21, $1912^{2}$ (cf. fig. I4.I), and the first day the tomb is mentioned in surviving Expedition diaries (by Clarence Fisher) is January 21, 1912. By January 23, the Expedition was working in the street between G 2160 and G 2180, where later the subsidiary mastabas G $2165-\mathrm{G} 2168$ would come to light. Fisher noted that the east face of G 2160 "either never had a dressed face or it was removed before the later pits were sunk, as in several cases these are built directly against the rough, stepped face." ${ }^{3}$ This area was completely cleared by February 6, 1912, and on February 26, after Reisner took over the diary entries, we read that:

There is no trace of an offering place in G 2180 and the chamber of G 2160 was never finished. There are poor, small later mastabas

See Reisner, GNi, pp. 447-49.
HU-MFA Expedition Photographs a628, bio53, and bio54 (available on www .gizapyramids.org).
3 Fisher diary, January 23, 1912, p. 13.
between G 2160 and G 2180. One of these is rather better. Fragments of two stelae were found. ${ }^{4}$

When the Expedition returned to the tomb under Wheeler's direction, shaft A was opened, beginning on December 30, 1932. On January 2, 1933, a small rock-cutting was located in the side of the pit, and the next day, II. 50 m down, the chamber on the south was discovered open and full of debris. Potsherds turned up during the clearance of the chamber, and Wheeler noted a small "mastaba" to the south of the west side (January 6, 1933). On January 8, 1933, the top of the mastaba was searched for additional shafts, but none was found. No Expedition photography from the bottom of the shaft or the burial chamber has so far been identified.

The reis's diary mentions work to the west of G 2160 , in the street between this tomb and G 2140, on March 19, 1938. Four days were spent the following year (September 27 -October I , 1939) just east of the mastaba. By this time, part of the debris from Junker's dump running from south to north over the eastern strip of Cemetery G 2IOO had to be removed to allow for the excavation of G 2165 .

## Finds

Fragments of pottery in debris from shaft A:
33-1-8 (shipped to Cairo, September 29, 1933): RP: small basin with flat bottom and tubular spout; contracted plain mouth; type DLXXII c; h. 13 ( 15.2 ) cm; d. rim 39 cm ; d. body 43.2 cm ; d. base 16.4 cm ; w. with spout $49 \mathrm{~cm}(\text { fig. } 14.5)^{5}$

## Architecture

Of all the major mastabas of Cemetery G 2100, tombs G 2160 and G 2170 are the least informative. No inscriptions survived to link them with specific individuals. Both tombs were constructed in the later, eastern half of the cemetery, and there is no reason to date the cores themselves to later than Khufu's reign. G 2160, like G 2140, aligns on its southern face with the southern edge of G 2120. The west face of the mastaba seems to have received a few courses of vertical stepped casing at the northern end, similar to the type $z$ masonry casing surrounding the mastaba of Kanefer (G 2150), with ample traces of mortar added between joins (figs. I4.7-14.8). ${ }^{6}$ Either the casing was never completed, or most of it was quarried away. But no evidence of a cult focus of any kind survives towards the south end of the east face of the mastaba. Neither exterior mud brick nor stone chapel traces were found, nor signs of an interior chapel broken into the core. It could be argued, however, that the later subsidiary mastaba G 2165 , built flush up against the east face of G 2160 , could have destroyed an earlier cult focus (figs. I4.I, I4.6). But it is more likely that G 2160, if used at all, was occupied well after Khufu's reign, and perhaps even after the end of Dynasty 4. Additional evidence for

4 Reisner diary, February 25, 1912, p. 27 ("fragments of two stelae were found"). Neither of these two false doors is included in the present volume. One belongs to Neferi, and was found partly in front (to the east) of G 2180 (= G 4990) and partly in front (to the east) of G 2200 (= G 5080): see MFA I2.1393 (top fragment), MFA i2.I498 (lower-left fragment), and MFA 12.1515 (bottom lower-right fragment) (HU-MFA Expedition Photograph A684). The other false door is a tablet fragment belonging to the funerary priest Khentka (Kakhent), (no relation to the owner of G 2130), found in front (to the east) of G 2180 (= G 4990): see MFA ${ }_{\text {I2.1520 }}$ (HU-MFA Expedition Photograph Bio90-bio91).
5 Reisner, $G N_{\text {I }}$, pp. 448, fig. 272, 449; pl. 43d; Reisner and Smith, $G N_{2}$, p. 86, fig. I24.
6 Contra Reisner, GN I, p. 440, and Jánosi, Giza in der 4. Dynastie, p. 152.
this conclusion lies in the burial shaft that is atypical for a Khufuera mastaba (figs. I4.2, I4.9-I4.IO). There are no T-shaped portcullis grooves and no lined burial chamber. While the chamber leads off from the shaft to the south, in typical arrangement, the chamber itself extends not to the west but atypically to the east. The form of the chamber is extremely rough, and the bottom of the shaft appears uneven as well.

Later construction around G 2160 consists primarily of the filling of the entire street east of the mastaba with late Old Kingdom subsidiary tombs. Reisner numbered this complex of small mastabas beginning on the south with G 2165 and extending northwards with G 2166-G 2168. By the time he reached the subsidiary tombs east of G 2170, he was up to the number G 2169 and counting higher. In the avenue between g 2160 and g 2170, Reisner numbered three mastabas G 216I-G 2163 .

## Shafts and Burials

Reisner noted that the burial chamber floor of shaft a was never completely excavated (figs. I4.9-I4.IO). ${ }^{7}$ Expedition photography for this chamber has so far not been identified.

Date
Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. i: late reign of Khufu (core); Dynasty 4-5 (mastaba). ${ }^{8}$

The mastaba core dates to Khufu's original layout scheme for Cemetery g 2100, but the unfinished nature of the tomb, the lack of alterations, and the atypical shaft and burial chamber all point to a much later date, most likely in Dynasty 5.

## No Decoration

## Tomb Owner and Dependents

No individual names are preserved in the tomb.

8 See also Reisner, $G N_{\mathrm{I}}$, p. II3: "The two chambers in 2160 and 2170 are difficult to place but are probably of late Dyn. IV or early Dyn. V."


Fig. I4.I. Street between G 2160 (Fisher's VIII.4) to the left (west) and G 2180 = G 4990 (Fisher's VIII.5) to the right (east), showing G 2165, G 2167, and G 2166, looking north. February 16, 1912. HU-MFA Expedition photograph (photographer not listed), A633P.



Fig. I4.3. G 2160, northeast corner, looking southwest. March 12, 1993. Peter Der Manuelian, pDM_1993.022.II.


Fig. 14.4. G 2160, north face, looking south. November 20, 1993. Peter Der Manuelian, pDM_1993.096.22.


Fig. I4.5. 33-I-8, fragment of large pottery bowl with tubular spout from g 2160 A. Left: March 16, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B8300 (detail). Right: drawing.


Fig. 14.6. G 2160, "chapel area," and mud layer beneath limestone blocks, looking north. November 27, 1993. Peter Der Manuelian, pdm_1993.119.I4.


Fig. I4.7. G 2160, northwest corner, looking southeast. March I2, 1993. Peter Der Manuelian, PDM_1993.017.06.


Fig. I4.8. Street east of G 2140, with G 2140 to the right (west) and G 2160 to the left (east), looking south. March II, 1993. Peter Der Manuelian, PDM_1993.003.II.


# Chapter 15 <br> ANONYMOUS TOMB: 

Mastaba G 2170

Summary of Reisner's Description<br>Mastaba: ${ }^{I}$ core of type II a, not cased<br>$23.2 \times 10.8 \mathrm{~m}$; area 250.56 sq . m; proportion I/2.14<br>h. 3.5 m ; average height of stepped courses 43.7 cm<br>average width of steps $I I .7 \mathrm{~cm}$<br>Chapel: probably exterior crude brick chapel of type (I), but all traces destroyed by later constructions<br>Shaft a: sole shaft, north of middle<br>$2.07 \times 2.05 \mathrm{~m}$ at top; $1.25 \times 1.5 \mathrm{~m}$ at bottom; -5.1 m in rock<br>lined with masonry, 3.5 m ; eleven courses<br>chamber: type $6 \mathrm{a}(3)$ : on west. 2.05 x I. 35 m ; h. I. 2 m area 2.76 sq. m; capacity $3.32 \mathrm{cu} . \mathrm{m}$<br>blocking: crude brick wall inside doorway, type III a, penetrated at top; plundered

## Excavation

Like the anonymous tomb G 2160 immediately to the south, G 2170 was not excavated during the first season in Cemetery G 2100 under Lythgoe in 1905-1906. Expedition diary entries that mention the tomb range from 1912 to 1932. Fisher's diary of January and February, 1912 mentions sporadic clearance work in and around G 2170. A fragment of a limestone statuette was unearthed in the debris east of the tomb on February 7, 1912. Reisner's diary entry of March 5, 1912 mentions the "space between G 2190 and 2170 finished as far as planned." He further notes the extension of the clearing operation "westward along northern end of 2170 as far as 2150 ." The entry for March 23, 1912 places the Expedition at work just north of G 2170.

Nothing more was written concerning G 2170 until Wheeler's diary entry of December 24, 1932, noting the clearance of the top of the mastaba and the location of shaft a. The long interval since the Expedition's earlier work in Cemetery g 2100 led to a minor surprise. Wheeler states that in the drift sand of shaft A were found eight inscribed blocks of wall relief. After Christmas day, the search continued for other shafts but none were found. In the entry for December 26, 1932, Wheeler explains part of the mystery:

The eight blocks of relief in the drift sand debris of pit a have the names and titles of $K_{3}-n f r, M r-s-n_{l}, K_{3}-s d_{3}$, Pth-wr-all of
whom occur in G $2170 .{ }^{2}$ There is also the name of a $h m-k_{3}$ priest, $N s$-ibt(?) and of (Pth?)-rdi-r, and a scribe $K 3$ - $i m-(?)$, which are not recorded in G 2170 . Bringing stones up to camp. These stones were found some years ago and buried here by the Expedition. ${ }^{3}$

While the first few names Wheeler mentions clearly come from G 2150, the second list of names is not particularly familiar. It seems that the crew of either the Lythgoe expedition of 1905-1906 or the Fisher expedition of I9I2 deposited the reliefs on top of G 2170. The Lythgoe mission was never active in this part of the cemetery, but that need not have prevented Lythgoe from using the top of G 2170 as a temporary storage area.

By December 28, 1932, Wheeler's crew had reached the bottom of shaft A, at a depth of about 8.70 m . The burial chamber was on the west side, with the mud-brick door-blocking broken in at the top. The chamber itself was small, rough-cut, and partly filled with debris. A fragment of a large alabaster vessel was found in the pit debris. December 30, 1932 saw the removal of the mud-brick doorblocking and clearance of the burial chamber. Wood fragments, alabaster vessel fragments, and potsherds were all that were found. No subsequent diary entries mention work in G 2170 .

## Finds

From debris of shaft a itself:
32-I2-I: about one-quarter fragment of flat bottom(?) alabaster bowl with contracted mouth and internal rim, type $\mathrm{S}-\mathrm{X} \mathrm{c} ; \mathrm{h} .8 \mathrm{~cm} ;$ d. max., 28 cm (fig. 15.4) ${ }^{4}$

From debris of burial chamber of shaft a:
32-12-I3 (MFA 33.721; shipped to Boston May 1933): burnished red wash, one-handled special ware jug with cord in relief around base of neck; type B-LIII b; broken into 35 fragments; h. 23.6 cm ; d. rim, 6.0 cm ; d. neck 5.2 cm ; d. body, 14 cm ; d. base, 3.2 cm (fig. 15.5) $)^{5}$ 32-I2-I4: alabaster fragmentary bowl, $3 \times 3 \mathrm{~cm}$ and 0.8 cm thick $^{6}$ 32-I2-15a: lower part of model RW jar of type B-LVI; d. base $3 \mathrm{~cm}^{7}$
$32-12-15 \mathrm{~b}$ : Io fragments ( 5 fitting) of RP bowl with recurved rim, type D-XXXVI or C-XXXII; d. $22 \mathrm{~cm}^{8}$
32-I2-I7: 8 potsherd fragments from different vessels, RW, WSR, etc. ${ }^{9}$

## Architecture

G 2170 bears many similarities to the neighboring mastaba G 2160, immediately to the south. Both tombs are unfinished, lack completed casing, fail to show evidence of enhancements or alterations, and preserve no trace of a cult focus. There is neither an interior nor an exterior chapel underneath the later subsidiary mastabas that choked

2 Wheeler presumably means all of whom occur in G 2150, the tomb of Kanefer, not G 2170. These reliefs were probably stored atop G 2170, across the street from Kanefer's mastaba, until the latter's chapel could be reconstructed. It is also possible that some of these reliefs were subsequently shipped to Boston in 1933. The name of Meresankh appears only on a fragment now in Boston (MFA 32-I2-IO), while the names of Ptahwer and Kasewedja occur on reliefs found only in Kanefer's chapel today.
Wheeler diary, December 26, 1932, p. I19I.
4 Reisner, $G N_{\text {I }}$, p. 449, fig. 274; p. 450.
5 Reisner, GNi, p. 449, fig. 274; p. 450; Reisner and Smith, GN2, p. 44, fig. 95, pl. $53 \mathrm{f}(\mathrm{I} / 4)$.
6 Reisner, $G N_{\text {I }}$, p. 450.
7 Reisner, $G N_{\mathrm{I}}$, p. 450; Reisner and Smith, $G N$ 2, p. 78.
8 Reisner, $G N \mathrm{I}, \mathrm{p} .450$.
9 Reisner, $G N$ I, p. 450.
the street east of the tomb (fig. 15.6). And no inscriptions were found to identify the owner.

