

Bernini Sculpting in Clay





Bernini Sculpting in Clay

C. D. Dickerson III, Anthony Sigel, and Ian Wardropper

With contributions by

Andrea Bacchi, Tomaso Montanari, and Steven F. Ostrow



The Metropolitan Museum of Art, New York

Distributed by Yale University Press, New Haven and London

For Elyse, Jennifer, and Sarah

This catalogue is published in conjunction with "Bernini: Sculpting in Clay" on view at The Metropolitan Museum of Art, New York, from October 3, 2012, to January 6, 2013, and at the Kimbell Art Museum, Fort Worth, from February 3 to April 14, 2013.

The exhibition and catalogue are made possible by the Iris & B. Gerald Cantor Foundation.

The exhibition was organized by The Metropolitan Museum of Art, New York, and the Kimbell Art Museum, Fort Worth.

Published by The Metropolitan Museum of Art, New York Mark Polizzotti, Publisher and Editor in Chief Gwen Roginsky, Associate Publisher and General Manager of Publications Peter Antony, Chief Production Manager Michael Sittenfeld, Managing Editor Robert Weisberg, Senior Project Manager

Edited by Nancy Grubb
Designed by Steven Schoenfelder
Production by Christopher Zichello
Bibliography by Penny Jones
Image acquisitions and permissions by Crystal Dombrow
Translations from the Italian by A. Lawrence Jenkens

Typeset in Absara and Scala Sans
Printed on 135 gsm Galaxi Supermat
Separations by Professional Graphics, Inc., Rockford, Illinois
Printed and bound by Conti Tipocolor S.p.A., Florence, Italy

Jacket illustration: Model for the Fountain of the Moor (cat. 13, detail)
Frontispiece: Kneeling Angel (cat. 52, detail)
Opposite: Model for the Equestrian Statue of Louis XIV (cat. 24, detail)
Pages 108–9: Half-Kneeling Angel (cat. 49, detail)

The Metropolitan Museum of Art endeavors to respect copyright in a manner consistent with its nonprofit educational mission. If you believe any material has been included in this publication improperly, please contact the Editorial Department at The Metropolitan Museum of Art. Photographs of works in the Metropolitan Museum's collection are by The Photograph Studio, The Metropolitan Museum of Art. Additional photography credits appear

Copyright © 2012 by The Metropolitan Museum of Art, New York

Second printing, 2013

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the publishers.

The Metropolitan Museum of Art 1000 Fifth Avenue New York, New York 10028 metmuseum.org

Distributed by Yale University Press, New Haven and London yalebooks.com/art yalebooks.co.uk

Cataloging-in-Publication Data is available from the Library of Congress. ISBN 978-1-58839-472-9 (The Metropolitan Museum of Art) ISBN 978-0-300-18500-3 (Yale University Press)





Contents

Directors' Foreword vi Sponsor's Statement viii Lenders to the Exhibition ix Acknowledgments x

Introduction xiv C. D. Dickerson III

Bernini at the Beginning: The Formation of a Master Modeler 3 C. D. Dickerson III

Sketching on Paper and in Clay: Bernini's Use of Preparatory Drawings and Models 25 lan Wardropper

The Role of Terracotta Models in Bernini's Workshop 47 Andrea Bacchi

Creating an Eye for Models: The Role of Bernini 63 Tomaso Montanari

"The Fire of Art"?: A Historiography of Bernini's *Bozzetti* 75 Steven F. Ostrow

Visual Glossary 87 Anthony Sigel

Catalogue 109
C. D. Dickerson III
Anthony Sigel

- I. Working for the Barberini 111
- II. Fountains 143
- III. Chapels and Saints 189
- IV. Equestrian Monuments 217
- V. Working for the Chigi 233
- VI. The Ponte Sant'Angelo 285
- VII. Altar of the Blessed Sacrament 343

Checklist of Drawings 365

Ian Wardropper

Notes 372 Bibliography 386 Index 407 Photography Credits 416

Directors' Foreword

The great Baroque sculptor Gian Lorenzo Bernini filled the city of Rome with large marble sculptures lining pilgrimage routes to Saint Peter's and with dramatic fountains in civic spaces. Dazzled by the artist's energy and creativity, modern visitors to Italy may wonder how Bernini conceived such complex and spirited works. The answer can be found in the terracotta models and drawings he produced in the process of developing ideas for his large-scale works in marble and bronze. While the lifesize sculptures required teams of assistants to complete, the small clay models intimately reveal Bernini's own skill and personality. This is the first exhibition attempting to assemble all of the terracottas accepted as by his hand. Because of the large number of sculptors in his workshop, ascertaining which works were made by the master and which by assistants can be difficult; in addition, producing his sculptures required various types of models serving different purposes, as this exhibition attests.

A team of curators and a conservator collaborated in examining and assessing the works in the exhibition: Ian Wardropper, formerly Iris and B. Gerald Cantor Chairman of European Sculpture and Decorative Arts at The Metropolitan Museum of Art, now Director of The Frick Collection; C. D. Dickerson III, Curator of European Art at the Kimbell Art Museum; and Anthony Sigel, Conservator of Objects and Sculpture at the Straus Center for Conservation and Technical Studies, Harvard Art Museums. Mr. Dickerson conceived the notion for the exhibition, while Mr. Sigel's long-term technical research on these terracottas was invaluable. At the Metropolitan Museum, they were ably assisted by Paola D'Agostino, Senior Research Associate, and had the full support of Luke Syson, the new Iris and B. Gerald Cantor Curator in Charge of European Sculpture and Decorative Arts. Combining art historical with technical studies, the authors' findings are presented in this catalogue. Together with essays by distinguished Bernini scholars, the entries on each of the fifty-two models constitute an important resource for this field.

We join the exhibition's curators in thanking all the lenders who were willing to send their fragile terracottas to this exhibition. It is our hope that new information generated by the studies for the show will be useful to each contributing institution as well as to all interested in the subject. Particular thanks must be made to Director Thomas W. Lentz and Curator Stephan Wolohojian of the Harvard Art Museums. The museum has never lent its group of fifteen Berninis since

their acquisition by the Fogg Art Museum in 1937. Indeed, it was the museum's willingness to lend—at a time when its premises are closed in preparation for a new building—that made this exhibition feasible. The State Hermitage Museum, in the person of Director Mikhail Piotrovski and Chief Curator Sergei Androsov, has been generous in considering the loan of a large group of models, provided that the temporary halt in loans between Russia and the United States is lifted in time. Finally, we are pleased that the important holdings of Bernini drawings at the Museum der Bildenden Künste in Leipzig and The Royal Collection, Windsor Castle, are amply represented. We are grateful to these and all the other institutions for contributing important works of art to this exhibition.

The Metropolitan Museum expresses its warmest appreciation to Iris Cantor and to the Iris & B. Gerald Cantor Foundation for their generous support of the exhibition and publication. As it has often done in the past, the Foundation is bringing art of the highest quality and interest to a large audience.

Thomas P. Campbell

Director, The Metropolitan Museum of Art

Eric M. Lee

Director, Kimbell Art Museum

Sponsor's Statement

How do great artists do it? What is their initial inspiration? Where do they find their points of view? Those of us who are passionate about art are compelled to seek answers to these questions. How lucky we are when artists leave us eloquent information. In the small clay sketches and drawings created by the masterful Italian Baroque sculptor Gian Lorenzo Bernini, we can find answers. The works are immediate, they bear the marks of his fingers, and they are filled with insight into his aesthetic vision.

The Iris & B. Gerald Cantor Foundation is known for having created the largest and most comprehensive private collection of Rodin sculpture. So therefore when we learned that The Metropolitan Museum of Art was planning this unprecedented exhibition of Bernini's work, we eagerly stepped forward with our support. We congratulate all who have contributed to this show and to this scholarly catalogue. We are proud to play a role in sharing it with the public.

Iris Cantor

President and Chairman

Iris & B. Gerald Cantor Foundation

Lenders to the Exhibition

France

Paris, Musée du Louvre

Germany

Berlin, Staatliche Museen zu Berlin, Bode-Museum Düsseldorf, Stiftung Museum Kunstpalast Leipzig, Museum der Bildenden Künste

Italy

Bologna, Accademia di Belle Arti
Florence, Gabinetto Disegni e Stampe degli Uffizi
Florence, Museo Horne
Milan, Gerolamo and Roberta Etro
Rome, Accademia Nazionale di San Luca
Rome, Istituto Nazionale per la Grafica
Rome, Museo di Roma
Rome, Museo Nazionale del Palazzo di Venezia
Siena, Banca Monte dei Paschi di Siena, Collezione Chigi Saracini
Siena, Istituto Statale d'Arte "Duccio di Buoninsegna"
Venice, Galleria Giorgio Franchetti alla Ca' d'Oro

Russia

Saint Petersburg, The State Hermitage Museum

Spain

Madrid, Real Academia de Bellas Artes de San Fernando

United Kingdom

London, Victoria and Albert Museum Oxford, Ashmolean Museum of Art and Archaeology Windsor Castle, The Royal Collection

United States

Brentwood, Tennessee, Private collection Cambridge, Harvard Art Museums Detroit, Detroit Institute of Arts Fort Worth, Kimbell Art Museum Los Angeles, The J. Paul Getty Museum New York, The Metropolitan Museum of Art

Vatican City

Musei Vaticani

Acknowledgments

"Bernini: Sculpting in Clay" grew out of conversations between C. D. Dickerson, Anthony Sigel, Malcolm Warner, and Stephan Wolohojian on October 12, 2007. The occasion was the unveiling at the Harvard Art Museums of the Kimbell Art Museum's newly restored *Model for the Fountain of the Moor* (cat. 13), which had been under the care of Sigel, Conservator of Objects and Sculpture at the Straus Center for Conservation and Technical Studies at Harvard, for the better part of a year. Seeing the *Moor* exhibited alongside the fifteen Bernini terracottas at Harvard inspired the question of whether it might be possible to present an exhibition of all the Bernini models. Wolohojian, the Landon and Lavinia Clay Curator and Head, Division of European and American Art at Harvard, indicated that the models at Harvard might be available for loan, given the imminent closing of the museum for renovation. Warner, then acting director of the Kimbell, encouraged Dickerson, Curator of European Art, to determine the feasibility of securing other loans.

In the fall of 2009 the project was brought to the attention of Ian Wardropper—then Iris and B. Gerald Cantor Chairman, Department of European Sculpture and Decorative Arts at The Metropolitan Museum of Art, and now director of the Frick Collection. Recognizing the uniqueness of the opportunity, he met with the Metropolitan Museum's director, Thomas P. Campbell, who has been a steadfast supporter of the exhibition ever since. We also thank Eric M. Lee, who became director of the Kimbell in 2009, for his boundless enthusiasm for the project. A third director deserving our greatest thanks is Thomas W. Lentz, Elizabeth and John Moors Cabot Director at Harvard, who worked with Wolohojian and other members of his staff—including Maureen Donovan and Henry Lie—to make the Harvard loans possible.

We are no less indebted to the other lenders to the exhibition. We thank them not only for entrusting their objects to our temporary care but also for facilitating our research. Numerous individuals went beyond the call of duty to ensure that we were permitted the many hours necessary to examine and photograph each terracotta: Dominique Boley, Musée des Beaux-Arts et d'Archéologie, Besançon; Geneviève Bresc-Bautier, Musée du Louvre, Paris; director Julian Chapuis, Bodo Buczunski, Michael Klëhs, and Volker Krahn, Bode-Museum, Berlin; director Gian Piero Cammarota and Emanuela Fiori, Pinacoteca Nazionale, Bologna; director Beatrice Paolozzi Strozzi, Museo Nazionale del Bargello, Florence; director Elisabetta Nardinocchi, Museo Horne, Florence; director Stefano Casciu and Daniela Ferriani, Galleria Estense, Modena; Angela Cipriani, Accademia Nazionale di San Luca, Rome; director Anna Coliva and Maria Assunta Sorrentino, Galleria Borghese, Rome; director Maria Elisa Tittoni, Rosella Leone, and Patrizia Masini, Museo di Roma, Rome; Maria Giulia Barberini, Davide Fodaro, Christano Giometti, and Livia Sforzini, Museo

Nazionale del Palazzo di Venezia, Rome; Donatella Capresi, Collezione Chigi Saracini, Siena; Giovanni Pala, Istituto Statale d'Arte "Duccio di Buoninsegna," Siena; director Claudia Cremonini and former director Adriana Augusti, Galleria Giorgio Franchetti alla Ca' d'Oro, Venice; director Michael Piotrovsky, Sergei Androsov, and Irina Grigorieva, State Hermitage Museum, Saint Petersburg; Charlotte Hubbard, Peta Motture, and Paul Williamson, Victoria and Albert Museum, London; Shelly Paine and Jon Seydl, Cleveland Museum of Art; director Graham Beal, Alan Darr, and John Steele, Detroit Institute of Arts; Denise Allen, Frick Collection, New York; director Antonio Paolucci, Alice Baltera, Flavia Callori di Vignale, Guido Cornini, Cardinal Raffaele Farina, and Arnold Nesselrath, Musei Vaticani; Princess Giorgiana Corsini and her daughter Sabina; Gerolamo and Roberta Etro; and Mark S. Weil. Additionally, in Italy, we extend a special thanks to Rossella Vodret, Soprintendenza Speciale per il Patrimonio Storico, Artistico, ed Etnoantropologico e per il Polo Museale della Città di Roma, and Cristina Acidini, Soprintendenza Speciale per il Patrimonio Storico, Artistico, ed Etnoantropologico e per il Polo Museale della Città di Firenze.

The doors to many drawings collections were also graciously opened to us, and we express our appreciation to Bettina Kosel, Jeannette Stoschek, and the late Richard Hüttel, Museum der Bildenden Künste, Leipzig; Sonja Brink, Stiftung Museum Kunstpalast, Düsseldorf; director Marzia Faeitti, Gabinetto Disegni e Stampe degli Uffizi, Florence; director Maria Antonella Fusco and Serenita Papaldo, Istituto Nazionale per la Grafica, Rome; Ascensión Ciruelos, Real Academia de Bellas Artes de San Fernando, Madrid; John Whiteley, Timothy Wilson, and Karine Sauvignin, Ashmolean Museum of Art and Archaeology, Oxford; Michael Clayton and Lady Jane Roberts, Royal Collection, Windsor Castle; and Julian Brooks and Lee Hendrix, J. Paul Getty Museum, Los Angeles.

Many individuals provided help during various stages of this project—from introducing us to collectors to securing photographs for the catalogue to giving research guidance. We are deeply indebted to these individuals: Carrie Rebora Barratt, Fabiano Forte Bernini, Babette Bohn, Bruce Boucher, Denise Braekmans, Virginia Brilliant, Andrew Butterfield, Tara Cerretani, Patrick Degryse, Bart Devolder, Elena Bianca Di Gioia, Katie Dillow, Susan Drake, Nancy E. Edwards, Frank Fehrenbach, Bianca Finzi-Contini Calabresi, George Fogg III, Davide Gasparotto, Karl Harrison, Molly Heintz, Catherine Hess, Frederick Ilchman, Alice Jarrard, Andrea Kann, Evonne Levy, Nancy Lloyd, Alison Luchs, Judith Mann, Tod Marder, Sarah McPhee, Jennifer Montagu, Franco Mormando, Nicholas Penny, Louise Rice, Xavier Salomon, Margi Schwartz, Karen Serres, Andrew Shortland, Miriam Stewart, Adrian Stolzenburg, Elyse Topalian, Valerie Troyansky, Jonathan Unglaub, Caterina Volpi, Phoebe Dent Weil, Aidan Weston-Lewis, and Nancy Winter.

Of inestimable importance to our research were the tools of X-radiography and fingerprint analysis. For the X-radiography, we are grateful to Katie May, Sheila Payaqui, and Shelly Sturman, National Gallery of Art, Washington, D.C.; Ulderico Santamaria, Laboratorio di Diagnostica per la Conservazione e il Restauro, Musei Vaticani; and Marco Cardinali

and Matteo Positano, Emmebi Diagnostica Artistica, Rome. For the fingerprint analysis, we are indebted to David Goodwin, Fingerprint Associates Limited, United Kingdom.

This publication is the result of months of hard work by many people. We thank the contributors for their thoroughness and passion for their subjects. In the Editorial Department at the Metropolitan Museum, publisher Mark Polizzotti, Peter Antony, Hilary Becker, Alexandra Bonfante-Warren, Crystal Dombrow, Penny Jones, Marcie Muscat, Gwen Roginsky, Michael Sittenfeld, Jane Tai, Robert Weisberg, Elizabeth Zechella, Christopher Zichello, and many others saw to it that the catalogue was produced at a high standard. The catalogue is much the richer for the lavish photography that graces its pages. The lion's share of the credit goes to Anthony Sigel, responsible for more than three hundred of the photographs; we also thank photographers Zeno Colantoni, Robert LaPrelle, and Giuseppe Nicoletti. Steven Schoenfelder receives our warmest thanks for his splendid work as designer. Finally, we were blessed to have been assigned the most extraordinary of editors, Nancy Grubb, in whose debt we will always be; we thank her for her superb attention to detail and unfailing enthusiasm for the project.

C. D. Dickerson extends a special thanks to Jeanette Sisk and Kirby Richards for their help with research. The catalogue is also much the better for the friendly and efficient service of the Kimbell's library staff, led by Chia-Chun Shih, assisted by Steven Gassett, Pat Oestricher, and Mary Runyan. The Kimbell's Publications Department, led by Wendy Gottlieb, assisted by Megan Burns-Smyth, gave valuable assistance on various editing and photography fronts. George Shackelford, Senior Deputy Director, offered timely advice on the catalogue and the installation. Finally, Dickerson pays tribute to Irving Lavin, the late Donald Posner, and Mark S. Weil for setting him down the Bernini path.

Anthony Sigel is particularly grateful to his colleagues at the Harvard Art Museums for their assistance and patience: Francesca Bewer, Angela Chang, Katherine Eremin, the late Gene Farrell, Francine Flynn, Narayan Khandekar, Daron Manoogian, David Sturtevant, and Julie Swiderski. He reserves a special word of thanks for Henry Lie, Director of the Straus Center for Conservation and Technical Studies, without whose continual support and advice the exhibition would not have been possible. Sigel is indebted to president Adele Chatfield-Taylor, former director Lester Little, executive assistant to the director Marina Lella, and the staff of the American Academy in Rome, where Sigel spent 2004–5 researching Bernini. In Rome, Sigel profited from the friendship and guidance of Maria Giulia Barberini and Elena Bianca Di Gioia. He, too, offers thanks to Irving Lavin, who provided valuable advice in Rome and whose contribution to Bernini scholarship remains fundamental.

Ian Wardropper would like to extend a special thanks to his assistants at the Frick Collection: Sarah Thein, Blanca del Castillo, and former assistant Angela Boulart. He is also grateful to the staff of the Frick Art Reference Library.

At the Metropolitan Museum, Jennifer Russell, Associate Director for Exhibitions; Martha Deese, Senior Administrator for Exhibitions and international affairs; and Nina

Maruca, Senior Associate Registrar, have provided tireless assistance. Linda Sylling, Manager for Special Exhibitions, Gallery Installations, and Design, along with Sue Koch, Michael Lapthorn, and Taylor Miller, all contributed to the design and installation. Peggy Fogelman, the Frederick P. and Sandra P. Rose Chairman of Education, along with other members of the department, including Christopher Noey and Stella Paul, aided the interpretative side of the exhibition. Sharon Cott and Kirstie Howard were helpful with legal matters, as was Danny Berger. Kenneth Soehner, Arthur K. Watson Chief Librarian, and all his staff were continually available for bibliographic references. Lawrence Becker, Sherman Fairchild Conservator in Charge, and Jack Soultanian, Jr., gave essential advice regarding condition and installation. Members of the Department of European Sculpture and Decorative Arts all made contributions to the exhibition and publication: the Iris and B. Gerald Cantor Curator in Charge, Luke Syson, with Alisa Chiles, James Draper, Jacob Goble, Wolfram Koeppe, Erin Pick, Melissa Smith, Juan Stacey, and Denny Stone. The staff of the Department of Drawings and Prints has been very helpful in contacting colleagues and advising on loans: the Drue Heinz Chairman, George Goldner, with Stijn Alsteens, Carmen Bambach, Maggie Bordonno, and Perrin Stein.

At the Kimbell, the exhibition benefitted from the organizational skills of Patty Decoster, Chief Registrar, assisted by Patty Tainter. Claire Barry, Director of Conservation, provided hours of advice and, with the catalogue deadline looming, graciously agreed to clean the two angels at the Kimbell. With his customary professionalism, Larry Eubank supervised the installation of the exhibition, supported by his stalwart band of art handlers. Designer Tom Dawson is to be thanked for his many superb ideas for the installation and for his assistance in realizing them. Samantha Sizemore provided countless hours of administrative support and prevented many loose ends from completely unraveling.

A special mention must be made of Paola D'Agostino, Senior Research Associate in the Department of European Sculpture and Decorative Arts at the Metropolitan Museum. Paola has followed this project from the beginning, writing many loan letters and making countless telephone calls, particularly to colleagues and lenders in Italy, and has patiently followed up on the complicated logistics of the exhibition. She has also had a major role in the installation and presentation of the exhibition at the Metropolitan Museum. An expert in seventeenth-century Italian sculpture, Paola has been of inestimable value to this project, contributing her eye and opinions to the examination of many objects, and we wish to express our deepest gratitude to her.

Finally, we owe particular debts of gratitude to our families for their patience and support throughout the years of this project. It is to our wives (or soon-to-be-wives) that we dedicate this book: Elyse Dickerson, Jennifer Clarvoe, and Sarah McNear.

C. D. Dickerson III, Anthony Sigel, and Ian Wardropper

C. D. Dickerson III

Introduction

Gian Lorenzo Bernini, who was born in 1598 and died in 1680, was extraordinary in many ways, including his openness to letting people observe how he carved, drew, or made models in clay. In contrast to his great Renaissance predecessor Michelangelo, who was careful to conceal how he worked, Bernini encouraged clients and friends to witness his process—to see how his sculptures evolved. One of the many people granted this opportunity was Lelio Guidiccioni. Bernini invited his close friend, a poet, to spend time with him in 1632 as he planned and executed his bust of Cardinal Scipione Borghese. In a subsequent letter to Bernini, Guidiccioni expressed his amazement over the sculptor's working methods, intimating that he had seen a previously unknown side of his friend. Bernini can only have smiled on reading the letter. He had doubtless invited Guidiccioni to observe him partly to give Guidiccioni a fuller picture of him as a sculptor. "Bernini: Sculpting in Clay" offers a similar invitation to look at Bernini in a new way: if we are to understand Bernini fully, we cannot focus exclusively on his finished sculptures. We must become modern-day Guidiccionis and watch Bernini as he worked.

"Bernini: Sculpting in Clay" seeks a deeper understanding of the sculptor through careful analysis of his preparatory models, which were integral to his working process. Bernini used models to shape his ideas in three dimensions, to convey his designs to patrons, and to guide his assistants. Their potential for shedding light on how he worked is matched only by that of his drawings. Many different approaches have been taken to studying the models since they first attracted scholarly attention at the beginning of the twentieth century. Among the oldest and most profitable has been to use the models to explore how Bernini moved from first idea to finished sculpture. Investigating the differences between a model and the sculpture for which it was preparatory allows us to accompany Bernini as he invented and perfected a composition; we see where he initially stood with a design and how he subsequently edited himself. Tracing his train of thought becomes particularly feasible with the angels for the Ponte Sant'Angelo and the Altar of the Blessed Sacrament, for which multiple models survive. Bernini emerges as an artist obsessed with detail, leaping from one model to the next as he endeavored to assure himself that he had developed the best possible design. Most of the models especially his sketches, or bozzetti—are executed in a loose style that conveys a great deal of speed, both manual and mental.

The following pages continue to investigate the models from the perspective of what they tell us about Bernini's creative process, uncovering aspects of his personality and clarifying how he arrived at a design—all part of observing him at work. But "Bernini: Sculpting in Clay" was undertaken in the belief that an even closer vantage could be possible. In addition to asking how the models were used to make finished sculptures, the exhibition explores how the models themselves were made. Over the past three years, Anthony Sigel, Ian Wardropper, and I have systematically examined more than sixty terracottas either by or associated with Bernini. Sigel, Conservator of Objects and Sculpture at the Straus Center for Conservation and Technical Studies at the Harvard Art Museums, guided our looking, employing techniques he had pioneered during the 1990s when he first became interested in the Bernini terracottas at Harvard. Grounding his approach in visual observation, he traveled with Wardropper and me through Europe and the United States, photographing each terracotta in minute detail. Thousands of photographs resulted. When possible, Sigel also produced or commissioned X-radiographs. Back home, he scrutinized the material, reconstructing how each terracotta was made. Through Sigel's analysis, we gain an unprecedentedly intimate view of how Bernini modeled. We can stand with him as he initially massed the clay and roughed out the forms; as he dug his fingers into the back of the clay to form stabilizing buttresses; as he draped his figures with sheets of clay; as he used oval-tip tools to shape pleats and render faces; and on and on. Not only his techniques are illuminated but also aspects of his character. The models reveal that he was highly pragmatic, that he prized efficiency, and that he allowed himself the occasional pause to marvel at his own extraordinary gifts as a modeler (see fig. 350).

Fifty-two terracottas were selected for entries in this catalogue. Cowritten by Sigel and me, the entries attempt a meaningful integration of art historical and technical interpretations. From the beginning of the project, it was clear to us that in order to engage the many questions posed by the models, we must combine our approaches. This integration was especially useful in addressing questions of attribution, which require a thorough understanding of Bernini's modeling techniques. That so many of the entries focus on attribution reflects the fact that Bernini's models have never been systematically catalogued. "Bernini: Sculpting in Clay" begins to fill that void, although it is not a true catalogue raisonné in that not every terracotta we reject as by Bernini is given its own separate entry. Of the fifty-two terracottas that are catalogued, only three could not travel as loans to the exhibition: Elephant with an Obelisk (cat. 6); Model for the Equestrian Statue of Louis XIV (cat. 24); and Pope Alexander VII (cat. 33). They were included in the catalogue in order to provide a comprehensive study of all the terracottas that we have examined and that are generally considered to be by Bernini. The reader is advised that qualifiers such as "possibly" or "probably" are omitted from authorship lines; the entries themselves indicate our degree—or lack—of certainty. "Attributed to" is used when a model is probably not by Bernini and we believe should be assigned to a different sculptor.

Among the rewards of looking closely at the fifty-two models given entries in the catalogue is a better awareness of how Bernini interfaced with his assistants. Some models represent collaborations with assistants (cat. 27); some models document use—perhaps even measuring—by assistants (cats. 8 and 9); some models show Bernini advising his assistants on practical matters of construction (cat. 7); and some models are by the assistants themselves, done on Bernini's orders and to his designs, likely conveyed as drawings or sketch models (cat. 46). In an effort to present the workshop in all its complexity, "Bernini: Sculpting in Clay" adopts a specific vocabulary when attributing models to unknown assistants. In the authorship line of entries, "associate" refers to an experienced sculptor like Ercole Ferrata or Antonio Raggi, who ran their own workshops and worked for Bernini in a freelance capacity; "assistant" refers to a sculptor of lesser talent who was likely training with Bernini and helping him in his studio. "Later copyist" indicates a sculptor with no direct connection to Bernini whose model is a copy after a finished sculpture by Bernini.

One of the five essays in the catalogue, by Andrea Bacchi, explores Bernini's use of models in his workshop. The other essays also endeavor to place the models into context. The first, by the present writer, asks how Bernini learned to model, a question not addressed in the entries, as there are no surviving models from his youth or early maturity; the earliest ones to survive date to after his thirtieth year, well after he had carved some of his most famous sculptures, such as the *Apollo and Daphne* (fig. 1). In the second essay, Ian Wardropper discusses the relationship between Bernini's models and drawings, highlighting a core feature of the exhibition: the display of drawings (about twenty-five at each venue) in proximity to related models. The drawings help make the point that Bernini did not limit his planning to clay; he sometimes started on paper or alternated between the two media. A checklist of the exhibited drawings (with bibliography and provenance) is included at the back of the present volume; each drawing is illustrated in either the essays, the entries, or the checklist.

The first of the two remaining essays addresses the collecting of models in Bernini's Rome. Tomaso Montanari makes the case that although models were not widely valued as art to be collected, Bernini helped establish a taste for them. The final essay, by Steven F. Ostrow, considers how scholars have engaged with the models in modern times. His discussion casts into relief some of the ways "Bernini: Sculpting in Clay" is innovative: its emphasis on technical research and the marriage it achieves between an art historian's approach and a conservator's. Following the essays is another innovation: a visual glossary of Bernini's modeling techniques. Written by Sigel and illustrated with his own photographs, it offers the reader tools for learning how to look at the models and to determine how they were made—extending even further the invitation that Bernini made nearly four hundred years ago.

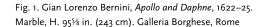
Bernini Sculpting in Clay



Bernini at the Beginning: The Formation of a Master Modeler

C. D. Dickerson III

MENTION THE NAME Gian Lorenzo Bernini, and the first sculpture to come to mind is likely his Apollo and Daphne, a lifesize work in marble (fig. 1). Acclaimed as a marvel of imagination and technique during Bernini's own lifetime, it continues to be viewed as one of the most dazzling creations in the history of art. That it came from the mind and hands of an artist in his early twenties has only strengthened its stature; Bernini began it in 1622, at the age of twenty-four, completing it in 1625. Those who visit Rome and seek out the Apollo and Daphne are rewarded with two other masterpieces from the sculptor's twenties, both also in marble: the Pluto and Proserpina (fig. 14), which dates from 1621-22, and the David (fig. 2), of 1623-24. All three reside in their original home, the Villa Borghese, and form a group of such rarefied beauty that they are widely considered the high points of Bernini's entire career—and even of all seventeenth-century sculpture.2 That so much of what we think about Bernini today originates with these statues poses a problem when we turn to his sculptural models. The earliest model that can be reliably dated and attributed to him is the Allegorical Figure, of about 1630 (cat. 2)—at least five years after the Apollo and Daphne was completed. Indeed, there are no surviving models for any of his youthful masterpieces. When and how did Bernini learn to create the sort of virtuoso models that are



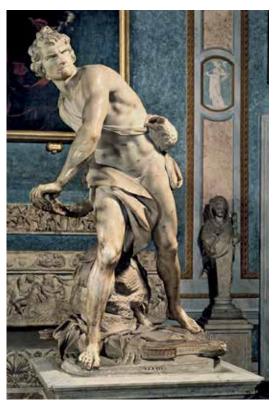


Fig. 2. Gian Lorenzo Bernini, *David*, 1623–24. Marble, H. 66% in. (170 cm). Galleria Borghese, Rome

the subject of "Bernini: Sculpting in Clay," and did models play any part in his early triumphs at the Villa Borghese?

The practice of making clay or wax models in preparation for larger works in marble or bronze was well established in Italy by Bernini's birth in 1598. An important indication is the opening sentence of the section on models in Giorgio Vasari's treatise on sculpture, published nearly half a century earlier, in 1550.3 He writes that sculptors were "accustomed" (sogliono) to making models, describing the typical model as being about half a braccio in height, or six inches. He goes on to elaborate that the purpose of the small model was to establish the pose of the figure and that sculptors were also in the habit of producing a more highly finished second model that was as large as the actual figure to be carved or cast.4 We now know that sculptors tended to distinguish between three types of models, not just these two (see Andrea Bacchi's essay in this volume).5 The first in the sequence was the sketch model, or bozzetto, which can be equated to Vasari's small model. The second was the modello (sometimes called a modello piccolo), which was larger and more finished than the bozzetto and used to refine details, such as drapery. The third was the fullscale model, or modello grande, described by Vasari.

From at least the 1550s on, no aspiring sculptor working in a major Italian city could have been unaware that making models was standard practice. The young Bernini certainly knew so—a fact that does not mean, however, that he immediately appreciated models or was skilled at making them. Plenty of painters made preparatory drawings as a matter of course, but it was the exceptional painter who delighted in drawing and excelled as a draftsman. The same was true for sculptors and modeling. Many made models because they were told it was the right thing to do; a few did it out of a genuine love for sculpting in clay. Bernini was among the latter. By his early thirties, to judge by any of his earliest models, he had developed a passion for modeling that ran much deeper than the average sculptor's. Modeling had come to occupy a central place in his approach to sculpture, and he had realized that certain aesthetic virtues in models could be incorporated into his marble sculptures. A careful

review of his formative years reveals that this awakening did not happen by itself. There were certain people (like his father) and experiences (like making portraits) that facilitated it, even if the lion's share of the credit must go to his own talents, including an extraordinary gift for self-instruction.

Pietro Bernini

The essential starting point for Bernini's artistic education is his father, the sculptor Pietro Bernini. Father and son were exceedingly close, to the point of becoming professional partners by the time Gian Lorenzo had reached adolescence. Among their most splendid collaborations is Bacchanal: A Faun Teased by Children (fig. 3), which dates to about 1616-17. All first lessons related to any major aspect of sculpture are certain to have come to the boy from his father—and this includes modeling, even if the traditional view of Pietro would not suggest so. Art historians have tended to characterize Pietro as just an able craftsman, lacking both imagination and any interest in the contemplative side of sculpture—which is to say that design and the two primary tools of design, modeling and drawing, were less important to him than the final product. The view has partly stemmed from a story told by Pietro's earliest biographer, Giovanni Baglione, recalling that Pietro carved in marble without the aid of any preliminary design:

One day in Naples, I saw this for myself. Pietro took a piece of charcoal and with it made a few marks on a block of marble, immediately taking his chisels to it, and with no other design, he made three lifesize figures, forming a fanciful fountain, and he handled the marble with such facility that it was astonishing to watch him. And if this man had had

Fig. 3. Pietro Bernini and Gian Lorenzo Bernini, Bacchanal: A Faun Teased by Children, ca. 1616–17. Marble, 521/8 x 29 \times 18% in. (132.4 \times 73.7 \times 47.9 cm). The Metropolitan Museum of Art, New York; Purchase, The Annenberg Fund Inc. Gift, Fletcher, Rogers, and Louis V. Bell Funds, and Gift of J. Pierpont Morgan, by exchange, 1976 (1976.92)



a greater sense of design, he would have been more famous, given his manual ability.7

A moment's reflection on the story, however, reveals how unhelpful it is regarding whether or not Pietro ever made models. Baglione could well have missed that part of the process, and there is nothing surprising about a sculptor who drew guide marks on a block

of marble before chiseling into it. That practice was standard, model or no model.8 Thus, with respect to Pietro's preparatory practices, Baglione's account must be treated with caution—and doubly so once we have factored in all the known details about Pietro's life. A new picture emerges, in which he not only made models but also was well qualified to convey their fundamental importance to his young son. Even though Pietro may not have offered his pupil a lot in terms of pure technique, he was

almost certainly the person who first encouraged Gian Lorenzo to respect models and to make them part of his process.

Pietro Bernini was born in Sesto Fiorentino, just outside Florence, on May 6, 1562.9 None of his immediate relatives were artists, and it is not clear who provided his introduction to sculpture. All Baglione indicates is that Pietro received "some principles of design" from Ridolfo Sirigatti, an amateur painter and sculptor who came from a wealthy Florentine family.10 Sirigatti is perhaps best known as one of the four interlocutors in Raffaello Borghini's II Riposo (1584), an imaginary dialogue on the arts that supposedly took place at a villa of the same name located outside Florence.11 That Sirigatti is one of the main voices in the book strongly suggests that any teaching he gave the young Pietro would have emphasized the theoretical side of art. To Sirigatti and his friends, painting and sculpture were learned endeavors, pursuits of the mind, not the hands. This is underscored by the fact that they came from Florence, a city whose artists were particularly driven by theory. Florence was the first city in Italy with a statesponsored arts academy, the Accademia del Disegno, founded in 1563. While Sirigatti is not known to have attended the Academy, Il Riposo makes it seem likely that he did: in discussing how sculptors should be trained, he adopts the standard academic view that they must begin by mastering the arts of drawing and modeling.12 This was undoubtedly the approach he took with Pietro, who may never have touched a chisel in Sirigatti's presence.

An important sign that Pietro did not concentrate solely on sculpture while with Sirigatti is that he helped fresco parts of the ceiling at the Villa Farnese in Caprarola.13 His stint there started in 1578 or 1579 and may have lasted as long as three years.14 The fact that he painted in a professional capacity furnishes key evidence that, in the years leading up to Pietro's decision to become a sculptor, he was gaining an education that can be termed liberal by the standards of the day. This is significant in that painting,

to a much greater extent than sculpture, had emerged in the public consciousness as an intellectual discipline.15 Painters prided themselves in being designers and rejoiced that their profession was increasingly considered noble. Working with established painters at Caprarola would have reinforced Pietro's awareness that design was the foundation of great art and that, to succeed as a painter, he must constantly draw. It seems safe to assume that he would have realized that the parallel requirement for sculptors was modeling.

From Caprarola, Pietro transferred to Rome, a logical choice given that many of his new colleagues were familiar with the mechanics of art patronage in the Eternal City and could help him find a job. That job quickly centered on sculpture: as soon as Pietro arrived in Rome, he traded his brush for a chisel, "directing all his spirit to sculpture."16 Pietro initially worked as a restorer of ancient statuary, an activity that provided him with "good practice in handling marble."17 This is doubtless true, as restoration work constituted the primary training ground for young sculptors in Rome. This point deserves some attention, as it bears directly on Gian Lorenzo's own education as a modeler.

Rome had no arts academy until 1593, when the Accademia di San Luca was established, a full thirty years after the founding of the Academy in Florence.¹⁸ For a variety of reasons, including the strength of the medieval trade guilds, Rome lagged behind Florence in fostering a liberal environment for artists, and sculptors fared especially poorly.¹⁹ Wealthy Romans were eager to hang paintings on their walls, but they were not inclined to install sculpture—unless those sculptures were ancient.20 This deprived sculptors of patrons who might have fostered a higher status for their profession or demanded improvements in how they were trained. Sculptors in Rome were, almost without exception, hardworking men who toiled in churches in teams or spent their days restoring ancient sculptures. Even if they had had an incentive to think about their work in

intellectual terms, they would have been hardpressed to find a sympathetic patron or institution to help them appreciate the importance of design, much less master the primary tools of design—drawing and modeling. To a much greater extent than painters, and to a much greater extent than their colleagues in Florence, sculptors in Rome received their training on the job.