Both the shafts of G 2160 and G 2170 show evidence of belonging to a later, secondary phase in the their respective tombs' history. The shaft in G 2170 is square, lacking any T-shaped portcullis grooves (fig. 15.7). There is a blocking stone at the bottom of the shaft, but no passageway (fig. 15.8). And most uncharacteristically, the burial chamber was situated, not to the south, but to the west of the shaft. Reisner does not mention the presence of any skeletal remains; from the debris of the pit came one fragment of an alabaster bowl, and various other broken vessels were unearthed in the burial chamber itself. Unfortunately, no Expedition photography from the burial chamber has yet been located. The view of the shaft blocking (fig. 15.8) is the only photograph thus far identified from shaft A.

East of the mastaba, the complex of minor tombs begins with G 2169 (at the south end of the street) and continues northwards (figs. 2.5, 15.1, 15.3). Reisner numbered the tombs north of G 2180 and east of the northeast corner of G 2170 as G 217I-G 2179. At the north end of the street, this complex merges into the secondary cemetery north of G 2150 (G 2151-G 2159). One large burial shaft, numbered G 2157 A, directly abuts the north face of G 2170 . Additional subsidiary tombs northeast of G 2170 and southeast of G 2220 received numbers ranging from G 222I to G 2227 . The cemetery occupation then extends
eastwards, to the north of the Cemetery en Echelon, which was populated primarily in Dynasty 5.

## Shafts and Burials

Apart from the isolated, fragmentary objects from shaft A, there is little evidence that the tomb was actually outfitted with a burial.

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. i: late reign of Khufu (core); Dynasty 4-5 (mastaba).

As noted above in the chapter on G 2160, the most likely chronological scenario is construction of the mastaba core during Khufu's reign as part of the later, eastern half of Cemetery g 2100, but occupation, if indeed the tomb was ever used, much later, probably in Dynasty 5.

## No Decoration

Tomb Owner and Dependents
No individual names are preserved in the tomb.


Fig. 15.I. G 2170, general view, looking northwest. Peter Der Manuelian, PDM_1993.022.09.



Fig. 15.3. G 2170, "chapel area" at south end of east face, and avenue with subsidiary tombs between G 2160 to the left (south) and G 2170 to the right (north), looking west. February 25, 1912. HU-MFA Expedition photograph, photographer not listed, A640P.


Fig. 15.4. 32-12-I, alabaster bowl fragment from G 2170 A. Above:
February 22, 2002. Museum of Fine Arts, sC27878. Upper right: March 16, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B8300 (detail). Right: drawing.


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Fig. 15.5. 32-12-13 (MFA 33.721), one-handled jug from g 2170 A. Left: May iI, 2005. Museum of Fine Arts, sci39360. Center: March 22, 1933. HUMFA Expedition photography, Dahi Ahmed, A7065 (detail). Right: drawing.


Fig. 15.6. G 2170, "chapel area" at south end of east face looking west. November 4, 1993. Peter Der Manuelian, pdm_1993.059.II.


Fig. 15.7. G 2170 A. looking west. November 4, 1993, Peter Der Manuelian, pDM_1993.059.15.


Fig. 15.8. G 2170 A, door blocking, looking west. December 29, 1932. HU-MFA Expedition photograph, Mohammedani Ibrahim, A7028.

## Chapter 16 <br> ANONYMOUS TOMB:

Mastaba G 2220

> chamber: type 4 a (I) irregular and unfinished, on south
> $2.5 \times 2.95 \mathrm{~m}$; h. I. 4 m area intended 7.37 sq. m; capacity intended $10.32 \mathrm{cu} . \mathrm{m}$ passage: I .55 x I. 3 m ; h. I .4 m ; south wall only partly excavated leaving a rock ledge
> completely plundered; no objects found

## Excavation

This tomb was not investigated during the 1905-1906 season in Cemetery G 2100. Reisner's diary entry of March 24, 1912 marks the first mention of the tomb, when the inscribed false door of G 2156 , just south of G 2220, was found (see Part 2, G $2156^{\prime}$ ). By March 27, 1912, the chapel had been cleared:

The stone door-bar lies broken in the chamber. A mound of dirty, stone-chip debris covered the north end. The destruction appears to have been caused in part by stone thieves of indeterminable date and in part by more recent Kafr-el-Haram plunderers. In the surface sand a clay pipe was found with the GLASGOW stamp on the stem. A similar one was found in Nubia at Cemetery no. [...]. The mastaba is built of large blocks of gray nummulitic limestone of the second or early Chephren period. ${ }^{3}$

As of 2009, the massive drum from the chapel entrance still lay broken in two inside the chapel (figs. 16.3-16.4, 16.6-16.7). Reisner's diary entry for March 30, 1912 notes the completion of the clearance of the face of G 2220 without locating any northern niche. The excavation of the chapel concluded the next day. The Expedition returned to the tomb under Wheeler's direction on May I, 1932. The first objective was the clearance of the mastaba's north face, a task which lasted some four days. Some of the diary entries for this period were penned by Hansmartin Handrick.

Attention shifted to the top of the mastaba on October 17, 1932, stopped, and then resumed from December 18-26, 1932. At this time the tomb's two shafts, в and c, were located and their excavation begun. Both shafts revealed primarily clean rubble and windblown sand. Meanwhile, the search for a "shaft A" at the northern end of the mastaba proved unsuccessful. On December 29, 1932 excavations in shaft в had reached 7 m , when they were stopped "until pit c is available for dumping." Wheeler did not know at the time that shaft c would continue downward for over 25 m ; the bottom was reached only on January 6, 1933. The small, rough, burial chamber was on the south, with no blocking visible. It was cleared by January iI, 1933, and excavations in shaft c resumed the following day. "Hard clean rubble filling only" is how Wheeler characterized the shaft's fill.

On January 12, 1933, the burial chamber was located on the north side at a depth of about 8.30 m , with door-blocking intact. Wheeler describes the blocking as small rubble 25 cm high on the floor, topped by 85 cm of larger stones piled up but not plastered or cemented (see figs. 16.2, 16.16-16.22). Above this and reaching to the roof were loosely piled mud bricks, also without any binding material of any sort. The measurements of the bricks are $37 \times 19.5 \times$ 13 cm . The pit continued downwards, but no additional chambers were found. Wheeler's entries for January 13-29, 1933 record in detail the discovery made in shaft в. They describe not only the excavation process but the working practices of the Expedition in general. For this reason, the diaries will be quoted extensively below in the section on Shafts and Burials. It should also be noted that,

[^29]on January 5, 1933, Reisner was forced to return to Cairo's AngloAmerican Hospital for a second cataract operation. The operation took place on January 24, 1933, and he did not return to Harvard Camp until May 20, 1933, Reisner's friend and colleague, the artist Joseph Lindon Smith (I863-1950), was temporarily placed in charge of the Expedition. ${ }^{4}$

The coffin itself was removed by winch between January 22-25, 1933 and the rest of the chamber was cleared. The rest of the shaft was cleared by January 27, continuing only 1.5 m further below the burial chamber. In the pit debris, a rough limestone headrest was found on January 28, suggesting to Wheeler the likelihood that the chamber was plundered in antiquity, perhaps during the burial, or at least before the pit was filled in.

Four years later (July 5, 7-9, 1937), another search was made for a "shaft A," but no other shafts were discovered. Additional clearance of the chapel and general area of the mastaba resumed briefly on March 27-28, 1938, exposing limestone debris and drift sand. The final diary entry for the tomb comes on April I3, 1938, when an unsuccessful attempt was made to locate a northern niche in the lining of the mastaba.

## Finds

From debris on top of mastaba:
$37-7-1$ : Block of nummulitic limestone with red mason's mark painted on rough surface; w. $15.5 \mathrm{~cm} ; 1.24 \mathrm{~cm}$; th. 15 cm (fig. 16.8 )
37-7-2: Block of nummulitic limestone with red mason's mark on rough surface; w. $25.5 \mathrm{~cm} ; 1.35 .5 \mathrm{~cm}$; th. 31 cm (fig. 16.8)
37-7-3: Block of nummulitic limestone with red mason's mark on smooth hollow cylindrical surface; w. $46 \mathrm{~cm} ; 1.56 \mathrm{~cm}$; th. 33 cm (fig. 16.8)
37-7-4: Block of nummulitic limestone with red mason's mark on rough surface; w. $26 \mathrm{~cm} ; 1.35 .5 \mathrm{~cm}$; th. 25 cm (fig. 16.8)
37-7-5: Block of nummulitic limestone with faint red mason's mark on rough surface; w. $23.5 \mathrm{~cm} ; 1.25 \mathrm{~cm}$; th. 9 cm (fig. 16.9)
37-7-6: Block of nummulitic limestone with red mason's mark on rough surface; w. $26 \mathrm{~cm} ; 1.27 \mathrm{~cm}$; th. 14 cm (fig. 16.9)
37-7-7: Block of nummulitic limestone with red mason's mark on rough surface; w. 28 cm ; 1.38 cm ; th. 18 cm (fig. 16.9)
37-7-8: Block of nummulitic limestone with red mason's mark on rough surface; w. 23 cm ; l. 29 cm ; th. 14 cm (fig. 16.9)
37-7-9: Block of nummulitic limestone with red mason's mark on rough surface; w. 23 cm .1 .29 cm ; th. 10 cm (fig. 16.9)
37-7-10: Block of white limestone with faint red mason's mark on rough surface; w. 29 cm ; 1.3 Icm ; th. 7 cm (fig. 16.io)
37-7-II: Block of nummulitic limestone with red mason's mark on rough surface; w. 36 cm ; 1.37 cm ; th. 17 cm (fig. 16.10)
37-7-12: Block of white limestone with black mason's mark on rough surface; w. 37 cm ; 1.39 cm ; th. 12 cm (fig. 16.10)
37-7-13: Block of nummulitic limestone with faded mason's mark; w. 35 cm ; l. 46 cm ; th. 27 cm

From shaft в:
33-4-2I (MFA 33.1o16; shipped to Boston September 1933): Well-preserved large cedar coffin; plain box with flat lid and overlapped beveljoints; made of large planks of cedar doweled together. The lid was lowered by means of dowels fitted into its sides; the sockets into which the dowels fitted are visible on the sides of the lid. The exterior and interior panels are undecorated. Knotholes in the wood were patched over and the panels were fitted together with round wooden pegs. outside, 1.2 .40 m (l. of interior: 209.5 cm )

4 For a popular account of the discovery and treatment of the mummy, see J.L. Smith, Tombs, Temples \& Ancient Art, pp. 190-91. Curiously, Smith omits any mention of the large wooden coffin, but this may be attributable to the fact that the book was posthumously compiled by his wife, Corinna Lindon Smith, from miscellaneous notes.
x 98 cm (w. of interior: 69 cm ); h. 83.5 cm ; h. of lid I 4 cm ; total h. with lid h. 97 cm ; weight of box 579.237 kg ( r 277 lb .); weight of lid $187.333 \mathrm{~kg}(413 \mathrm{lb}$.$) ; total weight 766.6 \mathrm{~kg}(\mathrm{r}, 69 \mathrm{llb}$.); along each long side of lid two cylindrical handles which were sawn off after burial; three of these were found in the chamber (figs. 16.19-16.26)
MFA OPı.33.Ior6, OP2.33.1oI6, OP3.33.ior6, OP4.33.1o16: four wooden pegs from coffin 33-4-2I ( = MFA 33.1016) (three pegs: fig. 16.II)
33-4-22 (MFA 33.1017.1, 33-1017.2; shipped to Boston September 1933): linen from mummy wrappings ${ }^{s}$ (figs. 16.36-16.41);
MFA 33.IoI7.I:


## $\theta \|^{\infty}$

Text: nfrt-nswt (3-ply) ssm-?
Translation: Good royal (linen), 3-ply: Leading-? (festival).
MFA 33.IoI7.2:

Text: nfrt-nswt (2-ply) šms-ntr
Translation: Good royal (linen), 2-ply: Following the God (festival).
From debris of shaft $\boldsymbol{в}$, intrusive:
33-I-83 (= MFA 33.1067): White limestone crudely formed headrest, broken in two; h. 21.6 cm ; w. 22.8 cm ; th. $10.2 \mathrm{~cm}(\text { fig. } 16.13)^{6}$

## Architecture

Some confusion has arisen in the tomb-numbering scheme because the HU-MFA Expedition originally believed the northern strip of this area constituted a new cemetery. This resulted in the numbers G 22 IO and G 2220, instead of the continuation of tomb numbers in the 2Ioos. Reisner described the revisions and the renumbering of this part of Cemetery G 2IOO as follows:

When the excavation of the northern strip of our concession in the Western Field was carried out in 1912, the work was continued eastwards across the northern end of the Cem. en Echelon and the core-mastabas of that cemetery were numbered in continuation of the cores of the eastern group of Cem. G 2100. Thus the mastaba I now designate as G 4990 was marked G 2180 . The mastabas of the next line to the east now designated G 5080 and G 5090 were numbered G 2200 and G 2190. At that time the Cem. en Echelon had not been revealed by excavations and the mastabas in question with cores of type II a appeared to continue Cem. G 2100. At this point the excavation of the last mastaba of the western group of Cem. G 2100 was undertaken and the number G 2210 was assigned to it. East of G 22 IO was another large mastaba on an independent site which was numbered in succession G 2220. At the present time it is clear that G 2210 was built around one of the five initial cores of Cem. G 2100. East of it stands G 2220, aligned with it later in date but on an independent site built before any of the mastabas of the secondary cemetery. It is obvious that the owner of G 2220 was directly related to the owner of G 22 IO and probably to the owner of G 2130 . It seems therefore advisable to include the

5 Haynes and Markowitz, in Egypt in the Age of the Pyramids, p. 68, cat. 16; Manuelian, Slab Stelae, p. 156, figs. 231-33. For generously supplying the translations here, I am grateful to James P. Allen.
6 Reisner, GNI, p. 45ı, fig. 277.
description of G 2220 in the description of Cem. G 2100 just as was done above for the mastabas of Merib and Nensezerka. ${ }^{7}$

Logically, G 22 IO should have been numbered G 2I4O, and G 2220 should have been numbered G 2160 . But renumbering now would only create additional confusion, particularly since these numbers are already taken by other mastaba cores.

G 2220 is not only the largest mastaba in nucleus Cemetery G 2100 ( $62 \times 20.4 \mathrm{~m}$ ), but after tombs G 2000 (= Lepsius 23; 105 x 53.2 m ), and G 75IO (Ankhhaf; IoI $\times 52 \mathrm{~m}$ ), it is the largest private tomb at Giza. ${ }^{8}$ It was designed to receive a white limestone casing but this was only begun north and south of the projecting part of the interior stone chapel and left unfinished. South of the chapel the thickness of the white casing was 2.4 m . Reisner noted that, had the casing of this thickness been completed, the mastaba would have measured 66.8 x 25.2 m with an area of $1683.36 \mathrm{sq} . \mathrm{m}$; proportion $\mathrm{I} / 2.65 .9$

The significance of this oversized mastaba for Cemetery G 2IOO is noteworthy. Should G 2220 be seen as this cemetery's principal tomb, after the manner of G I2OO (Wepemnefret) in Cemetery G I200 and g 4000 (Hemiunu) in Cemetery g 4000? ${ }^{10}$ As further evidence for its early date, it might be argued that G 2220 predates the core construction of G 2135 and G 2155 , for its location appears to have forced the two latter tombs out of alignment with the rest of this cemetery. G 2135 and G 2155 had to be placed further south than any other Cemetery g 2100 mastabas.

As originally constructed, G 2220 aligned with G 2210 along its southern edge. Subsequent extensions can only be estimated, due to the unfinished nature of the excavations, but they included an interior stone chapel. This displays fine Tura limestone blocks of the highest quality, even though the wall decoration was never completed (figs. 16.4, 16.14-16.15). The scenes consist solely of some large-scale standing figures of the tomb owner and his family on the east wall. While the chapel bears two false doors, a feature that generally seems to postdate Khufu's reign, it may nevertheless represent a secondary construction phase for the mastaba. ${ }^{\text {II }}$

The excavators were justifiably confused by the apparent absence of a principal shaft a in the northern half of the mastaba's superstructure. Instead, the HU-MFA Expedition located two shafts, в and $\mathbf{C}$ in an east-west alignment just to the northwest of the chapel. Both of these shafts are clearly later intrusive additions. Shaft в, further away from the chapel, contained the finely wrapped mummified body of a female, described above, placed within a massive, uninscribed cedar coffin. This is the best-preserved of all the core mastaba major shaft burials in Cemetery g 2IOO. Noteworthy here, and certainly atypical of Dynasty 4, is the orientation of the burial chamber opening to the north. The shaft continues below the

Reisner, $G N_{\mathrm{I}}, \mathrm{p} .45 \mathrm{O}$.
8 The mastaba of Hemiunu, by comparison, at $53.2 \times 26.77 \mathrm{~m}$, is larger on the long sides, but smaller on the short ends. Jánosi considers G 4000 to be larger than G 2220; Giza in der 4. Dynastie, p. 224.
9 Reisner, $G N \mathrm{I}, \mathrm{p}$. 45I.
Io Helck, "Miszelle," ZÄS 8I (1956), pp. 62-65, argued for such principal tombs for each of the three early nucleus cemeteries, although he cited G 2100 rather than G 2220 in the case of Cemetery G 2100.
II Cf. Jánosi, Giza in der 4. Dynastie, pp. 224-25; GNI, p. 453. Note, however, that the large mastaba of Ankhhaf in the Eastern Cemetery ( G 75 II ), also has two false doors in its interior stone chapel, and Jánosi has convincingly redated this tomb to the reign of Khufu; Giza in der 4. Dynastie, pp. rio-II. Additional Khufu-era mastabas with two false doors include Hemiunu ( G 4000 ) and the anonymous mastaba g 2000 ( $=$ Lepsius 23).
burial chamber containing the coffin, but no additional chambers were located. Shaft c, by contrast, was left unfinished. Neither shaft displays T-shaped portcullis grooves.

The identity of the tomb owner, most likely a male to judge from the unfinished chapel reliefs, rather than the female buried in shaft C, remains unknown. ${ }^{\text {I2 }}$ If the interior stone chapel does indeed represent a later addition to the mastaba, then the presence of two false doors need not counter our interpretation of the mastaba core itself as belonging to the original group of I2 Cemetery G 2100 tombs.

## Shafts and Burials

Shafts in G 2220: two shafts, c immediately northwest of chapel and B west of C ; a third shaft A was presumed north of middle, but was not found.

G 2220 B
Wheeler's diary records the events:
January I3, 1933. 2220 в. Removed door-blocking. Down 8.90 m in pit. The chamber is small and roughly cut, on the north side of the pit. The chamber contains a large wooden coffin, 240 x $98 \times 98 \mathrm{~cm}$, of which the wood appears almost as hard and strong as when new. The chamber is undisturbed, the coffin lid in place, and no other objects visible. Photographed chamber. The coffin is perfectly rectangular and flat on all faces, with two small hand knobs to the lid visible along its east edge (the longer side). All the joints and pegs of the wood are clearly visible and several small patches to repair blemishes. The weight of the coffin should be about 1044 lbs , and of the lid about 378 lbs .
From the position and nature of the chamber, and the fact that the pit descends further, it would seem that this is not the principal burial. The whole pit filling is undisturbed, so that one may expect the principal burial at a lower level also undisturbed. ${ }^{13}$ January I5, 1933. 2220 b. Lifted lid of wooden coffin partly. The coffin is smooth and undecorated inside, the lid being recessed to fit the top edge. The body lies against the west side, partly on left side, fully extended, legs and arms fully extended, arms at sides, feet together, head turned to left: head north.
The body is wrapped as far as can be seen, in cloth bandages, including hands, arms, feet and head. A loose cloth has been laid over the body, covering from ankles to neck. Nothing else is visible in the sarcophagus. Such photographs as are possible in the confined space are being taken.
The construction of the sarcophagus is very clear, as all the joints, inside and out, are visible-as are the pegs used. The bottom appears to be one piece; the lid is in two pieces, joined; each side consists mainly of three planks and the ends the same. ${ }^{14}$

This discovery prompted Wheeler to draft a memorandum to Reisner, who was still recovering from cataract surgery in Cairo. This memorandum is somewhat more detailed and is presented below.

## January I6, 1933

THE PIT SHAFT
The pit is immediately west of pit "C," near the south end of the mastaba. Masonry pit, rock-cut below, rectangular plan with longer sides $\mathrm{N}-\mathrm{S}$, $210 \times 180 \mathrm{cms}$. The rock level is 5.70 m below

I2 In this context, mention might be made of an intrusive sunk-relief architrave fragment belonging to a king's acquaintance, Hetephernefret, reused as fill material inside a pit wall. However, there is no confirmation of the tomb in question in a closeup view in HU-MFA Expedition photograph C4748, online at the Giza Archives Project (www.gizapyramids.org): March 16, 19I2, looking west.
I3 Wheeler diary, January 13, 1933, pp. 1202-03.
I4 Wheeler diary, January 13, 1933, pp. 1204-05.
the top of the pit: a chamber is cut in the north side (room I) and the pit continues on down below this. Debris in whole of pit is clean hard rubble, undisturbed.
THE CHAMBER (I)
A small, roughly cut chamber in the north face of the alignment with the pit, has its floor 2.90 metres below the rock surface. It is in poor alignment with the pit, and is about 4 m by 2 m . The door was found with blocking undisturbed, consisting of small rubble 25 cms deep, larger rubble on top of that 35 cms deep, and mud bricks piled in the remaining space at the top. No cement or plaster was used in the door-blocking. The bricks used were 37 x $19.5 \times 13 \mathrm{cms}$. Door-blocking photographed, drawn, and removed. The only object in the chamber is a large wooden sarcophagus, with lid in position, apparently in remarkably good and strong condition, and of very good and accurate work.

## THE SARCOPHAGUS

Plain rectangular with smooth faces on all sides $\&$ on lid. Length 240 cms , width 98 cms , height (coffin only) 83.5 cms , \& (with lid) 97 cms . The sarcophagus is placed along the west side of the room, against the wall, and occupies most of the length of that side: the floor of the room is of small rubble (see description of composition of door-blocking). The joints of the timber are clearly visible throughout, as are also the pegs and dowels; the lid has two lugs for handles along its east edge (\& presumably also along the west edge against the wall). Measurements of heights and lengths only differ by a few millimetres at different parts. The weight of the coffin is estimated at about $1044 \mathrm{lbs}, \&$ the lid at 378 lbs .

The lid has been raised sufficiently for photography, although the confined space will not permit much of this till the lid is removed. The only thing apparently in the sarcophagus is the body.

## THE BODY

Lies at full length, head north, slightly on left side, against the west side of the coffin, with head turned to left. A loose sheet covers the body from ankles to neck. The feet, hands, forearm, shoulder \& head, (which are clear of the sheet) are wrapped in narrow cloth bandaging; but from the appearance of bone through the hand \& foot wrapping, there seems no trace at the moment of mummification. The body is fully extended, arms and hands at the sides, feet together.
PROCEDURE
Such photographs as can be got in the present position are being taken; but they can only show small parts in each view. I would suggest, after taking these, that the lid be removed and transported to the Camp, and other photographs be taken in the improved conditions. After this, and before disturbing the body, the coffin could be moved into the pit where good pictures could be got.
On the instructions of Mr. Lindon Smith I am taking no further action until hearing your ${ }^{15}$ wishes.

## N.F.W[heeler]

On January 18, Joseph Lindon Smith and Dr. Douglas Derry removed the lid and transferred the mummy to Harvard Camp for additional photography and analysis. Two loose hand-lugs on the coffin's east side were removed, and the lid was placed in a crate that reached Harvard Camp on January 19, 1933. Wheeler and (J.L.) Smith removed the body from the coffin on January 20, 1933 by sliding two sheets of iron under it, with a wooden crate under the iron. Derry removed the outer wrappings for photography on January 2I. Wheeler's notes continue:

January 2I, 1933
Dr. Derry removed loose sheet from body. Sheet was laid single over the body, tucked round the lower legs.
The wrapping now visible is of one wide strip running from the ankles to the neck, and is the outer one of a thick covering, having the appearance of a long dress with a V-shaped neck opening. Removed this, which proved to be the end of lower wrappings brought up in one stretch from feet to neck. The bands beneath this are of 6.8 cms wide and encircle the body from ankles to neck. The outer fold was stitched down at one point.
The face is completely wrapped, the nose shaped \& pads in the cheeks. The breast wrappings are now visible, with the nipples formed in small button-shaped pads on the outside of the wrapping. The wrappings here cross in brace form over shoulders and between the breasts. The lower part of the body is still under encircling wrappings 10 cms wide. On the outer face wrappings one eye is still clearly painted in black, as is the eyebrow above it.
In removing these wrappings the right hand was removed as it was unsupported.
The body is clearly that of a woman, and the height, from heels to top of head-wrappings 15 cms .
January 25, 1933. An examination of the outer sheet from the body shows it to have retained the creases of folds as under. From the nature and intervals of these folds it appears that the sheet had been folded as shown below, and pressed in that position. Pull lines denote upward creases and dotted lines downward creases [fig. 16.30].
Reconstruction of folds [fig. 16.3I]: "A" is a circumferential wrapping, below which was a pad " B " to fill in the space between the two legs at the stage when separate leg-wrapping gave way to wrapping of body as a whole. Dr Derry removed "A" \& "B".
In order to preserve the construction of the upper part of the body wrappings, over the breasts, etc, Dr. Derry removed "D" in one piece. This revealed the section of the wrappings at this part, which was 1.5 cms. Both arms were removed, and then, in one piece, the area "E." Dr. Derry then removed all the bones, and the legs and arms were unwrapped.
State of wrappings: The linen is in an unusually good state of preservation and in the middle area (over thighs) is white and strong as new.
Nature of wrappings: The body seems to have had a single layer of wrapping with bands some io cms wide, over which, on legs and arms, was wound a thickness of I.O cm of narrow tape. This tape was formed by folding or twisting a wider band, and these lengths of "tape" were joined by knotting their ends. Over this tape was the ordinary bandage wrapping of about 37 layers over arms, legs, and body. As the bandages were wound on the hollows were filled in with pads: these pads were all made in the same way, by folding a square of linen radially [fig. 16.33]:

All such positions as between legs, in waist, etc, were padded thus to retain the body shape. On one of these pads-that in the hollow of the right groin - is a hieratic inscription, which has been photographed. On examining the other pads and wrapping bands a further small inscription was found. Both these inscriptions are in black ink on the linen... Dr. Derry's conclusion from the bones \& body remains is that the lady was probably old, and certainly had arthritis in the following joints:- left side between sacrum \& pelvis, between vertebrae of neck; also abcesses in upper jaw (both sides), $\&$ in pallet. The teeth were complete, well worn, but very fragile. From internal traces it seems that no internal organs were removed before burial.

Dr. Derry removed the head, and removed whole the face and head-dress wrapping. The whole face was wrapped and padded to preserve natural shape, the nose being entirely of linen and very well
shaped. The body would seem to have been very thin at time of wrapping, the neck diameter inside the wrappings being only 5 cms . The linen used is all good, the best being the outer sheet which has 42 threads per cm; the inner wrappings are very slightly coarser but still fine.
Some of the pieces of linen have stitched-on patches.
Material of wrappings.
On examining a specimen of the thread microscopically it is seen to be as identical as could be expected with the difference in age with a specimen of modern linen thread. Both show the single "hair" to be of regular diameter, with distinct rings like bamboo at intervals of about a length of io diameters. Cotton, for a comparison, is of twisted and deformed appearance, the diameter distorted, and there are no rings at all [fig. 16.34].

Wrappings of body: examined by Dr. Douglas Derry: ${ }^{16}$
(I) body with limbs wrapped separately; single thickness of linen band, 10 cm wide; the legs and arms were wound to a thickness of Icm with narrow tape (formed by folding or twisting a band); the lengths of tape were tied end to end.
(2) over the body thus prepared were wound bands in thirtyseven layers around body and legs; as wrapping proceeded hollows were padded out with wads of linen, some folded in triangular form and others in round wads, \&c.; to fill out the appearance of a body: one triangular pad was inscribed with black ink, šm't $n f r t(?)$, , $i s w(?)$, "fine linen"(?) ...: another frag. was inscribed ${ }^{m} m{ }^{\prime} t$ nfri ... (for a drawing, see Vol. II, chap. XIII, section $3^{17}$ ).
(3) The upper part of the body was then covered with narrow bandages, wound criss-cross to form the breasts which were moulded to a natural form by the use of wet resin (Derry), padded underneath the bandages the lower part of the body was wound with wide strips of linen; the breast nipples were made of little hard wads of linen stuck in the wrappings; the neck was filled with bandages wound around and around; the face was moulded in linen showing nose, mouth and eyes (eyes and eyebrows painted on linen); head wrapped with linen ending in a twist like a pig-tail.
(4) A large sheet of linen was laid over the body looking like a tunic with $V$-shaped neck, leaving arms and lower part of legs exposed: similar to a statue.
(5) on top of the whole mummy was a rather crumpled sheet of linen, showing regular folds as if taken from a box (newly laundered); according to wrapped bodies of the O.K. found at Naga-ed-Deir, the sheet had been spread evenly over the whole mummy: in the present case, the sheet had probably been disturbed by the sliding of the body in the coffin when the latter was placed in the chamber.

Measurements provided by Wheeler for the skeletal remains include the following:

| humerus: $277-80 \mathrm{~mm}$ | tibia: $309-312$ |
| :--- | :--- |
| radius: $203-205$ | fibula: $312-315$ |
| ulna: $218-221$ | femur \& tibia: $704-7 \mathrm{II}$ |
| femur: $392-396$ |  |

16 This text derives from Reisner, $G N$ I, pp. 452-53, but omits the long list of Expedition photography provided there.
17 This reference pertains to Reisner's unpublished manuscript "The Funerary Equipment Found in Burial Chambers: Miscellaneous Objects (continued)," in A History of the Giza Necropolis II, pp. 677-78 (no drawing present). At this writing the manuscript is available online at the Giza Archives Project (www .gizapyramids.org).

In 1987, Leslie Smith, former conservator in the Textile Department of the Museum of Fine Arts, Boston, examined fragmentary linen remains from the mummy in conjunction with the special exhibition, "Mummies \& Magic: The Funerary Arts of Ancient Egypt" (Boston, 1988). Her notes, compiled by Margaret Leveque, former conservator in the Museum's Objects Conservation Laboratory, are included below:

The fragmentary remains of the wrappings from an Old Kingdom mummy of a woman, from Giza G 2220 B:
MFA 33.Ior6-IoI7; Condition and Test Results
These are fragments from an Old Kingdom mummy which had been elaborately wrapped with linen to replicate the appearance of the deceased woman in life, including a padded wig with a ponytail at the back, and a well-cut linen dress.
The fragments are in severely deteriorated condition. The linen fibres have darkened and embrittled; they fracture at the slightest touch: no flexibility remains in any of the fragments. The mummy wrappings were cut apart by a Dr. Derry during an autopsy shortly after excavation (1933). The body and the physician's notes about his findings are now lost. ${ }^{18}$ Some handwritten notes were taken during the autopsy about the wrappings; copies are in the file and with the Giza notes in the MFA Department of Art of the Ancient World.

Tests to discover the effects of humidification were done on Egyptian textile fragments of similar age. This was fairly unsuccessful. The fragments lost their structural integrity, becoming even weaker, thus ruling out most water soluble resins for impregnation.
Consolidation tests were conducted on detached fragments to attempt to strengthen them and permit manipulation.
Klucel E, hydroxy propyl cellulose was chosen initially because it is soluble in ethanol without water. It was applied in $2 \%$ solution with a dropper, allowing the fragment to be saturated slowly without disruption. The fragment was reimpregnated three times and allowed to dry. Insufficient strength was imparted by this resin.
Another fragment was impregnated with $3 \% \mathrm{~B}_{72}$ in toluene. Following two applications the fragments could be handled without losing large fragments and shaped slightly, but the fibres at the outer edges were still friable. The surface had insufficient cohesion to permit adhesion. Two larger fragments, one from the neck and one apparently from the forehead, were chosen for further testing with $\mathrm{B}_{72}$. Three applications of $\mathrm{B}_{72}$ ( $3 \%$ in toluene) were applied dropwise. The fragments were reshaped and covered with crepeline to allow them to dry. While the pieces gained more overall strength they remained brittle. Pieces of loose strapping were reattached with dots of Beva D-8 to prevent their loss.
Further consolidant testing was considered but due to time constraints of the "Mummies and Magic" exhibition (1988), it was decided that a replica of the mummy would be made for exhibition purposes. ${ }^{19}$ It was felt that at this stage of our development of consolidants for degraded textiles that the remaining fragments

I8 Note that what remains of the mummy was not lost, but stored at the Kasr el Aini (Cairo) Faculty of Medicine—for study by Douglas Derry—as mentioned in the following report by Renate Germer.
19 A reproduction of the mummy was created from papier maché and other materials, and was displayed in the exhibition next to the actual coffin in 1988; A.M. Roth in Mummies \& Magic, cat. 6, pp. 76-77. Both objects subsequently traveled to the Dallas Museum of Art as part of a long-term loan from the Museum of Fine Arts, Boston, to that institution.
should simply be stored archivally to await further developments in the field.

Dr. Renate Germer kindly contributed the following remarks on the mummy, based on archival notes and photographs in the Museum of Fine Arts, Boston. She notes the use of the linen wrappings prior to their funereal function, and discusses, along with Derry and against Petrie and Wainwright, the unlikelihood of any the removal of skin from the body during the embalming process:

In dem von Noel F. Wheeler abgefaßten Grabungstagebuch ist die Fundsituation und Bergung der Mumie genau beschrieben: (siehe oben). Der von Wheeler erwähnte gesonderte Bericht Derrys gibt nun ganz genau die Wicklung der Mumie wieder, wie sie beim Ablösen der einzelnen Leinenschichten erkennbar wurde. Der Bericht ist von Reisner in umgekehrter Reihenfolge, also von den innersten Schichten nach außen gehend, veröffentlicht. ${ }^{20}$
Wheeler bemerkte ausdrücklich, daß sich das Leinen der Mumienwicklung bei Auffindung der Mumie noch in einem sehr guten Erhaltungszustand befand. Die Farbe des Leinens variierte von hellweiß bis dunkel bräunlich [fig. 16.46] und die Textur von ganz locker gewebt [fig. 16.38] bis recht dicht und kräftig. In einige Leinenstücke waren sorgfältig Flicken eingesetzt [fig. 16.39]. Aus dieser Tatsache ist zu erkennen, daß man die Leinentücher bereits längere Zeit im Haushalt benutzt hatte, bevor sie zum Einwickeln der Toten benutzt wurden. Der heutige Zustand des Leinens, das sich im Magazin des MFA Boston befindet, ${ }^{21}$ ist sehr viel schlechter (siehe Bericht von Leslie Smith und Margaret Leveque).
Aus Leinenstreifen und zusammengefalteten Leinenstücken und Tüchern hatten die Balsamierer kunstvoll die Konturen des Gesichtes und des Körpers der verstorbenen Frau modelliert sowie eine Bekleidung mit einem langen Gewand und einem im Nacken zusammengebundenen Kopftuch (Zeichnung). Reisner bemerkte, daß nach Derry die verarbeiteten Leinenstreifen mit "wet resin" getränkt gewesen seien. Leider erfolgte keine chemische Analyse, um Aufklärung über die verwendeten Substanzen zu erhalten. In seiner grundlegenden Arbeit uber die Mumifizierung im Alten Ägypten beklagte sich Derry, ${ }^{22}$ daß er zwar bei allen zu seiner Zeit in Ägypten durchgeführten Grabungen die menschlichen Überreste untersucht und auch ausführliche Berichte angefertigt habe, diese jedoch meist von den Ausgrabern nicht publiziert wurden. Ein solcher Fall liegt anscheinend auch bei der Mumie aus G 2220 B vor. Ein ausführlicher anthropologischer Bericht von Derry ist nicht erhalten. Reisner erwähnt in seiner Publikation den Zustand des Skelettes dieses Körpers gar nicht. Eine Nachuntersuchung des Skelettes ist zur Zeit auch nicht möglich, da die in der Cairo School of Medicine ${ }^{23}$ aufbewahrten Knochen nicht zugänglich sind. So ist uns über den Körperzustand der in G 2220 в beigesetzten Frau nur der in zwei Sätzen abgefaßte Bericht Wheelers erhalten, den er vermutlich während des Sezierens der Mumie durch Derry von diesem diktiert bekam. Bei dieser Untersuchung nahm Derry die Mumie vollständig auseinander und löste alle Knochen aus der Leinenumhüllung. Wheeler schrieb:

Dr. Derry's conclusion from the bones + body remains is that the lady was probably old, and certainly had arthritis in the following joints: - left side between sacrum + pelvis, between vertebrae of neck; also abcesses

- Reisner, $G N$ I, S. 452.