Returning to Pietro, we see that he held a distinct advantage over the many other young men in Rome who were trying to break into the sculptor's profession by means of the best option available to them: antiquities restoration.21 Not only did Pietro likely have a solid grounding in the concept of disegno, but thanks to his combined experiences with Sirigatti and of painting at Caprarola, he must also have had a considerable feel for modeling and drawing, which cannot be assumed for his competitors. Nor was restoration geared toward teaching any of them much more than how to wield a chisel. Some restorations were enormously complex, demanding the ingenuity and technical prowess of elite sculptors (including Gian Lorenzo, who executed several famous restorations during the 1620s), but the vast majority were fairly mundane, such as carving replacement limbs and heads for the hundreds of minor antiquities strewn around Rome, which were often destined to become mere decoration in a garden or on a facade.22 The result is that entry-level restorers gained excellent practice in carving marble but little exposure to the art of design, as they were never required to invent whole compositions. Indeed, they had little incentive to learn how to model or draw; there is no evidence that either skill was ever considered necessary for common restorations.23

The Accademia di San Luca could have saved young sculptors in Rome from missing out on such crucial instruction, but it proved ineffective. Even though many sculptors belonged to the Accademia—with some even rising to the rank of principe, or president—its teaching program, at least during the initial

decades, fell well short of the mark set by its idealistic founders.²⁴ Aspiring sculptors may occasionally have visited its premises and participated in drawing and modeling sessions, but there is no indication that they exited vastly changed.25 Their education lay in restoration, as confirmed by Baglione: "All men in this city [Rome] begin by restoring many ancient objects."26

Father as Modeler

Pietro's exposure in Florence to the fundamentals of design would have enabled him to take what he learned about carving through restoration and apply it immediately to creating independent sculptures. The earliest examples were made in Naples, where he moved in about 1584 and where he would live more or less continuously until 1606, when he returned permanently to Rome.²⁷ His style gradually matured over this period, and to study any of Pietro's best works is to gain a strong feeling that models featured regularly in his process—and not just as aids in establishing compositions. Having apparently developed an appreciation for the inherent softness of clay and wax, Pietro seems to have allowed this to influence his carving style, as in his marble Saint Bartholomew of 1602-3 (fig. 4).28 The hair and beard are wonderfully loose in execution, as though more shaped with fingers

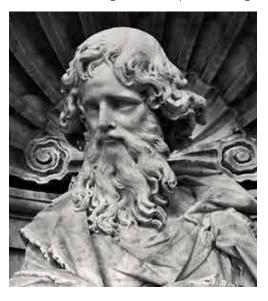


Fig. 4. Pietro Bernini, Saint Bartholomew (detail), 1602-3. Marble, H. 70% in. (180 cm). Ruffo Chapel, San Filippo Neri (Chiesa dei Girolamini), Naples



than carved with a chisel. Of course, whether Pietro's experience with models really played a role during this period in his life cannot be confirmed: we have neither the documents nor the models to do so.

Fortunately, two documents survive specifying models that Pietro did make later in his career. The first relates to his attempts to win a commission for another statue of Saint Bartholomew, in Orvieto Cathedral. A document of September 27, 1616, indicates that he created two models that he sent to Orvieto to be judged.29 As presentation models, they were presumably carefully finished. Beyond that, we know only that they failed to win him the job, but this likely had more to do with their design or some political issue than with the quality of their modeling. The second document is more revealing. On February 7, 1618, Pietro entered into a contract with Maffeo Barberini, the future Pope Urban VIII, for four cherubs to be installed above the lateral arches of the Barberini Chapel in Sant'Andrea della Valle, Rome (fig. 5).30 In the contract, Pietro agrees that his cherubs will follow the "clay models" (modelli di terra) that he had already produced for them. The document goes on to describe these models as "not totally

perfected" (non ridotti all'intera perfettione), which, as it explains next, refers to their design rather than their level of finish. There is a final, extremely important detail: Pietro would be carrying out the project with his twenty-year-old son, Gian Lorenzo. Thus, in the same document, we have evidence not only that Pietro was accustomed to making models but also that Gian Lorenzo, by the age of twenty, had gained practice in working from models. Was he experienced in making them, too?

As will be seen over the next pages, the answer appears to be yes, and Pietro continues to furnish key evidence. In 1606 he had been given the commission for a monumental relief of the Assumption of the Virgin for the facade of the Pauline Chapel in Santa Maria Maggiore, Rome (fig. 6).31 His undisputed masterpiece, the finished relief (now located in the church's baptistery) is spectacular for its strong threedimensional presence and pictorial effects, such as the soft, waxy clouds surrounding the Virgin. Steven F. Ostrow has demonstrated that, with the Assumption—as well as with his other great relief, the slightly later Coronation of Pope Clement VIII in the Pauline Chapel—Pietro engaged in one of the most famous debates of

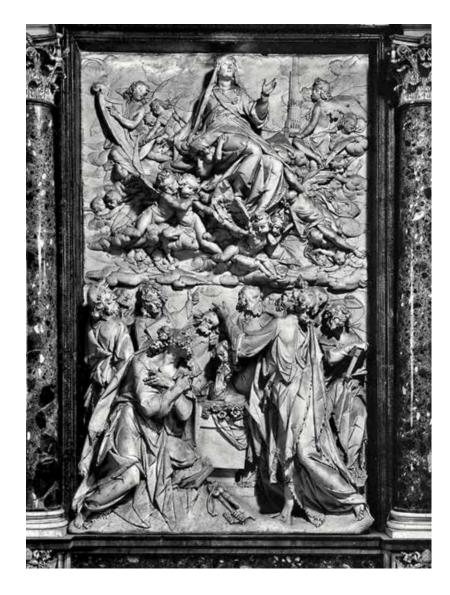


Fig. 5. Gian Lorenzo Bernini and Pietro Bernini, Cherubs, 1618. Marble, H. 43% in. (110 cm). Barberini Chapel, Sant'Andrea della Valle, Rome

Fig. 6. Pietro Bernini, Assumption of the Virgin, 1607–10. Marble, 12 ft. 9 in. x 8 ft. $\frac{1}{2}$ in. (390 × 245 cm). Baptistery of Santa Maria Maggiore, Rome

the Renaissance, the paragone, over the relative merits of painting and sculpture.³² The debate was couched in highly theoretical terms, and it is significant that Pietro was not merely aware of the debate but also succeeded in meaningfully contributing to it. Such intellectual sophistication confirms his sympathies for an academic way of sculpting, sympathies that presumably go back to his time in Florence and his period as a painter at Caprarola. Indeed, the Pietro of the paragone cannot have been a sculptor who scorned preparatory models.

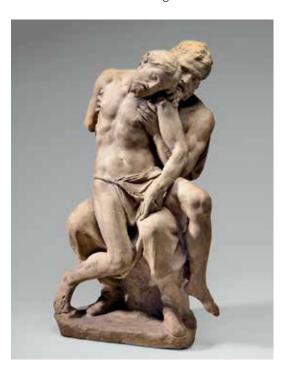
Despite Pietro's apparent attachment to theory and to the role of design in sculpture,

there is no guarantee that he gave Gian Lorenzo a wealth of actual modeling instruction. To judge by at least one anecdote, he recognized his son's gifts early on and realized that certain skills would be better taught to him by others or learned on his own. Filippo Baldinucci recounts that the young Gian Lorenzo would frequently go to the Vatican to draw and that his father, when shown the results, would feign disappointment in order to press his son to do better the next time.33 This makes perfect sense: Pietro is totally undocumented as a draftsman, and his skills in that field—as with modeling—were presumably not noteworthy.34 Baldinucci's story

suggests that Pietro's remedy was not to mask his own shortcomings but to help his extraordinary son by instilling in him the value of hard work and tireless practice. Pietro seems to have known that his son would be his own best instructor; once told what he should learn, Gian Lorenzo always found a way to learn it.

Stefano Maderno

If Gian Lorenzo was left largely on his own to learn the intricacies of modeling, to whom might he have turned? One sculptor who comes to mind, albeit one not widely known today, is Stefano Maderno. Among surviving terracottas, only eight can be confidently ascribed to sculptors working in Rome during the same time as the young Bernini, and all are by Maderno.35 The earliest two are inscribed 1605, while the remaining six, according to their inscriptions, span 1617 to 1622.36 The two from 1605, including the Nicodemus with the Body of Christ at the State Hermitage Museum, Saint Petersburg (fig. 7), are slightly freer in their modeling than the later six, which include the carefully and sensuously finished Hercules and Antaeus at the Galleria Giorgio Franchetti alla





Ca' d'Oro, Venice (fig. 8). All eight look far more highly finished than a normal sketch model, and we are left to wonder why Maderno chose to make them. They may have been teaching exercises, models for casting, or independent works of sculpture for collectors.³⁷

Whatever Maderno's reasons for making these models, he was as talented a clay modeler as the young Bernini is likely to have encountered: no one else in Rome at the time is known to have treated clay with similar virtuosity.38 (The brilliant modeler Alessandro Algardi would not arrive in Rome until about 1625.) Even though Maderno was a generation

Left: Fig. 7. Stefano Maderno, Nicodemus with the Body of Christ, 1605. Terracotta, H. 16% in. (43 cm). The State Hermitage Museum, Saint Petersburg

Above: Fig. 8. Stefano Maderno, Hercules and Antaeus, 1622. Terracotta, H. 21¾ in. (55.4 cm). Galleria Giorgio Franchetti alla Ca' d'Oro, Venice

Fig. 9. Gian Lorenzo Bernini, Model for the Fountain of the Moor (detail), 1653. See cat. 13.

Fig. 10. Stefano Maderno, Hercules and Antaeus (detail). See fig. 8.

older than Bernini, they were well known to each other by the time Gian Lorenzo was a teenager. The initial link was Pietro, who worked alongside Maderno in Santa Maria Maggiore between 1606 and 1614.39 The experience appears to have either sparked a friendship or reinforced an existing one. In 1614 Pietro selected Maderno to stand witness at the purchase of his new house near Santa Maria Maggiore.40 Pietro and Maderno are not linked in any later documents, but Gian Lorenzo and Maderno are. In a document of 1624 Maderno is paid for having contributed five "little putti in clay" (puttini di creta), or models, to Gian Lorenzo's mammoth Baldacchino.41 The next year, he was again employed by Gian Lorenzo, this time on stucco figures for an ephemeral memorial celebrating the canonization of Saint Elizabeth of Portugal.⁴² In both cases, Maderno was hired as a modeler, and he was by far the oldest sculptor among Bernini's assistants on the two projects. How did Maderno initially win Bernini's admiration, and how did he succeed in keeping it? A likely answer is that Bernini was impressed by Maderno's terracottas, the one type of sculpture in which Maderno had consistently excelled during his career. His body of work features only one bright spot in marble: the masterful Saint Cecilia in Santa Cecilia in Trastevere, Rome, which was carved in 1600, at the outset of Maderno's career.43

If Bernini bonded with Maderno partly because of the latter's superlative modeling skills, there is a high probability that the competitive young sculptor took pains to ensure that his own modeling matched his older colleague's. This cannot be directly proven, since no terracottas can be confidently ascribed to Bernini from the years he is known to have been in contact with Maderno. Rather, what can be observed is that, at some point during Bernini's life, he learned how to model in a style almost identical to Maderno's. This becomes clearest from a fairly recent addition to Bernini's oeuvre, his extraordinary Model for the Fountain of the Moor (cat. 13). Its careful





finish instantly calls Maderno to mind, and the connection is strengthened by specific similarities in facture, such as the modeling of the hair (fig. 9). From afar, the Moor's hair looks to have been rendered with infinite precision. Seen up close, it dissolves into an energetic pattern of oval-tip tool marks, each lock quickly and broadly defined. Comparison with Maderno's Hercules and Antaeus reveals a very similar approach (fig. 10). The Moor can also be likened to the Hercules and Antaeus in the way its

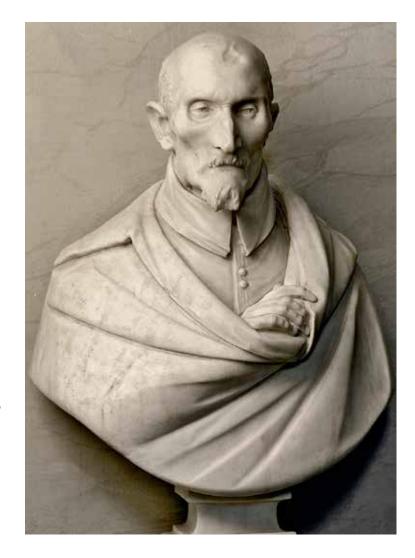
flesh is smoothed. Bernini went over the musculature with a fine yet stiff brush, as Maderno had done, and he even seems to have been mindful of the direction in which Maderno ran his brush; the parallel striations follow the circumference of the rounded forms, which gives the musculature added suppleness.

Another model that I and the other curators of this exhibition agree is by Bernini and whose modeling style seems to owe a great deal to Maderno is the Model for the Lion on the Four Rivers Fountain (cat. 7). The delicate mane, the carefully brushed and cloth-wiped skin, and the precisely rendered claws recall the kind of refinement that Maderno gave to his own terracottas. The problem with the *Lion*, however, is the same problem as with the *Moor*: they both date to well after Maderno's death in 1636. Therefore, they confirm only that Bernini could model like Maderno, not that he learned to model like Maderno from Maderno. Indeed, this is unlikely ever to be proven. Still, we can go at least one step further and demonstrate that, by his mid-twenties, Bernini did make models and that one of his earliest modeling styles was similar to Maderno's in its high level of detail and finish. The evidence lies in his activities as a portraitist.

Portraiture

Bernini's first foray into portrait sculpture occurred in about 1612, with the bust of Giovanni Battista Santoni in Santa Prassede, Rome.⁴⁴ Over the next two decades, he rose to become the leading portrait sculptor in the city. A review of some of his earliest commissions, combined with a consideration of portrait sculpture in general, leaves no doubt that by his early twenties he had grown accustomed to making head studies in clay—usually large and highly finished, in the Maderno mode.

Until about 1620 Bernini can be associated only with posthumous busts. These did not necessarily require a model, as he could have worked from a painting or drawing of the deceased. Among the possible exceptions is



when the visual record was limited to a death mask. Because death masks—with sagging skin and closed eyes—rarely presented a flattering likeness, they often needed improvements before being used as a guide for carving.⁴⁵ The easiest route was to cast a duplicate of the mask in clay (or plaster) that could serve as the basis for a lifesize model. Before the model dried (especially if it was in clay), the sculptor could re-form the eyes, smooth the skin, and bring life to the expression—in essence, make a new head.

At least once during Bernini's youth he appears to have carved a posthumous bust using a model derived from a death mask. The moment came very early, in 1612, with the

Fig. 11. Gian Lorenzo Bernini, Bust of Antonio Coppola, 1612. Marble, $26\% \times 18\% \times 11$ in. $(67 \times 48 \times 28 \text{ cm})$. San Giovanni dei Fiorentini, Rome

Bust of Antonio Coppola in San Giovanni dei Fiorentini, Rome (fig. 11). Irving Lavin is surely correct that this is a precocious work by the young Bernini rather than by his father and that the payments went to Pietro only because Gian Lorenzo was still a minor.46 According to a document of 1612, a wax death mask was taken of Coppola's face soon after he had died.⁴⁷ For the reasons noted above, Bernini may well have felt it necessary to prepare a model based on it—a model that may even be documented: "two clay heads by Bernini" are recorded in the basement of San Giovanni dei Fiorentini in 1634.48 Bernini is known to have made only one other bust for the church, so it is logical that one of these two heads relates to the Coppola. 49 It is unlikely to be a copy since the document specifies that it is by Bernini. The level of finish must have been high, especially considering it was derived from a death mask that was lifesize.

By about 1620 Bernini had become sufficiently famous that he began to receive portrait commissions from living sitters. In preparing for these busts, he doubtless made use of models once again—including some that were sufficiently large and detailed to capture the distinguishing characteristics of an individual. This becomes apparent in considering the practicalities of the process. First, Bernini could not expect his illustrious sitters to remain perfectly still for hours on end or to make themselves constantly available to him during the months required to carve a bust.50 Second, marble was too heavy to be easily transported to the client's home, where most portrait sittings would occur. Lastly, carving is messy. Thus, Bernini was like any other portraitist in needing to produce a transportable record of a sitter's face in a reasonable amount of time. His options were limited to drawings and models, and there can be no doubt that he regularly employed both.

The most complete account of Bernini's portrait-making methods appears in the diary of Paul Fréart de Chantelou, which details the many hours spent in 1665 by the elderly artist as he both drew and modeled Louis XIV's face

in preparation for the king's bust (fig. 67).51 But how long had Bernini been using this dual approach? From an early age, he had demonstrated phenomenal ability as a portrait draftsman, which makes it a virtual certainty that drawing played a role in his earliest portrait commissions.⁵² As for models, the earliest record of his going before a sitter and preparing a head study in clay dates to much later, in 1633. This is a description by the poet Lelio Guidiccioni of watching Bernini model Scipione Borghese's head.53 Guidiccioni's comparison of Bernini's fingers while modeling to those of an experienced harpist implies that years of practice lay behind his technique, and there is no reason to think otherwise. Eminently practical, Bernini must have recognized at an early age that a careful head study in clay was the best insurance against inaccurate or unseemly likenesses. Drawings were good but never as good as models, which offered the crucial benefit of three-dimensionality.

Finally, from about 1621 Bernini regularly undertook one kind of commission that gave him no choice but to make a large, exquisitely fine model: the portrait bust in bronze. A specialist would be responsible for casting the bust, but it fell to Bernini to produce the full-size model from which the cast would be made, and there is documentary proof that he did not shirk this responsibility. In 1623 Bernini agreed to execute a bronze portrait bust of Paolo Giordano II Orsini, Duke of Bracciano.⁵⁴ He likely began by modeling a head study in clay during a portrait session (or sessions) with Orsini. This could well be the object that Bernini is described as having made with "great enthusiasm" (grandissimo gusto) in a letter of June 1623.55 The more telling document, however, comes two months later, after he had sent the elaborate composition, itself modeled in clay, to the founder. According to a letter of August 1623, Bernini was asked to come to the foundry in order to touch up the wax model that the founder had prepared for the final casting. The author of the letter, Domenico

Fedini (the duke's agent in Rome), reports that Bernini cleaned the model "with every exquisite diligence," which can only mean that he used a style of modeling that ensured a high level of detail.56 Had he not done so, he would have needed to render the detail directly in the metal, after the sculpture was cast, which was never the preferred option. As the duke's agent makes clear, Bernini wanted his modeling to dazzle—and for good reason. By 1623 he had developed an approach to modeling, premised on exquisite fineness, that perfectly met the demands of portrait sculpture. Did he foresee other applications for it?

Presentation Models

One possible application would have been the models presented to patrons for the purposes of winning commissions or receiving approval of a design. Because they were meant to impress, and because they needed to convey a great deal of visual information, these presentation models were usually larger than bozzetti and more highly finished. A good example is the *Moor* (cat. 13), one of several presentation models included in this exhibition (see also cats. 6 and 27). Bernini appears to have been fairly traditional in his use of presentation models. He generally made them (often with the help of his workshop) for important commissions, especially when the stakes were high, as with the Moor, which came at a moment during the 1650s when his reputation was threatened (see cat. 7).

Back in the late 1610s Bernini had faced a different problem with his reputation: he had yet to establish one. In order to do so, he had to convince his first patrons that, although still young and lacking the marble-carving experience of an adult, he was ready for major commissions. A terracotta presentation model would have made the case more persuasively than almost anything else, and so it seems likely that before Scipione Borghese entrusted Bernini with the block of marble that would become the Pluto and Proserpina, he would

have asked to see the design in model form. If Bernini's mature habits are a fair indication, he lavished extreme care on this model, striving for the kind of virtuoso effects that would appeal to an art patron of Scipione's stature.

However logical this hypothesis may be, it cannot be proven: not a single terracotta is mentioned in any of the documents related to Bernini's first major sculptures. Nor can any terracotta known today be convincingly associated with his preparations for those early works. This includes the terracottas at the Hermitage and the Cleveland Museum of Art that are still sometimes published as autograph works by Bernini. As I have discussed elsewhere, the entire group (three at the Hermitage; one at Cleveland) can be excluded from his oeuvre.57 The reasons are mostly grounded in connoisseurship but also relate to the fact that these terracottas are too much like the marbles: they duplicate almost precisely the statues for which they were supposedly preparatory. Research into Bernini's carving methods has demonstrated that there should be differences.⁵⁸ The Pluto and Proserpina, the David, and the Apollo and Daphne were all carved from blocks of marble containing impurities. To deal with these defects, Bernini would have adjusted his designs as he carved. No presentation model could have forecast such changes.

Toward the Mature Sketch Model

Despite the lack of direct evidence, it still seems highly probable that Bernini produced presentation models for his Borghese sculptures—if not for every one of them, then at least for the first. The chances also seem very good that he turned to bozzetti as an aid in establishing their compositions. This makes sense not only given the complexity of the designs but also because he grew up in an environment where sketch models, if not a standard part of the art-making process, would at least have been discussed. Still, questions loom—not the least being: What would the sketch models of Bernini's late teens or early twenties have looked like? Would they

have been as freely improvised as those of his maturity, such as the ones that survive for the angels on the Ponte Sant'Angelo (cats. 35–44)?

Considering Bernini's earliest datable drawing, a sketch for the Pluto and Proserpina from about 1621 (fig. 37; cat. D.1), we are tempted to conclude that he would have modeled with the same brio as he drew. But caution must be exercised. First, drawing and modeling are very different skills; to master one is not to master the other. Second, whereas the young Bernini could have visited the studio of practically any major artist in Rome and seen examples of beautiful, lightning-quick sketches on paper, he would have had little luck locating equivalent bozzetti, or so it seems based on inventories of Roman collections and the few surviving models known to have been available to Bernini during his formative years.⁵⁹ Admittedly, trying to reconstruct what works of art Bernini knew, and when, is tricky. It is sometimes assumed, for example, that he made a study trip to Florence as a teenager, but the evidence for that is scant at best. Rome is probably where he stayed throughout his formative years, meaning that he is likely to have had only a faint idea of how the great Florentine sculptor Giambologna, for example, tended to model. I single out Giambologna because, of all the Italian sculptors to precede Bernini, he made sketch models that are most frequently compared to Bernini's, with the implication that the younger artist's were indebted to them.⁶⁰ The problem is that none can be confirmed as having been in Rome, only in Florence, where Giambologna spent the whole of his maturity.⁶¹

And even if Bernini did happen to see one or two, would he have reconfigured his modeling style to make it like Giambologna's? That seems unlikely, since he was not one to imitate for the sake of imitating. As emphasized throughout this catalogue, sketch models were tools for Bernini, and he went about making them in a pragmatic way. This again suggests that he came to his mature *bozzetto* style through a process of self-discovery, one that may have taken some

time to achieve and may have passed through various phases. This is not to exclude that his mature style came early in his life and that his sketch models for the *Pluto and Proserpina* or the *Apollo and Daphne* might have been among his freshest and most raw, rivaling any of those in this exhibition. But there is simply no way of knowing—only questions to ask.

One question is how clearly these Borghese sculptures reflect the quick modeling style typically associated with the older Bernini. If a visual correlation could be detected, it might be evidence of the kind of bozzetti that, theoretically, preceded the marbles. In pursuing this line of inquiry, I am indebted to an observation made by Irving Lavin over thirty years ago. He noted that Bernini, through his methodical preparatory procedures, "succeeded in all but eliminating the difference between bozzetto and final execution."62 Lavin reasoned that Bernini so admired the direct, unpremeditated quality of his own bozzetti that he deliberately approached carving as though he were still sketching in clay. For evidence, Lavin cited Bernini's mature marbles—especially later ones such as the Angel with the Crown of Thorns (fig. 337). The drapery wrapped around the angel conveys astonishing energy, achieved by the many narrow channels carved into the marble that swirl around the figure's waist and dart over and beneath its legs. The way the channels taper and change course looks totally accidental, which is the same impression given by the bozzetti for the statue, including the one at the Kimbell Art Museum (cat. 40). Bernini formed its drapery by massing the basic folds. Next, he ran an oval-tip tool through the clay in rapid, flowing lines that are precursors to the channels in the marble. From a distance, the marks present a fascinating pattern of snaking fissures. As we approach, however, we realize that there is another, less controllable element in the pattern, which complements Bernini's deliberate tooling: the countless shavings of clay kicked up by his modeling tool. They catch the light like facets of a gem and are an important reason the drapery



Fig. 12. Gian Lorenzo Bernini, Apollo and Daphne (detail). See fig. 1.

Fig. 13. Gian Lorenzo Bernini, Martyrdom of Saint Lawrence, 1617. Marble, 66 x 42½ in. (66 \times 108 cm). Contini-Bonacossi Collection, Florence

seems to pulse with energy. As Lavin quite reasonably hypothesized, Bernini could not resist giving his marbles similar effects effects inspired by his bozzetti.

Drapery is not the only aspect of Bernini's marbles in which the impression of sketch models is strong. Consider the doughy clouds at the base of his Angel with the Crown of Thorns. They are highly comparable in their plasticity to the massed clouds on the related bozzetti, and it is well within reason to posit that the latter informed the former. The same might be said of the wings on the marble sculpture; the soft feathers look to have been inspired by those on the bozzetti, rendered with quick flicks of a sharp tool in the soft clay. I could go on citing examples, but it should be obvious by now that for Bernini a bozzetto was much more than a tool for solving overall compositions. It held intrinsic worth as an art object, and the properties that gave it that worth—freshness, spontaneity, energy—warranted preservation in the final work. His thinking is likely to have had a corollary: that for a bozzetto to rise to the level of art object, it had to look natural, as though the product of effortless, instantaneous thought, despite the hours required to make it.

Which returns us to the crucial question: when did Bernini learn to create sketch models that look as though they flowed directly from his subconscious? If we use as a guide Lavin's observation that Bernini's styles of modeling and carving are strongly correlated, we would be tempted to date his first mature bozzetti toward the end of the period when he made the Borghese sculptures, perhaps around the time of the Apollo and Daphne. Whereas the Pluto and Proserpina, in technique and style, bears qualities more associable with deliberateness, control, and perfection, there is a decided loosening in the Apollo and Daphne, which could be related to the use of sketch models. It is easy to imagine a dazzling bozzetto for the statue in which the leaves are annotated with quick flicks of a sharp tool, and then to imagine that Bernini so appreciated their shimmering quality that he decided he must replicate the effect in marble—which he did by hiring the skilled Giuliano Finelli to carve each leaf wafer-thin and to set each one at a slightly different angle in order to scatter the light (fig. 12). The draperies in the Apollo and Daphne may also reflect a change in Bernini's modeling. Their seemingly impromptu pattern of twists and folds is more complex than had been typical of the young



sculptor's earlier work, a solution that may have suggested itself while he experimented with a new, freer style of modeling in clay.

Before going further, however, we should note that a carved surface can look freely modeled for reasons not directly dependent on bozzetti. For example, consider Bernini's Martyrdom of Saint Lawrence (fig. 13), which predates the Apollo and Daphne by five or more years. 63 Some type of sketch model could well have preceded the statue, but it is unlikely to have been a significant factor in the flames beneath the saint, which are notable for their malleable, waxy quality. In deciding how to render them, Bernini needed only to look to his father, whose mature marbles feature a pleasingly supple treatment of elements such as beards and clouds. If Bernini had still been in doubt about how to represent a shifting flame, he might have reflected on the general appearance of pliable substances, which would inevitably have related to his own experiences with clay and wax. By then, would he really have needed to make a lively bozzetto in order to

realize that the best way to represent flames in marble was to adopt a modeler's sensibility and try to make them look soft, even amorphous? Most likely not, which is to underscore the danger of looking at Bernini's earlier sculptures and assuming that especially plastic or impressionistic surfaces resulted from the use of models in a style like that of his mature *bozzetti*. The inspiration could have come from multiple quarters.

Modeling the Pluto and Proserpina

Without any certain way to establish when Bernini made his first mature *bozzetti*, I shift to the question of how he developed the compositions for the Borghese sculptures. It seems unthinkable that he conceived them without sketch models.

My analysis centers on the *Pluto and Proserpina* (fig. 14), the only Borghese sculpture for which there survives any shred of preparatory material: the aforementioned drawing in Leipzig (fig. 37), which represents an early stage in Bernini's exploration of how



to position Proserpina relative to Pluto. The composition comes fascinatingly close to a bronze statuette of Hercules and Antaeus that is routinely ascribed to Pietro Tacca (fig. 15).64 The major difference from the drawing is that, in the bronze, the captured Antaeus is presented stomach to stomach with Hercules. Bernini preferred that his abducted figure be more frontal, turning Proserpina outward; in the final statue, she is rotated even further, placed nearly at Pluto's side. Again, a bronze may have influenced Bernini's thinking—possibly one of the many reductions in bronze of the famous Hercules and Antaeus at the Palazzo Pitti, Florence, a colossal marble from antiquity that was widely known and admired (fig. 16).65 Another possibility is a small Pluto and Proserpina in bronze that was probably made in Florence around 1580 and wound up in Rome, where Bernini could have seen it (fig. 17).66 The only marble to feature a lifted figure that might have contributed to the design is Giambologna's Rape of the Sabine Women (fig. 18). But there is no guarantee Bernini knew it

Opposite: Fig. 14. Gian Lorenzo Bernini, *Pluto and Proserpina*, 1621–22. Marble, H. 100¾ in. (255 cm). Galleria Borghese, Rome

Right: Fig. 15. Attributed to Pietro Tacca, Hercules and Antaeus, 1600/25. Bronze, H. 191/8 in. (48.6 cm). The Art Institute of Chicago; Robert Allerton Endowment (1968.612)

Above: Fig. 16. Roman, Hercules and Antaeus, 1st century A.D. Marble, H. 114¼ in. (290 cm). Palazzo Pitti, Florence



firsthand at this early stage in his career—and even if he did, its system of multiple viewpoints did not mesh with his own aesthetic, which favored strong axial views.⁶⁷

That the Pluto and Proserpina is close in composition to many more bronzes than marbles appears not to be coincidental. There is every indication that Bernini purposefully went about planning it as though he were making a model for casting.⁶⁸ This approach had many advantages, including freeing him from having to yield to marble's primary limitation—its low tensile strength. Because clay and wax have much higher tensile strengths than marble, they can support their own weight to a much greater degree, which gives sculptors more freedom to try daring solutions involving projecting elements. Lifted figures are also vastly simpler in clay or wax because, up to a certain size, they are light enough to be held aloft in a variety of ways. This is not the case





with marble figures, which generally depend on some type of support to carry their weight, especially as they approach lifesize. One solution is to position the lifted figure directly above the one carrying it, so the weight of the statue bears straight down, as in a column. Another is to carve a buttress beneath the lifted figure, but buttresses can be unsightly. In clay or wax—or especially bronze—all these problems go away. Sculptors can think like painters, freed of material restrictions—unless the statue happens to be inordinately large, since every material does have a breaking point.

Bernini's great breakthrough came about 1620 with the Pluto and Proserpina, in which marble is pressed to its physical limits in several places. To the young sculptor, the behavioral differences between carved materials (marble) and modeled ones (clay and wax) must have become obvious early on, although he is unlikely to have grasped them fully until

he had accumulated direct experience with both types of materials. Even idly playing with clay or wax could have gone a long way toward teaching him how limited marble was by comparison. In keeping with the tastes of the time, he would have been raised to venerate marble and must have felt somewhat frustrated to discover that, in actual fact, it was not always the perfect material. One way he might have tried to reassert its value would have been to experiment with ways to make his marbles look strong and light, as though they had the same tensile strength as clay, wax, and even bronze. In the Pluto and Proserpina, he elongated Pluto's stride, which is exceedingly open for a marble sculpture. Proserpina, in turn, is borne effortlessly aloft; viewed from the front, as Bernini intended, she looks as though she weighs practically nothing. The sensation of lightness extends to her outstretched arms and legs, which shoot off into space, reinforcing

Fig. 17. Attributed to Pietro da Barga, Pluto and Proserpina, ca. 1580. Bronze, H. 231/4 in. (59 cm), with base. Museo Nazionale del Bargello, Florence (inv. 236 B; general inv. 13939)

Fig. 18. Giambologna, Rape of the Sabine Women, 1583. Marble, lifesize. Loggia dei Lanzi, Florence

the illusion that she is more flesh, muscle, and bone than weighty, brittle marble.

If one of the primary forces driving the design of the Pluto and Proserpina was Bernini's desire to make it look plastic, like a bronze, then it is hard to imagine that sketch models did not play a role—even if they may not have been in his mature, free-flowing style yet. Presumably made of clay and hence eminently pliable, they would have offered the fastest and most direct means for Bernini to bend and stretch a composition until it was visually pleasing as a whole. The trickiest part would have come next: ensuring that the design could actually be rendered in marble. Bernini likely sensed at once that he would need to adopt the age-old strategy of a buttress, although not just any buttress. His was to be cleverly disguised, a combination of drapery and the three-headed dog Cerberus at Pluto's side. Again, Bernini might have experimented with buttress designs in clay, although there is an equal chance that he let his superb sense of marble guide him, developing the solution as he carved. Either way, with the finished sculpture so deeply rooted in the aesthetics of modeling, there seems little chance that it came about without sketch models—no matter how rudimentary. They were more than just design devices for Bernini; they were the inspiration for an entirely new way of sculpting, which makes it all the more lamentable that they have not survived. Their absence may be due simply to a combination of studio practice and fashions in collecting: during the early 1620s, bozzetti were still considered tools rather than art objects, a situation that would change only gradually over subsequent decades. (See Tomaso Montanari's essay in this volume.) Bernini may not have preserved them initially because he was still too young at that point to have realized their importance to his creative legacy.

Head Studies

Sketch models may not be the only kind of model that Bernini used in planning the *Pluto*

and Proserpina, the Apollo and Daphne, and the David. As revolutionary as these statues are for their daring, dynamic compositions, they depend equally on their insistently lifelike quality, which is a combination of their emotionally charged faces and their smooth surfaces seemingly as supple as flesh. Were models a factor in these effects? It certainly appears so, even if their influence was indirect. Consider Bernini's presumed experience with making models for portraits. Not only would that have given him valuable practice in rendering convincing faces, but it also would have helped reinforce the realization that, to make marble look like flesh, he should treat marble as though it were soft—as though it were clay.

As persuasive as the analogy with portrait models may be, it has a principal drawback: no portrait bust in Bernini's entire oeuvre is anywhere near as expressive as the faces given to Pluto and Proserpina, Apollo and Daphne, and David. Whereas the portrait busts are calm and restrained, the sculptures are full of emotion, displaying a range of psychological states—from fear (Proserpina and Daphne) to power (Pluto) to supreme confidence (Apollo) to steely resolve (David). The complex individuality of each face argues for some form of direct study, and this seems especially likely given an incredible anecdote recounted by Bernini's son and biographer, Domenico. In an effort to give the early Saint Lawrence a convincing expression, Bernini is reported to have studied his own face in a mirror after sticking his leg in a fire. 69 Whether any models or drawings resulted from this exercise is not known, but it does suggest that Bernini, especially while young, did not leave expressions to chance. If his son is to be believed, he literally took pains to study them.

Two other sculptures from Bernini's beginnings are doubtless based on his own face: the *Damned Soul*, 1619 (Spanish Embassy to the Holy See, Rome), and the *David*. Again, we have no preparatory materials for either, but we do know that Bernini routinely drew himself,



even at an early age.71 Perhaps the constant availability of his face allowed him to forgo sketching in favor of carving these two projects directly from life using a mirror. If so, it was a process with a major limitation: it worked only when the iconographic subject being carved was young and male, like Bernini himself. In all other instances, he had to find different models, and the thought must have crossed his mind that some form of head study might be useful.

The need may have been particularly acute around 1620, as Bernini moved from his first sculpture of a female, the Blessed Soul (fig. 19), to his second, Proserpina (fig. 20). The earlier of the two, the Blessed Soul is by far the more generic, stereotypically sweet, as though drawn from imagination alone.⁷² In the second, a change sets in. The flesh is modeled more descriptively, and the expression is electrifying, with mouth agape and a trickle of tears conveying Proserpina's utter shock at her dire situation. Naturalism pervades, although it is

tinged with an idealism that may come from the ancient Niobe, then considered the paradigmatic image of grief and despair.73

In moving from the Blessed Soul to Proserpina, did Bernini undertake head studies in clay to help him understand not only Niobe's visceral expression but also her classical beauty? There is no terracotta that can be reliably attributed to him that suggests so, although there is one that provides an idea of what this model might look like: a terracotta Female Head that has been attributed to Bernini in the past (fig. 21).74 The model is strongly indebted to the Niobe—doubtless its primary source. The crucial difference is that, whereas the Niobe leaves the viewer with a cold, hard impression, the Female Head conveys a palpable sense of warmth, of flesh and blood. Proserpina is exceedingly close to it in approach, as are Daphne and Saint Bibiana (fig. 66), the next two images of females to issue from Bernini's chisel. Although all three vary in expression (Saint Bibiana could not, of course, be shown shrieking in fear), they are united by Bernini's pursuit of bringing to life faces as



Fig. 19. Gian Lorenzo Bernini, Blessed Soul, 1619. Marble, H. 141/8 in. (38 cm). Spanish Embassy, Rome

Fig. 20. Gian Lorenzo Bernini, Pluto and Proserpina (detail). See fig. 14.



Fig. 21. Formerly attributed to Gian Lorenzo Bernini, Female Head, formerly dated ca. 1625/ca. 1645-55. Terracotta, H. 12 in. (30.5 cm). Private collection, Saint Louis

beautiful as Niobe's. Whoever made the Female Head was engaged in that same pursuit—one reason to imagine the model as something the young Bernini might have made as he tried to formulate the kind of head he thought appropriate for Proserpina, Daphne, and Bibiana.

Later in this catalogue I propose that Bernini's modeling seems to have become truly integral to his practice during the second half of the 1620s, as he was juggling the many commissions being handed to him by the new pope, Urban VIII (see cats. 2-5). In response, Bernini had no choice but to establish a large workshop, which necessitated streamlining his design operations. He must have turned to models as never before, and it is a testament to the experience gained during his earlier years that he not only had the ability to put models to good use in a bustling workshop, but also that he chose to do so. As a modeler, he had assembled the perfect résumé for accomplishing this transition: observing both his father and Stefano Maderno, making portraits, and developing his own innate sense that the future of sculpture lay at the intersection of modeling and carving—the precise sense that enabled him to make the leap to the Pluto and Proserpina and the rest of the Borghese sculptures.75 Even if no specific models, surviving or documented, can be linked to their making, there can be no question that models were as essential to them as to any of Bernini's later sculptures.



Ian Wardropper

Sketching on Paper and in Clay: Bernini's Use of Preparatory Drawings and Models

SCULPTOR, ARCHITECT, AND PAINTER, Bernini used drawings to prepare for statues, buildings, paintings, and prints. He also executed portraits in chalk, bitingly satirical caricatures in pen and ink, and finished presentation drawings as works of art in their own right. The sheets gathered for "Bernini: Sculpting in Clay" are those related to commissions for which the artist made terracotta models. While the focus here is on the models, of course, it is impossible to ignore that nearly every one corresponds to studies on paper. This essay examines the relationship between drawing and modeling in Bernini's preparatory studies for finished statues. It seeks to understand why he turned to one format over the other; whether he tended to begin with the sketchbook or the modeling stand or whether these activities were interchangeable; and how the character of each medium stimulated and shaped his process of creation. Bernini's drawings served many functions, but for this essay it is useful to consider three specific categories: overall plans for a monument, tomb, or sculptural complex; complete studies for individual statues; and details of part of a sculpture.

Overall Views

In a document of 1644 related to a particular commission, Bernini stated both that he produced large and small drawings and models

Fig. 22. Gian Lorenzo Bernini, Study for the Sea Deity with Dolphin Fountain at the Palazzo Ducale, Sassuolo, ca. 1652–53. Black chalk, $13^{11}\% \times 9\%$ in. (34.8 × 23.8 cm). The J. Paul Getty Museum, Los Angeles (87.GB.142). Cat. D.20

for decorations and figures and that he finished all the figures himself.² Even though that claim may be exaggerated, he did generally make an initial rapid drawing of the overall project along with more specific three-dimensional studies of principal figures. Though often just abbreviated notations of forms, these clay sketch models, or *bozzetti*, were sufficiently specific to guide the artist or his assistants in making larger models. Two designs for monuments demonstrate how Bernini used drawings to conceptualize the broad outlines of a project in the early 1630s.

After Carlo Barberini—who had been Gonfaloniere, or standard-bearer, of the Church—died in 1630, the Roman Senate commissioned Bernini to design a commemorative plaque for the church of Santa Maria in Aracoeli (fig. 167). It was erected within two years of Barberini's death. A drawing in Leipzig (fig. 23) and a terracotta at Harvard (cat. 2) are evidence of his preparations for the monument. The drawing was made first, since it suggests an approach entirely different from that of the carved marble; the clay is a close study of one of the marble's two allegorical figures. Forms that hint at Barberini bees in the coat of arms above and at the death's head below link this sheet to the monument in question.3 The sketch proposes two versions of a rectangular tablet supported by figures of Fame blowing trumpets. Bernini began by lightly chalking in



the right-hand figure, one arm draped along the top of the frame, the other extended to hold the trumpet. On the left-hand side, the artist sketched the frame and a matching Fame but elected to shorten the frame's height and penned over this new version to emphasize it. The result recalls a common sixteenth-century design format that offered craftsmen two variations by dividing a structure axially with different solutions on either side. 4 Giving his client a choice does not seem to be Bernini's intent here; rather, he appears to have changed his mind midstream and marked his preference accordingly.

The model reinforces the notion that Bernini conceived the monument in two halves: here, he focuses on the upper right allegorical figure, no longer a Fame sliding along the right side of the frame but a grieving, helmeted woman perched on top of it. He continued to adjust the monument's shape: the model bears traces of a smaller shield to the right that he expanded by sketching in the clay with a wooden tool (see fig. 170). Multiple lines scribed under the figure show that he was still meditating on the exact placement of the border of the tablet, though he had already conceived her drapery as flowing over the top edge.

The artist continued to use graphic media —the most rapid means available—to rough in an initial overview of his concept and then would turn to clay to focus on the principal sculptural elements. This held true three years later, when Pope Urban VIII transferred the remains of Countess Matilda of Tuscany from Florence to Rome and ordered Bernini to design a wall tomb in Saint Peter's for this revered figure. In a swift sketch in Brussels dating to late 1633 or 1634 (fig. 24), the artist outlined the main elements: the statue of Matilda stands in a niche over a cartouche (the inscription abbreviated simply as horizontal lines), flanked by allegorical figures (probably Faith and Justice) holding a cross and scales, respectively, and seated on a figured sarcophagus. His pen reduces the statues to stick figures, particularly those on the relief, but adroit touches of wash shadow the niche and suggest the physicality of forms. In the final work (fig. 183), Bernini emphasized Matilda, shrinking the niche so that she dominates the space and scaling down the inscribed cartouche, now supported by small angels rather than full-size allegorical figures.

The drawings for both the Carlo Barberini and the Countess Matilda monuments are likely

Fig. 23. Gian Lorenzo Bernini, Study for the Memorial to Carlo Barberini, 1630. Red chalk and pen and ink, $6\frac{1}{2} \times 8\frac{3}{8}$ in. (16.4 × 22.7 cm). Museum der Bildenden Künste, Leipzig (NI.7845)

to have been made primarily for the artist's use, though one could imagine him informally showing them as initial concepts to patrons or others involved with the commission. Other of Bernini's drawings are complete, carefully finished, and centered on the sheet; these were clearly conceived as presentation drawings. For example, in the Design for an Elephant with an Obelisk, at Windsor Castle (fig. 25), which I believe to be from the artist's hand, pen lines note the wrinkles of the elephant's trunk and doodle the hieroglyphics of the obelisk, but the forms are fully described and wash unifies this tall structure from top to bottom. Protrusions from the tip of the shaft probably represent Barberini bees in profile, so this sketch likely dates from a project by Cardinal Francesco Barberini to erect an ancient Egyptian obelisk in front of the Palazzo Barberini (see cat. 6). Inspired by Renaissance woodcuts and stone statues, Bernini brought this concept to life by giving the elephant's face a mischievous look as it flips its trunk to the side.

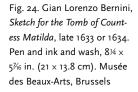


Fig. 25. Gian Lorenzo Bernini, Design for an Elephant with an Obelisk, ca. 1632 or ca. 1658. Pen and ink with wash over black chalk, $10\% \times 4\%$ in. $(27.3 \times 11.6 \text{ cm})$. The Royal Collection, Windsor Castle (RL 5628). Cat. D.14





papacy of Alexander VII, when the discovery of another small obelisk in 1665 prompted the pope to command an appropriate mount for it. Bernini appears to have proposed alternatives to the elephant at that point. A black chalk drawing in Leipzig shows the winged figure of Time (or Saturn), who somehow manages to clutch his scythe while also hoisting the obelisk up to the level of his waist.5 A finished pen-andink sheet by Bernini of Hercules struggling to





carry a teetering obelisk plus another one (which I would attribute to the workshop) of seated allegorical figures supporting this pillar on their shoulders suggest that Bernini took several designs to a high degree of finish, not as personal notations but to give choices to his client.6 Another sheet at Windsor, showing the finalized base but with the elephant's pose reversed, indicates that the original concept developed for Francesco Barberini was also one of these choices, and it was, in fact, the final selection (see fig. 186).7 It has been modified by extending the elephant's howdah blanket down to the ground—additional structural support for the obelisk that was absent from the more daring project for Cardinal Barberini. The striking Corsini model (cat. 6) reflects the initial design, leaving free the space beneath the pachyderm's body. Bernini loved the shock of a void beneath a weighty solid—witness the crevice beneath the mountain in the Fountain of the Four Rivers (fig. 191)—but the relatively smaller elephant must have required additional buttressing

beneath. In this instance, the master himself appears to have taken pains to sketch the appealing presentation drawing seen in fig. 25. The large, smoothly finished clay model probably represents a collaboration with assistants.

Two drawings for fountains also reflect Bernini's use of variant presentation sheets.8 In the first, three dolphins rear up, intertwining their tails to cradle a giant shell (fig. 26). In the second, these aquatic creatures similarly intertwine, but now a pair of facing tritons hoist the dolphins aloft (fig. 27). A terracotta in Berlin (cat. 11) resolves this second design in three dimensions. Both drawings are variations on a theme. The first is completed by a nowfaded blue wash that suggests how the water could spurt up from the shell and through the dolphins' mouths below. With bold line and vibrant use of wash to suggest light and dark, the second image also illustrates a functioning fountain: water splashes down from the dolphins' mouths. Slightly more refined than is typical of Bernini, the drawing of the shell in

Fig. 26. Gian Lorenzo Bernini or assistant, Design for Fountain with Dolphins Bearing a Conch Shell, ca. 1651-52. Pen and brown wash, with blue wash, $15\% \times 9\%$ in. (39.6 × 24.5 cm). The Royal Collection, Windsor Castle (RL 5625). Cat. D.21

Fig. 27. Gian Lorenzo Bernini, Design for Fountain with Tritons and Dolphins, ca. 1652-53. Pen and brown ink over traces of graphite, $9\% \times 8\%$ in. (24.6 \times 20.6 cm). The Royal Collection, Windsor Castle (RL 5623). Cat. D.22



Fig. 28. Gian Lorenzo Bernini or workshop, A Design for a Fountain, ca. 1652-53. Pen and ink and wash, $16\times10^{\frac{11}{4}}$ in. $(40.6\times27.3\text{ cm})$. Victoria and Albert Museum, London (CAI.416)

fig. 26 is possibly by an accomplished assistant, but the bold and speedy image of the tritons in fig. 27 fully reflects his rough urgency. Whether these were alternatives devised at the same time or at different moments, they both appear to be connected to a project to create a fountain in Rome's Piazza Navona complementary to the Four Rivers. The shell fountain, known as the Fountain of the Snail, was in fact executed by Bernini in 1652, but it was removed the fol-

lowing year, having been judged too small for the site (see cat. 11).9 Eventually, it was replaced by the Fountain of the Moor in Piazza Navona, featuring Bernini's single triton standing on the now-overturned shell (fig. 221).

In the same years of 1652-53, Bernini was commissioned by Francesco I d'Este, Duke of Modena, to prepare fountains for niches in the walls of his palace in Sassuolo. A chalk drawing in the Getty Museum (fig. 22), a wash drawing in the Victoria and Albert Museum (fig. 28), and two terracottas (cat. 15 and fig. 236) in Italy trace the progression of one of these, the Sea Deity with Dolphin Fountain. In the atmospheric sheet at the Getty, the artist roughs in his thoughts for the composition. Adroit lines and broad smudges describe the bridge of rocks on which a marine god perches, while more tentative strokes and pentimenti reveal Bernini's efforts to determine the position of the torso and arm of the man, who struggles to hold a slippery creature. Vertical lines suggest the limits of the niche containing the fountain, while Bernini playfully removed stucco from the wall drawn at lower left to disclose the brick structure beneath. The wash drawing in London specifies motifs that were indeterminate in the chalk version: for example, the wide flange of the dolphin's mouth is now firmly established, and this was followed carefully in the three-dimensional versions. Most striking is the bold representation of light and dark: the emphatic shadow of the fishtail on the hollow of the niche confirms the direction of the sun. This drawing carefully represents the statue within the whole setting, with a theatrical flair intended to dazzle a patron. (It is recorded that Duke Francesco received presentation drawings for the fountains.)10 Heinrich Brauer and Rudolf Wittkower list it as from the workshop.11 While this seems likely, it was surely a copy after Bernini—or did the master enlist members of his shop to create this type of drawing? Antonio Raggi's adept model (cat. 15) takes off from the wash drawing, precisely copying the dolphin mouth and the rectangular character of the

rocks. The attractive flow of forms in the terracotta becomes stiff in the final stucco sculpture. which was left largely to assistants (fig. 232): the sea god's grasp is less energetic, his face no longer covered by the bent arm, his left leg not twisted out to push against the rocks.

A chalk drawing in Madrid (fig. 29) for Constantine the Great on Horseback (fig. 265) may also have been made for presentation. The diary of Cardinal Fabio Chigi (later Pope Alexander VII) for September 5, 1654, records that Bernini had shown him a design for the Constantine statue. 12 It is not clear whether the drawing in Madrid is the one shown to Chigi, but it does represent the earliest phase of the commission, which Pope Innocent X intended as a counterpart to the monument to Countess Matilda in Saint Peter's. The drawing clearly shows the equestrian figure before a niche that accords with the proportions of the niches in Saint Peter's rather than the broad arch of its final setting on a landing of the Scala Regia. In the drawing, unlike the finished statue, the emperor is seen with his right arm behind him, his torso twisted to the front, his head turned so that only the profile is visible, and his leg nearly straight. The horse rears back on its hind legs, but its head and body spiral within the niche; the horse eyes the viewer while Constantine gazes raptly at the





Fig. 29. Gian Lorenzo Bernini, Study for the Equestrian Statue of Constantine, ca. 1654. Black chalk, $12\% \times 10\%$ in. (31 \times 26.7 cm). Real Academia de Bellas Artes de San Fernando, Madrid (D/2247). Cat. D.23

Fig. 30. Gian Lorenzo Bernini and assistant, Study for the Equestrian Statue of Constantine, ca. 1669-70. Black chalk with some red chalk accents and white heightening, $14 \times 8\%$ in. (35.5 × 22.3 cm). Museum der Bildenden Künste, Leipzig (NI.7916). Cat. D.41

Fig. 31. Gian Lorenzo Bernini, Study for an Altar and Monstrance, ca. 1658 or ca. 1672. Pen and ink, 93/8 \times 6½ in. (23.9 \times 16.4 cm). Museum der Bildenden Künste, Leipzig (NI.7865)

miraculous sign above. There is a breezy quality to the soft sfumato composition, but it has been executed with care. Attention is paid to the way light defines the rump and haunches of the horse, but light does not play as dramatic a role here as in other presentation drawings, even though the emperor's vision is of a burst of light.

A second Constantine drawing (fig. 30), representing the statue sited in the Scala Regia, has several odd features. The architectural rendering of the pedestal and niche is carefully ruled, leading one to think that an assistant laid this in first. The image of the horse and rider corresponds in essence with the final statue—there are some discrepancies, such as a thinner tail and front hooves that do not extend as far-but it is drawn somewhat timidly. The sharp, assured lines of the drapery are the strongest element, yielding not a careful description of the material but a powerful evocation of its movement. It appears, therefore, that an assistant drew in architectural elements and perhaps also the horse and rider from another graphic model, but it is clear that the master's own bold chalk strokes are responsible for the curtain.13 When the project was moved to the wider site of the Scala Regia in 1662, he contrived a dramatic stucco curtain to compensate for the larger back wall, and this drawing explores how to achieve that. It is difficult to pinpoint when the terracotta models were made in relation to the drawings. The fragment of the rump in Rome (cat. 22) has the same sharp angle of the leg as the final statue (unlike the gentler bend in the Madrid drawing); the Hermitage model of horse and rider (cat. 23) is close to the final pose.

Bernini's drawings for the Altar of the Blessed Sacrament in Saint Peter's (fig. 400) that have been gathered for this exhibition exemplify two of his uses of sketches on paper to conceptualize sculpture: the overall relationship of figures to architectural context and the serial development of the pose and mass of individual figures. The commission originated

with Urban VIII in 1629 but was suspended after a few months; Alexander VII revived the project in 1665-67, but it was sidelined until Clement X committed funds to its completion in 1672-74. A pen-and-ink sheet in Leipzig (fig. 31) briskly but deftly outlines an early concept of the altar, showing four angels kneeling on the altar and holding up the base of the tabernacle.14 Candles rise from its sides to illuminate the host framed by columns. This dazzling centerpiece is surrounded by excited lines that stream from it in all directions. Speedily executed, it brilliantly conjures up the spectacle Bernini intended and is so compelling that he might well have shown it to a patron to fire enthusiasm for his first concept. The sure strokes of the pen recall the rapid, if more delicate, lines of his sketch for the Angel with the Crown of Thorns, 1667-68 (see fig. 46).

Comparison to a later drawing of the altar in the Hermitage (fig. 32) is instructive. The four angels still hoist the tabernacle, only now they each support it with one hand and a taper with





the other. The altar's architectural elements are carefully noted: the blocks on which the forward angels kneel protrude before the main plinth, and the tabernacle takes the form of a circular colonnade supporting statuettes around a dome. Both of these features are close to the resolution of the final altar, and this stage was

sufficiently advanced that a scale was ruled in below. This may be a workshop drawing, but the vigorous pen lines and wash of the angels are close to Bernini's manner, while the wavering strokes and subtle wash lines for the steps suggest a confident approach.¹⁵ Some authors have noted that the scale of the structure would Fig. 32. Gian Lorenzo Bernini and assistants, Design for the Altar of the Blessed Sacrament, ca. 1658 or ca. 1672. Pen and brown ink with wash, $14\% \times$ $10\frac{1}{4}$ in. (38 × 26 cm). The State Hermitage Museum, Saint Petersburg (126). Cat. D.35

Fig. 33. Gian Lorenzo Bernini, Study for a Kneeling Figure, ca. 1658 or ca. 1672. Black chalk, $8 \times 5\frac{3}{4}$ in. (20.3 × 14.7 cm). Museum der Bildenden Künste, Leipzig (NI.7871)

Fig. 34. Gian Lorenzo Bernini, Study for a Kneeling Angel, ca. 1658 or ca. 1672. Black chalk and brown wash, oval cut and made up at left, 51/2 x 6 in. $(14.1 \times 15.2 \text{ cm})$. The Royal Collection, Windsor Castle (RL 5561). Cat. D.36





have obscured most of Pietro da Cortona's painted altarpiece on the wall behind it. 16 This concern may have persuaded Bernini to lower the tabernacle down to the altar plinth in the final work. With the angels no longer needed to raise it, they could be positioned farther to each side—in poses of reverence—and reduced from four to two.

Drawings and terracottas for individual angels relate to the late phases of the altar's planning. Two models at Harvard, each with one hand extended to hold the tabernacle and one to hold a candle (cats. 48 and 49), reflect the Hermitage drawing design. The pose of cat. 49, for example, is essentially that of the angel to the left rear of the drawing, indicating that Bernini took this design quite far, fleshing out his thoughts in three dimensions before abandoning the concept. A chalk nude study in Leipzig sets the contours for one of these angels, bowing forward with left hand pressed to his breast and the right clutching a candle (fig. 33). Shorthand abbreviations—a C for an ear, a slashed and smudged line for eye and mouth, parallel marks for fingers—reveal the speed with which Bernini captured this figure. Another chalk drawing, at Windsor (fig. 34), layers drapery, hair, and wings on the pose set in the Leipzig nude drawing. Here we see Bernini imagining how far the drapery pools around the angel, spreading from his limbs to the ground. The outline of the wings is drawn more lightly, gauging their curving form against the more angular body. Bernini dug into the paper with the edge of the black chalk to emphasize the position of the arms; he rubbed the side of the chalk to color in the mass of drapery, leaving patches of the paper to convey the sense of light and shadow. This same approach to form in clay can be seen in a Kneeling Angel at Harvard (cat. 51), where he ran a straight tool across the edge of the drapery fold crossing the legs to emphasize its sharp edge and dragged a toothed tool across flat patches to suggest texture on a leg or wings.



Several brilliant sheets at Windsor record the artist moving closer to his last phase of design. One combines a bold, caricatural line with broad, dark wash (fig. 35). The angel bows as emphatically as in fig. 34, but now the taper has disappeared and his hands are clasped in prayer. The angel is seen from the side, though angled slightly away from us, face in sharp profile. Bernini begins to imagine the effect of light on his form, as he picks out the edges of the wings and the top of the head, giving the effect of a blaze of sunshine from above. The study of light—possible only in drawings, not clay models—is carried further in a drawing in which the right-side angel is chalked lightly and then swathed in vibrant wash (fig. 36). This bold pattern flickers against areas of nearly white paper or smudged charcoal, as light dances over the drapery folds, perhaps to imitate the metallic sheen these forms would have in bronze. The terracotta sketches are modeled as three-dimensional correlates to the graphic images. The incisive comb marks on cat. 52, for instance, are like the caricatural pen lines seen in fig. 35. Deep pleats smoothed by fingers in cat. 50 emphasize light and dark in a way similar to the smudged areas of fig. 34. While these marks reflect Bernini's search for ways

to explore his aims in different materials, the terracottas seem to represent a stage after the drawings, since their poses are more upright and closer to the completed bronzes.

Drawings for Complete Statues

One can follow—in both graphic and modeled form—Bernini's development of the design for the Altar of the Blessed Sacrament from overall concept to individual statues. As one would expect, the pose and composition of individual figures was at the heart of his preparation. Several other examples also bear witness to the range of these concerns for the artist.

Bernini's earliest known drawing is a chalk study from Leipzig (fig. 37) for the Pluto and Proserpina (1621-22), one of his great statues for Cardinal Scipione Borghese (fig. 14). The



clay studies related to this statue are not widely accepted to be by Bernini (see C. D. Dickerson III's essay in this volume), but the Leipzig sheet is. It indicates that the artist turned to drawing early in the design process, jotting down his first thoughts for dramatic poses. In this initial study, Pluto holds Proserpina up against his middle while she stiff-arms his head away from her and struggles to disengage his hand from her waist. This dynamic composition pits the

Opposite, top: Fig. 35. Gian Lorenzo Bernini, Study for a Kneeling Angel, ca. 1672. Pen and brown wash on black chalk, $6 \times 5\%$ in. (15.3 \times 13.6 cm). The Royal Collection, Windsor Castle (RL 5562). Cat. D.37

Opposite, bottom: Fig. 36. Gian Lorenzo Bernini, Study for a Kneeling Angel, ca. 1672. Black chalk and brown wash, $5\% \times 6\%$ in. (14.4 \times 16.8 cm). The Royal Collection, Windsor Castle (RL 5560). Cat. D.38

Right: Fig. 37. Gian Lorenzo Bernini, Study for Pluto and Proserpina, ca. 1621. Red chalk, $5\% \times 3\%$ in. (13 \times 9.4 cm). Museum der Bildenden Künste, Leipzig (NI.7860). Cat. D.1



diagonal of his body against hers yet locks the figures together in the circular gesture of their arms and their intertwined legs. In the final resolution the poses are reversed, with Proserpina's body curving away from Pluto's. The gesture of her left arm shoving away his head was retained for the marble statue, but her other limbs flail away from him rather than engaging her assailant as in the chalk study.

Bernini concentrated in the drawing on the main outlines of the figures, sharply accentuating their contours in an overall X shape. Fingers and toes are represented by quick slashes, and facial features are noted only to establish the direction of heads. Broad patches of chalk give

a sense of light and shadow and solidify the forms. Yet here the artist is concerned less with establishing a consistent light source than with clarifying body parts: for example, the artist sets off the light form of Pluto's left leg with a darker passage of drapery and contrasts Proserpina's darkened right leg with a light patch. Several authors have noted stylistic relationships to the soft chalk studies by the sixteenth-century Venetian painters Tintoretto and Palma Vecchio.¹⁷ There is an affinity to these works, but it is more likely that Bernini picked up his draftsmanship from members of the Carracci family or their followers, whose style held sway in Rome in the early seventeenth century.18

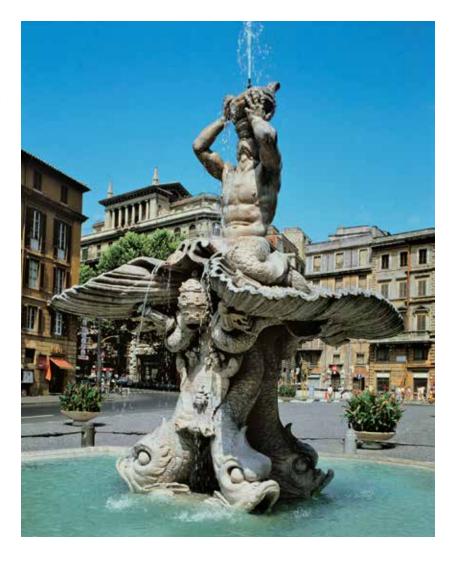


One of Bernini's most brilliant sketches for a whole statue, Study for a Triton (fig. 38), dates to about 1642-43, two decades after the Pluto and Proserpina. In a sense it is only part of a larger complex, since the brilliance of Rome's Triton Fountain (fig. 39) rests in the integration of all the parts: the triton, the opened shell, the family coat of arms, and the entwined dolphins. Yet the sheet in the Metropolitan Museum does describe a complete figure, and it is useful to note differences from and similarities with the Study for Pluto and Proserpina. The triton drawing represents a point far into the design process, since the pose is nearly identical to the carved version. The arms, one higher than the other, hold up the shell the triton blows through; the two parallel twists of flesh above his navel are present. Yet the shell has not yet acquired its final shape, nor has the triton grown his luxurious moustache. Bernini only cursorily suggests the triton's tails, focusing on the figure from the waist up—the portion of the statue most visible to a spectator in Piazza

Barberini. Using red chalk, he firmly describes most contours; fingers are indicated only by a series of parallel lines; rubbed chalk gives volume to the chest and also shadows the hair to set off the upturned face. In this more finished study Bernini was again clearly indebted to the broad, confident anatomical studies of Annibale Carracci.¹⁹ No terracotta models certain to be from Bernini's hand are known to be directly connected to the Triton Fountain. Related bozzetti, such as the Tritons with Dolphins in Berlin (cat. 11), also concentrate on the powerful torsos of the tritons but develop the integration of forms: tritons with each other and human forms with aquatic ones. The drawing is frontal, emphasizing the primary view intended for the

Fig. 38. Gian Lorenzo Bernini, Study for a Triton, ca. 1642-43. Red chalk, background tinted with pale brown wash, framing lines in pen and brown ink, $14\% \times 9\%$ in. (36.4 × 24.5 cm). The Metropolitan Museum of Art, New York; Harry G. Sperling Fund, 1973 (1973.265). Cat. D.15

Fig. 39. Gian Lorenzo Bernini (design) and assistants, Triton Fountain, 1642-43. Travertine, over lifesize. Piazza Barberini,



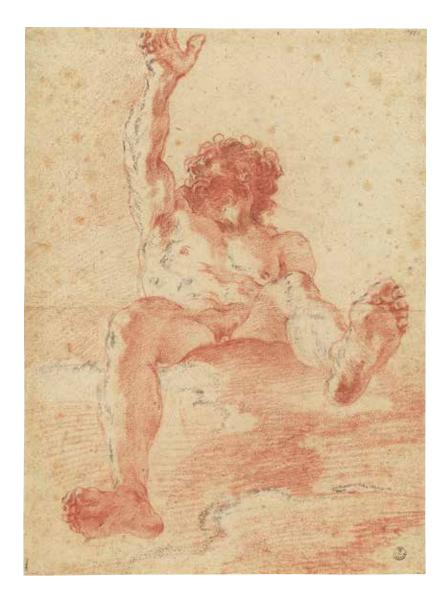


Fig. 40. Gian Lorenzo Bernini, Academy Study of a Male Nude Seen from Below, ca. 1648-49. Red chalk with white heightening, $20\% \times 15\%$ in. (52.4 \times 38.6 cm). Gabinetto Disegni e Stampi degli Uffizi, Florence (11921 F). Cat. D.18

fountain, and fleshes out the essential shape of its crowning element.

Several large chalk drawings of the human figure that seem related to the Fountain of the Four Rivers pose different questions. They are evidently "academies"—formal and complete studies of nude models in a manner traditionally prescribed in teaching drawing.20 In comparison to Bernini's other sheets, these are carefully finished. Toes, fingers, and eyes are completely rendered; the shading of the body is consistently followed; the bodies are situated within settings indicated by lines and shadows. What is unusual about two such sheets

in Florence is the perspective from beneath. In one (fig. 40), the figure is foreshortened so that his enlarged feet dangle in front of the compressed torso, indicating that Bernini was exploring poses of figures that would be perched high on a structure and seen from below. The suggestion of rocks in the drawings has reminded several authors of the statues in the Four Rivers Fountain, though none of the academies connects directly to any of those statues.21 This one is, however, reminiscent of the figure in the fountain embodying the Rio de la Plata, whose backward sprawling posture emphasizes his feet and who turns his head



sharply to the side of his upturned arm. The figure on the other sheet in Florence (fig. 41), seen from the side with right leg raised and left lowered, shares features with both the Danube and the Nile figures in the fountain. But the motif of the left arm pulling drapery behind him is closest in gesture to the Nile, who covers his head with his cloak. If, as seems likely, these sheets are related to the Four Rivers figures, then it appears that at an early stage of the design process Bernini drew live models in different poses, seeking those that would match his vision of the fountain. Since these studies are so carefully finished, it is also possible that he executed them without a particular project in mind and then adapted them to this specific commission.

In a few cases—all related to commissions from the last decades of Bernini's career multiple drawings for individual statues have survived. Whether these reflect increased dependence on graphic notation in his later

Fig. 41. Gian Lorenzo Bernini, Academy Study of a Male Nude, ca. 1648-49. Red chalk with white heightening, $20\% \times 16$ in. $(51.7 \times 40.6 \text{ cm})$. Gabinetto Disegni e Stampi degli Uffizi, Florence (11922 F). Cat. D.19





Fig. 42. Gian Lorenzo Bernini, Study for Daniel, ca. 1655. Red chalk, $14\% \times 9\%$ in. (37.8 × 23.8 cm). Museum der Bildenden Künste, Leipzig (NI.7890). Cat. D.26

Fig. 43. Gian Lorenzo Bernini, Study for Daniel, ca. 1655. Red chalk, 15% x 8% in. (39 × 21.2 cm). Museum der Bildenden Künste, Leipzig (NI.7891r). Cat. D.24

years or the better preservation of work by the increasingly famous artist is uncertain. In any event, those drawings (with the related terracottas)—for Daniel in the Lions' Den, 1655-57; Saint Jerome, 1661-63; and Angel with the Crown of Thorns, 1668-69—offer a trove of clues to the progression of his thoughts on paper.

Nine sketches survive for Daniel in the Lions' Den, which was commissioned in 1655 by Fabio Chigi (who became Pope Alexander VII in April of that year) for his family chapel in Santa Maria del Popolo, Rome (fig. 282).22 Rudolf Wittkower observed that the torso of the ancient Hellenistic statue Laocoön lay behind the saint's pose but that Bernini reversed and transformed this starting point in the course of thinking about the statue.23 He seems to have begun with a solid, muscular chalk rendering of Daniel's chest, with limbs and head only suggested (fig. 42). As his thinking evolved, the body became attenuated. At the point when the torso and hips were resolved, he addressed the inherent problem with the pose—that the arms raised in prayer obscured the face—by lightly chalking in the head's position as tilting away from the arms (fig. 43), the attitude adopted in the final statue. The survival of so many drawings, whereas only the one clay model is known (cat. 25), leads me to suspect that much of the design for this work was carried out on paper. However, as we will see, there are examples to the contrary, such as the angels on the Ponte Sant'Angelo in Rome, for which many of Bernini's models survive (see cats. 35-44) but only a few drawings.

Another series of drawings, in Leipzig, for a single statue was executed a few years later, in 1661, when Alexander VII commanded a marble statue of Saint Jerome (fig. 308) and Saint Mary Magdalen for another family chapel, in the Siena Cathedral. This set is not chalked but penned—ink was Bernini's preferred medium





for drawing later in his career. The half-dozen drawings for the Saint Jerome reflect less evolution in pose than those for the Daniel, perhaps because Bernini had a clearer concept of what he wanted from the beginning. A drawing in Leipzig (fig. 44) is the freest of these sketches and perhaps the earliest, since Saint Jerome holds the crucifix with his left hand in the middle of the upright rather than at the end of the crossbeam. Another drawing in Leipzig may have come next, as the left hand now holds the crossbeam, but the saint's head is slightly distanced from the cross.²⁴ Bernini heavily retraced the lines of the cloak beneath the crucifix, perhaps to note to himself that this element needed to be more emphatic. In what may be the last of this series (fig. 45), the head rests directly on the crucifix and the edges of the statue's niche have been roughed in to explore the relationship of figure to architectural setting. In the clay model (cat. 31), the lion's head on which Saint Jerome stands makes its first

appearance; the motif of drapery covering the foot of the crucifix is resolved (it is never clarified in the drawings), though the position of the saint's hand within the drapery pleats is not in final form; and a great deal of attention is paid to the saint's head and beatific smile. The large clay study of the head at Harvard (cat. 30), with its closed eyes and luxurious beard, shows the sculptor's dependence on three-dimensional modeling as he approached this crucial part

One of the most appealing of all Bernini drawings is a pen-and-ink sheet in Leipzig for the Angel with the Crown of Thorns (fig. 46).25 Executed with an assured hand and unencumbered by repeated or overlaid strokes, it has a freshness that has convinced most scholars that it is a first thought for one of the two angels for the Ponte Sant'Angelo that Bernini reserved for his own chisel.26 Two other drawings surely from his hand survive from the project, both in Rome: a page bearing two

Fig. 44. Gian Lorenzo Bernini, Study for Saint Jerome, ca. 1661. Pen and ink, 7% x 5% in. (18.6 × 12.9 cm). Museum der Bildenden Künste, Leipzig (NI.7861r). Cat. D.32

Fig. 45. Gian Lorenzo Bernini, Study for Saint Jerome, ca. 1661. Pen and ink, 7¾ × 45% in. (19.6 \times 11.7 cm). Museum der Bildenden Künste, Leipzig (NI.7846)



Fig. 46. Gian Lorenzo Bernini, Angel with the Crown of Thorns, 1667-68. Pen and ink, $4\% \times 2\%$ in. (11.6 × 7.5 cm). Museum der Bildenden Künste, Leipzig (NI.7867)

Fig. 47. Gian Lorenzo Bernini, Study for the Head of an Angel, ca. 1668. Red chalk, 711/16 × 51/8 in. $(19.6 \times 14.9 \text{ cm})$. Istituto Nazionale per la Grafica, Rome (FC 127499). Cat. D.40



careful studies of the pose of the Angel with the Superscription (fig. 338) and a study for the head of that angel (fig. 47). In addition, there exists a uniform series of pen, ink, and wash drawings, now divided among various collections, that were once attributed to the master himself but have been recognized more recently as workshop copies of Bernini's originals.27 They offer evidence that Bernini intended to show such studies to Pope Clement IX to represent the scope of the projected angels carrying the Instruments of the Passion.

The Leipzig pen-and-ink pensiero and the working studies in wash again reveal that the artist began thinking about the project in quick sketches and then executed more studied ones in wash to serve as presentation sheets. The large number of clay models for the two angels that he took personal responsibility for carving—there is only one for an angel assigned to other sculptors (cat. 37), though he may well have done more—suggest that at this point in his career Bernini often conveyed his intentions to assistants through drawings but turned to clay when he wished to explore the forms that most interested him. His two-figure drawing for the Angel with the Superscription could have either preceded or followed his clay studies, zeroing in on the contrapposto pose through the use of a male model (as his garb makes clear). The attractive study of the head with closed eyes may have been chalked after Bernini's terracottas were made, as it is close to the final marble's sweet expression but does not specify the emphatic curls of hair that frame the face of the marble statue (fig. 336).

Drawings of Details

When Bernini turned to paper to work out details of projected sculptures, these often concerned drapery, though drawings certainly do exist that focus on a portion of a figure the face of the Angel with the Superscription, for example. Within the pose of a whole figure, he would sometimes concentrate on the torso while indicating the rest of the body, as in the

Daniel (see fig. 42). Two of his earliest sheets show only the chest of Saint Longinus, for a sculpture that was in the process of design from 1628 until Urban VIII approved the fullscale stucco model in February 1632.28 Rather dry, these chalk drawings are schematic, like a map of musculature. The first sheet emphasizes the axis of the body from the squiggled navel to the clavicle (fig. 48). Shading makes the forms appear flatter rather than rounder; the contour lines are drawn unhesitatingly, except for the right shoulder and extended arm, which Bernini worried over in several lines. What I take to be the second version seems to be slightly more rounded, with smoother shading marks enhanced by white highlights and a greater plastic suggestion of the chest under the left arm (fig. 49). The right shoulder is now higher and more clearly demarked; the exact position of the left shoulder gave the artist more trouble. This portion of the anatomy was naturally a concern, as the drapery covers so much of the body except from the chest upward. Since the left arm angles down alongside the body, this sheet may reflect an early study before Bernini adopted the wide-flung arms that are the most striking feature of the final pose (fig. 159).