21 Inventar-Nr. MFA 33.IOI6-IoI7.
22 Douglas Derry, "Mummification. Methods practised at different periods," ASAE 4I (1942), S. 240-46.
23 Inventar-Nr. 235
in upper jaw (both sides), + in pallet. The teeth were complete, well worn, but very fragile.

Auf die interessante Frage nach der an dieser Person angewandten Mumifizierungstechnik geht der Bericht von Wheeler nur mit einem Satz ein: "From internal traces it seems that no internal organs were removed before burial." Über die im Alten Reich angewandten Mumifizierungsverfahren sind wir bis heute nur unzureichend informiert. Teilweise wurden wohl schon in der 4. Dynastie die Organe aus der Leibeshöhle entfernt und durch Leinen ersetzt. ${ }^{24}$ Die Organe wickelten die Balsamierer anscheinend gesondert in Leinen ein und setzten sie zuerst in einer Vertiefung des Grabes mit bei. Der früheste Beleg ihrer Verwahrung in Natronlauge in einem in vier Behältnisse unterteilten Gefäß ist der Kanopenkasten der Königin Hetepheres. ${ }^{25}$ Was mit dem Muskelgewebe des Körpers geschah, ist unklar. Zwischen Petrie und Wainwright einerseits und Elliot Smith andererseits wurde darüber eine ausführliche wissenschaftliche Diskussion geführt. ${ }^{26}$ Petrie und Wainwright gingen davon aus, daß die Körper teilweise entfleischt und nur die Knochen in Leinen gehüllt worden waren. Smith hingegen war der Ansicht, daß das Körpergewebe unter der Leinenumhüllung verweste, zerfiel und so der Eindruck entstand, nur die Knochen seien mit Leinen umwickelt. In einigen Fällen vermutete Smith, daß die Ägypter bereits bestattete und zerfallene oder durch Grabraub beschädigte Körper noch einmal neu eingewickelt und ein zweites Mal beigesetzt hatten. Derry, der eine große Anzahl von Bestattungen aus dem Alten Reich untersucht hatte, schloß sich der Meinung von Smith an. ${ }^{27}$ Nach Derry gelang es den Balsamierern im Alten Reich noch nicht, das Körpergewebe zu konservieren. Das Muskelgewebe unter den Leinenschichten verkohlte, ebenso die dem Körper anliegenden innersten Leinenschichten. Schnitt man dann bei modernen Untersuchungen diese Leinenmumien auf, so zerfiel die verkohlte Schicht zu Staub und es sah aus, als ob das Leinen der Umwicklung dem blanken Knochen aufliegen wurde. Einen wichtigen Beleg für diese Ansicht, daß die Körper vor dem Einwickeln nicht entfleischt worden waren, sah Derry in der Mumie aus G 2220 b. Leider schrieb er nur sehr kurz über die von ihm in dieser Hinsicht gemachten Beobachtungen: ${ }^{28}$

In order to preserve the breasts (die aus Leinen modelliert waren) intact, an incision was made right through the whole thickness of the bandages. In this way a section was exposed, and it was possible to see the boundary between the linen and what had been bodywall. The tissues had mostly disappeared, or existed in small fragments which crumbled at the touch; but in the region of the abdomen a large sheet of tissue was found in the abdominal cavity, which was almost certainly the remains of the abdominal wall, plus intestines which had become adherent to it during the course of desiccation. There was no sign of any material having been packed into either the abdominal or chest-cavities; and from the latter a shrivelled mass of tissue was removed, probably consisting of the heart and lungs.

Für die Bestattungsform der Frau aus G 2220 b läßt sich also feststellen, daß der vollständige Körper ohne die Eingeweide zu entfernen, mit Leinenstreifen umhüllt worden war. Mit Hilfe zusammengefalteter Leinenstücke und Leinenstreifen modellierten die Balsamierer dann kunstvoll eine Leinenmumie, die lebensecht aussah und eine Größe von 151 cm hatte. Das

[^30]Körpergewebe im Innern dieser Leinenmumie zerfiel im Laufe der Zeit fast vollständig, nur das Skelett blieb gut erhalten. Diese Mumie ist ein Zeugnis des Versuches der Ägypter bereits im Alten Reich verstorbene Personen so herzurichten, daß die Körper wie erhalten aussahen, obwohl die Formen wie Gesicht und Muskelgewebe nur aus Leinen modelliert waren.

Finally, the V-necked "garment" (fig. 16.44) placed over the mummy was discussed by G. Vogelsang-Eastwood:

It is a slight misnomer to call this particular item a "garment," as only the front half remained. It is not clear from either the photography or the accompanying text whether it was a piece of cloth which had simply been cut in the shape of a dress, or whether it was part of an actual garment. Unfortunately, it was destroyed during Derry's examination of the mummy in Egypt, so it is not possible to state exactly how the "garment" was made. What is clear, however, is that great attention was paid to the mummy, down to the inclusion of well-made cloth breasts to give as life-like an appearance as possible. The care taken with the mummy suggests that equal regard was paid to ensure that the form of the $V$-shaped garment was also accurate. Because no sleeves or pleating were indicated it can be suggested that the Giza "dress" was a simple, V-neck form without sleeves. ${ }^{29}$

## Date

Reisner, "List of Finished Mastabas in the Nucleus Cemeteries," p. I: Khafre-Menkaure (core); Dynasty 4-5 (mastaba).

Reisner believed that the massive core of G 2220 was constructed sometime in the reign of Menkaure, and that a "change in the owner's fortunes" caused by the death of that king prevented the completion of the tomb. ${ }^{30}$ According to him, shaft в was occupied during the reign of Shepseskaf, while shaft c was a Dynasty 5 construction. Smith ascribed the tomb to the reign of Shepseskaf. ${ }^{31}$

There is, however, no evidence to pinpoint such a detailed chronological reconstruction. The two shafts, located in unusual positions, are clearly secondary additions (contra Reisner), and therefore may bear no relation to the chapel's construction, or even to the tomb's originally intended owner. While there is no reason to doubt that the original core was built under Khufu, possibly intended as the most significant tomb of Cemetery G 2IOO, the eventual occupation of the shaft b-with its early attempt at "mummification"-could date to late Dynasty 4 (Menkaure?). ${ }^{32}$

## Decoration

The chapel's decoration occurs only on the east wall (figs. 16.5016.55). At the left (north) end, the tomb owner and presumably his wife and child stand facing to the right (south). Although we see only the beginnings of the carving-the unrounded outlines of the very high raised-relief figures-we can still discern most of the

29 Vogelsang-Eastwood, Pharaonic Egyptian Clothing, p. II2, pl. 25. See also her comments in "Textiles," in Ancient Egyptian Materials and Technology, p. 288, with fig. II.I6.
30 Reisner, $G N_{\text {I }}$, p. 453.
31 Smith, HESPOK, p. I64.
32 Jánosi suggests Khafre's reign as the earliest possible date, assuming that no tombs this big could be built at Giza under Djedefre. If the two-door chapel was part of the tomb's original design, then it would not predate Menkaure. But the chapel could be a later addition; cf. Giza in der 4. Dynastie, pp. 124, 224-25.
costume and pose of the figures. ${ }^{33}$ The tomb owner wears a short kilt and a leopard skin, and holds a staff and sekhem scepter. Curiously, the scepter appears to pass behind his figure, although he faces the "dominant" Egyptian direction of left to right. Perhaps the carving simply had not yet advanced far enough to show the scepter passing in front of his lower body (see below). Leg musculature is indicated, but there is little else in the way of interior detail. His wife wears a tripartite wig and a long garment; her anklets are indicated, as is a choker around her neck. To judge from the uncarved surface remaining between her husband's scepter-wielding arm and his back, his wife's left arm was meant to embrace his arm. ${ }^{34}$ Her right hand meanwhile bends at the elbow and reaches across her body to touch his elbow. The heads and faces of this standing couple have suffered damage and deterioration.

The outlines of the son's figure reveal that he grasps his father's staff with one hand, while turning back to gaze up at his parents. He places the finger of his right hand to his lips, and his arm is bent at the elbow. The figure is otherwise too rough for us to determine further details, such as whether he stands naked or clothed. But we have already seen this pose in Cemetery g 2100, on the west wall of the chapel of Kanefer (G 2150, see figs. I2.93, I2.95, 12.97).

At the right (south) end of the east wall, another large-scale male figure stands facing left (north) towards the couple described above. He is presumably either a son or officiating priest (though without a leopard skin) or, more likely, a second figure of the tomb owner himself. He wears a short curled wig and a wraparound pleated kilt, and holds a staff and sekhem scepter. Fingers, knees, kilt pleats, and leg musculature are all in evidence, but have suffered extensive deterioration since the time of excavation. ${ }^{35}$

The layout of the east wall resembles that of Merib (G 2100-I). Curiously, however, the depiction of the sekhem scepter here shows reversed orientation from that of Merib. The scepter passes in front of the body of this solitary male figure, even though he faces left, and the scepter held by the first male figure, though perhaps never carved, appears to pass behind the body even though he faces right. The opposite scenario is visible in Merib's chapel (see Chapter 4). The space between the two sets of figures was probably intended for registers of offering bearers or funerary estates, but the execution was never begun.

The chapel's two false door niches and the other walls were left undecorated, but display expertly prepared masonry, sharp corners, and symmetrical layout. The massive drum over the entrance was still broken in two, lying on the ground, as of 2008. The north false door is the better preserved of the two, with almost all elements intact but for the broken architrave over the tablet. The south false door, by contrast, preserves only the innermost lower jambs. However, a semicircular hole immediately beneath the small drum seems

33 Smith, HESPOK, pp. 164, 249, related the high-relief carving to that found in mastabas G 204I (Senenuka), G 4260 (fragments), G 5 IIO (Duaenre), and in the Eastern Cemetery on portions of the walls of G 7IIO-7I20 (Kawab).
34 For this pose, cf. the mastaba of Iteti (G7391), in Curto, Gli Scavi Italiani a el-Ghiza, pl. 6b. It is interesting to note two parallels between G 2220 and G 7391: the pose of the embrace and a serdab(?) squint punched through both chapel false doors (see below). A slightly different embrace occurs in the tomb of Khufukhaf I: Simpson, The Mastabas of Kawab, Khaf-Khufu I and II, pls. 23-24, fig. $33=$ N. Cherpion, "Sentiment Conjugal et Figuration à l'Ancien Empire," in Kunst des Alten Reiches, p. 33, pl. 4a.
35 As of 2008, this chapel was still open to the elements and unprotected by a modern roof or locking grated door.

## Mastabas of Nucleus Cemetery g 2 Ioo

to hint at a possible serdab behind (fig. I6.I4), if it is not simply a robber's hole. Reisner does not mention such a serdab, but there are precedents for such an arrangement. The false door of Iteti from G 739I (Turin, Museo Egizio Suppl. 1843), shows a similar hole. ${ }^{36}$

Tomb Owner and Dependents No individual names are preserved in the tomb.

36 Curto, Gli Saavi Italiani a el-Ghiza, pp. 39-40, fig. 7, pls. 5, 6a, and 7. See also, Fisher, The Minor Cemetery at Giza, pp. 9, 90, fig. 77 (G 3011 ). On the topic in general, see E. Brovarski, "Serdab," in LÄ 5 , cols. 874-79; Lehmann, Der Serdab in den Privatgräbern des Alten Reiches.