Most of the other sheets that survive for the Longinus are details of drapery. They appear to have been made around the same time as those for the torso, since some show the left arm at the same lower position. While the Harvard terracotta shows Longinus with arms outstretched and a linear pattern of drapery (cat. 3), the paper studies indicate an earlier stage, with more volumetric drapery. In the terracotta, Bernini seems to have concentrated more on the pose than the drapery, which he returned to study later. He spent a great deal of time working out on paper the exact pattern of the drapery, studied from front and side. What obsessed him in the group of drawings in Düsseldorf is a knot of drapery gathered over the upper fold over the chest (fig. 50)—a motif that he changed completely in the final version—and the pattern formed by the edge of a hang of drapery beneath the





saint's arm (fig. 51). The recto and verso of another drawing in Düsseldorf show this knot now connected to the hanging cloth; in the marble statue Bernini gathered the drapery into two knots by Longinus's left side.29

Two final examples from Bernini's famous sculptures of female saints—Saint Teresa in Ecstasy, 1647-52 (fig. 237), and The Blessed Ludovica Albertoni, completed by 1674 (fig. 255)—suggest how the sculptor used chalk or pen to test his ideas for aspects of a statue. A hazy sketch of Teresa's body from the neck down darkens two patches under her knees to establish the structure of the body within the

Fig. 48. Gian Lorenzo Bernini, Study for the Torso of Saint Longinus, ca. 1629-30. Red chalk, $9^{13}\% \times 10^{7}\%$ in. (25 × 27.7 cm). Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 7719. Cat. D.6

Fig. 49. Gian Lorenzo Bernini, Study for the Torso of Saint Longinus, ca. 1629-30. Red chalk heightened with white, $10 \times 11\frac{1}{2}$ in. (25.5 \times 29.2 cm). Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 7716. Cat. D.7





Fig. 50. Gian Lorenzo Bernini, Two Studies of a Draped Figure, Probably Saint Longinus, ca. 1629-30. Red chalk, $10\frac{1}{6} \times 15\frac{1}{2}$ in. (25.6 × 39.3 cm). Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 13260. Cat. D.12

Fig. 51. Gian Lorenzo Bernini, Two Studies of Details of Drapery, One with the Left Arm of Saint Longinus, ca. 1629-30. Red chalk, 10% × 14% in. (26.2 × 37 cm). Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 12975. Cat. D.13

amorphous drapery (fig. 52). His real intent, however, appears to be to locate her arms: her right hand covers her chest—a motif he changed in the marble so that it lies limply on her lap, palm upward. Sketches for her head (fig. 53) show him taking particular interest in the way her wimple frames her face, its peak pointed above her forehead and its sides descending in broad waves along her head.30 A study on the recto of fig. 52 establishes how far the face projects beyond the headdress from the side. In the end, he abandoned this symmetrical placement of the headgear for a more irregular one that accords with the swirling layers of clothing. It is intriguing that Teresa's head tilts left and is more frontal in the drawing than in the marble, which decisively angles right and is more in profile. Rendered as if seen from below, the features in these two drawn images register little other than that her eyes are closed. A clay model, probably from the workshop, in the Museo Nazionale del Palazzo di Venezia (cat. 18) fleshes out the face with wimple and habit only partially included. Here the details of open mouth and closed eyes are established within a smooth, sensuous surface. It is more finished than the terracotta face of Saint Jerome (cat. 30) but, like it, focuses on the part visible to a spectator.

Two decades later, ink sketches for the Blessed Ludovica again focus on a passage of drapery. In one drawing relatively early in the

design process, Ludovica is shown with left arm over right (fig. 54), a relationship reversed in the marble. No face is visible in either of the two studies on one sheet. In the top one, the arms are indicated with only a few quick squiggles, but Bernini's pen returns repeatedly to the curl of drapery from which her left arm emerges and to a matching drapery motif farther down her side. In addition, multiple lines underscore the area beneath her body, where drapery lies on the bed. That Bernini's principal interest in the top drawing on the sheet is the central curls of drapery is evident in the lower (and subsequent) study.31 Here, most of the body is undescribed, but heavily scored lines mark the two bends of drapery and the caesura between them. In the clay sketch in London (cat. 20) and in the finished marble, Bernini relinquishes the idea of creating a break in the drapery in favor of a continuous line that snakes along her side with many twists and turns. As with other drawings of details, these are speculative early explorations, whereas the clay model for the same commission is more resolved.

In the early stages of a project, drawings allowed Bernini to imagine the entire scope of figures within an architectural complex like a tomb or a fountain. He could accomplish this with great speed and follow up with a more presentable study, if desired. A three-dimensional version would be labor intensive and was





better suited to the later, more resolved stages of preparatory study. The master generally turned over production of large-scale models to assistants, especially if they were made of multiple media, such as wood and clay. It is notable that Bernini's drawings of the overall concept were often changed in the final sculpture. The Barberini plaque and the Countess Matilda tomb, for example, evolved considerably through sculptural models—and likely through drawings that have not survived—with details developed in plastic form.

Did Bernini always produce both drawings and models in preparation for sculpture? This is impossible to answer with certainty, though in nearly every case of a commission for which we have one or more models there are also drawings. For Daniel in the Lions' Den, for example, he produced a succession of drawings that show him thinking out many problems of a pose on paper. Generally, his drawings depict a sculpture either frontally or from the direction Bernini imagined the viewer would be looking. It is hard to conceive that someone as acutely aware of form as Bernini would have been content with

the single viewpoint of a drawing when a clay model would immediately evoke the effects of a work in space and could be turned to be seen from different angles. Yet it is fascinating how frequently he turned to paper to work out details of drapery. In his preparatory work, clothing is often added over the human form, whether by sketching drapes over an existing line drawing of a body or by adding a sheet of clay drapery over a terracotta model of the figure. Perhaps he mentally paused in these drawings to rethink the effect of drapery, which was often intricate despite appearing naturalistic. Because Bernini's drapery often spreads over surfaces rather chaotically, he needed motifs to stand out from and to organize the complex shapes. This may be why a number of his sheets, such as those for the Longinus and the Blessed Ludovica, reveal him making multiple studies of a principal element—a fold, a break in a line of fabric—in the clothing.

There are aspects of Bernini's art that only drawing could address, such as the effects of light on the angels of the Altar of the Blessed Sacrament. A sketch could also help him gauge

Fig. 52. Gian Lorenzo Bernini, Drapery Study for Saint Teresa, ca. 1647. Black chalk, $11 \times 8\%$ in. (28 × 20.7 cm). Museum der Bildenden Künste, Leipzig (NI.7882v). Cat. D.16

Fig. 53. Gian Lorenzo Bernini, Study for the Head of Saint Teresa, ca. 1647. Red chalk, 715/6 × 711/6 in. (20.2 × 19.5 cm). Museum der Bildenden Künste, Leipzig (NI.7881r). Cat. D.17

the scale of his figures within their space—for the tomb of Countess Matilda, say, or the Constantine—more easily than with a clay model. Bernini had the brilliant ability to imagine a palm-size model rendered lifesize or larger; drawing could quickly confirm his intuition.

Clearly, Bernini was sensitive to the different possibilities of these preparatory media. Unlike the sculptor Alessandro Algardi, whose drawings are almost always graceful and often beautiful, he was uninterested, for the most part, in making attractive images. His were usually working drawings, made to solve problems, though he also recognized their value in appealing to a client. Bernini approached paper as he did clay: he scratched outlines with the sharp edge of chalk or smudged shadows with the chalk's side, much as he jabbed his fingernail to create a curl of hair or rubbed his finger to hollow a pocket of drapery or soften an angle. There is an economy of means in his approach: drawing the chest of Longinus with the minimum number of strokes needed to define it or rendering Teresa's wimple with a few geometric lines replicates the speed with which he executed the models, stopping as soon as he had achieved the description of form he sought. He also made notes to himself in the middle of a drawing or a model. The repeatedly overscored lines of Saint Jerome's cloak seem intended to remind himself to pay attention to this detail in his next attempt—emphasizing it or making it fuller—just as quickly scoring the sides of the buttresses in the clay models for his angels (see fig. 343, for example) was a note to himself that these would be voids, not solids, in the final work.

Bernini's models appeal to us for their vitality and their vivid reflection of the sculptor's touch. Yet his gouged and smudged drawings often have a tactile quality too. There is a remarkable range to the types and quality of his drawings: Bernini clearly appreciated the versatility they offered as he grappled with the diverse problems confronted in sculptural commissions. From the largest scale to smallest detail, drawings served the artist well and were indispensable to his design process, linking his thoughts to his clay models and to the final sculptures.

Fig. 54. Gian Lorenzo Bernini, Studies for the Blessed Ludovica Albertoni, ca. 1671. Pen and ink, $8\% \times 9$ in. (20.5 × 22.9 cm). Museum der Bildenden Künste, Leipzig (NI.7813v)





The Role of Terracotta Models in Bernini's Workshop

Andrea Bacchi

BETWEEN ABOUT 1620 AND 1622 Gian Lorenzo Bernini created something of inestimable importance to his future: a workshop. Admittedly, it was not a very large workshop—the smallest possible, in fact: a single sculptor, Giuliano Finelli, hired to help with such tasks as carving the intricate vegetation that enlivens Bernini's Apollo and Daphne (fig. 1).1 Still, to all intents and purposes, it was a workshop, with Bernini having to communicate his ideas to Finelli and entrust him with executing them. Just a couple of years later, the workshop looked very different, having expanded as Bernini wrestled with a project of far greater complexity: the huge canopy in bronze that occupies the crossing of Saint Peter's Basilica (fig. 55). Called the Baldacchino, it was not something any artist could produce alone. A workforce was required, and it had to be well coached. Whereas words might have sufficed with Finelli, the Baldacchino required specific designs, which would have come in two varieties: drawings and three-dimensional models. This essay will focus on the latter, investigating the many uses to which models were put in Bernini's workshop.² They—along with drawings—were the lifeblood of the operation.

First, some explanation is needed regarding how models were classified during the seventeenth century. Most documents, such as payment receipts and inventories, distinguish between only two kinds of models: *modelli*

Fig. 55. Gian Lorenzo Bernini, Baldacchino, 1624–35. Bronze. Saint Peter's Basilica, Vatican City

piccoli (small models) and modelli grandi (large models). Today, we are accustomed to dividing modelli piccoli into two types: the all important bozzetto, or sketch model, and the larger, more finished modello. During the seventeenth century, however, the term "bozzetto"—from the Italian word "abozzare," to roughen—was rarely used in reference to models. In fact, to the best of my knowledge, the earliest document to describe a terracotta as a "bozzetto" is the death inventory of Ercole Ferrata, drawn up in 1686. The inventory uses "bozzetto" several times, including in reference to a terracotta Charity by Ferrata's former pupil Melchiorre Cafà.3 Ironically, in Bernini's own death inventory, taken five years before, there is no mention of a single bozzetto. All the models—reportedly a "quantity"—go by the generic "modello."4 For the purposes of this essay, I will abide by current terminology: bozzetto, modello, and modello grande.

A few examples related to Bernini will suffice to demonstrate the differences between *bozzetti*, *modelli*, and *modelli grandi*. The *modelli grandi* that survive at the Vatican for the Cathedra Petri (see figs. 60–63) and the Altar of the Blessed Sacrament are impossible to confuse with a *modello* like the *Model for the Fountain of the Moor* at the Kimbell Art Museum (cat. 13). The *modelli grandi* to which I refer are full scale and made of unfired clay (*terracruda*) and stucco.

They were used to test the composition in situ and to provide the models for casting. The Moor is obviously a lot smaller, and its purpose was different. It was likely a presentation model, shown to Bernini's patrons in order to secure him the commission. It needed to convey a great deal of visual information—hence its high level of detail—and to make a strong impression: hence its sumptuous execution. The Moor can also be clearly distinguished from bozzetti, such as the many that survive for Bernini's two marble angels in Sant'Andrea delle Fratte (figs. 336 and 337), originally for the Ponte Sant'Angelo (see cats. 35-44). Much more loosely worked than modelli, bozzetti are sketches, intended only for the use of the artist and his workshop.

The purposes served by bozzetti, modelli, and modelli grandi in Bernini's workshop illuminate the artist's creative process. He generally made the bozzetti himself but almost always delegated to his assistants the production of modelli grandi. He sometimes also delegated the smaller modelli, as with the two that survive for the Sea Deity with Dolphin Fountain at the Palazzo Ducale, Sassuolo (see below and cat. 15). Furthermore, Bernini seems never to have made anything in terracotta that he intended as an autonomous work of art. Bernini's chief rival, Alessandro Algardi, was different. Algardi came from Emilia, where terracotta was traditionally favored by sculptors, and he tended to make all his own modelli—even the largest and most complex ones, such as those for the relief decorating the urn on the Tomb of Leo XI (now in the Accademia di San Luca, Rome) and for the busts in the Frangipane Chapel (now in the Pinacoteca Nazionale, Bologna, and the State Hermitage Museum, Saint Petersburg).5 Moreover, Algardi also made important finished works in terracotta—or at least works in terracotta that were treated like autonomous sculptures immediately after they had served their preparatory role as models for casting or carving. This would seem to include a gilded terracotta of



Fig. 56. Alessandro Algardi, Baptism of Christ, 1646. Gilded terracotta, $17\frac{34}{2} \times 18\frac{1}{2} \times 9\frac{1}{2}$ in. $(45 \times 46 \times 25 \text{ cm})$. Museo Nazionale del Palazzo di Venezia, Rome (13474)

the Baptism of Christ at the Museo Nazionale del Palazzo di Venezia, Rome, thought to be the one bequeathed by Algardi to his friend and important patron Cristoforo Segni (fig. 56).6

Bernini's working methods were extraordinarily adaptable, varying both over the course of his career and according to what he wanted in each of his projects. The role of his assistants also varied, from simple help in blocking out the marble to the independent execution of entire works. Regarding the latter, the resulting sculpture might carry the assistant's signature (as with Andrea Bolgi, who signed the Allegorical Figure on the right side of the Memorial to Carlo Barberini in the church of Santa Maria in Aracoeli, fig. 167) or might be credited to an assistant in documentary sources.7 For example, during Bernini's lifetime, the assistants who carved the large figures on the Fountain of the Four Rivers in Piazza Navona were being identified in guidebooks and in biographies.8

As indicated earlier, Bernini's first use of an assistant dates to about 1622, when he employed Finelli. Years before that, Bernini had been on the other side of the equation, working for his father, the sculptor Pietro Bernini. We know from documents that models did play a role in how Pietro communicated designs to

his son.⁹ What remains a mystery is whether Gian Lorenzo created models of any kind in preparation for his first mature works, such as the *Apollo and Daphne* (see C. D. Dickerson III's essay in this volume).

Later in the 1620s, Bernini's growing workshop created the need for an ever more complex and sophisticated studio practice, one that became indispensable in the planning of monumental works not only in marble but also in bronze, plaster, and colored stone. We can trace this process through Bernini's many and welldocumented projects at Saint Peter's Basilica, which began about 1624 and continued for more than half a century. The vast scale of these commissions—which included the Baldacchino, the decoration of the crossing piers, the Cathedra Petri, and the Colonnade—required that he recruit entire squadrons of sculptors, metal casters, and craftsmen. In 1645, for example, in order to finish the decoration of all the pilasters lining the Basilica's nave in just a matter of months, Bernini "was obliged to round up almost anyone in Rome who could hold a chisel"—to borrow Jennifer Montagu's evocative description.10 Bernini hired about forty sculptors, including Ercole Ferrata, who was also asked to design part of the work himself and reportedly created modelli for some of the putti decorating the pilasters.11

Bernini was almost always free to choose which assistants would work with him on the commissions he directed. A possible exception is the Saint Veronica in the crossing of Saint Peter's; the governing board of the Basilica, the Congregazione della Fabbrica di San Pietro, may have assigned the commission to Francesco Mochi against Bernini's wishes.¹² This is not to suggest, however, that Bernini was always able to put together the perfect team of assistants, even when the choice was entirely his. Depending on the size of the project and the timetable for completion, he might need to hire a sculptor with inadequate experience or one whose style was dissimilar to his. There were only so many sculptors available for the Ponte Sant'Angelo, for example, and not all of them were perfectly in tune with Bernini's style. Domenico Guidi was especially distant from the sculptor—extremely faithful to Algardi's style and never very receptive to Bernini's.¹³ A comparable example in the field of painting is the cycle of frescoes commissioned by Pope Alexander VII for the gallery at the Palazzo del Quirinale. Pietro da Cortona directed that work and hired assistants whose painting styles were very different from his. Some were responsible for executing whole scenes, just as Bernini's assistants carved entire angels for the Ponte Sant'Angelo.¹⁴

In terms of sculpture, the closest parallel to Bernini's studio practice comes from Algardi, whose Tomb of Leo XI and marble altarpiece the Encounter of Saint Leo the Great and Attila were both large sculptural commissions for Saint Peter's that were executed mainly by assistants. 15 No commissioning documents or contracts have survived for Bernini's large Vatican projects—a regrettable loss because such documents are often more informative than payment records alone, as in the illuminating example of the contract for the Tomb of Leo XI, commissioned from Algardi by Cardinal Roberto Ubaldini in 1634.16 That contract specifies that Algardi was to produce the model for the tomb, which he can be assumed to have done. Algardi and Bernini were truly alone among their contemporaries in Rome in having sizable workshops. This mostly had to do with the fact that they had a virtual monopoly on major commissions. François Du Quesnoy and Francesco Mochi, to cite two of the more important sculptors active in Rome at the time, never had a real need to organize a large workshop. They contented themselves mostly with projects they could handle alone or with a single assistant. Their two largest and most complicated sculptures—the Saint Andrew by Du Quesnoy and the Saint Veronica by Mochi—were carried out under Bernini's direction for the crossing of Saint Peter's. At that moment, they more than likely each had a small team working for them.

How were the initial creative phases of a project handled in Bernini's workshop, or more accurately, his workshops? In addition to the work space adjacent to his own house (first near Santa Maria Maggiore and then in via della Mercede), Bernini also had access, at least from the 1620s on, to the Vatican foundry near Santa Marta.¹⁷ Contrary to its name, the foundry was also a place where sculptures were carved; the equipment for the foundry took up only part of the space. Works for Saint Peter's were made there, and many of Bernini's assistants also worked at the foundry—often independently. Most of the sculpture for the Colonnade, for example, was carved there by the master's students and assistants.18 Ferrata and some of Bernini's other collaborators had their own studios and produced sculpture for the master there. In only a few cases during his fifty years of running a workshop did Bernini's assistants live in the master's house (a common practice with other artists)—one being the mysterious Arrigo Giardè.19 The dates for his residency are 1654 to 1657, which coincide with the period when he was working for Bernini in Santa Maria del Popolo, charged with carving the angel to the right of Giovanni Maria Morandi's altar painting in one of the chapels in the right transept.

Whatever conclusions we can draw about how Bernini organized his workshop based on the making of preparatory models depends on the accident of their survival as well as on what information can be gleaned from the relatively few contracts that have been discovered in archives. It is also important to compare Bernini's production to the larger number of surviving terracottas by Algardi and Ferrata and to those documented in postmortem inventories of other artists' workshops or recorded as gifts and bequests.20 One of the reasons we have more models, large and small, by Algardi and Ferrata than by Bernini is that both of them were heavily involved in formal teaching. Algardi founded a school that attracted many sculptors. (Surprising as it may seem now, there

were more sculptors in the seventeenth century who worked in the style of Algardi than in that of Bernini.) As for Ferrata, he was involved in leading the academy that Cosimo III de' Medici opened for Florentine sculptors in Rome in 1673.

Bozzetti: Bernini's Own

Of the three types of models—bozzetti, modelli, and modelli grandi—only the first can be considered the sole province of Bernini. Bozzetti represented his direct thoughts: threedimensional translations of his ideas, which only he could generate. Bernini was unlike any other sculptor active during the seventeenth century in that he tended to produce his bozzetti in groups, a practice that invited surprisingly little comment from his contemporaries. The most famous reference—and still an oblique one—comes from the German painter and biographer Joachim von Sandrart, who lived in Rome during the 1630s. He tells us that Bernini showed him some twenty-two wax models (Modellen), each about three palmi high (approximately twenty-six inches), that he made for the Saint Longinus in Saint Peter's, the largest statue the artist ever carved (fig. 159).21 Sandrart emphasized how unusual this practice was, noting that sculptors normally made only one, or at most two, preparatory studies. He may have been referring to more finished modelli—as the term he used, Modellen, suggests—although the distinction between bozzetti and modelli is not very precise in seventeenth-century sources. Nor is Sandrart always entirely reliable.²² Here, for example, he refers to wax models, but Bernini is otherwise known to have modeled only in clay. The two preparatory terracottas that survive for the Saint Longinus are modelli (cats. 3 and 4). But the large number of preparatory studies that Sandrart cites—twenty-two—suggests that at least some of them (and likely a lot) were true bozzetti.

Although Bernini certainly made bozzetti throughout most of his career, those that survive come mainly from late in his life,

when he was much more dependent on assistants to carve his sculptures. Thus, the many bozzetti that survive for the Ponte Sant'Angelo are somewhat exceptional in being preparatory for two sculptures that he did carve himself: the Angel with the Superscription and the Angel with the Crown of Thorns, both now in Sant'Andrea delle Fratte (figs. 336 and 337). Bernini also made bozzetti for works he did not execute himself. The earliest example is the bozzetto he made in 1630 or 1631 for the Allegorical Figure on the right side of the Memorial to Carlo Barberini in Santa Maria in Aracoeli, Rome (cat. 2). As mentioned above, the figure was carved in marble, and signed, by Bolgi (fig. 167).23 There are significant differences between the terracotta and the marble: the composition is much more striking in the bozzetto, which conveys the figure's magisterial power in a broad, summary style that evokes the great tradition of sixteenth-century Florentine terracotta sculpture from Michelangelo to Giambologna.

A similar distinction can be seen between the bozzetto for the relief on the east wall of the Cornaro Chapel in Santa Maria della Vittoria, which represents four members of that noble Venetian family (cat. 16), and the finished marble itself (fig. 238). The relief was almost certainly executed, in about 1649, by one of Bernini's many assistants (Giacomo Antonio Fancelli, Baldassare or Giovanni Antonio Mari, Lazzaro Morelli, or Antonio Raggi), although the documents offer no clue about the author's exact identity.24 In this case, however, the significant differences between the terracotta and the marble—most notable in the face in the background, which moves to the far right of the composition in the final version—must be the result of specific instructions from Bernini.

Modelli: Bernini and Assistants

Once Bernini had resolved the design for a project by making his *bozzetti* and drawings, he would be in a position to benefit from his assistants. Among their first tasks was often

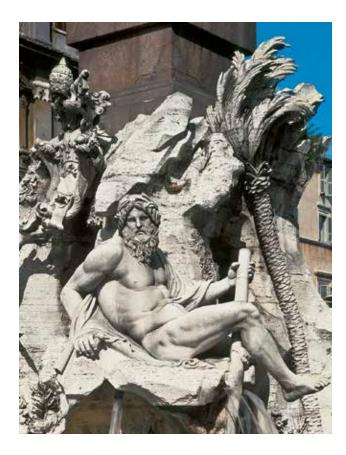
to work up a more finished *modello* based on Bernini's initial *bozzetto*. The *modello* might be used for presentation to a patron or to provide guidance during the final execution of the sculpture. *Modelli* were not something Bernini took lightly, knowing that the fate of a project often rested on them. There were times—as with the *Moor* (cat. 13)—when he resolved to undertake the *modello* either substantially or entirely by himself. There were other times, however, when a *modello* could be left to an assistant, although it is clear that not every assistant qualified for that privilege. He had his favorite modelers, two of whom are particularly interesting: Ercole Ferrata and Antonio Raggi.

According to Filippo Baldinucci, Ferrata first came to Bernini's attention as a modeler. In 1647, at the age of thirty-seven, he impressed Bernini with a modello for the putti meant to decorate the pilasters in the nave of Saint Peter's.25 That Ferrata was already a skilled modeler by that stage of his life makes it unsurprising that he ended up in Algardi's workshop. Algardi was one of the century's most talented modelers, a fact clear even to Bernini, who was forced to admit that Algardi could model better than he could, as reported in a letter written in 1674 by the Medici agent in Rome, Paolo Falconieri. Commenting on the arts academy that Cosimo III had recently founded in Rome under Ferrata's codirection, with Ciro Ferri, Falconieri writes: "I do not know who can be a sculptor who is not also skilled at modeling. When Algardi came to Rome, Bernini said, wishing to discredit him, that Algardi was unable to make a statue. Bernini said this after he had been forced to admit that Algardi modeled in clay better than he. We have now seen what it means to model in clay, as Algardi has created works of such kind that Bernini will never be able to rival them in their glory."26 The grudging respect Bernini showed for Algardi's modeling was doubtless based on the many models, small and large, that Algardi made with such skill that he frequently gave them as gifts to patrons and friends.²⁷ Bernini, to the

contrary, is documented as having made gifts of drawings but never of terracottas. Ferrata inherited Algardi's sensibility as a modeler and remained tenaciously faithful to his style and teachings—even when in the service of Bernini, as proven by his large terracotta for the Angel with the Cross (cat. 46). This is the only certain model by Ferrata that survives for a project directed by Bernini. It is splendidly worked and exquisitely Algardi-esque, especially in comparison to the dramatic quality of Bernini's small bozzetti, discussed above, for the same project.

Ferrata also made models for another project that he executed for Bernini: the *Elephant* with an Obelisk in the Piazza della Minerva, Rome (fig. 186). Commissioned from Bernini by Alexander VII, it ended up being carved by Ferrata between 1666 and 1667 and can be associated with a terracotta now in the Corsini collection, Florence, that once belonged to the Barberini (cat. 6).28 The terracotta is mentioned in a document of May 8, 1666, that records its delivery from Cardinal Francesco Barberini to Bernini.²⁹ It is likely that the model had been made for Cardinal Francesco in about 1658 for a project that was never executed (see cat. 6). The idea was revived in 1665 when an obelisk that had been found near Santa Maria sopra Minerva was erected in the church square. The Corsini terracotta was almost certain to have been the inspiration for Ferrata's marble, although he also seems to have made his own studies for it, given that the inventory of his studio lists "a clay model of the Minerva Elephant" and "a broken elephant in wax."30 For the most part, his inventory is very careful to identify artists by name, so the fact that it does not mention Bernini suggests that Ferrata made these. How Ferrata used them is unknown; the one in clay may have been shown to Bernini as confirmation of the final design.

That Bernini often let his more experienced assistants produce modelli for projects he was directing is also proven by Raggi, his favorite pupil during the latter part of his career. The sculptural decorations for Duke Francesco I



d'Este's residence at Sassuolo, near Modena, exemplify the great trust Bernini put in Raggi insofar as modelli are concerned. The commission for the decorations, which centered on the Sea Deity with Dolphin Fountain, came to Bernini in 1652 and is richly documented (see cat. 15). After several rounds of negotiations with his patron, Bernini agreed that Raggi was the best sculptor for the job. What remained to be ironed out were such practical matters as who would realize the modelli. In December 1652 the duke's ambassador in Rome reported that Bernini "is never pleased to have [Raggi] out of Rome, although he did say that to serve [you] he would be more than willing to send [Raggi] and furthermore that he [Bernini] would have him [Raggi] make the modelli."31 As in other instances, Bernini appears to have produced only a drawing for the fountain (see fig. 22). He left to Raggi the task of translating the drawing into models, two of which survive (cat. 15 and fig. 236). Both were likely made in

Fig. 57. Claude Poussin, after a design by Gian Lorenzo Bernini, the Ganges from the Fountain of the Four Rivers, 1649-51. Marble, over lifesize. Piazza Navona, Rome

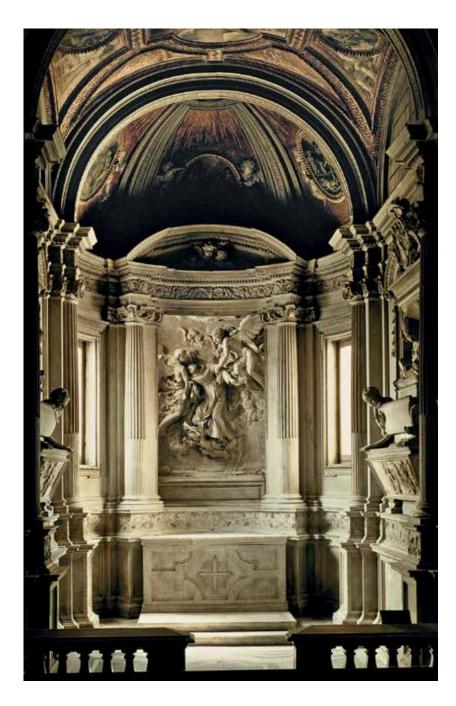


Fig. 58. Raimondi Chapel, 1640-47. San Pietro in Montorio, Rome

Rome. Raggi probably sent one off for presentation, retaining the other for use during the final execution.

In the same letter of December 1652, Francesco's ambassador touches on the modeling abilities of another of Bernini's assistants, Claude Poussin. He writes that, according to Bernini, Poussin "was not yet ready for big things although he can model very well and in a good style." The ambassador goes on to report that Bernini laments the young man's inexperience in working with marble ("non ancora ben sicuro nelle cose grandi") but praises his ability to model, a skill obviously important in the master's eyes. Poussin had just completed the figure of the Ganges for the Fountain of the Four Rivers, which may have been the source of Bernini's negative opinion of his carving abilities (fig. 57). Perhaps what had impressed him was the model that Poussin had presumably made in advance of carving the gigantic figure. As with Raggi and the fountain at Sassuolo, Bernini likely provided Poussin with some type of sketch—a drawing, a bozzetto, or both—and asked him to work up a more finished modello that he might approve. What is fascinating is that all early guidebooks treat the Ganges as Poussin's independent work, ignoring the distinction between design and execution.32

As early as the 1630s and 1640s, Bernini was allowing not only his most experienced assistants to make modelli but also those who were less established. He abstained almost entirely, for example, from intervening in the execution of the marbles for the Raimondi Chapel in San Pietro in Montorio (fig. 58). He delegated that work to his assistants—in this case, Francesco Baratta (who signed the altarpiece), Andrea Bolgi, and the French artist Nicola Sale, to whom both Baldinucci and Domenico Bernini attribute the funerary monuments on the lateral walls, although Fioravante Martinelli gives them to Baratta.33 The overall composition of the chapel's decorations is surely Bernini's (although no autograph drawings for the chapel survive). The two tombs include relief panels, and a small



preparatory modello for one of them still exists (fig. 59), which is certainly not by Bernini; it is likely to be by Baratta, based on Martinelli's mention that the finished relief is by him and on stylistic similarities with the main altarpiece in the same chapel, the relief of Saint Francis in Ecstasy, signed by Baratta.

The difficulty in attributing the aforementioned model to Baratta underscores how very little sense we have of the modeling styles of most of Bernini's assistants. There are no surviving terracottas securely attributable to Finelli, Bolgi, or Morelli, and only a few to Ferrata; Raggi has the two for the fountain at Sassuolo (cat. 15 and fig. 236); and there is one each for Giulio Cartari, Paolo Naldini (cat. 45), and Giovanni Rinaldi.34 A different case is Giuseppe Mazzuoli, for whom we have a large corpus of modelli, but none relate to any of the work he did as an assistant to Bernini, with the possible exception of the Charity (cat. 34). These modelli were in Mazzuoli's workshop when his nephew, Bartolomeo, inherited it, and his grandnephew, Giuseppe Maria, still had eighty-one of Giuseppe's terracottas in 1767.35

As noted earlier, Bernini considered some projects so important that he would undertake the modello himself. Written sources make it seem that this happened frequently. A good example is the statue of Pope Alexander VII in Siena Cathedral Domenico Bernini writes that his father "made a modello of the whole statue of that pope which was then carved in marble by Antonio Raggi who was called II Lombardo."36 The modello is also mentioned in a letter by Ludovico De Vecchi, rector of the cathedral, who comments that Bernini "favored us with a modello of the statue."37 Of course, it could be the case that Bernini had Raggi prepare the model—especially considering how Bernini handled the fountain at Sassuolo.

Among the modelli by Bernini that survive, two can be counted as outright masterpieces of seventeenth-century sculpture. The first is the figure at the Kimbell Art Museum (cat. 13) for the Fountain of the Moor in Piazza Navona,

Fig. 59. Attributed to Francesco Baratta, Raising of the Dead, ca. 1642-46. Terracotta, Santa Maria in Trastevere, Rome

which Giovanni Antonio Mari carefully translated into marble—albeit with some simplifications (see fig. 221). The Moor Fountain presents a fascinating contrast with the Four Rivers Fountain. They were both executed under Bernini's direction at about the same time—the Four Rivers Fountain between 1649 and 1651; the Moor Fountain, 1653-55—but the process for each was radically different. The sculptors who made the four colossal figures for the Four Rivers Fountain appear to have been given wide latitude (although see the entries for cats. 8 and 9, where the suggestion is made that Bernini kept at least two of the sculptors on a short leash). Raggi's contract for the figure of the Danube required only that he "carve this statue in marble conforming to Sig. Cav. Bernini's pensiero for it."38 This document makes no mention of large or small modelli, although we can assume that Raggi made some himself. Bernini certainly did not: he offered his assistant only a "pensiero"—in all likelihood, a drawn sketch. However, in a letter to the papal treasurer about the payment to Mari for the Moor, Bernini refers explicitly to "the modello I made," which can be identified with the terracotta now at the Kimbell.39 Filippo Titi's guidebook to Rome of 1674 praises Raggi's work on the Four Rivers Fountain, crediting him (along with the other three artists who worked on this monument) with having "demonstrated his genius with the assistance of Cavaliere Bernini."40 The 1763 edition of the same book mentions that Bernini made "modelli" for the figures on the Four Rivers Fountain and says that the master himself was responsible for the "most esteemed" statue of the Moor Fountain—also attributed to Bernini in Giovanni Battista Mola's guidebook of 1663.41 Thus, Mari seems, in the case of the Moor anyway, to have been serving only as the master's hands.

The second modello masterpiece was preparatory for the Equestrian Statue of Louis XIV (cat. 24). It is first mentioned in a very interesting letter written by Bernini to the French minister Jean-Baptiste Colbert on December

30, 1669: "I will first make a clay modello of the aforementioned work myself, then I will continually assist the aforementioned young men in imitating that modello, teaching them all the skills they need to have. . . . Then I will make his majesty's head entirely with my own hands, and then too if God gives me life and strength and for the great love and obligation I have for the King of France, I will force myself to do that which I do not want to promise with words but believe I can do with deeds."42 The "clay modello" he refers to must be the one now in the Galleria Borghese (cat. 24).43 This is likely to be the same model recorded in the death inventory of Mattia de' Rossi. 44 If the execution of the Moor figure in Piazza Navona was delegated entirely to Mari—and we have detailed receipts for his payments for it—then the Equestrian Statue of Louis XIV (fig. 279) was probably also carved by assistants, just as Bernini said it would be. Given this extraordinarily prestigious commission, however, Bernini committed himself to supervising the work personally despite his advanced age: "I will force myself to do that which I do not want to promise with words but believe I can do with deeds."

Modelli grandi: Full-Scale Models by Bernini and His Workshop

Surviving documents suggest that Bernini did not always feel it necessary to make modelli grandi, or full-scale models, even for monumental works like the Moor Fountain or the Equestrian Statue of Louis XIV, the execution of which he left to his workshop—entirely in the case of the former, mostly in the case of the latter. In some instances, though, he did make (or have made) full-scale models, albeit for different reasons. Sometimes they might have been used to gauge a sculpture's visual impact in its intended location; in other instances, full-scale models were required for the bronze-casting process. The nearly lifesize clay models (roughly five feet tall) for the angels that were to flank the Cathedra Petri in the apse of Saint Peter's (now in the Vatican Museums) were made for both reasons.

When the full-scale models for the angels were installed on the monument to study the effect of the work as a whole, the results were criticized by the painter Andrea Sacchi. According to the biographer Lione Pascoli, Bernini had invited Sacchi to Saint Peter's to see the models in place. Sacchi did not walk all the way up to the apse but "stopped a little beyond the crossing, and when he saw that the model for the Cathedra was unveiled, he said to Bernini, who was following him, 'This, Signor Bernini, is the place from where I want to see your work, from where it must be seen, if you wish to know my opinion, this is the place from where it should be seen."45 Sacchi advised Bernini to make the figures "a good palmo [approximately nine inches] larger," and Bernini took his suggestion. It is extraordinarily fortunate that Bernini's second and definitive pair of full-scale models for the angels (88¾ and 89¾ inches tall) are also preserved at the Vatican (figs. 60 and 61). Like the first ones, they too must have been installed in the apse to study the effect of the ensemble, and marks still visible in the clay indicate they were used to make molds for the bronze casting. According to payments, the smaller of the two sets of modelli grandi for the angels were made by assistants— Ferrata, Raggi, and Lazzaro Morelli.46 The absence of explicit payments for the later, larger models has led some scholars to believe they are by Bernini.47

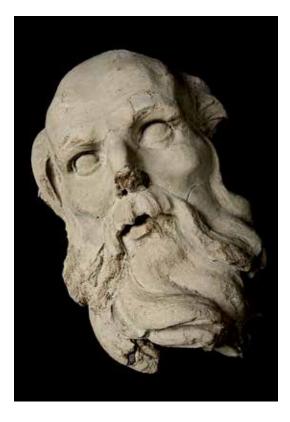
Two of the full-scale models for the Cathedra Petri that still survive at the Vatican deserve special mention: the sensational terracruda heads of two of the Doctors of the Church,





Fig. 60. Modello grande for angel on the Cathedra Petri, ca. 1662. Terracruda, H. 88¾ in. (225 cm). Musei Vaticani, Vatican City

Fig. 61. Modello grande for angel on the Cathedra Petri, ca. 1662. Terracruda, H. 89% in. (227 cm). Musei Vaticani, Vatican City



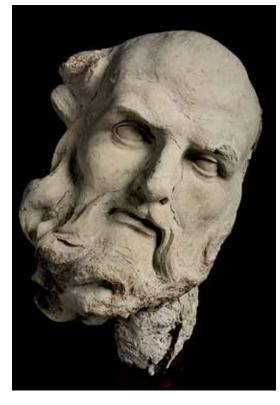


Fig. 62. Gian Lorenzo Bernini, Head of Saint John Chrysostom, modello grande for a statue to flank the Cathedra Petri, ca. 1662. Terracruda, H. 39¾ in. (100 cm). Musei Vaticani, Vatican City (D6559)

Fig. 63. Gian Lorenzo Bernini, Head of Saint Athanasius, modello grande for a statue to flank the Cathedra Petri, ca. 1662. Terracruda, H. 36% in. (93 cm). Musei Vaticani, Vatican City (D6560)

Saint John Chrysostom and Saint Athanasius (figs. 62 and 63). They are all that remain of the four colossal models for the bronze figures flanking the Cathedra. These models are characterized by a summary execution that nevertheless fully expresses the figures' dramatic qualities. Their particularly lively and sensitive modeling strongly suggests that they belong to the final phase of work on the Cathedra, just prior to the figures' casting: the Saint John Chrysostom in October 1662 and the Saint Athanasius in January 1663. From 1661 through 1662 Morelli was collaborating on the realization of models, but only sporadically, and this fact, added to the exceptional quality of the heads, argues for Bernini's direct involvement in this final phase of work.

Documents support the claim that Bernini also worked on other large models; for example, he is recorded as saying that he "made the small and large *modelli* himself" for the angels on the Altar of the Blessed Sacrament in Saint Peter's. ⁴⁸ Proof of his claim seems to lie in the

exceptional quality of the large models, which still survive at the Vatican. Nevertheless, he must have relied on his workshop considerably. Bozzetti and even small modelli were necessarily the work of a single artist, but because the creation of a full-scale model was more complex, requiring an armature (usually in metal) beneath the clay, it is a virtual certainty that Bernini had the help of assistants. It is not surprising, then, that there are documents indicating that the modelli grandi for the angels on the Sacrament Altar were executed in part by Giovanni Rinaldi in 1673.49 Documents are ambiguous about another modello grande that Bernini entrusted to Rinaldi. This was for the silver altar frontal (now lost) for the cathedral in Reggio Emilia. A letter written by an Este ambassador, dated October 10, 1668, tells us that "Signor Cavaliere Bernini asked the Frenchman [Rinaldi] for a modello of the altar frontal, that he ordered him to let him see it first, retouch it, and then make it on a larger scale."50 It is clear that "the Frenchman"—

Rinaldi—made a modello of the altar frontal and that Bernini reworked it. What remains uncertain is which of the two (most likely Rinaldi) then made the full-scale model for casting.

Ercole Ferrata, who had earlier collaborated with Bernini on the models for the Cathedra Petri, was employed by his master in the decoration of the Chapel of the Madonna del Voto in Siena Cathedral between the end of 1661 and the beginning of 1662. He was commissioned to carve the statue of Saint Catherine, for which the modello grande survives in the oratory of the church of Santa Caterina da Siena in Rome (fig. 64).51 This is one of the very rare examples of this type of large-scale model that has come down to us from seventeenthcentury Rome. Aside from those that can be connected to the Cathedra Petri, the Sacrament Altar, and the relief above the Saint Helen in the crossing of Saint Peter's (see below), only two others are known to me: those by Algardi for the Encounter of Saint Leo the Great and Attila and the Vision of Saint Agnes, both in the Oratorio dei Filippini in Rome.52 The lyrical and delicate drapery as well as the expression of the Saint Catherine model are close to Bernini's works, but the composition of the figure reveals an overall balance that is typical of Ferrata's Algardi-esque style and attests to the freedom that Bernini allowed his collaborators.

Delegating modelli grandi to assistants was not a new practice for Bernini. Documentary evidence shows that he had worked in more or less the same way almost half a century earlier, when he oversaw the largest of his workshops at Saint Peter's—the one responsible for the Baldacchino (see fig. 55), a project that kept the artist and his studio busy for more than ten years, from 1624 to 1635. In September 1624, Stefano Maderno, one of the most important sculptors in Rome at the beginning of the seventeenth century, was paid for making five clay putti.53 These were models for the putti to be cast in bronze as embellishments for the Baldacchino's four gigantic columns. The payment is particularly interesting because no others that are known for the Baldacchino credit an assistant with making a specific model all by himself, suggesting that Maderno enjoyed a special position within Bernini's workshop. This is doubtless true—not only because of his seniority (he was nearly twenty-eight years older than Bernini) but also for other factors (see C. D. Dickerson III's essay in this volume). It is impossible to know if Bernini gave Maderno any directions for these putti, whether in the form of a drawing or perhaps a bozzetto; what is important, though, is that Bernini, who was just twenty-six years old, was already employing established artists as assistants and granting them a good deal of autonomy to create elements for the larger ensembles he was orchestrating.

Besides Maderno, other important sculptors worked on the Baldacchino in the capacity of modelers. They include Bolgi, Finelli, and Du Quesnoy, although the documents are less forthcoming about their specific roles. The many payments to Finelli and Bolgi for models for the Baldacchino do not specify which they made or what kind of models they were. Instead, they are more generically phrased: "to Andrea Bolgi, sculptor, for six days spent assisting on the modelli above the columns"; "to Giuliano Finelli, sculptor, for his service and assistance on forms and modelli"; and "to Andrea Bolgi ten scudi for assistance on the modelli for angels."54 Du Quesnoy was also paid, between 1625 and 1627, but only for "retouching waxes," "retouching and modeling," and for "helping to rough out the clay modelli"; there is no document that says unequivocally he was responsible for making an entire modello.55 Giovanni Pietro Bellori and Giovanni Passeri (both contemporary biographers known for their antipathy toward Bernini) suggest, however, that Du Quesnoy actually played an important role in modeling some of the putti for the Baldacchino.⁵⁶ Still, a document of 1627 seems to make it fairly clear that Bernini had done a lot of the work up to that date—stating that he



Fig. 64. Ercole Ferrata, Saint Catherine of Siena, modello grande for a statue in the Chapel of the Madonna del Voto, Siena Cathedral, ca. 1662

was entirely responsible for "the drawing and modello piccolo for the aforementioned column . . . the modelli grandi for the aforesaid large columns," and specifying that he had "retouched and assembled . . . wax modelli, making them into perfect modelli for casting them."57 The document concludes by confirming that "Bernini himself worked continuously for three years in making the aforementioned modelli, and casting the said columns."58 On the one hand, the document clearly attests to Bernini's unique way of managing his enormously complex

workshop, which from its beginning in 1624 transformed individual artistic personalities into the master's collaborators. On the other hand, the document cannot be taken literally, for it was certainly not Bernini himself who made all the small and large modelli as well as all the plaster and wax forms for casting the columns.59

Most of the large works that Bernini made for Saint Peter's—in marble as well as in bronze—were therefore preceded by models that existed on a one-to-one scale with them.60



These models enjoyed a brief moment of popularity at the beginning of the eighteenth century when Pope Clement XI created a Museum of Models in the Vatican. 61 Bernini's models were exhibited next to works by other sculptors, including Domenico Guidi and Pierre Legros, and the museum also included Bernini's fullscale model (now lost) for the Saint Jerome in the Chapel of the Madonna del Voto in Siena Cathedral (fig. 308).62 Clement's museum began to be dismantled as early as the pontificate of Benedict XIII (1724-30), and only a few of the models from it still survive. A model for the relief above one of the reliquary niches in the crossing of Saint Peter's was recently discovered at the Vatican. Made by Stefano Speranza of wood, stucco, straw, cane reeds, iron, and cloth, it represents an angel and putti carrying the relics of the cross (fig. 65).63 Payments tell us that Speranza produced the model in 1634 and make no mention that Bernini participated in it at all.⁶⁴

Fig. 65. Stefano Speranza, after Gian Lorenzo Bernini, Model for the Angel with the Cross, 1634. Stucco, cane reeds, wood, straw, iron, and cloth, 131% × 90% in. (335 × 229 cm). Musei Vaticani, Vatican City

From Bernini to Canova

We can conclude from the discussion above that Bernini made preparatory drawings, bozzetti, and modelli to ensure that his monumental works would turn out the way he wanted. Because of them, it was not strictly necessary for him to make the modelli grandi himself or even to carve the marble. Following Giorgio Vasari's idea that design was the father of the three arts, Bernini could claim responsibility for the work because the original invention was his. A century later, also in Rome, Antonio Canova's workshop practice would represent a radical shift away from this concept of creative responsibility. Although he had a large number of assistants, sources tell us that Canova personally participated not only in the initial phases of a project but also in the final stages of its execution; he alone was responsible for what he called l'ultima mano, or the final touches. Canova's contemporary Leopoldo Cicognara, author of Storia della scultura (1813-18), wrote of l'ultima mano that it "forms the most

interesting aspect of art and is precisely that which pushes the work to its most exquisite perfection, marking the final imperceptible line that, in this last surface of the work, sublimely conceals the highest workmanship and, after the inherent quality of the concept, forms the true excellence of a work."65 By contrast, seventeenth-century sources rarely comment on the surfaces of Bernini's marbles, as though both assuming and accepting that they did not represent his direct work. And while there is no doubt that Bernini highly valued the finishing of surfaces and the almost pictorial effects that he was able to achieve in marble, "the inherent quality of the concept," as Cicognara called it, as embodied in a drawing or small model, was for Bernini the most important basis for determining a sculpture's value. Thus, for Bernini, a modello like the one for the Moor contained all the essential qualities of the final work in embryonic form. Its execution could be entrusted to an assistant, even one of unexceptional ability, without undercutting the brilliance of the original conception.



Creating an Eye for Models: The Role of Bernini

Tomaso Montanari

IN 1729 THE FRENCH political philosopher Montesquieu and a young compatriot, the sculptor Lambert-Sigisbert Adam, found themselves in an almost rural part of Rome, inside the small church of Santa Bibiana. In his travel diary Montesquieu recorded the conversation the two of them had while looking at the statue of Saint Bibiana (fig. 66), carved a century earlier by Gian Lorenzo Bernini:

Bernini, M. Adam told me, is admirable for his arrangements; what in the context of painting we call composition. As he lacks accuracy in his draftsmanship, and as this accuracy is not as necessary for a complex arrangement as for a single statue, one sees only sweeping ideas, and his faults then become less glaring. By contrast, [Alessandro] Algardi and the Fleming [François Du Quesnoy] are accurate in their draftsmanship. Bernini's great ability is in knowing how to cut marble; it seems he could do with it whatever he wanted. In the figure of the holy virgin, Saint Bibiana, that M. Adam and I have been to see, Bernini, with an admirable effort, distinguished the woolen cloth with large folds used for the robe from the sort of silk undershirt [camisole] that extended to the

Fig. 66. Gian Lorenzo Bernini, *Saint Bibiana*, 1624–26. Marble, H. 75^{1/4} in. (191 cm). Santa Bibiana, Rome

hips and the chemise underneath. The robe has large folds and seems to be of wool. The camisole has little pleats and is smooth and seems to be of silk, as does the lining of the robe. The chemise also consists of a large number of folds, which are neither as large as the first nor as small as the second and furthermore, being linen, have no polish. He has endowed all of the draperies with a very large number of folds and, by his art, not allowed the nude figure beneath to appear, such that with much he makes much, unlike the Fleming [Du Quesnoy] and Algardi, who use few folds and allow the form of the body to show through. Bernini's art comes from his skill in carving marble. This ability allows him to represent quantities of pleats and material, and because marble is translucent, he makes "eyes" and "holes" [deep drapery folds] to good effect. For this reason, his models are not greatly sought after abroad; that is because, as clay is not as translucent as marble, the "holes" and the "eyes" [the deep drapery folds] become dark, which makes his models seem crude, and the resulting confusion suggests that they are the design of a lesser artist. In

addition, because they are not correct, their faults leap out at the viewer. By contrast, the drawings of Algardi are much in demand. Thus Bernini is well known only in Rome.1

This is an extraordinarily rich passage as well as one of the oldest texts I know that, in any modern sense, discusses models in an artistic and historical context. One of the major obstacles in the study of clay sculpture from the early modern period is the resounding silence on this subject in the contemporary literature on art. Aside from documents recording business transactions (such as contracts and payments for art), treatises on sculpture, and inventories of academies and artists' studios, it is not easy to find information that illuminates how a seventeenth-century Roman might have understood the contemporary sculptor's use of models, whether *modelli* or the more intimate and challenging bozzetti.2 Ignored by guidebooks and travelogues, models are mentioned by artists' biographers but usually only in terms of the part they played in the creative process of individual works.3 More rarely, they are cited in connection with an artist's professional struggles; Giovanni Pietro Bellori tells how the young Algardi, in order to make ends meet, made models for goldsmiths. 4 Paradoxically, this paucity of evidence makes what are generally considered less important documents—such as inventories listing models and other sculptures in clay especially valuable and historically telling.5

The sculptor Adam—who owned two models attributed to Bernini and more associated with Du Quesnoy—certainly thought of models as works of art when he discussed them with Montesquieu.⁶ Even while conversing in front of a marble sculpture, he refers to the models to illustrate a constant characteristic of Bernini's style: the strong, painterly chiaroscuro created by the deep drapery folds that Montesquieu calls "holes" and "eyes." Adam is treating Bernini's models as a homogeneous group and according them the same dignity as monumental sculpture. Furthermore, he suggests it is useful to look at models in order to understand a sculptor's style. The clay and the way it can be more freely modeled make the characteristics of style more legible, whether in a positive or negative sense. In other words, the French sculptor was, in 1729, doing what art historians do today: comparing a sculpture in marble to its model in clay and considering how the characteristics of the materials influence style. It is quite possible that Adam's remarkable sensitivity to this point can be related to his familiarity with Pope Clement XI's so-called Museum of Models at the Vatican, a collection still on view when the French sculptor arrived in Rome in 1723.7

Adam knew that because models were comparatively accessible (in terms of cost and size), they offered access to a sculptor's style even to those without direct experience of the finished works. He also provided an interesting perspective on the circulation of models. According to the passage quoted here, there was a group of international collectors whose taste led them to seek out models by some artists (Algardi, Du Quesnoy) while ignoring others (Bernini).8 Finally, the dynamic of the conversation between Adam and Montesquieu and even who they were is important—the former an artist who confidently expressed his own opinion about objects (modelli and bozzetti) that until recently had been of interest only to artists, and the other a connoisseur who paid attention to that opinion, recorded it, and in some way made it his own. Their exchange represents a vivid example of how the model itself has shifted from being simply one element in the artist's own creative process to an object with independent aesthetic value, and it illuminates the role of artists in this process.

This essay is intended to clarify the role Gian Lorenzo Bernini played in this historical evolution. The points to be made are the same as those highlighted by Adam a half-century after Bernini's death: the importance of the material used, the relationship of model to finished work, the parallels with drawing, and the role

played by collectors and the market. I will offer in the following pages a different interpretation of some of the few seventeenth-century sources on these issues and add others that have not previously been considered. I will suggest that the appreciation of clay models that art collectors and connoisseurs in Rome first began to express, faintly but clearly, in the 1660s resulted from a peak in interest in the figural arts in general and in sculpture in particular—a phenomenon due largely to the extraordinary popularity of Bernini's work as well as to his personal success. This seems to be one instance when the Roman cultural elite adopted the artist's point of view rather than imposing its taste on him. Indeed, if the collectors in Pope Alexander VII's Rome (almost all of whom were cardinals) began to understand bozzetti as works of art (an understanding that developed very slowly but without pause), it is because they began to see them through Bernini's eyes.

The Reception of Terracotta Sculpture in the Seventeenth Century

A few days after he arrived in Paris, in 1665, Bernini asked for and received a cartload of clay, which he wanted in order to make modelli and bozzetti. This activity was a vital but also routine part of his studio practice, something that he and his assistants were very accustomed to—not unlike a musician's daily practice sessions.9 Modeling in clay was one part of a larger process that Bernini attempted to explain, some years later, to the young Swedish architect Nicodemus Tessin: "You need to draw using your eye, that is, imprint everything in your mind, and always make sketches and drawings of your different ideas keeping in mind the advice of great men. Put one thought after the other down on paper, judge them, consider their errors against ancient and modern works, make modelli in clay, always preserve that idea even in the most elaborately worked things, and contemplate many prints in order to see variations on the idea."10

How many clay models might Bernini have made across a career that lasted almost seventy years? Even if we take into account only those that were fired, the number is likely to have been in the several thousands. Yet only about forty of them survive today, and almost all of those are associated with the artist's maturity or old age. This poses an art historical problem that cannot be solved even if a few more are eventually discovered.11 I believe the widespread loss of Bernini's terracottas is the result of general circumstances (a relative lack of interest in sculpture, and especially clay sculpture, as an art form in the seventeenth century) as well as more specific factors (Bernini's lack of interest in making small-scale sculpture for private consumption).12

The idea that painting and sculpture are of equal value—theorized by Giorgio Vasari, embodied in the work of Michelangelo, and confirmed by long interest in the idea of the paragone (the debate over the relative merits of painting and sculpture)—was shattered in the seventeenth century.13 Because the renewal of the figurative arts at the beginning of that century involved only painting (with Caravaggio's revolution and the Carraccis' reform), the paragone was discussed on the basis not of theory (as in the sixteenth century) but of history. The parallel paths taken earlier by the sister arts diverged, and because sculpture lacked an effective champion, the gulf between them became unbridgeable. Giovanni Pietro Bellori, the most important historian of contemporary art in the seventeenth century, noted the reasons for this at the beginning of his Lives of the Modern Painters, Sculptors and Architects (1672): "Sculpture to date lacks a sculptor, because it has not been raised to the level of painting, its companion, and marbles remain deprived of narrative, boasting only some few statues such as those by Michelangelo, which are inferior to ancient works."14

Bellori was one of the very few seventeenthcentury critics who were open to sculpture (or even to Michelangelo). Giovanni Battista

Agucchi, Giulio Mancini, Vincenzo Giustiniani, and almost all the historians who followed them over the rest of the century (from Carlo Ridolfi and Francesco Scannelli to Marco Boschini, Carlo Cesare Malvasia, and finally to André Félibien and Roger de Piles) saw the history of art as the history of painting.¹⁵ This state of affairs both reflected and reinforced patterns of public and private patronage that, with the exception of Alexander VII's Rome and Paris during the latter part of Louis XIV's reign, clearly gave pride of place to painting. Thus when Pierre Cureau de La Chambre considered writing a history of sculpture, in 1685, he could say, "What brings me again to this work is the thought that it might serve to persuade our great lords who pay such honor to painting and who spare nothing to decorate their cabinets and galleries to do nothing less for sculpture, and in imitation of Louis the Great—who never wanted to separate these two sisters, and had his own Lysippus and Apelles—they should have the same interest in busts, bronzes, basreliefs and statues."16

This divergence in status between painting and sculpture also explains why the enormous popularity of collecting drawings in the seventeenth century did not extend to threedimensional models. It seems not to have occurred even to Filippo Baldinucci, Bernini's biographer, to expand his modern and rather capacious definition of a work of art to include models: "For now I mean by 'work' of art not only pictures but also the drawings artists make on paper, including their first thoughts and sketches."17 On the other hand, this taste for drawings was due in large part to their intimate connections to the idea of learning and the history of art. Drawings were, for the most part, bound into books and thus enjoyed a position somewhere between the library and the picture gallery. Bozzetti never achieved the same stature, and their plainness was hard to reconcile with the sumptuous decoration of Baroque galleries. When bozzetti were exhibited, they were often gilded.

In a famous passage of about 1590, Galileo expressed some skepticism about the more intimate "cabinet" collections of the Renaissance, called studioli, which were steeped in an interest in erudition and which sometimes held bozzetti. He was far more enthusiastic about the rhetorical and decorative grandeur of Baroque picture galleries, which would reach their apogee a few decades later. Comparing the poets Tasso and Ariosto, Galileo wrote:

It has always seemed to me that the inventions of this poet [Tasso] are stingy, poor and miserable while those of Ariosto are magnificent, rich and admirable. When I turn to consider the knights and their actions and adventures as well as the other stories in [Tasso's] poem, it seems I have entered the study of some little man with a taste for curios who has taken delight in fitting it out with things that have something strange about them, either because of age or because of rarity or for some other reason, but are, as a matter of fact, nothing but bric-a-brac—a petrified crayfish, a dried-up chameleon; a fly and a spider embedded in a piece of amber; some of those little clay figures that are said to be found in the ancient tombs of Egypt; and as far as painting is concerned, some little sketches by Baccio Bandinelli or Parmigianino and other such things. But on the other hand, when setting foot into the Orlando Furioso [by Ariosto] I behold, opening up before me, a treasure room, a festive hall, a regal gallery adorned with a hundred classical statues by the most renowned masters, with countless historical pictures (and the very best ones by the most excellent painters), with a great number of vases, crystals, agates, lapis lazulis and other

jewels, in fine, full of everything that is rare, precious, admirable and perfect.¹⁸

Contemporary inventories confirm this picture. Neither Scipione Borghese nor Pope Urban VIII's Barberini nephews, for example, are known to have owned models by Bernini, even though the latter at least were interested in experimenting with pictorial displays, sometimes exhibiting works that were little more than drawings.19 Because terracotta sculpture was not considered beautiful nor associated with erudition, there was no market for it, so it just passed from artist to artist as part of their studio furnishings, serving the same function as plaster casts of ancient statues or study collections of drawings and prints.20

Like Michelangelo, Bernini emphasized the monumental and public role of sculpture (although he diverged from his sixteenthcentury predecessor in the importance he assigned to portraiture). Unlike Algardi or Du Quesnoy, he was not interested in making smallscale bronze or silver sculptures for private collections. Those two sculptors, through their wide production of bronze statuettes and other kinds of precious sculpture, attracted collectors who might have been open to acquiring models. Bernini, however, never gave his collectors that chance.21 His close circle seems to have shared his lack of interest in small-scale sculpture, and one of the more telling indications is found in the very valuable catalogue of his works compiled by his sons, with their father's help (a version of which was published as an appendix to Baldinucci's biography). It ends with a miscellaneous list of everything excluded from the more important categories of sculpture and architecture: "Note that this does not include theater sets, Forty Hours installations, fireworks, catafalques, masques, and innumerable similar things. A great quantity of drawings, most of which are in the Chigi and Medici households and in France. More than 150 paintings, with images of heads or two or three figures in each picture, many of which are in the Chigi,

Barberini, and Bernini households."22 There is not a single mention of modelli or bozzetti.

More proof can be provided that models were not generally held in high esteem in Bernini's circle. His biographers write that he wanted to bequeath something to Cardinal Giacomo Rospigliosi, and because the artist no longer had any of his marble sculptures, he left the cardinal a painting rather than one of the busts or terracotta models that we know he possessed and that were kept in his own house.²³ Furthermore, the notary who drew up the inventory of the contents of the house at the time of the artist's death noted, "In one of the attics above there are many modelli in clay by the late Cavaliere."24 This inventory, of 1681, also records that there were "several clay modelli" in Bernini's studio, in addition to "some quantity of plaster heads and other parts of the body."25 Bernini's sons seem never to have realized that these studio tools might have value as original works or function as decorative objects; instead of looking after, exhibiting, or even selling this group of autograph works, they left them to disintegrate in storage. By the time of the revised inventory of 1706, they are listed as "rotti" (broken) and, in the one from 1731, as "quasi tutti logorati" (almost all damaged).26

By 1706 some of these "largely ruined clay models, mostly broken because they were moved into storage . . . had been given to Signor Giulio Cartaré [Cartari], the Cavaliere's pupil, since they were of little value."27 A few of them eventually found their way into the art world by way of this gift to Cartari. He stands at the beginning of a long provenance, which may also have included Bartolomeo Cavaceppi and Giovanni Piancastelli, that can likely be attached to some of the still-extant examples of these clay models—perhaps even the ones now at Harvard, for example, that are included in this exhibition.²⁸ The history of these objects is also responsible, in part, for the modern transformation of the bozzetto from a private tool of the artist to a public work of art.

The Public Function of Bernini's Models

There is another side to this coin. There is much evidence to suggest that Bernini recognized that modelli, if not bozzetti, had some sort of a public function that went beyond the traditional and important artist-patron relationship.29 Unlike Michelangelo, he did not hide the essential elements of the creative process but transformed them into a performance. One need think only of the making of King Louis XIV's bust (see fig. 67), which took place in front of the entire French court, or the execution of the equestrian monument to the same king (fig. 279), which was witnessed "by the elite not only of the Roman nobility but that of all Europe" in the "large hall" near Saint Peter's where Bernini worked.30 There are some hints about similar events earlier in the artist's career. One example is the famous episode in the spring of 1623 when Cardinal Maffeo Barberini (later Pope Urban VIII) held a mirror for Bernini as he carved his own self-portrait for the face of his David (fig. 2).31

In each of these instances, modelli (if not bozzetti) must have had an important public function. I imagine, for example, that as he was working in front of Cardinal Maffeo, Bernini was not actually carving the marble now in the Galleria Borghese but was instead modeling a lifesize clay image of his own face (now lost). The most perceptive and passionate description of these sophisticated, carefully choreographed performances by Bernini is contained in Lelio Guidiccioni's well-known letter to the artist. He clearly underscores the role of the modello in the genesis of the bust of Scipione Borghese in 1632:

I will never forget the delight I had in observing this work, seeing every morning how your lordship does a thousand different things with a singular grace: conversing, always abreast of contemporary events, while your hands are engaged elsewhere, working the modello with your fingers with the

speed and variety of one playing the harp; marking the marble in a hundred places with chalk; striking the marble in a hundred others, striking it I say in one place while looking elsewhere; turning your head while carving to look behind you; overcoming the difficulties quickly and with great spirit; destroying the marble because of a hairline crack after work on it was already finished.32

Guidiccioni's literary tone does not disguise his thorough understanding of the three phases involved in making the work: the creation of a clay modello, evidently while Scipione was sitting for it; the transposing of the composition onto the marble block; and then finally the carving of the stone. The important thing to note here is that even the first phase in this process was played out in public.

Three years later, Bernini literally played out onstage the performance-related aspect of artistic creation in a comedy he wrote that represented "two academies, one for painting and the other for sculpture, and in which work was executed non-stop; the comedy is based on those academicians and the making of their work." According to the same source, "Everything takes place around the sculptures and paintings, and while the artists are making these statues and pictures, discourses are delivered and love stories woven with great facility and naturalness and with such diverse invention that the audience never grows tired of it."33 Another source offers a similar description of the play: "In Bernini's scene one can see through a low window into the shop of a painter on one side and on the other, that of a sculptor; artists are working in both, moving around and doing what usually takes place in a workshop."34 The actors are Bernini's young pupils and collaborators; painters play the painters and sculptors, the sculptors.35 There is nothing to suggest that the latter were not actually carving marble onstage, but the cost, noise, and dust involved might lead us to

assume they were modeling clay instead—if so, this would have been an extraordinary public representation of what was normally a rather private moment in the creative process.

The most widely noted public display of a model by Bernini was also tied to the theater: a lifesize sculpture in papier-mâché (which we wish we could have seen!). In 1638 he "realistically represented the collapse of a house that crushed several people. The cadaver of one of those who was crushed was represented with such realism that it terrified those who saw it. And no wonder, for he had faithfully represented the body of one of those who had been crushed some months earlier by the collapse of the house above the sword maker's shop near the customs house. He made the corpse of papier-mâché and then had it carried around."36

A small and well-to-do part of Bernini's theatrical audience would also have had the opportunity to visit the artist's studio, where they would have seen his models. The most famous example is Joachim von Sandrart's valuable and often-cited description of the some twenty-two models for the Saint Longinus (cats. 3 and 4) that he saw with his own eyes.37 Another comes from one of Cardinal Mazarin's correspondents, who went to see the just-finished bust of Cardinal Richelieu in 1641. He then wrote to Mazarin: "I have nothing else to say except that not many days ago and by chance I went to Cavaliere Bernini's and there saw a very beautiful portrait, the sight of which drove me mad. Around it were the busts of Borghese, the King of England, and one the same Cavaliere made of a lady when he was madly in love with her, and these works are unparalleled."38 The date suggests that these were large clay models, and the inventory drawn up after Bernini died, compiled exactly forty years later, confirms this interpretation, mentioning two modelli in "fired clay" of busts of Pope Urban VIII, one for that of Scipione Borghese, and one for the portrait of Richelieu.39

When Bernini showed an important visitor his models, he did so out of an abiding belief

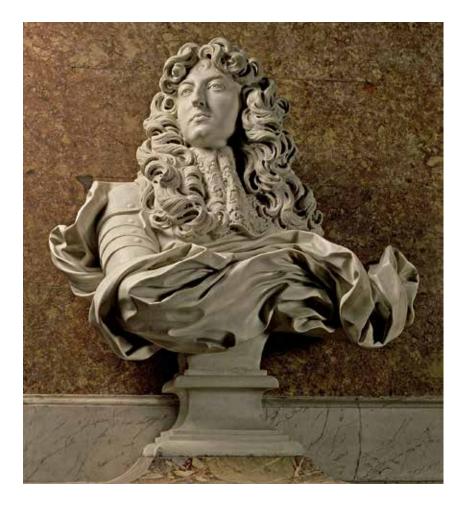
that they were an inextricable part of the marble-carving process. This is particularly revealed in a story told by the English sculptor Nicholas Stone. According to Stone—who interviewed Bernini during a visit to Rome in 1638, while Bernini was working on a bust of the wealthy Englishman Thomas Baker—he received orders from Urban VIII that he must stop work on the sculpture. At the time, Bernini had already finished the model and, to comply with the orders, he did what he felt would send the clearest signal to the pope that no marble would ever be made: in Stone's words, "he defaced the modell in divers places." 40 Stone goes on to relate that, when Baker came the next day to sit for the bust, Bernini turned to the model and declared the commission over. In reality, it was not. The bust ended up being made, although very quietly and with the help of an assistant. The model must have been repaired or a new one made.

Certainly, of all the portrait busts Bernini ever carved, none tops that of Louis XIV (fig. 67) for the scrutiny it invited during its execution. This became a sort of seventeenth-century "reality show," with Bernini constantly watched by the "cameras" of the court and recorded by a metaphorical microphone wielded by Paul Fréart de Chantelou. Models were definitely part of the "performance," although confusion remains over how many models and which kinds. Rudolf Wittkower claimed that Bernini made multiple bozzetti when designing the bust but never a lifesize modello.41 Wittkower appears to have based his position mainly on a passage by Baldinucci: "In order to make the bust of His Majesty the King of France, he first made several modelli, but when he began the work, in the presence of the King, he removed all of them."42 As Baldinucci goes on to explain, the reason Bernini removed the modelli was that he did not want the finished bust to resemble the *modelli* rather than the person.

Chantelou relates a similar version of the story, although substituting "drawings" for

"modelli": "He had not even used his own drawings, lest he make a copy of his own work instead of an original." Chantelou restates the idea two other times in his diary, and both times he refers explicitly to drawings and not to clay models.⁴³ This makes much more sense. First, during the seventeenth century, the term "modello" could mean either a model in clay or a drawing.44 Second, bozzetti would have served only as compositional studies for the bust, while the challenge the artist faced was to create an individual physiognomy (achieved by the unheard-of practice of carving the marble while looking at the king). Thus, his primary tool during the initial stages of planning must have been drawings. If he made any bozzetti, they were few. Chantelou does mention bozzetti once in connection with the bust. He reports that on the day Bernini learned of the commission—June 11, 1665—Bernini "asked for clay to make sketch models of the king in action, as he wanted to bring a sense of movement to the finished bust."45 Chantelou never brings up bozzetti again.

If Chantelou appears never to have seen any bozzetti for the king's bust, he was certainly aware of a single, presumably lifesize modello, to which he made repeated reference in his diary.46 As noted above, Wittkower did not believe there was such a work, but in fact it was commented on by, and subject to the approval of, various figures at court (including Jean-Baptiste Colbert). 47 From June 24 until July 14 (when he began the marble), Bernini worked on a single large *modello* (evidently kept moist by covering it with damp strips of cloth). We know from the letters of Mattia de' Rossi to Bernini's oldest son, Pier Filippo Bernini (which have never been interpreted from this point of view), that the modello was finished enough that the artist could focus on the king's features, which he had already studied in the drawings. Rossi wrote, "At Saint Germain, [Bernini] drew various parts of the king's portrait in order to be able to make the model in Paris."48 This same correspondence gives us a vivid account of the



resounding public success of this large study in clay: "On Wednesday [June 24, Bernini] began the clay modello and is now making it . . . Mons. Colbert came on Thursday morning . . . and saw the rough modello and said 'what a lovely thing and how much it is like the king' ... on Friday morning [Hugues de Lionne] came to see the Cavaliere for the same reason and saw his modello, which he found in good taste and with which he was very satisfied."49 A document like this suggests that the feverishly public aspect of Bernini's creative work likely made an impression on his illustrious audience, and that Colbert, Lionne, Chantelou, and Louis XIV himself must have appreciated the modello as a work of art in itself. Yet—and this suggests the magnitude of the mystery—we do not know what happened to that famous modello, which is not recorded in any inventory or document.

Fig. 67. Gian Lorenzo Bernini, Bust of Louis XIV, 1665. Marble, H. 31½ in. (80 cm). Châteaux de Versailles et de Trianon, Versailles

It is almost as if once the marble bust was completed, the greatly admired *modello* was, in a sort of instantaneous artistic transformation, no longer worthy of being noticed or even preserved.

Through Bernini's Eyes

Still, something was very slowly beginning to change in Rome during these years. For the first time, modelli and even bozzetti began to enter important collections as autonomous works of art; they were no longer simply records of family commissions, nor were they gilded or varnished to imitate small bronzes. A case in point is the collection of Cardinal Flavio Chigi, nephew of Alexander VII, who by 1666 had come to own thirty-two small statues and bas-reliefs in terracotta that he kept in his Casino at the Quattro Fontane. 50 Preserved in large part by his heirs, today these form the nucleus of the Vatican's collection of seventeenth-century terracottas (see cats. 1, 25, and 26). That Chigi's collection included autograph works by Bernini dating to the reign of Urban VIII provides evidence that it was formed intentionally rather than just resulting from the family's patronage of monumental works. 51 This is also supported by the fact that Flavio owned almost fifty drawings by Bernini, made at different times and even including portraits of random people—both casual sketches and more careful studies.

In the thirty years since Olga Raggio's fundamental article first recognized the importance of Flavio Chigi's collection, very little has been done to ascertain to what degree it marked the beginning of a new trend in collecting.⁵² The collection of Giacomo Filippo Nini, the Sienese cardinal who was an intimate member of the Chigi circle, offers another interesting case. The inventory made at the time of his death in 1680 tells us that in the small rooms adjacent to the gallery—a typical feature of a cardinal's residence—there were seventeen terracotta *modelli* (seven of which were not gilded) among the other small sculptures, both ancient and modern, in marble and metal.⁵³ Unfortunately, this

document does not list the names of artists. Yet based on some of the subjects and especially on the fact that Nini owned three drawings by Bernini in addition to his famous lost drawing for the Trevi Fountain (also recorded by Nicodemus Tessin), we can assume that at least some were by or after Bernini.⁵⁴ We also know that Girolamo Farnese, another cardinal created by Alexander VII, owned "two clay *modelli* of statues for the Cathedra Petri made by Bernini of two Doctors, one white and the other the color of metal." It is interesting that Farnese had these works (even if just copies), although the religious and political importance of the Cathedra Petri may help explain this.

There are clues that Alexander VII's cardinals were not the only ones who included terracottas by or after Bernini in their art collections. This new taste seems to have spread among a wide variety of collectors, from a member of the Roman establishment like Francesco Barberini who could boast of an old friendship with Bernini and who, by 1666, had come to own the model Elephant with an Obelisk (cat. 6)—to a genial outsider like Gaspar de Haro y Guzmán, the Marquis of Carpio and Spanish ambassador in Rome, who a little more than ten years later displayed in his house "two fired clay masks made by the Cavaliere Bernini."56 It is impossible, of course, to generalize from such sparse and scattered evidence, but it is undeniable that there was a break with the collecting habits of the previous decades. What changed?

One factor was certainly the popularity of contemporary sculpture in Alexander VII's Rome. Around 1660, sculpture gained unprecedented prominence due to the visibility and the quality of the projects undertaken by the pope. That prominence was reinforced by the abundant literature these works occasioned. Some texts were critical of the projects, while others—such as Giovanni Andrea Borboni's Delle statue of 1661—were full of praise.⁵⁷ Nevertheless, these writings alone are not enough to explain the stirring of interest in Bernini's models, which were so different from

the solemn, and even pompous, monumental marble sculpture being commissioned in Alexander's Rome.

I believe an explanation can be found in the personality cult of Bernini himself, which had reached unprecedented heights by 1660.58 This was the moment when Rome's leading intellectual, the Jesuit Cardinal Pietro Sforza Pallavicino, was able to declare (as quoted by Baldinucci): "Cavaliere Bernini was not only the best sculptor and architect of his century but (to put it simply) the greatest man as well. A great theologian (he said) or a great captain or great orator might have been valued more highly, as the present century thinks such professions either more noble or more necessary. But there was no theologian who had advanced as far in his profession during that period as Bernini advanced in his."59 The accumulation of texts and stories behind Sforza Pallavicino's exaggerated praise also fed into the early biographies of the artist and, eventually, his historical image. 60 We must look back to the reception of Raphael and Michelangelo to find any real precedents for such an artistic apotheosis, although short-lived Raphael did not have the time and Michelangelo did not have the character to exploit it the way Bernini did.

One consequence of Bernini's fame was widespread and almost fetishistic veneration of any product, no matter how small, from his hand. According to Baldinucci, Bernini "in his works, whether large or small, . . . strove with everything within him to make resplendent all the conceptual beauty inherent in whatever he was working on. He said he was accustomed to putting in no less study and application in designing an oil lamp than in designing a very noble edifice."61 This concept was well understood by his contemporaries. In 1674, for example, Louis XIV commissioned a medal in the artist's honor from François Chéron (fig. 68), and the motto on it lauded Bernini as "Singularis in singulis, in omnibus unicus"—"singular in everything, unique in all."62 Another passage in Baldinucci's biography helps us understand the practical implications of such singularity: "[Rinaldo d'Este] esteemed so greatly even a stroke from Bernini's hand that when he took him to Tivoli to see if the design of a fountain for his famous garden had been well executed, he made him a gift of a ring with five diamonds for a slight retouching of certain stuccos."63

The idea that the value of a work by Bernini did not depend on its size or importance and that one could find in all of them, including the simplest "stroke from his hand" (a perfect definition of a bozzetto), what is singular and unique in his art seems the perfect theoretical basis for an appreciation of clay sculpture. In Del bene (On goodness), his treatise on moral philosophy written in 1644, Sforza Pallavicino wrote (citing Galen), "One can discern and appreciate the art of the sculptor as much in a sculpture of clay as in one of gold."64 This sentence could provide the theoretical underpinnings for the modern separation of artistic value from material or size.