Fig. 16.I. G 2220, chapel and south end of east face of, looking west. November 20, 1993. PDM 1993.096.io.


Fig. 16.2. G 2220, plan.


Fig. 16.3. G 2220, plan of chapel area.


Fig. 16.4. G 2220, chapel, looking north. November 3, 1993. Peter Der Manuelian, PDM 1993.056.oI.


Fig. 16.6. G 2220, chapel interior, two fragments of fallen drum lintel from chapel entrance, looking northwest. November 3, 1993. Peter Der Manuelian, PDM 1993.056.06.


Fig. 16.5. G 2220, casing blocks just south of chapel entrance, looking north. November 4, 1993. Peter Der Manuelian, pdm 1993.059.06.


Fig. 16.7. G 2220, chapel interior, larger of two fragments of fallen drum lintel from chapel entrance, looking west. November 3, 1993. Peter Der Manuelian, PDM 1993.056.05.


Fig. 16.8. Four limestone blocks with mason's marks from debris on top of G 2220: left, upper: 37-7-I; left, lower: 37-7-2; middle: 37-7-3; right: 37-7-4. October II, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI4213.


Fig. 16.9. Five limestone blocks with mason's marks from debris on top of G 2220: left, upper: 37-7-5; left, lower: 37-7-6; middle: 37-7-7; right, upper: 37-7-8; right, lower: 37-7-9. October II, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, CI4214.


Fig. 16.io. Three limestone blocks with mason's marks from debris on top of G 2220: left: 37-7-10; middle: 37-7-II; right: 37-7-I2. October II, 1938. HU-MFA Expedition photograph, Mohammedani Ibrahim, ci42I5.


Fig. 16.II. Left to right: 33-4-2I.I, 33-4-2I.2, 33-4-21.3 (MFA OPi.33.ioi6, OP2.33.1016, OP3.33.1016, OP4.33.1016), wooden pegs from coffin from shaft в. Top: March I4, 1933. HU-MFA Expedition photograph, Mohammedani Ibrahim, cı4140. Bottom: July 16, 2008. Peter Der Manuelian, PDM_IMG_O2379.


Fig. 16.12. 33-4-2I (MFA OPI.33.IoI6, OP2.33.1oI6, OP3.33.IoI6, OP4.33.Io16), wooden peg elements from the coffin from shaft b. July 16 , 2008. Peter Der Manuelian, pdm_IMG_02390.


Fig. 16.13. 33-I-83 (MFA 33.1067), limestone headrest from g 2220 b. Left: March 16, 1933. HU-MFA Expedition photograph, Dahi Ahmed, ci3403 (detail). Center: July 16, 2008. Peter Der Manuelian, pdm_IMG_O2344. Right: drawing.


Fig. 16.I4. G 2220, chapel, west wall, south false door, looking northwest November 15, 1993. Peter Der Manuelian, PDM_1993.077.22.


Fig. 16.15. G 2220, chapel, west wall, north false door, looking west. November 4, 1993. Peter Der Manuelian, pDM_1993.059.08.


Fig. 16.16. G 2220 b, mouth of shaft, looking north. November 18, 1993. Peter Der Manuelian, PDM_1993.093.06.


Fig. 16.17. G 2220 b, mouth of shaft, looking down, eastwards. November 3, 1993. Peter Der Manuelian, PDM_1993.055.16.


Fig. 16.18. G 2220 в I, door blocking, looking north. January I3, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B8265.


Fig. 16.19. G 2220 в I, chamber with wood coffin, looking north.
January 13, 1933. HU-MFA Expedition photograph, Dahi Ahmed, B8266.


Fig. 16.20. G 2220 B I, chamber with south end of wood coffin, looking north. January 13, 1933. HU-MFA Expedition photograph, Dahi Ahmed, в8267.


Fig. 16.21. 33-4-2I (MFA 33.Io16), cedar coffin from G 2220 в, with a modern reproduction of the female mummy, prepared for MFA "Mummies \& Magic" exhibition in 198r. Museum of Fine Arts, Boston, sLi6i73.


Fig. 16.22. G 2220 в I, plan and section.


Fig. 16.23. G 2220 B I, mummy (wrappings 33-4-22) in wood coffin (33-4-2I = MFA 33.IOI6), looking south. January I9, 1933. HU-MFA Expedition photograph, Dahi Ahmed, A7041.


Fig. 16.24. G 2220 в I, mummy (wrappings 33-4-22) in wood coffin (33-4-2I = MFA 33.IOI6), looking north. January 19, 1933. HU-MFA Expedition photograph, Dahi Ahmed, a7040.


Fig. 16.25. G 2220 b I, mummy (wrappings 33-4-22) in wood coffin (33-$4-2 \mathrm{I}=$ MFA 33.1016), foot end, looking west. January 16, 1933. HU-MFA Expedition photograph, Dahi Ahmed, A7039.


Fig. 16.26. G 2220 в I, mummy (wrappings 33-4-22) in wood coffin (33-$4^{-21}=$ MFA 33.IoI6), head end, looking west. January 16, 1933. HU-MFA Expedition photograph, Dahi Ahmed, A7038.


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$i m 3 b(w) b r n b=f(r \subset n b)$, "revered under his lord (every day)," 156,162 imy-ib n ntr $=f$, "favorite of his god," 314,318 imy-r wpwt, "overseer of commissions," 312-313, 316-318
imy-r pr, "steward," 79, 155-158, 160, 162, 312, 368, 378, 380, 382-383
imy-r pr-ch3, "overseer of the weapons house (armory?)," 79, 155-158, 160, 162, 312, 368, 378, 380, $382-383$
imy-r pr-hd, "overseer of the treasury," 79, 155-158, 160, 162, 312, 368, 378, 380, 382-383
imy-r prwy-hd, "overseer of the double treasury," $156,158,162$
imy-r phw, "overseer of the marshlands," 318
imy-r $\underline{W} k r t-n s w t n b$, "overseer of every royal ornamented," 156,162
imy-r $s \check{s} \times n s w t$, "overseer of royal document scribes," 158 , 162
imy- $\boldsymbol{s s}$ s P prw, "overseer of regiment scribes," 155 , 162
imy- $[r]$ sš $\operatorname{cprw}$, "overseer of regiment scribes," 160
imy-r ss bry-e nswt, "overseer of scribes of the portfolios of the king," 156 , 158, 162
imy-r ssr, "overseer of the bag," 38 r
imy-r sšrw, "overseer of linen," 379, 382
imy-r sti $\underset{i}{d}(3 w)$, "overseer of the double storehouse of provisions," $156-158$, 162
(imy)-bt $H$ 3, "follower of Ha," 382
iry bt nswt, "royal acquaintance (keeper of the king's property)," $30,80,83$, 162
iry mdsts, "archivist," 378,383
[irr?] mrr nb $=f$, "[who does what] his lord loves," 158 , 162
$i d w$, "page," 73-80, 82-83, 240, 315-316, 378-380, 382-383

## -

r $\underline{d} m r \underline{b} w$, "administrator of the fleet," $74,78,83,373$
rd-mr $D p$, "district administrator of Dep," 380, 382

## w

wsh nswt, "royal wab-priest," 162, 259, 262
$w^{〔}(m) w r w h b$, "one (among) the great ones of the festival," 380,382 wr ms 'Iwnw, "greatest of seers of Heliopolis," 83
wr md $\underset{w}{ }$ Šm‘w, "great one of the tens of Upper Egypt," 76-78, 80, 83, 156, 158, 162
$w t$, "embalmer," 77-78, 80-83, I20, 156-157, 159, 162, 314-316, 371-382
wt 'Inpw, "embalmer of Anubis," 77-78, 80, 83
wdpw, "butler," 81, 37I-372, 374-375, 38I-383
wdpw bnty wr, "butler of the great hall," 37I-372, 382
$f_{f s w,}$
fsw, "cook," 375, 382

## m

mitrt, "miteret," $30,80,157,162$
$m r(y)=f$, "whom he loves," 242
mry $n b=f$, "beloved of his lord," $76-78,80,83,158,162$ mry [Sk]r, "beloved of [So]kar," 367
mryt=f, "beloved of him," 83, I24
$m r r n b=f$, "whom his lord loves," 73, 76-78, 80, 83, 158, 162
$m d w$ rbyt, "staff of the subjects," 314,318
$m d w k 3-h \underline{d}$, "herdsman of the white bull," 313, 316, 318
n
nb imsh, "possessor of veneration," "revered one," 73, 76, 79, 81, 83, 155, 260, 317, 379, 381-382
$n b$ imsh $b r n b=f$, "possessor of veneration/revered before his lord," 155
nb im3h (br ntr $\mathrm{C}_{3}$ ), "possessor of veneration/revered before/under the great god," 73, 76, 81, 317, 379, 382
nbt imshb br ntr ${ }^{3}$, "possessor of veneration/revered before/under the great god," 83, 121-124
nfr, "recruit," $51,73,77,120-123,155-158,160,162,240,242,282,313,315-317$, 319, 369-370, 372-373, 379-383
[nswt-bit], ["king of Upper and Lower Egypt"], 367
$r_{3} P n b$, "mouth of all the people of $\mathrm{Pe}, " 78,83$
${ }^{3}$ p pyw nbw, "mouth of all the people of Pe, " $378,380,382$
$r$
rb nswt, "royal acquaintance," $30,73,76-78,80,83,152-153,156-158,162,314$, 318-319, 378, 380, 382
rbbt nswt, "royal acquaintance," $158,162,313-314,316,319,38 \mathrm{I}-382$ rth, "baker," $122,159,374-375,382-383$

## b

ham-ntr nb imt, "priest of the lord of Buto," 380,382 hm-ntr Nt, "priestess of Neith," 318
hm( $t$ )-ntr Nt mbtt inbw, "priestess of Neith, north of the wall," 52,83
hm-ntr Hwt-hr, "priestess of Hathor," 83, 122, 124, 318
ḅ-ntr $\mathrm{H} H w f w$, "priest of Khufu," 78, 83, 122, 124
hm-ntr Sbk Šdt, "priest of Sobek of Crocodilopolis," 312, 318
ham-k3, "funerary priest," 83, II7, I22-124, 157-158, 162, 312-314, 318-319, 37I-372, 375, 378-383, 42I
hmt=f, "his wife," 316, 318
hry wdb hwt-nh, "chief of reversion offerings of the house of life," 380,382 bry sstz, "master of secrets," $155,312,378,380,382$
hry-ssts $n$ bist $n b$, "master of secrets of every foreign land," "318
hry ssts ( $n$ ) pr dwst, "master of secrets of the robing room," 382
bry-sstıs nswt $m$ swt $n b$, "keeper of the secrets of the king in every place," 158 , 162
hry tp, "chief," 210, 216, 380, 382
bry $t p$ Nbb, "overlord of el-Kab," 210, 380, 382
bhks b3t, "ruler of Bat," 76, 79, 367, 380, 382
h.k. $\mathrm{h}_{\mathrm{l}} \mathrm{w}$, "chief of the estate," 77-78, 80-83, 120, 156-157, 159, 162, 314-316, 37I-382
b
brp ist, "controller of the crew," $38 \mathrm{I}, 383$
$b r p$ ' $w$, "controller of interpreters," $162,312,316,318$
$\operatorname{brp}{ }^{c} p r(w) n f r(w)$, "controller of regiments of recruits," $155-157,162$
brp $c h$, "controller of the palace," $50,75,77-83,122-123,155-159,162,2 \mathrm{II}, 213$, 260, 282, 309, 312, 316-318, 371, 375-377, 379-383, 415, 42 I
hrp mrwy nswt, "controller of the two banks of the king," 318
brp hists km , "controller of the black jar," 380,382
brp sh, "controller of the kitchen," 158-159, 371, 375, 382-383
brp šndwt, "controller of kilts," 375, 379-382
brp tmistyw, "controller of bowcase bearers," 316,318
btmty, "seal-bearer," 73-83, 121, 124, 375, 382

## Mastabas of Nucleus Cemetery g 2 Ioo

btmty ntr wiz, "seal-bearer of the god of the barque," 75, 78-79, 81-83, 121 I24
btmty ntr $b_{3} n t r w$, "seal-bearer of the god of the (ship) 'Ba-netjeru'," 73-80, 82-83, 121
btmty ntr br ntrw, "seal-bearer of the god of (the ships) 'Ba/ab-netjeru'," 73-80, 82-83, I2I
btmty $n t r \underline{h} \dagger w$, "seal-bearer of the god of the fleet," $75,78-79,8 \mathrm{I}-83$, I2I, I24 btmty ntr nb rbyt, "seal-bearer of the god of the (ship) 'Neb-rekhyt,'" 73-75, 83
btmty ntr dws tswy, "seal-bearer of the god of the (ship) 'Duwa-tawy'," 73, 79-80, 83