These were the concepts current in Bernini's circle. The artist's own ideas were even more radical since he believed that neither lowly materials nor sketchy form impeded the perception of art but instead made it easier. When looking at Renaissance drawings in the collection of the French painter Pierre Mignard, Bernini said that "he derived the utmost enjoyment from seeing the first productions from the minds of great men; . . . the drawings of a great master were to a certain extent more satisfying than the works that he executed from them after great study and care."65 This is the sense in which we should interpret Bernini's most explicit declaration about the poetics of sculpture. "The greatest value of his chisel," he said, was to overcome "the difficulty of rendering marble as pliable as wax" and "making stone as obedient to the hand as if it were dough."66

Fig. 68. François Chéron, Gian Lorenzo Bernini, 1674. Bronze, Diam. 278 in. (7.3 cm). The Metropolitan Museum of Art, New York; Purchase, Gift of Ogden Mills, by exchange, 1987 (1987.108)

Bernini made this technical challenge the ultimate aim of his art, and there are many indications that he was especially interested in communicating his personal vision of art to his audience. He wanted his public to appreciate that turning marble into wax was no easy feat and thus was happy to lay bare the manual side of his process—even in front of a pope or a queen. Baldinucci recounts, for example:

It is not easy to describe the love Bernini brought to his work. He said that, when he began work, it was for him like entering a pleasure garden. There are many indications of the great esteem that he always aroused. As proof it will suffice to tell of the first time that Her Majesty the Queen of Sweden did him the honor of going to see him at work in his own house. Bernini received her in the heavy rough garment he was accustomed to wear when working in marble. Since it is what he wore for his art, he considered it to be the most worthy possible garment in which to receive that great lady. This beautiful subtlety was quickly perceived by the Queen's sublime genius. His action not only increased her concept of his spirit, but even led her, as a sign of her esteem for his art, to wish to touch the garment with her own hand.⁶⁷

This welcome offered to Queen Christina of Sweden was an attempt by Bernini not just to raise the status of art but also to reveal the artist's language and visual code to an illustrious nonartist. Speaking to Chantelou, Bernini said that, in fact, "The Queen of Sweden knew as much about the mysteries of art as those whose profession it was."68

An understanding of the synthetic language of bozzetti and modelli and thus the desire to acquire, preserve, and collect them, was once the province only of sculptors—that is, in the words of Chantelou, "those who practice." Bernini wanted his finished sculpture to have the same qualities that characterized his bozzetti, and thus he obliged the public both to understand these qualities (spontaneity and so forth) and to embrace them. This was not an easy process, but rather a "slow fuse" (to borrow John Shearman's expression). 69 The extraordinary heights of Bernini's fame in the 1660s, however, encouraged some enlightened collectors, including Flavio Chigi, to accept this challenge, and it produced two important results: it helped preserve at least some of the terracottas from Bernini's mature period, and it facilitated the shift in taste reflected in the words of Lambert-Sigisbert Adam with which this essay began. The ability to recognize the artistic value of clay bozzetti and modelli is part of Bernini's legacy.

A year after Bernini's death, Baldinucci wrote a profoundly meaningful passage about the gift that allows artists to see things and values that others do not. It is found in his Life of the painter Salvator Rosa:

"How many things painters see in shadows and in the foreground that we do not see," Cicero acknowledged, and it occurs to me in this regard that Nicomachus the painter, when observing the very famous Venus that Zeuxis painted for the Crotons, heard a certain wretched man making something of his amazement, and he felt it necessary to respond to him, "You would not say that if you had my eyes." The gifted painter Salvator Rosa made gracious use of this ancient idea in a similar circumstance. When the work of a dilettante artist was highly praised to him, Rosa exclaimed, with one of his usual spirited gestures that suggested astonishment, "Oh, think what you would say if you could see it with Salvator Rosa's eyes."70

Bernini's role in the growing interest in terracotta sculpture was precisely that. He allowed the public to see it through the eyes of the artist—his eyes.



"The Fire of Art"?:

Steven F. Ostrow

A Historiography of Bernini's Bozzetti

GIORGIO VASARI OBSERVED that, in contrast to more finished works, "very often in sketches, born in a moment from the fire of art, an artist's conception is expressed in a few strokes."1 With these words he articulated ideas that would become central to the aesthetic appreciation of preliminary sketches, both in two and three dimensions: that sketches are products of creative furor; that they are spontaneous creations, dashed off "in a moment"; and that they reveal the essence of an artist's conception. Bernini voiced similar ideas during his sojourn in Paris in 1665. Commenting on some drawings by other artists, he said that these "first productions from the minds of great men" revealed the "splendor of a pure, clear, and noble idea." "The drawings of a great master," he added, "were to a certain extent more satisfying than the works that he executed from them after great study and care."2 In the eighteenth century J. J. Winckelmann, likening the sketch modeled in clay to the drawn sketch, argued that the "genius of an artist is displayed in all its naturalness and truth in works in soft material or on paper," and instructed sculptors to "sketch with fire, and execute with phlegm."3

To a great extent, scholarly engagement with Bernini's terracottas has similarly focused on their apparent immediacy, creative "fire," and pureness of conception. But as a review of the literature reveals, interest in Bernini's clay

Fig. 69. Gian Lorenzo Bernini, Study for Saint Augustine, ca. 1658. Black chalk with white heightening, $16\% \times 10\%$ in. (42.2 × 25.9 cm). Museum der Bildenden Künste, Leipzig (NI.7894). Cat. D.30

sketches has not been limited to their aesthetic appeal. A number of other areas of inquiry have been engendered by these fragile works, the most fundamental of which centers on their authenticity. Because none of the bozzetti are signed or definitively documented, attributing them has been fraught with challenges, and many attributions have, over time, been contested or flatly rejected. For the most part, the basis for attributing the terracottas has been connoisseurship and the relationship of a bozzetto to a finished marble or bronze. For a number of scholars, technique—how the bozzetti were modeled—has been the dominant factor in attributing works to Bernini's hand. Most recently, art historians, in collaboration with art conservators and scientists, have taken a forensic turn, relying on material and technical analysis as the primary basis for attributions, as exemplified by the entries in this exhibition catalogue.

Beyond the issue of authorship, many scholars have been interested in integrating Bernini's models within his larger oeuvre, approaching them as works of inherent artistic value and as essential as his finished sculptures to an understanding of his style. Many others have focused on Bernini's working methods and the role that models played in the genesis and development of his projects, seeing them as virtual documents of his creative process. A number

of scholars, through the study of Bernini's working methods, also have illuminated his workshop practices—specifically, the use of his bozzetti and modelli by assistants in executing the final works. Where and how Bernini's models fit within the long tradition of preparatory sketches by sculptors has been another focus of attention; those pursuing this historical approach emphasize the unique aspects of his terracottas, especially in terms of their physical character, the modeling techniques used to make them, and the role they played in his working process. Finally, the collecting of Bernini's bozzetti has been the subject of sustained investigation over the past three decades.

Each of these ways of approaching the models can be seen as a discrete mode of inquiry, but in reality they are deeply interconnected. And, although a number of scholars have concentrated on just one of these areas of study, many others have engaged several simultaneously, yielding a more complete understanding of the style, technique, function, historical position, and collecting of Bernini's terracotta sketches.

The Early Literature, 1900–1924

The critical engagement with Bernini's models began with Stanislao Fraschetti's monograph of 1900, Il Bernini: La sua vita, la sua opera, il suo tempo, which marks the beginning of modern Bernini scholarship. 4 Throughout his text, which traces Bernini's career chronologically, Fraschetti cites and illustrates approximately a dozen bozzetti that he claims to be by Bernini's hand, along with numerous drawings. Although he offers little sustained discussion of the terracottas, and even though a number of his attributions are incorrect, Fraschetti can nevertheless be credited with attempting to integrate the bozzetti into Bernini's oeuvre, both as works of art in their own right and as part of his preparatory process.

The next three publications devoted to Bernini's terracottas are far narrower in scope. In 1906 Pèleo Bacci published the highly finished clay model for the Antamoro Fountain as an autograph work, calling it "a wonderful bozzetto designed with a marvelous quickness"—the first of many such claims for Bernini's speed of execution.5 One year later, Ernst Steinmann attributed two terracottas, a Time and Truth and a Venus and Adonis, to Bernini; neither attribution, however, has been accepted.⁶ And in 1910 Hermann Voss more successfully continued this effort to identify and attribute models in a long article devoted to Bernini's fountains.7

Richard Norton's Bernini and Other Studies in the History of Art, of 1914, marks an early milestone in the literature on Bernini bozzetti. In his introductory essay, Norton champions Bernini's revolutionary genius as a sculptor, emphasizing his unprecedented method of production through drawings and bozzetti, which demonstrate the "fertility of his invention and the labour he spent" in developing his works.8 More significant is his brief chapter cataloguing the twenty-seven bozzetti in the collection of Mrs. Edward D. Brandegee (which would be acquired by the Fogg Art Museum in 1937)—the greatest single collection of Bernini's terracotta sketches in the world. Although several of Norton's attributions would later be rejected, the majority have been universally accepted, among them many of the models in this exhibition. His appreciation for the bozzetti focused on their "freshness" and on the insight they provided into Bernini's process of visualizing his creations. Asserting that the terracottas show "not a trace of effort" and that, instead, one sees in them "how Bernini's fingers . . . played over the wet clay like wavering flame," Norton codified the notion that the terracottas were spontaneous creations.9

In three short articles—by Arturo Viligiardi (1920), A. E. Brinckmann (1924), and Arduino Colasanti (1924)—the effort to expand the corpus of Bernini's models continued. Viligiardi published a terracotta in Siena for the Charity

on the tomb of Pope Alexander VII (cat. 34); Brinckmann published two *bozzetti* of tritons (then in the Rudolf Berl collection, Vienna; now Detroit Institute of Arts) and the *Head of the Moor* (cat. 14); and Colasanti identified a fragmentary terracotta head (now Cleveland Museum of Art) as an autograph model for the *Daphne* (see fig. 70). Leaving aside the question of the accuracy of these attributions, what is notable about these articles is that the authors based their attributions primarily on technique, not style, claiming that only Bernini would have been capable of the modeling evident in these works.

In 1923–25 Brinckmann also published his monumental Barock-Bozzetti—four volumes devoted to terracotta sketches produced in Italy and Northern Europe from the sixteenth through the eighteenth century. In the introduction, he defines the bozzetto as the "first artistic sketch"; distinguishes its role in the working process from that of the modello; associates the increase in the production of bozzetti during the Baroque period with the widening separation between invention and execution of a work; and addresses the problem of distinguishing authentic bozzetti from later copies. He also reiterates the Vasarian idea that, by virtue of its liveliness, the bozzetto is of greater value than the finished work. Brinckmann's most important contribution was his catalogue, with individual entries on and illustrations of each work; it remains the starting point for virtually every study of bozzetti. His catalogue includes twenty-eight terracottas attributed by him to Bernini—many of them correctly, several of them not—each of which he discusses in terms of its formal character and its place within the genesis of the project. He also saw Bernini's bozzetti as following a linear stylistic development: from a period of "intense naturalism" and "ridgy garments" (up to 1635) to a phase of "purified academic naturalism" and a "grand pathetic style" (1635-60), culminating in "mannerism" and "whirling forms" (1660-80).10 However arbitrary this schema may be, it constitutes the first attempt to trace a development of Bernini's *bozzetto* style.

The Next Thirty Years

Brinckmann's publication was followed by a number of articles and books that attempted to add new models to Bernini's corpus and to refine our understanding of both the style of his terracottas and their place in his preparatory process. In a short (and largely overlooked) article of 1928, Rudolf Wittkower emphasizes the importance of the bozzetto for what it reveals about an artist's original inspiration, focusing on Bernini's clay sketch for his *Elephant with* an Obelisk (cat. 6); he also discusses full-scale modelli and the intermediary role they played between the bozzetto and the finished work. And, in an intriguing conclusion anticipating his coauthored study of Bernini's drawings (see below), he argues that understanding an artist's working processes is essential to establishing the authorship of a finished work.

Between 1929 and 1931 Valerio Mariani published three articles in which he attributed several new bozzetti to Bernini (not all of them convincing) and addressed the full-scale models for the Cathedra Petri, which he argued were largely by Bernini rather than by his collaborators. Mariani also invoked the trope of instantaneity, writing that the sketch for the Angel with the Superscription in the Museo Nazionale del Palazzo di Venezia (cat. 38) shows such "immediacy of realization" that "there can be no doubt of its attribution to Bernini, whose art reveals itself in every stroke of the stick, resolved, impetuous, knowing and spontaneous like the brushstroke of some great painter."11 To Mariani, Bernini's technique was sui generis and the unequivocal sign of authenticity.

With Heinrich Brauer and Rudolf Wittkower's *Die Zeichnungen des Gianlorenzo Bernini* (1931), Bernini scholarship took a huge leap. The authors not only assembled a checklist of all known drawings by Bernini and his workshop (including fig. 69), but they also analyzed

each drawing with respect to typology, style, and especially function—as documents of Bernini's working process from inception to completion. Although they addressed the bozzetti only marginally, their focus on process as a way to understand the meaning of Bernini's art and his creative intelligence laid the groundwork for more rigorous studies of his terracottas.12

In 1936 the Kunsthistorisches Museum in Vienna presented the first exhibition of early modern European bozzetti, which included two works by Bernini: the Berl tritons, which Brinckmann had published in 1924.13 In the introduction to the catalogue, Ernst Kris and Leo Planiscig acknowledge their debt to Brinckmann's Barock-Bozzetti and reiterate the distinction between the bozzetto and the modelletto. The catalogue was followed in 1938 by a short article by Leonard Opdycke, announcing the Fogg Art Museum's acquisition of the bozzetti in the Brandegee collection, which Norton had published in 1914. In addition to providing a checklist of the terracottas (closely following Norton's), Opdycke stressed the importance of bozzetti in casting light on the evolution of an artist's ideas, and he asserted (in another presumption of their spontaneous creation) that "with Bernini the terracotta was the ideal medium for instant self-expression."14

Following World War II, scholars again turned their attention to both new and established attributions. In 1951 Sherman E. Lee attributed to Bernini a model in the Seattle Art Museum depicting a triton and a sea horse, comparing it to the Berl (now Detroit) bozzetti. Even though subsequent scholarship has not accepted Lee's attribution, his article is noteworthy for another reason. In reference to fingerprints on the bottom of the model, Lee asked, "Would it be possible to employ criminological methods and compare these prints with those on the Berl and Casa Giocondi models?"15 As we will see, his question would be answered decades later. Following the acquisition by the Detroit Institute of Arts in 1952 of the Berl bozzetti and a highly finished model for the chair of the Cathedra Petri (cat. 27), they were published anew. In two articles Paul Grigaut presented a detailed analysis of the Cathedra model. Calling it "a historical document of great importance," he argued that its modeling, which shows a "fire of intensity," supports an attribution largely to Bernini himself.16 The Berl bozzetti, in turn, were published in a 1953 article by E. P. Richardson. While praising their technical bravura, Richardson focused on their function, proposing that they might have been made for the Triton Fountain (no longer extant) at the Villa Mattei rather than for the Fountain of the Moor, as Brinckmann and others had suggested.

The *Bozzetto* Literature, 1955–80

The study of Bernini's models was given an incalculable boost in 1955 with Irving Lavin's doctoral dissertation, the first systematic and comprehensive examination of all known bozzetti by the artist. His stated goal was "to define the significance of Bernini's bozzetti for the understanding of his style and working procedure."17 The first part of the dissertation consists of a long introduction comprising four parts. The first includes subsections entitled: "Bernini's Working Procedure and Its Relation to His Style," "The Changing Relationship between Drawing, Bozzetto and Final Work: Bernini's Stylistic Development," and "An Abiding Principle of Design: Toward a Reintegration of Bernini's Style." The second part considers Bernini's bozzetti in the historical sources and documents. Part three examines his technique. And the final part of the introduction addresses problems of authenticity. A catalogue raisonné of all the known terracottas attributed to the artist constitutes the second half of the dissertation.18

Lavin argued that Bernini's drawings and bozzetti were complementary parts of the same creative process and thus must be studied in relation to one another and to the

Fig. 70. After Gian Lorenzo Bernini. *Head of Proserpina*, 1650-1700. Terracotta, $5^{1}\% \times 4$ in. (15.2 × 10.3 cm). The Cleveland Museum of Art; John L. Severance Fund (1968.101)

finished works in order to understand Bernini's artistic concerns and stylistic development. He also emphasized that, in contrast to earlier practices, with Bernini there was no "fixed operational sequence from drawings to bozzetti"; that Bernini produced bozzetti in greater numbers than previous sculptors; that his bozzetti did not become more finished as he got closer to the final work; that his goal was to preserve in the final work the spontaneity of the terracotta sketch; and that the bozzetti were made not as guides for assistants to follow in executing the final works (full-scale models served that purpose), but as integral prepara-



tory stages for works he executed himself. Like Opdycke before him, Lavin underscored that clay was Bernini's medium of choice, as it lent itself to a "swift facility of treatment," and he claimed that Bernini favored a subtractive method, using a variety of tools, including his fingers. As this précis is meant to suggest, Lavin's approach to the *bozzetti* was multifaceted, at once concerned with technique, function, historical position, working process, and—especially—formal character (style). Lavin's Bernini was a unique genius, who used the *bozzetto* in an unprecedented way to conceptualize a work in three dimensions. 22

Because Lavin's dissertation was not published, it was not readily accessible and had no immediate impact. Thus, much of the scholarship on Bernini's bozzetti from the 1960s and 1970s did not follow up on Lavin's comprehensive approach, focusing instead on specific attributions and the place of the bozzetti within the development of particular projects. Maria Vittoria Brugnoli, in her article of 1961, for example, published a newly discovered model for the Saint Jerome in the Chapel of the Madonna del Voto, Siena Cathedral. Giannetta Matzulevitsch, in a 1963 article, introduced three terracottas in the Hermitage from the collection of Filippo Farsetti, purportedly for Saint Teresa in Ecstasy (cat. 17), Saint Bibiana (fig. 66), and Constantine the Great on Horseback (cat. 23).23 In 1968 Ettore Sestieri focused on the wellknown bozzetto for the Fountain of the Four Rivers in a private collection in Rome (previously in the Casa Giocondi), analyzing its place in the development of the monument. Also that year, Silla Zamboni published another, newly discovered, model in Bologna for the same fountain (cat. 10), which he rightly identified as belonging to the final phase of preparatory work. Henry Hawley, in an article of 1971, reconsidered the model that Colasanti had published in 1923–24 as a study for the *Daphne*, correctly identifying it as the Head of Proserpina and proposing that it is a fragment of a model for the entire group (fig. 70).24

In a 1974 article, Nina Kosareva presented another terracotta from the Hermitage (also from the Farsetti collection), depicting the Blessed Ludovica Albertoni (cat. 21). On the basis of both technique and style, she argued that it was an autograph bozzetto by Bernini, but the authenticity of this work, too, has been widely contested. Also published during this period were two studies on the angels for the Ponte Sant'Angelo. Hanno-Walter Kruft and Lars Olof Larsson (1966) analyzed their development through the drawings (both autograph and workshop) and bozzetti. And, in The History and Decoration of the Ponte S. Angelo (1974), Mark S. Weil undertook an even more probing analysis of the models and drawings, illuminating not only how Bernini developed the angels but also the role played by drawings, bozzetti, and modelli in collaborative projects with assistants.

During this period, three monographs on Bernini were published in which the bozzetti figure to a greater or lesser extent. Howard Hibbard, in his Bernini (1965), cited and illustrated a small selection of the terracottas as indicative of how the sculptor developed his ideas. In the second edition of his seminal Gian Lorenzo Bernini: The Sculptor of the Roman Baroque (1966), Rudolf Wittkower discussed in the catalogue of works virtually every known model attributed to Bernini, passing judgment on their authenticity and indicating their place in the development of the projects. And Hans Kauffmann, in his Giovanni Lorenzo Bernini: Die figürlichen Kompositionen (1970), considered twenty-four bozzetti within the context of his largely iconographic approach to Bernini's figural sculpture.

In a broadly historical essay of 1967, Lavin expanded upon parts of his dissertation, situating Bernini's *bozzetti* within the history of sculptors' models, especially those by Michelangelo and Giambologna. He discussed what he calls the "paradox of Bernini's calculated spontaneity," arguing that his "rapidly executed" *bozzetti* are at once works of "free-

dom and spontaneity" and "an unprecedented degree of conscious premeditation." Bernini's goal in his bozzetti, Lavin proposed, was to increase the sense of immediacy and freshness as he moved toward the final works, and in those final works, he asserted, the sculptor's "major challenge was to preserve . . . the momentary quality . . . of a sketch."25 Wittkower similarly took a broad historical approach in his Sculpture: Processes and Principles (1977), in which Bernini's bozzetti figure prominently. While focusing on the role they played in the sculptor's efforts to develop and clarify his ideas. Wittkower also attended to their technique and their remarkably sketchy quality, which, like so many scholars before him, he read as a sign of their having been produced "at tremendous speed."26 Phoebe Dent Weil, in an essay entitled "Bozzetto-Modello: Form and Function" (a chapter in her 1978 edition of Orfeo Boselli's Osservazioni della scoltura antica), likewise approached the subject historically. Following a discussion of the typology of models and a succinct historical overview of sculptors' sketches and models from the fifteenth to the seventeenth century, she turned to the function of Bernini's bozzetti and modelli, arguing, as Lavin had, that the latter are generally more finished than the former and were made only when the final work was to be executed by his assistants. She also expanded on the observation made by Lavin in his 1967 essay that what Boselli wrote in his treatise about making models—in terms of their medium, size, technique, and function—directly reflects Bernini's workshop practices, which Boselli knew from personal experience.

Discoveries, Exhibitions, Collecting, and Forensics, 1980 to Now

In 1980 another terracotta—a highly finished *modello* of the lion for the Fountain of the Four Rivers (cat. 7)—was rediscovered and published by Angela Cipriani, who argued, on

the basis of its quality, that it was an autograph work by Bernini.27 This article was soon followed by three exhibitions devoted to Bernini, each with an extensive catalogue, which consolidated and expanded upon the terracottarelated literature. "Bernini in Vaticano" of 1981 presented all the bozzetti and modelli in the Vatican's collection. In anticipation of the exhibition, the black pigment that covered the two terracotta sketches of the Charity (see cat. 1) and those for the Daniel in the Lions' Den (cat. 25) and the Habakkuk and the Angel (cat. 26) was removed, revealing the fineness of their modeling and dispelling doubts, earlier expressed by Lavin and others, about their authenticity.²⁸ The entries in the catalogue on the modelli for the Cathedra Petri and the angels for the Altar of the Blessed Sacrament are especially useful, as they discuss how the models were made, their function, and the complex issue of their authorship. An exhibition of Bernini's drawings from Leipzig, organized by Lavin, was presented in Princeton and several other venues in 1981 and 1982. It did not include any of the artist's bozzetti, but the entries in the catalogue paid close attention to all the terracottas associated with the projects for which the drawings were produced, analyzing their place in Bernini's creative process and their relationship to the drawings and final works. The third exhibition, "The Art of Gianlorenzo Bernini: Selected Sculpture," presented at the Kimbell in 1982, included a number of bozzetti and was conceived to complement the Leipzig drawings show, which the Kimbell was also presenting. As Michael P. Mezzatesta noted in the catalogue, when viewed together, the bozzetti and drawings demonstrated "the integral relationship of works in various media in the artist's profoundly unified creative process."29

The collecting of Bernini's *bozzetti* began to receive serious attention with Olga Raggio's article of 1983, focusing on the vast collection of Cardinal Flavio Chigi, which included the four terracottas in the Vatican.³⁰ Elena Bianca

Di Gioia, in a series of articles and essays of 1984 and 1986, turned to a very different kind of collecting. Her focus was the collection of sculpture, both ancient and modern, discovered in Rome in 1982 in what had been the house of Francesco Antonio Fontana, a sculptor who worked for Flavio Chigi. Among those sculptures were nine terracottas by Roman Baroque sculptors, including three by Bernini (for the Saint Longinus [cat. 4] and for two standing saints [cat. 19]), which are notable for their lack of finish, in contrast to the highly finished bozzetti collected by Cardinal Chigi. These terracottas, Di Gioia argued, had been collected by Fontana to serve as studio models, and they demonstrate his unusual taste for sketchy prime idee rather than more finished models.31

Two more exhibitions (and their catalogues), both from 1991, also prominently featured Bernini's bozzetti.32 The first, held at the Museo Nazionale del Palazzo di Venezia in Rome, included four works in that museum's collection: bozzetti for the Head of the Moor (cat. 14), a fragment of a horse (cat. 22), the Angel with the Superscription (cat. 38), and the controversial papier-mâché prova for the Memorial of Maria Raggi. The catalogue, by Maria Giulia Barberini, contains individual entries on the works plus a wide-ranging essay that discusses, among other things, the collecting of Roman Baroque terracottas; the history, materials, and typologies of sculptors' models; and the style, technique, and function of Bernini's bozzetti.

The second exhibition, held at the Palazzo Ruspoli in Rome, featured terracotta sculptures from the Farsetti collection in the Hermitage and the Galleria Giorgio Franchetti alla Ca' d'Oro, Venice—among them, thirteen identified as autograph works by Bernini. In his introduction to the catalogue, Sergei Androsov provides a history of the terracotta collection amassed by the Venetian prelate Filippo Farsetti in the second half of the eighteenth century, the bulk of which was purchased in 1799 by Czar Paul I and taken to Saint Petersburg, later becoming part of the Hermitage's collection.³³

In addition to the bozzetti for the Constantine the Great on Horseback (cat. 23), the Angel with the Superscription (cat. 44), the Angel with the Crown of Thorns (cat. 45), and the Rio de la Plata and the Nile for the Fountain of the Four Rivers (the latter two in the Ca' d'Oro; cats. 8 and 9), all but one of which are generally accepted as autograph works by Bernini, the exhibition presented highly finished bozzetti for a number of other works that Androsov and Nina Kosareva, in their entries, argue are unquestionably also by Bernini's hand—attributions rejected by this author and by the curators of the current exhibition (including fig. 71).34

Three publications from the mid-1990s continued the effort to integrate Bernini's models more fully into his larger oeuvre. The most significant of these efforts was made by Charles Avery in his 1997 monograph, Bernini: Genius of the Baroque, in which he discusses approximately fifty bozzetti and modelli attributed to the sculptor, illustrating over thirty of them. Avery analyzes the formal character of almost all the terracottas; situates them within Bernini's development of his projects; and is especially attentive to the various tools and modeling techniques employed by Bernini. Although he points to the difficulty of differentiating bozzetti by Bernini's hand from those by assistants, he tends to be overly inclusive in his attributions—prone, like others before him, to see any terracotta that displays a "spontaneous fluidity and sheer attack on the clay" as "Bernini's own handwork, under the fire of artistic inspiration."35 One of the other two publications is by Andrea Bacchi and Susanna Zanuso (1996), who in their extensive catalogue of seventeenth-century Roman sculpture cite some fifty terracottas by the sculptor (and illustrate nine). The second is the entry on Bernini by Rudolf Preimesberger and Michael P. Mezzatesta in The Dictionary of Art (1996), which includes a section on his working methods and techniques, providing a useful précis that helps contextualize his preparatory models.



In 1998 the Art Institute of Chicago presented a slightly reduced version of the Palazzo Ruspoli exhibition of 1991, featuring the Farsetti collection of Italian Baroque terracottas from the Hermitage and including eleven works attributed to Bernini. The catalogue included a reprise of Androsov's essay on the history of the Farsetti collection; an essay by Dean Walker on the history of collecting Italian sculptural models; an essay by Ian Wardropper on the

Fig. 71. After Gian Lorenzo Bernini. David, 1650-1750. Terracotta, H. 181/8 in. (46 cm). The State Hermitage Museum, Saint Petersburg

function of terracotta models in Italian Baroque sculptural practice, which focuses on Bernini and closely follows Lavin's arguments; and entries on all the works, in which Androsov and Kosareva again argue for Bernini's authorship of some of the more controversial Hermitage terracottas. One year later, the Museo Nazionale del Palazzo di Venezia presented "Gian Lorenzo Bernini: Regista del Barocco," which included twenty-five *bozzetti* attributed to the sculptor, among them many widely accepted works and several of the disputed Hermitage pieces.

Ivan Gaskell and Henry Lie's edited volume of 1999, Sketches in Clay for Projects by Gian Lorenzo Bernini: Theoretical, Technical, and Case Studies, can be considered the most significant recent publication on the bozzetti. The essays closely examine fifteen of the Fogg's terracottas, all widely accepted as autograph and clearly associated with Bernini's projects, focusing on their physical character. In his introduction and conclusion, Gaskell argues that the "authorship" of the bozzetti is an equivocal issue, given Bernini's workshop practices and the collaborative role played by assistants. Traditional connoisseurship is, he warns, problematic, and more important than attributing the terracottas to Bernini is understanding the role they played in the development of the works. Henry Lie, in a short essay, introduces the various technical methods used to analyze the bozzetti, including chemical and morphological clay analysis, inductively coupled plasma mass spectrometry (ICP-MS), X-radiography, close surface examination, and fingerprint analysis. Lie, Eugene F. Farrell, and Suzanne M. M. Young present the results of their clay analysis, using ICP-MS and thin-section petrographic analysis on core and powder samples taken from the Fogg's bozzetti and a few comparata. Although not conclusive, the results of their study show a consistency in the chemical and mineral structure among the samples, as well as a consistency with clay from Monte Vaticano.

In his study of modeling techniques, also in that volume, Anthony Sigel provides a detailed

analysis of the physical character of the boz*zetti*: the massing of the clay; the treatment of their bases; additive and subtractive modeling techniques; the use of tools; finishing techniques; additions and amendments after completion of the modeling; pointing marks; and post-firing alterations. Particularly noteworthy are his observations that the bozzetti were modeled primarily through an additive technique (which contradicts Lavin's claim that they were worked primarily through subtraction) and that they show evidence of being worked, put aside, and worked again, over several sessions (which undermines the assumption that they were created spontaneously). The technical evidence leads Sigel to conclude that they show a "highly individual approach to working in terracotta," with the consistency in their modeling pointing "toward the work of a single hand," which he identifies as Bernini's.36 And in her essay, Nancy Lloyd presents a study of the fingerprints that appear on thirteen of the bozzetti, which were subjected to criminological dactyloscopy—answering the call first made by Lee in 1951. Other than confirming that prints on two of the terracottas matched, the results were inconclusive.³⁷ The most striking aspects of this publication are the extent to which science—forensic analysis—replaces traditional connoisseurship and the assertion that authorship is less significant than understanding how the works were created. Yet, despite this new emphasis, several of the volume's contributors conclude their studies with a claim for Bernini as a unique genius and as the bozzetti's sole creator. The methods may have changed, but the conclusions have not.38

In 2001 a major exhibition, "Earth and Fire: Italian Terracotta Sculpture from Donatello to Canova," was held at the Museum of Fine Arts, Houston, and the Victoria and Albert Museum, London; it included Bernini's *bozzetti* for the Ponte Sant'Angelo angels and a few other works attributed to him. In the catalogue Maria Giulia Barberini discusses the unique aspects of Bernini's terracottas, arguing for the "modernity"

of his approach to bozzetti evident in their manifesting "the progressive transformation of his ideas . . . very fast."39 Bruce Boucher, the exhibition's curator, focused on the bozzetti for the Ponte Sant'Angelo angels, analyzing them in conjunction with the drawings and in terms of their modeling, relying on Sigel's earlier work.40

The first monograph devoted to a single Bernini terracotta, the modello for the Moor (cat. 13), was published in 2002 as a dealer's catalogue, with essays by Avery, Sigel, and Mark S. Weil. In his brief history of the Fountain of the Moor, Avery focuses on the model's importance as a document of a specific stage in the evolution of the design. Weil argues for its authenticity on the basis of its modeling, "which shows a sense of purpose unique to Bernini's work" and closely follows the modeling in other of the sculptor's terracottas (again drawing on Sigel's 1999 study of Bernini's modeling techniques).41 Sigel presents a technical study of the modello, using the same means as for the Fogg terracottas, noting that the technical study of the methods, tools, and materials of sculpture is still "in its infancy." In another publication of 2002, Bernini scultore: La tecnica esecutiva, the technical study of Bernini's sculpture was again privileged. Anna Coliva, the volume's editor, focuses on the Borghese sculptures—the Pluto and Proserpina, the Apollo and Daphne, and the David—in her introductory essay. Noting the absence of surviving bozzetti and modelli for these early works, she argues that it was only when Bernini began to rely on a large workshop that he conserved his preparatory works. 42 Maria Giulia Barberini discusses the bravura modeling of most of Bernini's bozzetti but underscores the difficulty in distinguishing between bozzetti and modelli made by Bernini and those by his assistants. And Colette Czapski Hemingway and Sigel, in the volume's final essay, provide a brief summary of the visual, technical, and scientific analyses brought to bear on the Fogg terracottas.

In the catalogue of seventeenth-century sculpture in the Museo di Roma, also published in 2002, Elena Bianca Di Gioia discusses, once again, the sculpture collection of Francesco Antonio Fontana, which is now part of the museum. Her entries on the three Bernini bozzetti provide extensive visual and technical analysis and, with respect to the Saint Longinus (cat. 4), a detailed discussion of its place in the development of the statue. The Bernini bozzetti in the collection of Flavio Chigi were studied anew by Adriana Villani in an article of 2008. Going beyond Olga Raggio's 1983 article, Villani presents a comprehensive history of Chigi's collection, drawing extensively on inventories to identify and trace Bernini's works in it from the 1660s to 1922, when the collection was given to the Vatican. She rejects Raggio's argument that the black pigment that covered the Bernini bozzetti was seventeenth century in origin, citing the inventories, which until 1770 describe them as terracotta (and not a finto bronzo, or "feigned bronze"). Detailed discussions of each of the four bozzetti and transcriptions of the inventory records that cite them follow her discussion of the collection.

Rounding out the recent literature are three essays that also address collecting. Jennifer Montagu (in 2008) looked at artists as collectors of Roman Baroque sculpture, discussing the collections of Ercole Ferrata, Francesco Antonio Fontana, Bartolomeo Cavaceppi, and—although not an artist—Filippo Farsetti. Raggio (also in 2008) examined Clement XI's Museum of Models in the Vatican, focusing on Bernini's modelli grandi of the angels flanking the Cathedra Petri and the Altar of the Blessed Sacrament. In addition to discussing their materials and construction, she reconsidered the question of their authorship. Finally, in an exhibition catalogue of 2010, Di Gioia provided an in-depth consideration of Ferrata's collection of drawings, bozzetti, and modelli (which included several works attributed to Bernini), which, she argues (following Montagu), served as study objects for Ferrata's studio assistants and did not reflect his personal collecting interests.

Conclusion

As this historiographic overview makes evident, the study of Bernini's models has been a sustained scholarly effort for over a century. Although we still lack a definitive corpus or catalogue of works, and attributions continue to be debated and proposed, we can at least claim to have a list of some forty bozzetti, in North American and European collections, whose authenticity is widely accepted. The literature has also illuminated the distinctive formal character of the *bozzetti*; the integral role they played in Bernini's preparatory process; how their function complemented that of drawings; the technical means by which Bernini made them; their place within the history of sculptors' models; and at least a partial picture of the collecting of them.

Remarkably, it is only with the essays in this catalogue that scholars have begun to question seriously the assumption that Bernini modeled the bozzetti at great speed. Lelio Guidiccioni, who observed Bernini making the model for the bust of Scipione Borghese, wrote with literary hyperbole of how quickly the sculptor wielded his fingers, but technical evidence and common sense suggest that the bozzetti, though giving the illusion of spontaneity, could only have been made over extended periods and in a highly deliberative way. This is made clear, for example, by the terracottas for the Allegorical Figure, the Head of Saint Jerome, and the Angel with the Crown of Thorns, all in the Harvard Art Museums (cats. 2, 30, and 43). Certainly Bernini modeled clay with confident mastery and an economy of means, but wedging the clay, building up the forms, adding strips and sheets of additional clay, crafting appendages, allowing a bozzetto to dry before applying moister fresh clay, modeling and smoothing surfaces with fingers and tools, and removing stabilizing buttresses—all of these steps required careful consideration and time. 43 What Lavin referred to as "calculated spontaneity" should, I propose, be taken literally, in that Bernini seems to have wanted his bozzetti to appear to be spontane-

ous creations, but they were in fact painstakingly produced in a calculated and studied way, just as his marbles were. Hopefully, future scholarship, building upon this exhibition catalogue, will further engage this issue, recognizing the trope of the "fire of art" for what it is, and as a consequence, deepen our understanding of and appreciation for Bernini's remarkable creative process.



Anthony Sigel

Visual Glossary

Introduction

In 2005 I was given the opportunity to examine Bernini's terracotta model for the lion on the Fountain of the Four Rivers in Piazza Navona, now in the collection of the Accademia Nazionale di San Luca, Rome's oldest art academy (cat. 7). The director, Dr. Angela Cipriani, generously made the model available to me for study, and I spent the day scrutinizing the surface of the *Lion* from all angles, taking photographs, and recording my observations. My goal was to learn what the surface of the clay could teach me about how and why the model was made and to capture what I was seeing in photographs that would communicate my findings to other audiences.

The Lion is a magnificent large terracotta, and the day's examination was fruitful: I discovered and recorded many details that suggested how it had been made. Some of these were hunches—for example, that the Lion was not hollowed, but solid—that could be confirmed only by X-radiographs made six years later. Others were more straightforward observations about the kinds of tools used, how the clay was assembled and shaped, how the surfaces had been smoothed, and so on. Of particular interest were the layout lines and other markings made in the clay after completion of the modeling, which indicated how extensively the model had been put to use in Bernini's studio

Fig. 72. Composite of the *Model for the Lion on the Four Rivers*Fountain (cat. 7) and the marble lion from the fountain in Piazza

Navona, Rome

Toward the end of my examination, while playing the raking light at a steep angle over the lion's flanks, I noticed several very faint lines I had missed earlier, lightly inscribed in the cloth-smoothed clay. A straightedge had been used to draw a vertical line just in front of the lion's hind legs, crossed by a horizontal line along the upper third of the body; this configuration was repeated on both sides (fig. 193). Intrigued, I assumed they had some enlargement or layout purpose, now long forgotten; the presence of the lines was duly noted and the photographs taken.

Near dusk, as I was hurrying back to my lodgings, I went through Piazza Navona to see the travertine lion in the fountain itself. Despite the failing light, I realized instantly that the faint vertical lines I had seen in the clay model defined the plane where the hindquarters of the lion merged with the grotto (fig. 194). The horizontal lines demarcated the assembly of two courses of the travertine blocks. The lines on the model that had so puzzled me were, in fact, clear instructions to the builders. The terracotta lion was not simply a magnificent modello but a working model used to plan the assembly of the fountain.

We have learned to see these terracottas as beautiful objects, but the technical examinations remind us that Bernini was not



Fig. 73. Detail of Model of an Angel and Cherub for the "Celestial Glory." Cat. 32

necessarily thinking about making a beautiful object when modeling his bozzetti. Instead, he often shaped them in quick pursuit of his changing ideas, and the clay records his dynamic process of conception, modeling, and revision. We can, in a sense, look over Bernini's shoulder as he prepared his clay, assembled the basic masses, added limbs or drapery, and detailed facial features. Even more than that, we can discover what makes Bernini's hand distinctive.

A case in point is the little-known Model of an Angel and Cherub for the "Celestial Glory" (fig. 73). When I first saw it at the Museo Horne in Florence, I had no great expectations for it. The label, Angels in Gloria, suggested no connection to any known sculpture. And yet I knew immediately that I was looking at Bernini's work. It was not just that the faces of this angel and cherub resembled those of the familiar Harvard terracotta angels. More specifically, the model revealed both Bernini's characteristic assembly and modeling of drapery, wings, and facial features, plus one completely telling detail—the line defining the back of the neck, delineated

with an oval-tip tool (fig. 148). That precise gesture appears over and over on Bernini's terracottas. Even before we determined that the model was a sketch for the Celestial Glory, this signature technique unmistakably identified it as the work of Bernini's hand.

This Visual Glossary expands the preliminary investigations of Bernini's modeling techniques that I made in 1998 while working on the collection of his fifteen terracottas at the Harvard Art Museums. My provisional conclusions made then have been tested and extended by examining the much broader range of Bernini's terracottas included in the current exhibition and catalogue. The findings recorded here may now seem preordained—the logical outcome of accumulated observation—but this journey began very much in the dark, often without knowing which observations might prove to be important. The researcher must start by simply observing and recording everything. It is often the details that initially do not make sense that ultimately yield genuine discoveries. This glossary offers the reader tools with which to see and understand the visual evidence.

Assembly

Bernini would begin a typical bozzetto by first wedging and compacting the clay. His habitual wedging method would yield a roughly cylindrical column of clay, close to the desired height of the model. He would then add large pieces of clay to build a stabilizing buttress at the back, while building out the front of the base into a cloud formation or a simple rectangle for the figure to stand on. Refinement of these details would come later. He would begin to shape the torso, the limbs, and other details integral to the column by squeezing, pulling, and pushing the clay with his fingers. He also used larger tools to create locations for limbs and wings to be added. Some clay was certainly cut and trimmed from the initial column during the roughing out of basic forms, but from this point on, the modeling was almost entirely additive.

Wedging

Clay is "wedged" before use to mix and compact it. If this is not done, any air pockets in the clay will expand during firing and may damage the model. Wedging consists of vigorously folding the clay in upon itself in a repetitive, rolling motion—like kneading bread dough. The wedging methods preferred by Bernini would yield a cylindrical or somewhat cone-shaped mass and leave the end with a spiral appearance (figs. 78, 82, and 373).

Massing

Methods of massing can range from using a single wedged column, as in most of Bernini's angel models; to assembling a figure from two or three pieces; to assembling handfuls of clay into a pile, as with the bottom third of the Model for the Fountain of the Moor (cat. 13).

Additive vs. Subtractive

Bernini's mode of assembling terracottas was primarily additive (built up with additions), rather than subtractive (carved from a larger mass). He rolled and attached clay to form limbs; he cut sheets and strips of clay to form wings and drapery, attaching and modifying them with tools and his fingers; and he applied additional layers of clay. Simple visual examination of assembly joins confirms this,



Fig. 74. Kneeling Angel. Cat. 52

as does evidence such as the shrinkage cracks that often follow joins, as in the attached wings on the Kneeling Angel (fig. 74). Even though Bernini was not unique in working this waythe additive approach was employed by many other Baroque sculptors—it is particularly characteristic of him.

Joins

Joins between clay elements are signaled by gaps or shrinkage cracks that develop during drying and firing. Breakage may also signal a join: an assemblage of clay is often weakest at these points and will tend to break there when stressed. The bottom of the Pope Alexander VII (cat. 33) reveals several masses of clay joined together to form the sculpture (fig. 324). To make larger drapery passages, Bernini added strips and sheets rather than modeling them out of existing clay. In the attachment of a drapery passage to an Angel with the Superscription (cat. 44), the join is reinforced from above with a bit of clay added with the fingers (fig. 75).



Fig. 75. Angel with the Superscription. Cat. 44

Applied Hair

Bernini employed several different means of applying and modeling hair. For the Tritons with Dolphins in Berlin (cat. 11) and the angels for the Ponte Sant'Angelo (cats. 36-44), he rolled a small ball of clay and applied it to the head, using a blunted oval-tip tool to simultaneously attach and shape it into a hollow curl (fig. 215; see also figs. 345 and 356). On other figures, the hair was attached in small strips and then shaped with fingers and small oval-tip tools



Fig. 76. Model for the Fountain of the Moor. Cat. 13

(see figs. 361, 374, 376, 379, and 421). On larger models, such as the Lion for the Four Rivers Fountain (cat. 7), the curls of the mane were bigger and more completely detailed (fig. 198). The hair of the Moor (cat. 13) sprouts flowerlike from the back of the head (fig. 76).

Strut



Fig. 77. Constantine the Great on Horseback. Cat. 23

Because his preference for rapid modeling and solid construction made it unfeasible to use internal or external armatures, Bernini often inserted small clay struts to support fragile models. These struts are an analogue in clay to the practice in marble carving of leaving marble struts connecting delicate features such as fingers in place until the last stages of work, when the struts were removed. In terracotta, struts range from tiny, as on the right hand of the Saint Teresa (fig. 245), to the thick struts used on the Model for the Equestrian Statue of Louis XIV (cat. 24) to support a drapery passage at the waist and the right arm at the elbow. On each of his models for the Angel with the Crown of Thorns, Bernini contrived a strut to support the outstretched arms and crown. On the earliest version (cat. 35), a thick, tall strut branches off the buttress to support the left arm and crown (see fig. 340). Later he would use a shelflike horizontal strut merged with the figure's arms (cats. 36, 40, and 43). The Constantine the Great on Horseback (cat. 23) was modeled with a strut that supports the horse's chin (fig. 77).

Bases

The bottom surfaces of Bernini's terracottas reveal a wealth of information about how the clay and the modeling platform were prepared and about how the models were freed from the surface afterward. In some cases, the bases were altered after firing.

Flared Base

After forming a wedged column of clay, Bernini would seat it on the modeling platform with considerable force, to make a flat, stable base. This resulting flare in the bottom is occasionally visible in X-radiographs (fig. 367).

Spiral-Pattern Base



Fig. 78. Half-Kneeling Angel. Cat. 48

In cross section, the bases of many models show a circular, or so-called spiral, formation, the result of Bernini's preferred method of wedging used to produce a columnlike mass of clay (figs. 78, 82, and 373).

Laid-Paper Impressions

Sculptors would often place the model on a sheet of paper to keep the clay from sticking to the modeling platform. The paper was burned away during firing, and the pattern of laid lines remains impressed into the base (fig. 101).

Wood-Grain Impressions

Models were often made on a rough, saw-cut wooden surface and left to dry slowly. As the clay dried and shrank, it released itself from the wood, preserving the impressed wood textures.

Sanded Base



Fig. 79. Kneeling Angel. Cat. 50

Many of the terracottas have sand trapped in the interstices of their bases (fig. 79). This remains from the sand sprinkled on the modeling platform to prevent the clay from adhering, just as cornmeal is put on a baking surface to keep dough from sticking.

Wire-Cut Base



Fig. 80. Model for the Cathedra Petri. Cat. 27

Many models were cut from the modeling platform by pulling a wire through the stillmoist clay, leaving characteristic wire-cut marks in the clay (fig. 178). On larger, heavier pieces, the cutting wire (often with a stick attached to each end as a handle) was pulled with a sawing motion, producing a zigzag pattern (fig. 80).

Ground Base

To level or flatten a base after drying, the sculptor would slide the model back and forth on a flat, abrasive surface such as a slab of limestone, leaving linear striations; see, for



Fig. 81. Half-Kneeling Angel. Cat. 49

example, the bases of a Half-Kneeling Angel (fig. 81) and a Kneeling Angel (fig. 79). The height reduction could be significant: when the base of the Angel with the Superscription (cat. 42) was ground flat after a workshop repair, several millimeters of clay or more were removed.

Saw-Cut Base



Fig. 82. Charity with Four Children. Cat. 1

After firing, bases were occasionally cut with a saw to reduce the model's height; the Charity with Four Children (fig. 82) and the Pope Alexander VII (fig. 324) both show this treatment.

Buttresses

Bernini kept his bozzetti from slumping by adding a buttress of clay to the back, rather than using internal or external armatures. The buttress would be added to the initial wedged column of clay in strips or as heaps of clay and then compacted. Added buttress clay is often



Fig. 83. Kneeling Angel. Cat. 51

visible in X-radiographs or revealed through breakage—as on an Angel with the Crown of Thorns (cat. 43), where a discrete sheet of buttress clay has broken off, revealing tool and finger marks in the underlying clay (fig. 378). On some models, buttresses were simply left in place, as on the two Kneeling Angels (figs. 74, 83, and 402), the Constantine the Great on Horseback (fig. 272), and the Model of an Angel and Cherub for the "Celestial Glory" (fig. 319). On many others, once the clay became harder and more self-supporting, the buttress was either removed or reshaped and reduced by carving away excess clay. Unlike his bozzetti, Bernini's modelli-such as the Daniel in the Lions' Den (cat. 25)—typically did not have a buttress at all (fig. 286).

Buttress Trimming

Trimming the back and sometimes the sides of the buttress was most commonly done with a simple knife; in some cases, the clay clearly shows impressions of the curved blade (figs. 84 and 266). Straight chisels (fig. 352) and toothed chisels (fig. 362) were also used to trim the buttresses of excess clay. Occasionally, both knife and chisel were employed, as in a Half-Kneeling Angel (fig. 410). The buttresses of the Kimbell's two angels (cats. 39 and 40) were trimmed after firing with saw and rasp; the



Fig. 84. Angel with the Superscription. Cat. 41

exposed inner surfaces reveal the vertical linear grain in the clay (fig. 366).

Clay and Terracotta

Clay is found on and just under the surface of the earth. It is easily shaped when wet; when heated, it forms a hard, water-resistant solid. Terracotta is an Italian word meaning, literally, "cooked earth," or clay that has been fired.

Composition

Clay is formed by decomposing rock particularly granites, diorites, and basalts, plus other components that vary by location. Composed principally of silica and aluminachemically, it contains 14% water—clay often also incorporates varying amounts of nonclay minerals, including magnesium, iron, and calcium. Measuring only a few angstroms in size, many of these minerals have a hexagonal platelike shape. The water in the clay acts as a lubricant between them, creating the plasticity that is useful in modeling sculpture.

Sources

It is thought that Bernini obtained his clay locally in Rome, from clay beds in the Monte

Vaticano geological formation near the Vatican. Because much of what is now Rome was once at the bottom of the ocean, terracottas made from local clays contain calcium in the form of localized benthic microfossils—single-cell creatures the size of a grain of sand (see Farrell, Lie, and Young 1999).

Firing

Kilns on the via delle Fornaci, adjacent to the Monte Vaticano clay beds, produced terracotta bricks and roof tiles in massive quantities, and Bernini may have used these kilns to fire his models. Variables affecting clay during firing include temperature, duration, and the atmosphere maintained in the kiln. During firing, the temperature is slowly raised while the clay passes through several stages. As the clay is first heated, any free water is driven off as steam. If the temperature is raised too quickly, the trapped steam can cause breakage. By 600°C, the clay is completely dehydrated and loses its plasticity. At temperatures above 900°C, the clay starts to fuse and partial vitrification begins.

The firing temperature of some of the terracottas was quite low—below 900°C. In several of the models, including the Model of an Angel and Cherub for the "Celestial Glory" (cat. 32), the fired clay remained soft enough to have become noticeably worn, especially on the bases. Thin-section microscopy analysis of the clays from the Harvard group of models showed that many of them still contain calcium-based microfossils; since calcite breaks down at about 850°C, their firing temperatures must not have exceeded this level (see Farrell, Lie, and Young 1999). Most models, however, were fired at a higher temperature, which made them harder and quite robust.

Color and Texture

The color of terracotta, typically buff to reddish, derives from its iron oxide content and from the amount of oxygen present during firing. Firing in an oxidizing atmosphere leaves the clay with a red-brown color. Firing in a reducing atmosphere—which removes oxygen—leaves the clay with gray and black colorations. Saw cutting the base of the Charity with Four Children (cat. 1) after firing exposed the interior clay, revealing different colors governed by the amount of exposure to oxygen during firing. The exterior is a red-buff color; the interior is largely

gray (fig. 82). Other firing-related variables influencing color include the temperature and duration of firing, the amount of moisture in the kiln, and even the location of the sculpture

Two of Bernini's models—the Four Members of the Cornaro Family (cat. 16) and possibly the Saint Longinus in Rome (cat. 4)—were broken and reassembled while still in the workshop, and both have some pieces that are darker in color than others. Either the models were broken before firing and the pieces were loaded into the kiln in different locations, or the models broke during firing and the fallen pieces were exposed to differing firing conditions.

Variations in the amount of iron and other minerals can affect the color of the clay. Some clays, such as those used for the Daniel in the Lions' Den (cat. 25) and the Habakkuk and the Angel (fig. 288), appear somewhat sparkly, due to the presence of flakes of mica. Others may have a nubbier, more granular texture, due to the presence either of temper or of larger particles that were uncovered when finer clay washed away during draping and rewetting. Temper was made of ground-up fired clay, sand, or organic matter (such as chopped straw or grass) added to stabilize the clay during drying and firing and to prevent shrinkage.

Shrinkage

Clay shrinks between 5% and 8% during drying and firing—and more if fired at temperatures in excess of 900°C. Sculptors and ceramists know this and have learned to calculate for shrinkage in their work (see cat. 18 for further discussion).

Consistency

Different stages of modeling required the clay to be at different states of hardness. At the beginning of a modeling project, large pieces of clay had to be broadly manipulated, as the sculptor wedged, divided, squeezed, and bent the clay to form the basic masses of the sculpture. This was most easily done with the clay in a wet, plastic state, which was also necessary for the clay to adhere well to itself during initial assembly. Some of Bernini's bozzetti were the work of only a few hours, in which the soft, creamy texture of the clay remained the same from the first stroke to the last. Examples of this are the Kneeling Angels (cats. 51 and 52) and the Model of an Angel and Cherub for the "Celestial Glory" (cat. 32), where finger marks and prints, tool marks, and the assembling of clay into larger forms all remain visible, recorded in the surface.

Many other of the bozzetti and all the modelli were worked on for extended periods. The time to add detail-modeling crisp folds in the drapery, refining features in the face, and detailing the hair—was not when the clay was soft and liable to form a raised lip or rough edge, but when it was firmer, giving some resistance to the tool. Fine details like the inscription in the Elephant with an Obelisk (fig. 190) were best applied in leather-hard clay. The small face of the Blessed Ludovica Albertoni in London (cat. 20) has carefully wrought brows, eyes with lids and pupils, and cheeks detailed in very hard clay (fig. 259). The surfaces show few of the tool marks, raised edges, and clay crumbs that would have resulted had the clay been softer.

Damage and Restoration

Bernini's models often show damage that occurred before, during, or after firing, caused by mishap, shrinkage cracks, or environmental effects such as weathering, soluble salts, and biological deterioration, and even by wellintentioned but poorly executed restorations.

Breakage

Breakage before firing could result from toorapid drying and the resulting shrinkage, or simply from accidents in the workshop. If a model broke before firing, the kiln could be loaded with the separate pieces, to be repaired afterward. If the model had not been carefully wedged, hollowed, and dried, or if the firing process was not properly regulated, trapped air and moisture could expand, causing breakage during firing.

Early Repairs

Many terracottas contain repairs that were executed in the workshop or early in their fourhundred-year history. Some repairs were made to cracks that developed during modeling, even before drying and firing (fig. 377). One immediate post-firing repair can be seen on an Angel with the Superscription (cat. 42), in which a pine resin adhesive was used to join broken sections of the base. The repair can be dated to the workshop because the entire baseterracotta and resin alike-was ground flat after the repair was made (fig. 373). Before modern adhesives existed, shellac and sticky tree resins such as pine were used to join broken terracotta pieces; often they would be combined with dowels to strengthen the join.

Shrinkage Cracks



Fig. 85. Angel with the Crown of Thorns. Cat. 35

Clay shrinks as it dries, and different parts of the model dry at different rates because of variations in thickness and shape. The resulting tensions cause shrinkage cracks, and few terracotta models escape drying and firing without them. The Cathedra Petri (cat. 27), for example, shows large cracks in its back and bottom surfaces (fig. 80). Shrinkage cracks are more likely to occur at clay joins, where the structure of the assembled clay is inherently weaker, as seen along the attachment of the legs to the torso of the Angel with the Crown of Thorns (fig. 85) and the right wing of a Kneeling Angel (fig. 74).

Biological Deterioration

Prolonged storage of models under damp, humid conditions—often draped with wet cloths—promoted the growth of microorganisms that could cause the clay to deteriorate, as seen in the Daniel in the Lions' Den (fig. 86) and the Four Members of the Cornaro Family (fig. 92). Further damage could occur when the cloths were periodically rewetted; excess water would run down and erode the surface, creating small fissures.



Fig. 86. Daniel in the Lions' Den. Cat. 25

Soluble Salts

Clay and terracotta can be damaged by contamination with soluble salts, typically introduced during cleaning with chloridecontaining solutions—such as dilute hydrochloric acid or bleach. During seasonal changes in humidity, the salts crystallize on the surface, which causes destructive flaking. Storage in museum display cases made of unsuitable materials (certain woods, composite materials, sealants, and paints) can cause similar damage.

Calcium Spalling

Chips called "spalls" can pop off the clay surface, revealing small white calcium oxide inclusions underneath. After firing at temperatures above 800°C, the calcium oxide expands, forcing the spall away from the surface. This spalling can be seen on the Elephant with an Obelisk (cat. 6).

Restoration-Related Damage



Fig. 87. Model for the Fountain of the Moor. Cat. 13

Well-meaning restorers have caused various kinds of damage to the terracottas. These include staining and residues from applied coatings, adhesives, and fills. Unstable repairs may fail, causing further damage or loss. Drilling dowel holes and cutting channels so that staples can be embedded not only disfigures but also weakens the terracotta. C-shaped metal staples have been used for repairs since antiquity. They were used, along with dowels, to join broken sections of the Model for the Fountain of the Moor (fig. 228); an earlier restoration on the foot of the Moor (cat. 13) contains a wooden dowel (fig. 87). See X-radiographic Evidence: Dowels and Staples. By far the worst damage is inflicted when joins are misaligned and the projecting terracotta is cut or filed down, obliterating the original surface and leaving an ugly scar.

Modern conservation adhesives have rendered these techniques largely obsolete. Current practitioners adhere to a code of ethics in which the concepts of stability and reversibility inform every decision. If the goal of restoration is to restore a so-called original, or undamaged, appearance, the goal of conservation is to preserve the artifact and the cultural information it contains. Restoration may be so extensive that it obscures what is original. The Model for the Equestrian Statue of Louis XIV (cat. 24), for example, went through several substantial campaigns of restoration. Louis's feet and portions of the horse's forelegs (fig. 158) and tail are replacements, made of plasterlike materials and attached with metal dowels. The hooves, for example, were reskinned with tinted fill (fig. 88). X-radiography reveals the restorations to have a speckled appearance, unlike the original clay.



Fig. 88. Model for the Equestrian Statue of Louis XIV. Cat. 24

Examination **Techniques**

Raking-Light Examination





Fig. 89. Angel with the Scourge. Cat. 37

Close visual examination and photography of the surfaces of the terracottas with the aid of a bright low-angle, or "raking," light are by far the most important examination techniques. Raking light throws the textures and tool marks on the clay into strong relief (fig. 89, bottom). This evidence, often not visible otherwise, is essential to understanding how the artist used his fingers and tools. Most of the technical photographs in this catalogue were illuminated with raking light.

Matching-Angle Photography

It is useful to photograph the terracottas and the finished marble sculpture from the same angle. Such images help characterize the relationship of the model to the completed work, allowing a detailed assessment of the differences between the two (fig. 72).

Reading Clay Strokes

The superimposition of finger and tool strokes follows the sequence of modeling. Typically, the initial rough assembly is followed by shaping with large oval-tip and toothed tools; next, more clay is added and shaped with the fingers and smaller tools; and then final smoothing is done with fingers, cloths, and brushes. Unless the



Fig. 90. Angel with the Scourge. Cat. 37

earlier gestures are completely overwritten, all of these actions leave visible traces in the clay. Wet, soft clay is much more malleable and will record every detail (figs. 374 and 417), whereas drier, harder clay is difficult to move and often will not register fingerprints.

Three overlapping finger strokes in the Angel with the Scourge (cat. 37) record the direction and sequence of gestures used to form the lower wing feathers (fig. 90). Bernini pushed his finger up from the bottom, leaving a fingerprint at the top when the finger was lifted. The middle stroke is superimposed over the other two and therefore was made last. The characteristics of the finger stroke and the print at the end of it, plus the depth and quality of the impression, all help to gauge

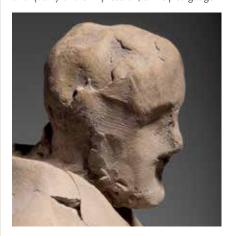


Fig. 91. Pope Alexander VII. Cat. 33

the force of the movement and the condition of the clay.

One of the best examples of the creative act visibly captured in clay is offered by the head of the Pope Alexander VII (cat. 33), which reads like a miniature map of its creation. Bernini shaped the head by pinching clay to form the eye sockets and nose, then pushed his finger along the sides of the head from front to back at the cheek and temple, each stroke ending with a fingerprint in a small mound of displaced clay (fig. 91). The nose bears the fingerprints from his squeeze to form it, and a quick blotting touch of his finger has muted the sharp tip.

Reading Break Surfaces



Fig. 92. Four Members of the Cornaro Family. Cat. 16



Fig. 93. Angel with the Superscription. Cat. 41

Because breakage often occurs where separate pieces of clay were previously joined together, examination of surfaces left by a break often has much to reveal about how the model was assembled. For example, losses on the edge of the Four Members of the Cornaro Family (cat. 16) disclose how the structure of the outer "frame" was built up from a square-sectioned strip of clay and other additions (fig. 92).

The missing top layer of the buttress of an Angel with the Crown of Thorns (cat. 43) reveals tool marks and even a large handprint in the underlying surface, made when the model was picked up and moved around the studio before more clay was added (fig. 378). On an Angel with the Superscription (cat. 41), losses to the base reveal underlying fingerprints from earlier stages of shaping the model (fig. 93).

Cross-Section Analysis

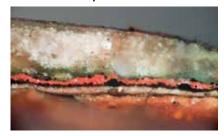


Fig. 94. Saint Ambrose. Cat. 28

A visible and ultraviolet (UV) microscope can be used to examine the composition and layer structure of a sample from a painted or gilded surface. A small sample is removed and mounted in resin, then polished to reveal a cross section of the layering structure. Often historical coatings such as gesso, bole, gilding, and pigments can be identified, as well as the order in which they were applied (fig. 94). See Surface Decoration: GOLD- AND BRONZE-COLORED PAINT.

Fingerprint Analysis

Fingerprints found in the clay of models attributed to Bernini have been the subject of a systematic and ongoing campaign of fingerprint analysis, or dactyloscopy. The surfaces of these terracottas contain many partial prints, but only clear and complete prints are useful for analysis. The first study of Bernini's prints was undertaken by Harvard conservator Nancy Lloyd and published in the 1999 Harvard University Art Museums Bulletin devoted to Bernini research (see Lloyd 1999). At that time, thirty-nine fingerprints from models in Harvard and Detroit were photographed in raking light and submitted to a fingerprint analyst for a law-enforcement agency. He reported a match between prints on two different works in Harvard's collection: the Four Members of the Cornaro Family (fig. 95) and an Angel with the Superscription (fig. 96). This match was striking



Fig. 95. Four Members of the Cornaro Family. Cat. 16



Fig. 96. Angel with the Superscription. Cat. 42

for what it suggested about the possibilities of fingerprint identification, especially because these two bozzetti are dated more than twenty vears apart.

In 2003, working independently, I established a match between the print on the Four Members of the Cornaro Family (cat. 16) and one on a third model, the Louvre's Angel with the Crown of Thorns (fig. 97)—providing evidence that a single hand was involved in creating all three models. In 2011, in preparation for this exhibition, I initiated a larger study, incorporating Lloyd's initial group of fingerprints and recording (this time with digital photography) fortythree more fingerprints from works represented in this catalogue as well as others. All eighty-two fingerprint images were submitted for analysis to David Goodwin of Fingerprint Associates Limited, in Irthlingborough, England. Goodwin, who is in the UK's National Register of Fingerprint Experts, has over thirty-two years of experience in fingerprint identification. He confirmed



Fig. 97. Angel with the Crown of Thorns. Cat. 36



Fig. 98. Rio de la Plata. Cat. 8



Fig. 99. Daniel in the Lions' Den. Cat. 25

the two Harvard fingerprint matches from 1999—which he tentatively identified as a left thumbprint—and the 2003 Louvre match. He also established two more matches, linking the Rio de la Plata modello in the Ca d'Oro (fig. 98) and the Vatican's Daniel in the Lions' Den modello (fig. 99) to the previous three matches. These

attributions not only extend the identification across five collections but also link, for the first time, two modelli with the previous bozzetti. Furthermore, since the Rio de la Plata was already linked by stylistic and technical evidence to its companion piece, the Nile (cat. 9), the attribution of the Nile is reinforced too (albeit indirectly) by the fingerprint identification.

Hollowing

Terracottas were often hollowed to prevent damage from shrinkage during drying and firing, but Bernini did not hollow any of his bozzetti except the Pope Alexander VII (cat. 33); the Study of a Horse (cat. 22) had a couple of fistfuls of clay dug out of its back (fig. 266). His choice not to hollow bozzetti suggests an artist not overly attached to objects that he seems to have considered mere by-products of the creative process. This attitude is perhaps one reason so few of his bozzetti survive to the present day.



Fig. 100. Model for the Fountain of the Moor. Cat. 13

Remarkably, even some of Bernini's modelli were not hollowed. The Model for the Lion on the Four Rivers Fountain (cat. 7), a large and complex modello, was made of solid clay and not hollowed. As a result, it has suffered breaks and losses. Most of his modelli, however, were hollowed, such as the Blessed Ludovica Albertoni in London (cat. 20) and the Harvard Saint Ambrose (cat. 28). The Model for the Fountain of the Moor (cat. 13) suggests Bernini's

ambivalence about hollowing: the head and chest were hollowed (as discovered during conservation treatment; see fig. 100), but the rest of the large composition was left solid and suffered damage as a result. Larger modelli such as the Elephant with an Obelisk (cat. 6) and the Model for the Equestrian Statue of Louis XIV (cat. 24) needed hollowing for another reason to reduce their weight. The body of the Elephant was probably constructed hollow, from slabs of clay, to keep the still-soft legs from being crushed.

Hollowing from the Back

Models that were hollowed from the back include Harvard's Saint Longinus (fig. 177), the Study of a Horse (fig. 266), the Habakkuk and the Angel (fig. 292), the Head of Saint Jerome (cat. 30), the Saint Jerome (fig. 313), and the Pope Alexander VII (fig. 325). The Saint Longinus in Rome (cat. 4) was hollowed both from the back and after it was cut into sections. The rocky bases of the Rio de la Plata (cat. 8) and the Nile (fig. 208) were built with open backs, hollowed further, and then holes were cut up into the seated figures above. These holes were invisible from the outside and were not filled.

Hollowing through Cut Holes



Fig. 101. The Blessed Ludovica Albertoni. Cat. 21

If a model might be damaged by being inverted, holes were cut into the sides and clay was scooped out through the holes. Plugs textured with scoring were then fitted into the holes, and the outer surfaces smoothed. The two Blessed Ludovica Albertoni models (cats. 20 and 21) were hollowed in this manner; the plugs can now be seen from inside, underneath the sculpture (fig. 101). The London Ludovica (cat. 20) was later hollowed further from below (fig. 260). The head of the Moor (cat. 13) was

hollowed from the top (fig. 228), as was the king's head in the Model for the Equestrian Statue of Louis XIV (cat. 24). The horse was almost certainly hollowed through cutand-plugged holes—the voids are visible in X-radiographs (fig. 274).

Measuring, Pointing, and Layout Marks

Measuring and pointing marks, made with a divider, are found on many of the models. They fall into two general types: small round holes, called "sharp" point marks, that are impressed by the tip of one leg of the divider, and either square or triangular marks, as well as short "struck" lines, that are made with the tip of the other leg. When these marks appear in the clay of a finished model, it is evidence that measurements were taken from it. Accidental marks can resemble measuring marks, so the location and grouping of marks are important in determining their purpose. Typical locations for clusters of measuring marks are the throat, wrist, elbow, and shoulder, and the knee, ankle, and toe.

Measuring Scales

Along with measuring marks, small scales drawn in the clay of several models indicate how the measurements were used (fig. 418). A corresponding scale would be inscribed in or adjacent to the new sculpture being made, with each unit enlarged according to the desired ratio. A 1:8 ratio between the two scales, for example, would be used to produce a model eight times bigger than the initial bozzetto. A measurement would be taken with the divider on the small bozzetto. The distance would then be applied to the small measuring scale and the number—say, 4.5 units—noted. Moving to the larger model, the sculptor would choose a larger divider and, applying it to the larger scale, set it to 4.5 of the larger units. This proportionally enlarged distance would be marked on the larger model and then repeated with the next element. As many as fifty or more measurements would be used to ensure that the proportions of the larger model were identical to those of the smaller one. Pointing marks recorded on the Angel with the Crown of Thorns

(cat. 43) allow for partial reconstruction of the point-to-point measurements (fig. 380).

An elaborate scale can be found on each side of the buttress of an Angel with the Superscription (figs. 384 and 385). Scales on other models may have been smoothed away in repair campaigns or even inscribed into excess clay on the worktable and later discarded.

Divider



Fig. 102. Dividers

A divider, normally made of metal, was used to take measurements from the terracottas (fig. 102); one leg ends in a round tip that would be stuck in the clay, and the other leg was extended to the location to be measured—the elbow, wrist, and so on. The tip of this leg could be square or pyramidal. The legs meet at the top in a stiff hinge. Dividers could also be used to subdivide a length into a desired number of units by walking, or "stepping off," along a line, adjusting the leg opening until the desired number of units fit. A variant, the X-shaped proportional divider, has a sliding pivot that could be moved to control the degree of enlargement.

Nexus

The pit of the throat is a common location where the divider would be placed to make measurements to other places on the figure, such as the shoulder, elbow, wrist, hand, knee, and ankle. The resulting cluster of point marks, or nexus, is found on many of the models, including an Angel with the Superscription (fig. 103) and an Angel with the Crown of Thorns (fig. 379). Though the head is missing from the Constantine the Great on Horseback (cat. 23), the nexus is visible just below the break surface. The Model for the Equestrian Statue of Louis XIV (cat. 24) has a distinct circular impression in the throat area that may relate to measuring (fig. 278).



Fig. 103. Angel with the Superscription. Cat. 41



Fig. 104. Angel with the Superscription. Cat. 38

The nexus of pointing marks was not always at the pit of the throat. On a Kneeling Angel (cat. 52), it lies on the base next to the left knee (fig. 419). On the Nile (cat. 9), the nexus is on the rocky ledge adjacent to the left buttock (fig. 206). On another Angel with the Superscription (cat. 38), it seems to have been on the left ankle (fig. 104).

Point Marks

The tips of dividers were sharpened, and they left different tip shapes impressed in the clay of Bernini's models. "Sharp" point marks are small round holes that were made by a round divider tip. They often have a directional character that indicates the angle of the point's entry into the clay; see, for example, the wing of a Kneeling Angel (fig. 105). Square point marks are made by a divider tip trimmed into a pyramidal shape.



Fig. 105. Kneeling Angel. Cat. 52



Fig. 106. Angel with the Crown of Thorns. Cat. 43



Fig. 107. Kneeling Angel. Cat. 52

Such marks are found on an Angel with the Crown of Thorns (fig. 106) and a Kneeling Angel (fig. 421). Triangular marks are made by the side of a pyramidal tip, as on the shoulder of a Kneeling Angel (fig. 107).

Struck Lines

Struck lines are made as the leg of the divider opposite the nexus is swung a millimeter or two in the clay, marking the wrist, elbow, or other location. They can be seen in the Tritons with

Dolphins in Berlin (fig. 108), the Rio de la Plata (fig. 202), the Nile (cat. 9), two of the Angels with the Superscription (cats. 41 and 42), and an Angel with the Crown of Thorns (cat. 43).



Fig. 108. Tritons with Dolphins. Cat. 11

Point Mark Repair

Marks left in the clay from measuring were often smoothed over afterward. This is true not only of modelli but also, surprisingly, of some bozzetti. Several of the models retain only a few marks, at typical locations, that must have been missed during the cleanup campaign. In other cases, the marks were incompletely effaced by tool or brush smoothing and still remain visible.

The nexus itself is often completely erased. Several of the angels for the Ponte Sant'Angelo, such as the Hermitage Angel with the Superscription (fig. 109) and an Angel with the Crown of Thorns (fig. 341), show evidence of repaired surfaces at the neck, where a nexus may have been located. On the Rio de la Plata



Fig. 109. Angel with the Superscription. Cat. 44

(cat. 8), struck lines on the right shoulder and left ankle (fig. 202) were smoothed over with a wet finger, though they remain visible.

Layout Lines

Lines were drawn in the clay of the models to aid in measurement or layout, to establish proportions, and to guide trimming. Layout lines on the right wing of an Angel with the Crown of Thorns (cat. 43) have embedded point



Fig. 110. Model for the Lion on the Four Rivers Fountain. Cat. 7

marks. Similar layout lines are found on the right arm, across the crown, and down the shin. Lines were incised with a straightedge to establish the centerline and outside edges on the Allegorical Figure (cat. 2).

A centerline was inscribed down the spine of the Model for the Lion on the Four Rivers Fountain (fig. 110), and several overlapping lines were drawn with a straightedge on the right side of its base (fig. 195). Lines relating to the assembly of the travertine blocks of the fountain were drawn into the lion's clay flanks (fig. 193). Lines along the base of the Cathedra Petri (cat. 27) remain perhaps from laying out a course of decorative moldings, never executed. Vertical lines on the backs of several Ponte Sant'Angelo angels were drawn as an aid to visualizing them without a buttress or to guide the buttress trimming (figs. 343, 357, and 381).

Signature Modeling Techniques

Examination of Bernini's terracotta models has identified a group of dynamic and distinctive techniques that he employed repeatedly. No one of these techniques alone is enough to determine an attribution to Bernini, but when several are found in different combinations

on multiple pieces, they confirm each other. Taken into consideration along with stylistic, technical, and art historical information, they add a sound criterion for assigning authorship. Most of Bernini's signature techniques appear primarily on bozzetti, though some appear

> on modelli as well. On a rapidly executed bozzetto, facial features as well as wing and drapery details were often just quickly suggested with his own personal modeling shorthand, using both fingers and tools. Such rapid methods of indicating features on a head about an inch tall would not, however, serve for larger modelli, which are much more highly finished; the traces of their formation were often largely effaced by final smoothing and finishing.

Clay Pushed around Limbs

Bernini habitually shaped the arms, and occasionally the legs, of his models by pushing clay around the limbs rather than along their length. Fine striations in the clay record the movement and direction, as does the partial fingerprint often left in the clay at the end of each stroke. This signature technique appears repeatedly on the angels for the Ponte Sant'Angelo; nine of the ten that I consider to be autograph have arms shaped this way. They include five bozzetti of the Angel with the Superscription: at the Palazzo di Venezia (fig. 354), the Kimbell (cat. 39), two at Harvard (fig. 111 and cat. 41), and the Hermitage (fig. 112). The bozzetti of the Angel with the Crown of Thorns that feature this technique include



Fig. 111. Angel with the Superscription. Cat. 42



Fig. 112. Angel with the Superscription. Cat. 44



Fig. 113. Angel with the Crown of Thorns. Cat. 35



Fig. 114. Angel with the Crown of Thorns. Cat. 36

Harvard's (figs. 113 and 339) and one each at the Louvre (fig. 114) and the Kimbell (cat. 40), plus the Angel with the Scourge (cat. 37). Arms built from pieces rather than rolled clay would be clad with a thin sheet of clay, then shaped and smoothed the same way. This is seen on the Angel with the Superscription in the Palazzo di Venezia (cat. 38) and one of the two at Harvard (cat. 42). The three other angel models for the Ponte Sant'Angelo, by sculptors other than Bernini—Paolo Naldini (cat. 45), Ercole Ferrata (cat. 46), and an anonymous workshop assistant (cat. 47)—do not feature this technique.

Bernini also used this shaping method elsewhere, including the leg of the Study of a Horse (fig. 267), the rider's leg on the Constantine the Great on Horseback (cat. 23), the leg of the Louvre's Angel with the Crown of Thorns (cat. 36), and the arms of the Tritons with Dolphins (cat. 11).

Neck Fingernail Pinch

This unmistakable signature technique appears on many of the angel bozzetti from 1667-75, in which Bernini used his fingernail in a pinching motion to delineate the back of the neck and to separate the buttresslike hair from it; see, for example, two Angels with the Superscription (figs. 115 and 375), an Angel with the Scourge



Fig. 115. Angel with the Superscription. Cat. 44



Fig. 116. Angel with the Scourge. Cat. 37



Fig. 117. Half-Kneeling Angel. Cat. 48



Fig. 118. Angel with the Crown of Thorns. Cat. 40



Fig. 119. Model of an Angel and Cherub for the "Celestial Glory." Cat. 32

(fig. 116), a Half-Kneeling Angel (fig. 117), and the two Kimbell Angels (figs. 118 and 360). On the Model of an Angel and Cherub for the "Celestial Glory" (fig. 119) and a Half-Kneeling Angel (fig. 409), Bernini used an identical strategy

to draw the curvature of the back of the neck, but substituted an oval-tip tool for his fingernail.