## b

bry-hb, "lector priest," 76-77, 80, 83, 216, 367, 380, 382
bury-[hbb]..., "lector [priest]...," 76-77, 80, 83, 216, 367, 380, 382 bry-hbb [...], "lector priest [...]," 76-77, 80, 83, 216, 367, 380, 382 bhkrt nswt, "royal ornamented," 83, 120-124, 158,318

## $s$

$s 3=f$, "his son," $73-75,83,313,318,378,380,382$
$s 3=f n \underline{b} t=f$, "his son of his body," 73, 83, 378,380, 382
$s 3=f$ smsw, "his eldest son,", $74,83,313$
$s 3 \mathrm{mbtt}$, "son of the north," 380,382
s3 nswt, "king's son," 31, 73-80, 82-83, 121, 122, 124, 242, 312-313, 318, 372, 375, 378-379, 381-382
ss nswt $n \underline{b} t=f$, "king's son of his body," 73-80, 82-83, 242, 375, 379, 382 ssb nht brw, "tally man of the judiciary," 157,162 $s 3 t=f$, "his daughter," 74,83 , 121, 124, 317-318, 380, 382 $s s t=f n \underline{b} t=f$, "his daughter of his body," 380,382
sbsty nswt, "royal instructor," 32, 240, 242
sm, "sem priest," 372-373, 375, 379-382
smз H r, "stolist of Horus," 375, 379-382
smr, "companion," 3I, 74-80, 82-83, I21, I24, 242, 312, 314, 316-318, 378-382 smr wrty, "sole companion," 3I, 79, 83, I21, I24, 242, 312, 316-318, 378-382 smsw is m pr.wy, "elder of the chamber in the double administrations," 318 snwt(y) Inpw, "who belongs to the snwt-utensil of Anubis," 76-80, 83 shd br ntrw, "inspector of the (ships) 'Might of the gods'," 83 , I21, I24 sš, "scribe," 75,78 , 152, 155-158, 160, 162, 210, 213, 312, 318-319, 368, 378-380, 382-383
sš ‘nswt, "overseer of royal document scribes," 155, 158, 162, 312, 318 sš md 3 t, "archive scribe," 378, 383
$s s{ }^{2} p r-3$, "scribe of the palace," $156,158,162,312,368,379-380,382$ sš pr md 3 t, "library scribe," 312, 368, 379-380, 382
ss pr hry-wdb, "scribe of the house of reversion offerings," 156 , 162 sšm, "butcher," $158,162,374,38 \mathrm{I}-382$

## s

šmsw, "retainer," 309, 318-319
[...] bry-[h]b, "[...] lector [priest]," 76-77, 80, 83, 216, 367, 380, 382

## V. EGYPTIAN WORDS AND PHRASES

This index is not all inclusive, but lists merely those words discussed or cited in the text or footnotes. Most common words and titles are omitted, as are individual entries from the various offering lists.

```
i
irs b3 s%m!, "panther/leopard skin mantle," 214, 370
if3 msst, "mantle of wild cow skin," 214, 370
(i) }\mp@subsup{3}{3}{}(ww), "interpreters," 312
intt, "weaver," 79
iryt, "weaver," 79
irp mbw, "Lower Egyptian wine," 379
it Šm'w, "Upper Egyptian barley," 2I4
idw, "page," 379
idmy "idemy linen," 214, 282
\Gamma
(i) 3(ww), "interpreters," 312
(wy), "production," 79
bw rr, "repast," 159
w
w3g, "wag-festival," 77
wp rnpt, "new year's festival" (instead of wpt rnpt), 12O
wrs, "headrest," 2I4
wt, "wt-priest," 371
b
br ntrw, "Ba/ab-netjeru" ship, or possibly "horn of the gods," 74
bš, "malt," I60
p
pr-bd\underline{d}"treasury," 155
pr d}d\mathrm{ t, "funerary estate," 371
prt-brw, "invocation offerings," 79
m
ms't feather on Anubis jackal, 79
mnht"cloth," 215, 283
```

mh, "cubit," 119
msit, "mesit-geese," 8I (instead of $s t$ ) mddint, "half-month festival," 73. I20

```
n
nb, "lord," 76-77
nbt imshb brr, "possessor (fem.) of veneration under...," I2I
nfr "recruit," 379
nds, "junior," 157
r
rnpt zp, "regnal year," 213, 24I
h
rb nswt, misspelled hr nswt, "royal acquaintance," I53
b
h, type of linen width, 283
hry sstt, "master of secrets," 380
htp-nswt, "royal offering," 159
bts(w)t, "weavers," 79
bts, "hetjes-bread," 159
b
b3st, "foreign land," 312, 318
brp ch, "controller of the palace," }7
brp mrwy nswt, "controller of the two canals of the king," 317-318
brp sh, "controller of the dining hall(?)," I57
brp tmstyw, "conroller of bowcase bearers," 3I8
bt nb(t) nfr(t)rnpw(t) nb(t), "everything good and all kinds of vegetables,"
370
btmty "sealed valuables, treasure," 74
btmty, "seal-bearer," 73
s
smdt, "half-month festival," 73, I2O
snwty Inpw, "he of the snt-utensil," }7
snmt, "to supply," 8r
szf, "sezef width," I59, 214, 215
sst," "secret," 380
Skr, "Sokar" (spelled Srk), I2O
st-(n)-bt, "bed," 2I4
sdlzwty, "seal-bearer," }7
s
šnw, "shenu-collar," 317
ssp 动 rmtw, "list of the census people," 378
d
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West of the Great Pyramid at Giza, the Fourth Dynasty pharaoh Khufu laid out scores of mastaba tombs for the elite members of ancient Egyptian society. Specific clusters of tombs seem to form architectural and archaeological units, prompting the modern division of the Giza Necropolis into discrete "nucleus cemeteries." This book interprets the complete archaeological record of the mastabas of Cemetery g 2100, one of the six nucleus cemeteries at Giza. As a key to understanding Old Kingdom mortuary development at Giza, it explores the distinguishing features of such a grouping of tombs and tomb owners: relative chronology and individual artistic styles; common administrative titles; possible familial connections to the king; and the relationship of the earlier, major mastabas to the subsequent, minor burials surrounding them.

More than a century has elapsed since the fourteen major mastabas and about sixty-two smaller subsidiary tombs of Cemetery G 2100 were first excavated by the Harvard University-Boston Museum of Fine Arts Expedition at Giza under George A. Reisner (1867-1942). In addition, the southern edge of Cemetery g 2100 fell within the excavation concession granted to the German/Austrian expedition under Georg Steindorff and then Hermann Junker, on behalf of institutions in Leipzig, Hildesheim, and Vienna. The author has undertaken a re-examination of this cemetery. The results incorporate excavations between I845 and 1940, and include objects from museums in Berlin, Birmingham, Boston, Cairo, Copenhagen, Hildesheim, Paris, Philadelphia, Rome, and Vienna. Art-historical treasures, significant artifacts, and unique architectural elements unattested anywhere else at Giza are set in their proper archaeological context, often for the first time. Examples include the Boston "reserve head" of Nefer (mastaba G 2iIo); Nefer's chapel reliefs spread today across three continents; one of the best-preserved and oldest female mummies (G 2220); and two complete chapels removed to Europe-Merib in Berlin (G $2100-\mathrm{I}$ ), and Kaninisut I in Vienna (G 2155 ). The chapel of Merib, long known only from C.R. Lepsius's illustrations from the 1840s, is represented in new color photography prepared especially for this volume

The book contains historical and interpretive remarks, followed by individual chapters on the major mastabas. Several detailed 3D computer illustrations reconstruct unique views of the tombs from above and below ground. Part 2 of Giza Mastabas 8 will describe the later, subsidiary structures in Cemetery G 2100. Both volumes enhance the much larger corpus of information available, in undigested form, on the Museum of Fine Arts's Giza Archives Project Web site (www.gizapyramids .org). The work should prove useful to those investigating Old Kingdom history and chronology, mortuary architecture, ceramic and faunal remains, inscriptional material, and art-historical style.

## The Author

Peter Der Manuelian received a BA from Harvard University in 198I, and a Ph.D. in Egyptology from the University of Chicago in 1990. Joining the curatorial staff of the Museum of Fine Arts, Boston, in 1987, he has been Giza Archives Director there since 2000. The Giza Archives Project serves as a comprehensive online resource for all archaeological research at the Pyramids (www.gizapyramids.org). He is the author of Studies in the Reign of Amenophis If; Living in the Past: Studies in Archaism of the Egyptian Twenty-sixth Dynasty; and Slab Stelae of the Giza Necropolis, as well as several Egyptological children's books. Since 2000 he has also taught Egyptology at Tufts University.

Front jacket illustration: MFA 06.1886, reserve head of Nefer from G 2110 A (see Chapter 6, figs. 6.39, 6.90-6.100). Museum of Fine Arts, sc62136

Back jacket illustration: The Western Cemetery at Giza, looking northwest from the top of the Great Pyramid, and highlighting the mastabas of Cemetery g 2100. November 16, 1993. Peter Der Manuelian, PDM_1993.130.23

## The Giza Mastabas Series

Edited by Peter Der Manuelian and William Kelly Simpson

I.n 1902 the Egyptian Antiquities Service granted permits for scientific excavations at the royal pyramids and private mastaba tombs of Giza, arguably the world's most famous archaeological site. The American team, under archaeologist, Museum of Fine Arts curator, and Harvard professor George Andrew Reisner (1867-1942), became the Joint Egyptian Expedition of Harvard University and the Museum of Fine Arts, Boston, in 1905, and continued almost uninterrupted until 1946. Despite the publication of his monumental History of the Giza Necropolis III, Reisner was unable to begin the tomb-by-tomb publication series he originally envisioned. This task was initiated by William Kelly Simpson in the early 1970 , in the form of the Giza Mastabas Series. In coordination with the Giza Archives Project Web site (www.gizapyramids.org) launched in 2005, the goal of the series is to augment and complete the publication of the HU-MFA Expedition's excavations at Giza, fully documenting the mastaba tombs with descriptive text, hieroglyphic translations, facsimile line drawings, plans, sections, and photographs.

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Giza Mastabas 3: William Kelly Simpson, The Mastabas of Kawab, Khafkhufu I and II, G 71I0-20, 7130-40, and 7150 and Subsidiary Mastabas of Street 7100. Boston, 1978

Giza Mastabas 2: William Kelly Simpson, The Mastabas of Qar and Idu, G 71017102. Boston, 1976

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[^0]:    io The west wall of Senenuka's chapel was removed to the Museum of Fine Arts, Boston (MFA 07.1000 + 07.100I + 07.1003 + 07.1004 + 07.1005).

[^1]:    iI Contrary to Reisner's statement, Merib was not a son of Khufu; see K.-H. Priese, Die Opferkammer des Merib, p. 27; Jánosi, Giza in der 4. Dynastie, p. 123 with n. 706.

[^2]:    24 The 1937 Harvard Directory lists: West, Louis Coulton [g. II-I2, A.M. Sc.].

[^3]:    21 Reisner/Fisher, $A S A E 1913$ article with this explanation. For Reisner's description of the topography of Cemetery g 2100, see his GNI, Appendix C, p. 417.
    22 Reisner, GN I, p. 62.

[^4]:    28 See fig. 7.19; Reisner, $G N_{\text {I }}$, p. 427, fig. 246; Manuelian, Slab Stelae, p. 79, figs. 106-107.

[^5]:    37 Junker, Gîza ı, pp. ıo-14; Gîza 2, p. 136.
    38 Jánosi, Giza in der 4. Dynastie, p. 153. It should be noted, however, that this tomb lacks the T-shaped portcullis groove found in the burial shafts of all five Khufuera mastabas in the earlier, western half of Cemetery G 2100.

[^6]:    53 Reisner, $G N$ i, p. 67.
    54 Reisner, $G N$ i, pp. 178-8o.
    55 Another example of roofing stones may be seen on the mastabas of Kasewedja, G 5230 (Babaef); PM III, pp. 155-56; and Reisner, $G N$ I, pp. 175-76.

[^7]:    59 Reisner，$G N \mathrm{I}$ ，pp．417－18．
    60 Jánosi，Giza in der 4．Dynastie，p．154．
    61 Reisner，$G N$ I，p． 40.
    62 Reisner，$G N_{\mathrm{I}}$ ，p．i1 ．

[^8]:    80 These tombs all show two false doors. The exception, G 2100 (Nefer), displays a single false door, atypically placed at the north end of the west wall, and accompanied by Strudwick's third decorative layout scheme: the deceased seated at left and facing right (north).
    8I Cf. Strudwick, Administration, p. 50, who cites the tomb of Senedjemib Inti (G 2370) as one of the first at Giza to show the "Prunkscheintür."

[^9]:    97 See also Junker，Gîza 2，fig．I before p． 97.
    98 See Jánosi，Giza in der 4．Dynastie，pp．45I－52，tables Hi－H3．
    99 What looks like a canopic niche in the southeast corner of G 2130 A is apparently just the absence of a floor paving stone；see HU－MFA Expedition Photograph A7029．Reisner＇s general discussion on canopic pits is in GNI，pp．155－62；see also Junker，Gîza I，pp．49－54；and K．Martin，＂Kanopen II，＂in L̈̈ 3，cols．316－ 19，who lists the tomb of Meresankh III（G 7530－sub）as the earliest to preserve canopic jars．Reisner notes that twelve of his initial fifteen core mastabas of the Western Cemetery contained canopic pits in their burial chambers，averaging dimensions of $50-60 \times 50-60 \mathrm{~cm}$ ，with a depth of about $50-55 \mathrm{~cm}$ ．
    For a clear view of a canopic niche slab cover，see G 4250 （＝IIs）：Junker，Gîza 2, pl．9d．See also Reisner，$G N$ I，pp．162－63．
    IoI Reisner，$G N$ I，p．422；Junker，Gîza 2，p．iıo．

[^10]:    ı18 For comments on individuals holding scribal positions, see Piacentini, Les scribes, pp. 117-19.

[^11]:    36 Junker, Gîza 2, p. Io9.
    37 Ibid., p. iro: "Am Schädel beobachteten wir noch Strähnen gewellten Haares. Neben den Skeletteilen lagen verstreut Tierknochen von den als Beigaben niedergelegten Opferstücken, wie Schenkel und Schulterblatt."
    38 For shaft photographs possibly localized to G 2Ioo-II, see the following Vienna images on the Giza Archives Project Web site (www.gizapyramids.org): AEOS_I_sI82 (shaft S 28), AEOS_I_SI89 (shaft S 29), AEOS_I_SI9I (shaft 7, between mastabas S $4 / \mathrm{I} 3$ and $\mathrm{S} 5 / \mathrm{I} 8$ ), AEOS_I_5214 ( $\mathrm{S}_{\mathrm{I}} 4$ in mastabas 4/13), AEOS_I_5245 (shaft S 3), AEOS_I_532I (shaft S 27), and AEOS_I_5365 (possibly in the vicinity of G 2 IOO-II).

[^12]:    21 Ibid.
    22 Cf. Manuelian, Slab Stelae, stelae I, 6, 9, and I3, and cf. J. Sainte Fare Garnot's description of Nefer's tomb in "Etudes sur la nécropole de Gîza sous la IVe Dynastie," RdE 9 (1952), pp. 73-74, and 78, fig. 7.

[^13]:    43 Jones, Index of Ancient Egyptian Titles 1, p. 242, no. 884.
    ÆIN 937; h. 73 cm; w. 158 cm. Jørgensen, Catalogue. Egypt I, cat. Io, pp. 46-47 (with bibliography); acquired in 1900 in Cairo; Mogenson, $L a$ Glyptothèque Ny Carlsberg, pl. 94, 673; Reisner, GN I, fig. 242, pl. 31a-b; El-Metwally, Entwicklung der Grabdekoration, pp. 157-6I, figs. 59, 73, 79, 82, IO3, IIO.
    45 As drawn in Reisner, $G N_{\mathrm{I}}$, fig. 242.

[^14]:    77 Bates, "Report of the Department of Egyptian Art," in Museum of Fine Arts, Boston Thirty-first Annual Report for the Year 1906, pp. 75-76, no. 7.

[^15]:    37 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; Reisner and Smith, $G N_{2}$ 2, p. 88, fig. 13 r.
    38 Reisner, $G N_{\text {I }}$, p. 426, fig. 245; p. 429; Reisner and Smith, $G N_{2}$, p. 71.
    39 Reisner, $G N_{\text {I }}$, p. 429; Reisner and Smith, $G N_{2}$, p. 69.
    40 Reisner, $G N$ I, p. 426, fig. 245.
    4I I am very grateful to Richard Newman, Head of Scientific Research, Conservation and Collections Management, Museum of Fine Arts, Boston, for the analysis (made in July, 2007) of samples described above.
    42 For a reconstruction of the two construction phases of the chapel area, see Jánosi, Giza in der 4. Dynastie, p. 178, fig. 36.

[^16]:    79 On the literacy of iconoclastic agents in Egypt, see Manuelian, "Semi-literacy in Ancient Egypt: Some examples from the Amarna Period," in Gold of Praise Studies on Ancient Egypt in Honor of Edward F. Wente, pp. 285-98.
    8o Cf. Manuelian, Slab Stelae, p. ı18, fig. 176.
    8i On furniture lists, with specific reference to this stela, see Brovarski, "Inventory Offering Lists and the Nomenclature for Boxes and Chests of the Old Kingdom," in Gold of Praise: Studies on Ancient Egypt in Honor of Edward F. Wente, pp. 27-53, and idem, "An Inventory List from 'Covington's Tomb' and Nomenclature for Furniture in the Old Kingdom," in Studies in Honor of William Kelly Simpson I, pp. II7-55.
    82 Reisner, $G N$ I, p. 428.
    83 Manuelian, Slab Stelae, pp. I08-III, pls. 29-30.

[^17]:    Reisner diary, March 22, 1912, p. 72.
    8 Wheeler diary, December 29, 1932, pp. 1192-93.

[^18]:    14 Reisner, $G N$ I, p. 435; Reisner and Smith, $G N 2$, p. 8i.
    I5 Reisner, $G N_{\text {I }}$, p. 435; Reisner and Smith, $G N_{2}$, p. 81.
    I6 Reisner, $G N_{\text {I }}$, p. 435; fig. 253; Reisner and Smith, $G N 2$, p. 70. Reisner, $G N_{\text {I }}$, p. 435; Reisner and Smith, $G N$ 2, p. 70. Reisner, $G N$ I, p. 435; Reisner and Smith, $G N$ 2, p. 7 I . Reisner, $G N_{\text {I }}$, p. 435; Reisner and Smith, $G N$ 2, p. 7 I .
    Reisner, $G N_{\text {I }}$, p. 435; fig. 253; Reisner and Smith, $G N 2$, p. 7I.
    Reisner, $G N$ I, p. 435; Reisner and Smith, $G N$ 2, p. 88.

[^19]:    Reisner, $G N \mathrm{I}$, p. 435, fig. 253; Reisner and Smith, $G N 2$, p. 70.
    
    Reisner, $G N_{\mathrm{I}}$, p. 435 ; Reisner and Smith, $G N 2$, p. 70.
    Reisner, $G N_{\text {I }}$, p. 435 ; Reisner and Smith, $G N 2$, p. 70.
    Reisner, $G N_{\text {I }}$, p. 145 .

[^20]:    I See Reisner, GNi, pp. 435-36; Junker, Gîza i, pp. 227-3i; idem, Gîza 6, p. 84, fig. 26.

[^21]:    Junker, Gîza i, p. 23I, n. 2.
    Junker, Gîza 6, pp. 93-94, with fig. 26.
    Io Compare PM III, p. 75: middle of late Dynasty 4; Jánosi, Giza in der 4. Dynastie, p. 153: Khufu or shortly thereafter; Manuelian, Slab Stelae, p. 85: Khufu.

    II Jánosi, Giza in der 4. Dynastie, pp. 15I-53; cf. also Reisner, GNI, p. II2.

[^22]:    io Fisher is referring to shafts $\mathrm{U}, \mathrm{v}, \mathrm{A}$, south of the north niche, and s and T north of it; February 14, 1912, p. 20
    iI Wheeler diary, January 9, 1933, p. II98.
    I2 Wheeler diary, January I2, 1933, p. I2OI

[^23]:    86 Reisner, $G N_{\text {I }}$, p. 439, fig. 259; pl. 40b.
    87 H.G. Fischer discusses fly whisks and bastinados terminating in human hands in "Varia Aegyptiaca," JARCE 2 (1963), pp. 32-33, fig. $8 \mathrm{~g}-\mathrm{h}$, and "scepterlike batons" in "Notes on Sticks and Staves in Ancient Egypt," MMJI3 (1979) $=$ Ancient Egypt in the Metropolitan Museum Journal, Supplement, pp. 1617; see also Sourdive, La Main, p. 138, top. For additional representations of fly whisks, see Moussa and Altenmüller, Nefer and Ka-hay, pl. 24a; K. Weeks, Mastabas of Cemetery G6000, p. 38, fig. 32 (tomb of Iymery, G 6020); and the tomb of Khuenre (Giza MQ I), HU-MFA Expedition photographs B 2046 and B 2058 (east wall). In the Eastern Cemetery, a rare representation of a humanhanded staff is held by a female offering bearer on the north wall of the chapel of G 7530-7540: Dunham and Simpson, Mersyankh, pl. 13a; L. Flentye, "The Mastaba of Meresankh III (G7530/7540) in the Eastern Cemetery at Giza: An Archaeological and Art Historical Analysis," BEM 3 (2006), pp. 73, 79 fig. 4.
    88 For the table offerings as dating criterion, cf. Cherpion, Mastabas et hypogées, pp. 49-50, critère 22, "table garnie de victuailles diverses" (Khafre-Niuserre).

[^24]:    89 Reisner, $G N$ i, p. 438, fig. 258.
    90 For this military title see Fischer, "A Scribe of the Army in a Saqqara Mastaba of the Early Fifth Dynasty," JNES I8 (1959), pp. 267-68 (22), and Junker, Gîza 4, pp. 7I-72, title 9 of K3-m-nhb; Jones, Index of Ancient Egyptian Titles 2, pp. 75354, nos. 2745-2747.
    91 Discussed by H.G. Fischer, Varia, p. 45, fig. II,

[^25]:    6 Manuelian, Slab Stelae, pp. 88-91, pls. 21-22 (stela ir); Junker, Gîza I, pp. 58-59, 230, fig. 53c, pl. 29b; Hölzl, Reliefs und Inschriftensteine des Alten Reiches 3, CAA 22 (in preparation); Brovarski, in Studies in Honor of William Kelly Simpson 1, p. 128 (item no. 13, incorrectly citing Junker, Gîza I, pl. 37b instead of pl. 29b); idem, in Gold of Praise: Studies on Ancient Egypt in Honor of Edward F. Wente, esp. p. 2, n. 2 (item no. I3, incorrectly assigned to mastaba VIInn $=\mathrm{G} 4770$, and incorrectly citing Junker, Gîza I , pl. 37b instead of pl. 29b), pp. 32-39, 41 (table 4.I, item no. 13).
    7 See Junker, Gîza 2, p. 140, with fig. I4.
    8 These minor mastabas, excavated by Junker, are briefly described in Part II.

[^26]:    64 Scribal error has placed the $\triangle t$ after the preposition $\propto r$ ．
    65 Note the reversal of the $k$ basket．
    66 Ranke，PNi，p．72．27．
    67 Junker，Gîza 2，p．156－58，figs．20，22；Hölzl，Reliefs und Inschriftensteine des Alten Reiches 2，pp．36－43，69－70， 79.

[^27]:    68 Note the reversal of the fo ws sign
    69 Note the reversal of the $k$ sign．
    70 Note the reversal of the $\square h$ sign．

[^28]:    92 This is Kaninisut II, the owner of G 2156 (see Part II for his tomb).
    93 Literally, "The document; viewing."
    94 Another Wehemka (ss pr md $3 t$ ) appears on the west wall, south of the south false door, and a $s s{ }_{s} W h m-k_{3}$ is known from the south entrance thickness of the nearby

[^29]:    3 Reisner diary, March 27, 1912, pp. 74-75

[^30]:    24 Petrie, Mackay, and Wainwright, Meydum and Memphis 3 S. 18-19.
    25 Lucas, Ancient Egyptian Materials and Industries, S. 27I.
    26 Derry, $A S A E$ 4I (1942), S. 243-46.
    Ibid.
    Ibid., S. 242.