Over-the-Shoulder Finger Stroke



Fig. 120. Kneeling Angel. Cat. 52

Bernini often shaped his models' shoulders by pushing or pulling his fingers from front to back alongside the neck. In most cases, the tracks from his fingers and a fingerprint remain in the mound of displaced clay at the end of the stroke, as in the Angel with the Scourge (fig. 348). A Kneeling Angel (cat. 52) shows a similar conformation (fig. 120), and a comparable gesture is seen on two Angels with the Superscription (cats. 36 and 39). On another Angel with the Superscription (cat. 41), he used the index fingers of both hands. We can determine that Bernini was facing the back of the sculpture at the time, because his fingernail marks are impressed in front of his fingertips (fig. 370).

Finger Sweep around the Head

Bernini habitually smoothed and shaped the sides and backs of the heads on his bozzetti



Fig. 121. Model of an Angel and Cherub for the "Celestial Glory." Cat. 32



Fig. 122. Angel with the Superscription. Cat. 38



Fig. 123. Half-Kneeling Angel. Cat. 48



Fig. 124. Kneeling Angel. Cat. 50

with sweeping finger strokes around the head (figs. 121-24). On one occasion an oval-tip tool was used to the same effect (fig. 420). On an Angel with the Superscription (fig. 376), Bernini pushed his thumbnail around the head from

back to front, cutting a crisp, fresh track in worn clay and leaving a fingerprint and an impressed nailprint at the end.

Toothed Textures as Negative Space

Bernini frequently used a large-tooth tool to texture areas that were to represent negative space. The texture was often applied at an



Fig. 125. Angel with the Crown of Thorns. Cat. 35

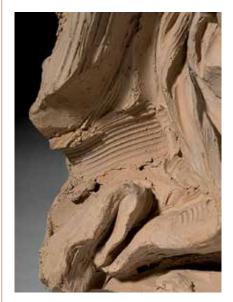


Fig. 126. Kneeling Angel. Cat. 51

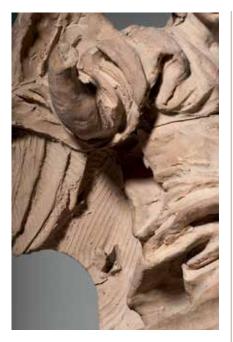


Fig. 127. Half-Kneeling Angel. Cat. 49

oblique angle, to differentiate it from the striations he used to indicate drapery, wing feathers, and clouds. This technique can be seen on the buttresses on most of Bernini's models for the Ponte Sant'Angelo angels, including the Angel with the Crown of Thorns at Harvard (fig. 125) and the Angel with the Superscription in Rome (fig. 357). Other models showing toothed textures made for this purpose include the negative space under the belly of the Study of a Horse (cat. 22) and on Constantine the Great on Horseback (cat. 23); all three Kneeling Angels (cats. 50-52; see fig. 126) and below the wings of a Half-Kneeling Angel (fig. 127); and on each of the clay figures on the Model for the Four Rivers Fountain, where the clay and wood meet (fig. 209).

Impressed Tool Marks

Examining the hair on the Moor modello (cat. 13) yielded the discovery of stamped holes in linear patterns that Bernini made with the tip of a toothed tool (fig. 226). Similar stamped marks are also found in the dolphin's whiskers in the same model (fig. 227), in the drapery of an Angel with the Superscription (fig. 369), and on the Rio de la Plata figure on the Model for the Four Rivers Fountain (fig. 211). The horse's mane on the Model for the Equestrian Statue of Louis XIV (cat. 24) contains passages of stamped holes from toothed tools (fig. 276) that

are very similar to those in the hair of the Moor. As on the Moor, the marks were impressed after the passages were already completed, to add texture and contrast. The technique is an analogue in clay for one of Bernini's idiosyncratic marble-carving techniques (see discussion in cat. 13).

Hair Buttress



Fig. 128. Angel with the Superscription. Cat. 38



Fig. 129. Angel with the Crown of Thorns. Cat. 43

To buttress the slender necks on many of the angel models, Bernini added clay to the back of the head and neck, squeezing it between his fingers into a roughly defined mass of descending hair. On two of the models for the Angel with the Superscription (cats. 42 and 44), this feature is rendered in precisely the same manner. It was similarly formed on another Angel with the Superscription (fig. 128), an Angel with the Crown of Thorns (fig. 129), and the two Kimbell angels (cats. 39 and 40; see fig. 362).

Wing-Root Feathers

Bernini's rendering of the large feathers at the root of his angels' wings is remarkably consistent: several oval pads of clay were attached and modeled with fingers, to represent an inner cluster of feathers. This treatment appears in four Angels with the Superscription (figs. 130, 131, 133, and 135), two Angels with



Fig. 130. Angel with the Superscription. Cat. 44



Fig. 131. Angel with the Superscription. Cat. 42



Fig. 132. Kneeling Angel. Cat. 51



Fig. 133. Angel with the Superscription. Cat. 39



Fig. 134. Angel with the Crown of Thorns. Cat. 40



Fig. 135. Angel with the Superscription. Cat. 41

the Crown of Thorns (cat. 35 and fig. 134), the Angel with the Scourge (cat. 37), a Kneeling Angel (fig. 132), and the Model of an Angel and Cherub for the "Celestial Glory" (cat. 32).

Stages of Work

Multisession Piece

Many bozzetti are clearly single-session pieces, modeled in fresh, soft clay with no evidence of reworking, but some were made in multiple sessions. Models worked on for extended periods before firing have surfaces worn from handling and prolonged storage, showing fabric impressions, abrasions, and biological deterioration from wet draping cloths. The Constantine the Great on Horseback (cat. 23), an Angel with the Superscription (fig. 376), and an Angel with the Crown of Thorns (fig. 379) exhibit such characteristics. During the extended modeling of the Angel with the Superscription (cat. 42), a shrinkage crack developed in the superscription. Bernini applied a quick finger smear of wet clay to fill the crack; the new clay superimposed over the harder underlying clay is clearly visible (fig. 377).

Refreshing



Fig. 136. Model for the Fountain of the Moor. Cat. 13

Through the many stages of completing a piece, especially a modello, the initial freshness of execution might become muddied or lost through repeated shaping and smoothing. Particularly noticeable on the Model for the Fountain of the Moor (cat. 13) is the way Bernini returned to add details to the face and other areas after the final brush smoothing, to reinforce earlier marks blunted by the smoothing (fig. 136). These final marks with their fresh, crisp textures and raised edges—added complexity and recaptured the spontaneous effect of the earlier passages.

Revision



Fig. 137. Angel with the Crown of Thorns. Cat. 35

That several of Bernini's bozzetti were revised after their initial completion is indicated by areas with fresh tool marks or clay additions that interrupt previously smoothed and seemingly completed surfaces. These changes could have been made hours, days, or weeks after the initial completion. The smoothed chest of an Angel with the Crown of Thorns (cat. 35), for example, was reworked with a small-tooth tool, then only partially re-smoothed with a finger (fig. 137). The right wing of the Kimbell Angel with the Crown of Thorns (cat. 40) was also revised (fig. 366). The left temple, cheeks, and brow of the Head of Saint Jerome (cat. 30) were altered with toothed tools (fig. 311). In addition, the nose was reshaped with a squeeze between thumb and forefinger, interrupting previously completed surfaces (fig. 309). On a Half-Kneeling Angel (cat. 48), an earlier drapery pattern drawn into the bodice was remodeled later (fig. 403). On the Allegorical Figure (cat. 2), a larger shield was attached over an earlier, smaller version (fig. 170). Such changes show Bernini reassessing and revisiting the bozzetti, as one would expect of a sketch. Clear revisions to modelli are less common, but one can be found on the Blessed Ludovica Albertoni in London (fig. 260), where a one-centimeter-thick strip of clay was attached to the bottom back edge, tilting the figure more toward the viewer.

Surface Decoration

Many of the terracottas bear traces of applied paint or gilding. Some may have been gilded in Bernini's studio in preparation for presentation to patrons, but it is more likely that the gilding was applied in later years, as the models began to be collected.

Gesso

Gesso, a white mixture of animal glue and chalk, was used as a priming and smoothing layer, preparatory to gilding or painting a terracotta (fig. 177).

Bole



Fig. 138. Saint Jerome. Cat. 31

Bole is a paintlike mixture of animal glue, iron oxide, and clay. Applied over smoothed gesso, it provides a secure surface for metal leaf, allowing it to withstand burnishing. The Saint Jerome in Siena (cat. 31) has remnants of orange and dark red bole layers (fig. 138). The dark red bole used on the Saint Longinus at Harvard (cat. 3) can be seen through worn areas of the gilding (fig. 173).

Water Gilding

Using this method, the gilder reactivates the adhesive in the bole with brushfuls of hot water and then applies the metal leaf using a wide, flat brush called a "gilder's tip." Once the surface is firm, the gilder burnishes it with an agate stone or an animal tooth, bringing the gold or silver leaf to a deep shine.

Oil Gilding

Oil gilding could be applied over gesso or directly to the raw terracotta, as on the Tritons with Dolphins in Berlin (fig. 214) and the Saint Ambrose (fig. 94). It cannot be burnished; the surface therefore has a matte appearance, without the sheen of water gilding. Harvard's Saint Longinus (cat. 3) combines both gilding techniques. The head, arms, legs, and other

skin areas were oil gilded; the remaining surfaces were water gilded. This allowed the saint's helmet, cuirass, clothing, and base to be burnished and the cuirass to be decorated with punch marks (fig. 173).

Gold- and Bronze-Colored Paint

Many of the models were later painted to resemble darkly patinated bronze, brightly polished gold, or combinations of the two. Over the centuries, the gold-colored pigments of copper and zinc alloy have proven unstable, with corrosion changing them to green and blue. These changes in appearance are one reason the coatings were so frequently renewed, as on the Saint Ambrose (cat. 28). It has remnants of five superimposed layers: first, gold leaf; next, silver leaf; followed by three layers of gold-colored paint applied over the centuries and all now highly deteriorated (fig. 94). The first paint layer over the gilding contains fine machine-ground pigments, dating to the nineteenth century.

The terracottas from the Chigi family collection (now in the Vatican Museums) were painted a dark bronze color, now removed from the Charity with Four Children (cat. 1), the Daniel in the Lions' Den (cat. 25), and the Habakkuk and the Angel (cat. 26).

Surface Textures

The surfaces of the terracottas retain textures from the fingers and tools used to model, smooth, and finish them. Presentation modelli are more smoothed and finished than bozzetti, with less evidence of their creation remaining visible. However, even smoothing leaves specific marks from fingers, cloth, and brushes.

Finger Smoothing

Marks left from modeling the clay surfaces with the fingers are often difficult to distinguish from marks left by finger smoothing, though vigorous modeling strokes often end with a fingerprint and a distinctive mound of displaced clay at the end of the stroke (fig. 348). The finger-smoothed surfaces of the Saint Jerome in Siena (cat. 31) are covered in a delicate tracery of the fine striations left by the sculptor's fingerprint ridges (fig. 139). See Examination Techniques: Reading CLAY STROKES.

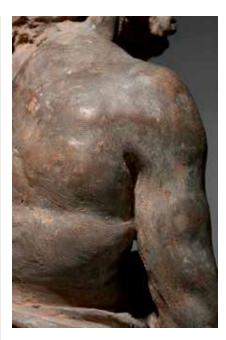


Fig. 139. Saint Jerome. Cat. 31

Cloth Smoothing

A piece of cloth wrapped around the fingers could also be used to smooth the clay, and the size and texture of the weave would influence the model's appearance. Unlike fingers or brushes, the cloth acted as an abrasive that helped level the surface. Used damp, on a Half-Kneeling Angel (cat. 49), the cloth dragged inclusions along, forming short lines (fig. 408). Dipped in water, as on the flanks of the Model for the Lion on the Four Rivers Fountain (cat. 7), it produced a softer, smoother appearance, with more muted striations (fig. 193).

Brush Smoothing



Fig. 140. Model for the Lion on the Four Rivers Fountain. Cat. 7

Brush smoothing could be undertaken with a dry or a wet brush, with stiff or soft bristles. Each creates different effects, ranging from the small round brush used with care on the face of an Angel with the Superscription (fig. 356), to one several centimeters wide used vigorously, in very wet clay, on the base of the Lion (fig. 140). The most refined example of smoothing brushwork in Bernini's oeuvre can be found on the Model for the Fountain of the Moor (cat. 13), where the legs and torso show brushstrokes following the circumference of rounded forms, overlapping at oblique angles and providing light-gathering textures that emphasize the musculature (fig. 224).

Wet Brush Smoothing



Fig. 141. Angel with the Cross. Cat. 46

On the surfaces of Ercole Ferrata's Angel with the Cross (cat. 46), a brush was used with water to smooth the drapery. It left extremely soft, velvety surfaces, but also rings from bubbles that formed in the watery slurry (fig. 141). This technique was not part of Bernini's repertoire and is not found on any of his terracottas.

Toothed Textures

The sides, the back of wings, and the buttress of many models were given an overall toothed texture. This can be seen on an Angel with the Superscription (fig. 142) and an Angel with the Crown of Thorns (fig. 343).

Toothed textures were also used to represent different materials. Examples of this are cloud forms, wings, and feathers on virtually all of the angel bozzetti, and the rocky bases of the Rio de la Plata (cat. 8), the Nile (cat. 9), and the Model for the Fountain of the Moor (cat. 13). Before modeling the Allegorical Figure (cat. 2), Bernini textured the flat surface with a fine-tooth tool, possibly to suggest that, on the finished relief, he wanted the background to be a different



Fig. 142. Angel with the Superscription. Cat. 42

shade of marble (fig. 170). Overall toothed textures were broadly applied to the Model for the Equestrian Statue of Louis XIV (fig. 275) and the Elephant with an Obelisk (fig. 188) as a final step, to represent the distinctive character of the animals' skin.

Tools and Tool Marks

We can recognize Bernini's characteristic gestures in clay regardless of the specific tool he used. While rapidly executing a sketch model, he often used whatever tool was closest at hand, or indeed in hand. Choice of tool would also have been governed by the scale of a project. On a bozzetto, for example, the desired effect could be easily accomplished with a fingernail, while generating the same effect on a larger work might require a large oval-tip modeling tool.

Bernini's basic tool set was common to most sculptors in clay during the seventeenth century. His work is distinctive because of how he used these common tools, not because of the tools themselves. They were made of either wood or metal. Clay is abrasive, so the wooden tools would have needed regular sharpening or



Fig. 143. Taking an impression of a tool mark (cat. 13) with silicone putty



Fig. 144. Tool mark made with re-created tool

reshaping. Metal tools would have been much more durable, but those carved from wood might have been preferred for their lightness and non-rusting properties. The clay in the models has retained evidence about which tools were used: oval-tip and toothed tools for modeling; cloths and brushes for smoothing; and tools such as chisels, rasps, and saws to make alterations in the rock-hard clay after firing. To understand the design of Bernini's modeling tools, I made silicone rubber molds of selected tool marks in the Model for the Fountain of the Moor (fig. 143), which enabled me to re-create the tools used to make them (fig. 144).

Armature

An internal armature is a construction of metal or wood made to support the model from within during its creation; external armatures are also known. If an internal armature was left in place during drying, the clay would shrink around it and crack badly. Bernini's bozzetti and modelli show no use of armatures to support the figure during modeling; he relied instead on large stabilizing buttresses of added clay, which were usually trimmed off later. Unlike Bernini, Ercole Ferrata used a vertical metal rod to stabilize his Angel with the Cross (fig. 392). See BUTTRESSES.

Brush



Fig. 145. Angel with the Scourge. Cat. 37

Brushes used to smooth the surfaces of bozzetti and modelli ranged in size from several millimeters in diameter to several centimeters. The bristles could be soft, but Bernini typically used brushes with some stiffness and spring, as on the left leg of the Angel with the Scourge (cat. 37), where the bristle marks parallel the sweep of the drapery over the right leg (fig. 145). See Surface Textures: Brush Smoothing.

Chisel

Chisels of the type used for wood carving were occasionally used to trim buttresses before firing, as on the Angel with the Scourge (fig. 352) and one of the Half-Kneeling Angels (fig. 410). Other terracottas—such as the Pope Alexander VII (fig. 325)—were trimmed after firing, possibly to fit within wooden architectural models. The area under the left arm of the Charity with Four Children (cat. 1) was chiseled away (fig. 165), likely to allow it to fit snugly into a wooden scale model of the Tomb of Pope Urban VIII (fig. 160).

Draping Cloth

Marks from wetted cloths used to keep the terracottas moist and to regulate drying are found on most of the clay models, though they are more prevalent on *bozzetti* such as the *Kneeling Angel* (fig. 146). On *modelli*, such marks



Fig. 146. Kneeling Angel. Cat. 51

were more often tidied away during final repairs and smoothing.

Fingernail

Bernini used his fingernail to push clay around the head of an *Angel with the Superscription* (cat. 42), leaving its path recorded in the leatherhard clay, with a fingerprint and accompanying fingernail impression at the end of the stroke (fig. 376). The curving path of his fingernail can also be traced in the hair on the back of the head of the *Angel with the Scourge* (cat. 37), where even the minute irregularities in the edge of his fingernail can still be seen (fig. 348). See Signature Modeling Techniques.

Knife



Fig. 147. Half-Kneeling Angel. Cat. 49

Impressions from a curved knife blade are found on many of the models—most often associated with hollowing, trimming, and shaping the sides and buttresses (figs. 84 and 147). A knife was used to carve a triangular wedge of clay from the back of the *Saint Jerome* (fig. 313), to square off the back of an *Angel with the Superscription* (fig. 384), and to trim the back of the Harvard *Saint Longinus* around the hollowed area (fig. 177). See Buttresses, Hollowing.

Oval-Tip Tool



Fig. 148. Oval-tip tools (left to right): large, medium, small, and small with blunted tip



Fig. 149. Kneeling Angel. Cat. 51

In sizes from small to large, the oval-tip tool was widely used for shaping and smoothing. Variations in the oval tip, which resembles a fingernail, include tips with a D-shaped section, which has one flat side, and the blunted oval-tip tool, which has a blunted or ball-shaped end (fig. 148). A large oval-tip tool would be used early in the modeling process to broadly shape drapery, clouds, and wings. Medium and small tools were used to form the finer features of the face, hair, hands, feet, and more delicate drapery folds (figs. 171, 202, 256, 374, and 419). Impressed oval-tip tool marks are found in the narrow drapery folds of the Kneeling Angel (fig. 149). Ercole Ferrata put the blunted oval-tip tool to spectacular use in the head and hair of the Angel with the Cross (fig. 394), where it was also used to form the rounded recesses in the drapery folds.

Prop



Fig. 150. Daniel in the Lions' Den. Cat. 25

Bernini regularly used props made from rectangular wooden sticks to support projecting elements such as the upraised arms of the two Half-Kneeling Angels (cats. 48 and 49); holes below the arms testify to the use of props (fig. 127). Similar strategies were employed in the models for the Pope Alexander VII (cat. 33) and the Daniel in the Lions' Den (cat. 25). In both, the clasped hands were supported from underneath by a wooden prop. The hands of the Pope Alexander VII are now missing, but the rectangular hole can be seen in the base (fig. 327). On the Daniel, the lower prop hole is missing, probably repaired before firing, but the upper hole is still visible underneath the clasped hands (fig. 150).

Rasp



Fig. 151. Allegorical Figure. Cat. 2

A rasp is an iron file with sharp, hand-cut teeth. It was used after firing to shape and smooth broken or saw-cut surfaces. The shallow striations and slight polish it leaves in the clay can be seen on the side edges of the Allegorical Figure (fig. 151) and on the backs of both Kimbell Angels (cats. 39 and 40), where a rasp was used to smooth the saw-trimmed buttresses (fig. 366). Fine rasp marks show that an element, possibly an angel, was removed from the upper

background of the Four Members of the Cornaro Family (fig. 242). The left side of the Model for the Lion on the Four Rivers Fountain (cat. 7) was saw trimmed, then smoothed with a rasp.

Saw



Fig. 152. Four Members of the Cornaro Family. Cat. 16

A saw was used to alter the shape of several models. Saw marks, made in rock-hard clay after firing, are both coarser and more varied than rasp marks; like the rasp, though, they also leave the terracotta with a bit of polish. A saw was used to trim the edges of the Four Members of the Cornaro Family (fig. 152) and the buttress from the back of the Allegorical Figure (fig. 169). Another reason for taking a saw or a chisel to a fired model may have been to alter its footprint to fit into a wooden architectural model. The Pope Alexander VII (cat. 33) was saw cut from its clay base, perhaps modified to fit atop a scale model (fig. 324). The bases of the Charity with Four Children (fig. 82) and a Kneeling Angel (fig. 411) were also saw cut, possibly for similar reasons.

Toothed Tool

The toothed tools that Bernini used to model the terracottas may have been the same as those used for carving marble. These tools ranged in width and tooth size from large to very small (fig. 153). The marks they left can be seen on the Head of Saint Jerome (fig. 311) and on the helmet of the Allegorical Figure (fig. 171). The track of the tool—the size and spacing of the lines it left in the clay—could be altered by changing the angle at which the tool was held. When it was held perpendicular to the direction of travel, the marks would be widely spaced. Holding it oblique to the direction of travel would reduce the spacing of the marks and the overall width of the tool mark. The overall toothed textures on the two Saint Longinus models (cats. 3 and 4), applied at the end of



Fig. 153. Toothed tools (left to right): large metal stonecarving chisel; medium-tooth tool; three fine-tooth toolswide, rounded, and narrow

modeling, may have been intended to secure the gesso and gilding layers (figs. 174 and 182). However, these overall toothed textures also echo the linear striations carved into the final marble figure (fig. 175) and may also be considered a finishing technique. See Surface TEXTURES: TOOTHED TEXTURES.

X-radiographic Evidence

X-rays are a form of electromagnetic energy that can penetrate solid objects. When the rays are directed through an object onto a sheet of film, or a digital plate, it records the density of the object in tones ranging from black to white. Properly exposed, an X-radiograph can reveal the interior structure of a terracotta sculpture, because solid clay blocks the transmission of X-rays more than thinner areas—such as hollows and cracks in the sculpture.

Clay Grain

X-radiographs of Bernini's terracottas often reveal a vertical "grain" in the clay, as seen in the X-radiograph of a Kneeling Angel, especially the upper chest area (fig. 154). The darker, linear character of the grain results from the alignment of small air pockets trapped in the clay as it is wedged. See Assembly: Wedging.

Clay grain can provide evidence of manipulations, and their sequence, that were carried out on the column of clay. See, for example, a Kneeling Angel (cat. 51) in which the continuous vertical grain indicates that the model was initially formed of a single column of wedged clay (fig. 415). The curve in the grain shows that the column was bent forward to form



Fig. 154. Kneeling Angel. Cat. 52



Fig. 155. Angel with the Superscription. Cat. 41

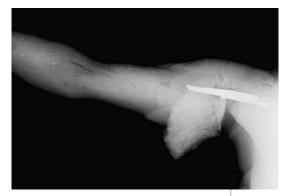


Fig. 156. Saint Longinus. Cat. 3

the supplicating posture of the angel (see discussion in cat. 51). Changes in grain direction seen in X-radiographs can also result from joining pieces of wedged clay together in different orientations. These effects and others seen in the X-radiographs have allowed us to determine how the clay was assembled for many of the models. In an *Angel with the Superscription* (cat. 41), for example, the vertical grain changes to horizontal just below the arms, which indicates that clay was added there (fig. 155).

Additions



Fig. 157. Daniel in the Lions' Den. Cat. 25

When clay was added in layers to build the forms, air trapped between the layers often appears dark and linear in an X-radiograph—not unlike clay grain (figs. 220 and 249). Rolled elements such as the arms of the Harvard Saint Longinus (cat. 3) can often be identified because

they display a linear grain of trapped air along their length (fig. 156). Air trapped where legs, arms, wings, or a head were joined to the torso to build a figure, or between an added buttress and a cloud base, shows up in X-radiographs as darker lines (fig. 176). The leg of the *Daniel in the Lions' Den* (cat. 25), rather than being formed from rolled clay bent at the knee, was made from two separate rolled pieces—the thigh

and the lower leg (fig. 157). Each shows a linear grain from being rolled, and each was attached separately; the join at the knee is clearly visible in the X-radiograph but completely invisible on the exterior.

Dowels and Staples



Fig. 158. Model for the Equestrian Statue of Louis XIV. Cat 24

Metal objects such as dowels and staples used as reinforcements during restoration block the X-rays, appearing white. Dowels are visible in the raised foreleg of the *Model for the Equestrian Statue of Louis XIV* (fig. 158), and staples can be seen in the *Model for the Fountain of the Moor* (fig. 228). See also DAMAGE AND RESTORATION: RESTORATION-RELATED DAMAGE.







I. Working for the Barberini

On August 6, 1623, Maffeo Barberini was elected pope, choosing the name Urban VIII. It was a momentous day not only for the fifty-five-year-old cardinal but also for his young friend Gian Lorenzo Bernini. One of the first acts of the new pope was to call Bernini to his side and tell him: "It is your great fortune, Cavaliere, to see Cardinal Maffeo Barberini become pope, but my fortune is far greater in that Cavaliere Bernini lives during my pontificate." With these famous words, Bernini's life as an artist changed. Urban had enormous ambitions as an art patron, and he knew that in order to realize them he would need his own Michelangelo, an artist who would not flinch at heroic projects like the Baldacchino (fig. 55) or the statue of Saint Longinus (fig. 159). Bernini was ready for the challenge, even if it meant less time for his first love: carving in marble. As the number of papal commissions mounted, his days became increasingly filled with administrative obligations, and he was forced to add more and more assistants to his workshop. By the late 1620s Bernini sat at the helm of a sprawling artistic enterprise, very much like the principal of a large architectural firm today. As not only chief executive officer but also designer-in-chief, he relied on drawings and clay models to communicate his visual ideas to the assistants responsible for realizing them in stone or bronze.

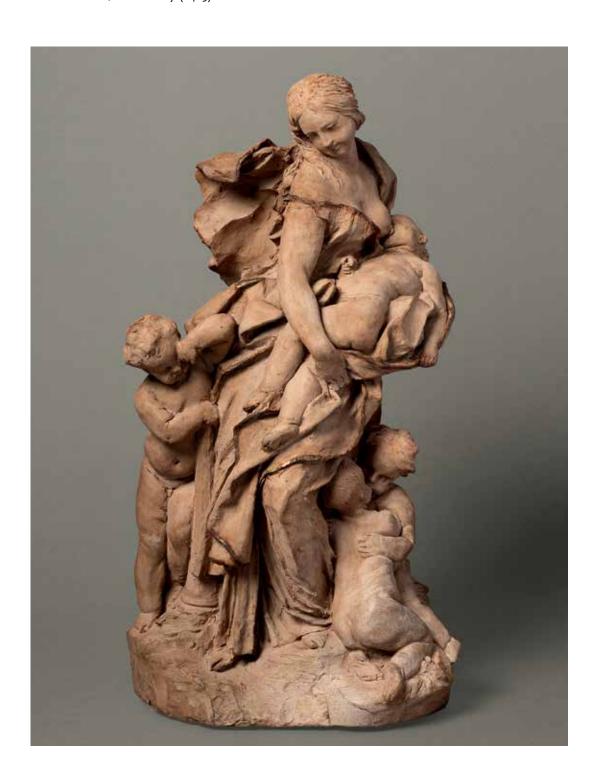
The earliest models that can be attributed to Bernini date to Urban's papacy, which spanned over two decades, from 1623 to 1644. Three of those early models relate to projects undertaken at Urban's behest: his tomb in Saint Peter's (cat. 1) and the *Saint Longinus* (cats. 3 and 4). The fourth was preparatory for a memorial to the pope's younger brother Carlo Barberini (cat. 2). Many of Bernini's other sculptures relate to Urban's patronage, and he was also busy with commissions from Urban's relatives, even after the pope's death (see cat. 6). Hundreds of models, now lost, must have been made during Bernini's time with Urban. The few survivors make clear that Bernini burst onto the papal stage in full command of his modeling talents.

Fig. 159. Gian Lorenzo Bernini, Saint Longinus, 1635–38. Marble, over lifesize. Saint Peter's Basilica, Vatican City

Gian Lorenzo Bernini

1 · Charity with Four Children

1627–before 1634. Terracotta, $15\% \times 8\% \times 6\%$ in. (39 × 21.5 × 15.5 cm) Musei Vaticani, Vatican City (2423)



INSCRIPTIONS, MARKS, AND STAMPS: 2423 written in black paint on lower back; various letters written in white paint across the back; E written in pencil at center of the base

PROVENANCE: Cardinal Flavio Chigi, Casino at the Quattro Fontane, Rome (d. 1693); by descent in the Chigi family, Rome (until 1918); Kingdom of Italy (by purchase, 1918; donated to the Vatican, 1922)

LITERATURE: Brinckmann 1923-24, vol. 2, pp. 32-35; Lavin, I. 1955, pp. 59-61; Wittkower 1955, p. 194; Wittkower 1966, p. 199; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 63; Kauffmann 1970, p. 122 n. 84; Borsi 1980, p. 296; Wittkower et al. 1981, p. 199; Raggio 1983, pp. 368-69, 372-73; Bacchi and Zanuso 1996, p. 779; Avery 1997, p. 122; Wittkower et al. 1997, p. 252; Ferrari and Papaldo 1999, pp. 557-58; Tomaso Montanari in Pinelli, ed. 2000, Notes vol., p. 632; Montanari 2004a, p. 114; Cristina Ruggero in Bonn and Berlin 2005-6, p. 150; Villani 2008, pp. 457-58

EXHIBITIONS: Vatican City 1981, no. 88; New York, Chicago, and San Francisco 1983-84, no. 27; Ottawa and other cities 1986-87, no. 18

CONDITION: There is a filled loss at the edge of the base under the foot of the kneeling child at right; the left foot of the child embracing him is restored. There are chip losses along the proper right front edge of the base. Traces of reddish paint covered in a dark brown glaze remain in interstices; the paint was removed in the early 1980s. The edges of Charity's robe are highlighted with reddish bole and gilding.

THIS MODEL WAS FIRST PUBLISHED by A. E. Brinckmann, who identified it as Bernini's initial concept for the statue of Charity on the *Tomb of Pope Urban VIII* in Saint Peter's Basilica (fig. 160). That attribution and identification have gone generally unquestioned since then, with the model usually dated to about 1627, when Bernini received the commission for the tomb. Marc Worsdale remains the one scholar who, in writing about the model, declared it to be not by Bernini. He notes that the model departs in crucial ways from the sculptor's normal style and technique, and we agree. Where we disagree with Worsdale is in concluding that the points in favor of the attribution outweigh those against it. The model may not be Bernini's most typical *bozzetto*, but it does sufficiently correspond with his others in style and technique to warrant the attribution. If we are correct, the *Charity with Four Children* almost surely dates to between 1627 and 1634, which means it could be Bernini's earliest surviving model.

The model is routinely compared to Bernini's *Allegorical Figure* (cat. 2), a model from 1630 or 1631 that was preparatory for the *Memorial to Carlo Barberini* (fig. 167). Beyond

general similarities in the modeling-Olga Raggio notes the "amazing freshness" of both2they can be related to each other in two specific ways. First, both models share the peculiar trait of having limbs that are somewhat flattened or compressed, which appears on no other models by Bernini. The treatment is most pronounced on the present model, particularly in the arms of the two embracing children. Second, both models bear evidence of having been modeled with a very fine-tooth tool, a tool that Bernini is not known to have used elsewhere. On the present model, marks from the tool appear on various parts of the drapery (including over Charity's right breast), on the flesh above the breast, and throughout the ground. On the Allegorical Figure, the marks are on the face (used to shape) and on the helmet (used to decorate).



Fig. 160. Gian Lorenzo Bernini, *Tomb of Pope Urban VIII*, 1628–47. Marble and bronze, over lifesize. Saint Peter's Basilica, Vatican City





Fig. 161. Face of Charity: note fine-tooth tool marks on chest

Fig. 162. Face of crying child: compare with that of the Allegorical Figure (fig. 171)

Comparison with the Allegorical Figure reinforces the attribution, but it does not make it definitive. Even though the models display a similar fluidity in their execution, they are subtly different in important ways—not least in how their faces are treated. The face of the Allegorical Figure is a sublime essay in abbreviation, with Bernini using the fewest possible tool strokes to render the Virtue's glowering expression. For iconographic reasons, Charity could not be shown scowling but instead had to communicate maternal sweetness (fig. 161). Yet hers is a sweetness tinged with unexpected wistfulness. Moreover, a lot more time was spent modeling her face than the Allegorical Figure's. The modeling is correspondingly fussier, with obvious pains taken to smooth the lips and detail the eyes. The children's faces are more expressive and altogether effective, particularly that of the crying child (fig. 162). Here, we are much closer to the Allegorical Figure and to Bernini, even if the modeling is still not quite as efficient or economical.

The model departs from Bernini in other ways—for example, the extreme rotation of Charity's upper body, which results in a pose of questionable stability, particularly with her feet placed so close together. Bernini was doubtless calculating that she would be resting her baby on something (a sarcophagus perhaps), but such an exaggerated contrapposto is atypical of him, as is the lack of concern for correct placement of the feet. The drape blowing off Charity's back is also hard to reconcile with Bernini. The iconography demands matronly calm, not the suggestion of windswept agitation. Moreover, the drape does not break or fold in a convincing manner, and it also creates visual confusion at the back. Bernini was not one to sacrifice clarity for such theatrics. Finally, the toothed texturing on the base is atypically illegible, and the flames of the upended torch blend awkwardly with the ground.

What may be most persuasive in establishing the attribution, however, are two modeling gestures that, if not unique to Bernini, were certainly habitual for him. The first is the finger or thumb swipe used to round off the back of Charity's head and that of the standing child (fig. 163). Bernini applied the same gesture—a little more crisply—to four of his models at Harvard (cats. 42, 48, 50, and 52; see also figs. 122–24). The second gesture is located where Charity's hairline meets the back of her neck and comes to a knot. On the left side, an oval-tip tool was used to draw a curved line that helps to separate the hair from the neckline (fig. 164). On the right side, the tool was impressed more deeply and for the same purpose. Marks of very similar character—made in the same location and with the same tool—appear on two models that are unquestionably by Bernini: one of the *Half-Kneeling Angels* (cat. 49) and the *Model of an Angel and Cherub for the "Celestial Glory"* (cat. 32). On six of his other models, he applied a close variant of the gesture, substituting his fingernail for an oval-tip tool (cats. 35, 39, 40, 42, 44, and 48; see also figs. 115–18).

Another way to approach the attribution is to ask how the model might have served Bernini. As noted above, ever since first being published it has been identified with Urban VIII's tomb and thought to be preparatory for the allegorical figure on the left, representing Charity. Unquestionably, the finished *Charity* relates to the present one in pose. The key difference is that the finished composition features two children, not the four seen here. According to a document of 1630, more than two children were being envisioned at one



Fig. 163. Back of Charity's head, rounded off with a single thumb swipe



Fig. 164. Left side of Charity's neck: note separation of hair and neck with a stroke from an oval-tip tool

stage in the design, although the document suggests that Bernini was vacillating between two and three children at that point, rather than two and four.³ Still, that the number was in question leaves open the possibility that he considered adding a fourth child before settling on two. The commission for the tomb was awarded in 1627.⁴ There is no definite proof of when Bernini resolved *Charity*'s design, only that it had to have happened before the start of carving in 1634.⁵ The fact that this proposed date means that the present model could be his earliest surviving model—by several years—may account for some of the peculiarities in its technique: we simply do not know how Bernini was modeling in clay before the *Allegorical Figure* of 1630 or 1631.

A year before the tomb was commissioned, Bernini was apparently at work on a different Charity. According to a letter of October 3, 1626, written by an agent of the Este family, Bernini had begun to carve a large statue of Charity in Parian marble for "il Principe"—likely a reference to Cardinal Francesco Barberini.⁶ The statue does not appear ever to have been delivered; there is no trace of it in any inventories of the Barberini family. It may, in fact, have remained with Bernini. "A statue of Charity with four children in marble" is listed in his death inventory, alongside Bacchanal: A Faun Teased by Children (fig. 3). Yet even if Bernini had been in the process of carving that *Charity* in 1626, there is



Fig. 165. Trimming under Charity's left arm, probably to accommodate an architectural model

no reason to see the present model as preparatory for it. The model almost definitely relates to a tomb—thus Urban's. First, the child with the extinguished torch is iconographically correct for a tomb but not for a stand-alone image of Charity. Second, the present model makes much better compositional sense as part of a tomb, with Charity able to lean against a feature such as a sarcophagus. A detail under Charity's left arm reinforces the hypothesis: after the model was fired, a chisel was used to carve away a portion of the clay (fig. 165). This was undoubtedly done to ready the model for testing on a wooden architectural model—presumably one for the tomb. The trimming occurs at precisely the place where the corner of a scale-model sarcophagus would have needed to fit.

The Charity with Four Children may find a place among Bernini's known projects, but its provenance reopens the question of authorship. The model came to the Vatican from the Chigi family and is almost certainly one of two terracotta Charities that Cardinal Flavio Chigi displayed at his Casino at the Quattro Fontane. In what is thought to be the earliest of several inventories of the collection (undated but certainly after 1666), only one Charity is described.8 In what is thought to be the second of the inventories (also undated), the same

is true.9 Only in the third inventory, drawn up in 1694, is a second Charity specifically mentioned.10 One of those Charities is the present model. The other—which is also at the Vatican and also relates to the *Charity* on Urban's tomb—we consider to be a copy. That Flavio might have owned such a terracotta copy is not surprising (see cat. 26). But what does strike us as strange is that he managed to acquire a model that Bernini may have made as early as 1627, especially given that no other of the sculptor's models survive from that time.

The evidence of the inventories leaves open the possibility that the present model did not enter Flavio's collection until after 1672. That year marks the moment Bernini was engaged on a Charity for the Chigi, which was to go on Pope Alexander VII's tomb in Saint Peter's Basilica (fig. 322).11 The present model differs substantially in composition from Alexander's Charity, but it could have been conceived in relation to that project, even

preparatory for it, which would better explain how the Chigi came to own it. ¹² This could also help to explain why the model is not completely like others by Bernini in style and technique. The *Charity* for Alexander's tomb was carved by a sculptor in his late twenties named Giuseppe Mazzuoli, who would make a name for himself as a sculptor of Charities. ¹³ Might he have made the model, either during some earlier phase of Alexander's *Charity* or as an exercise in reimagining Urban's *Charity*? Aspects of the design do fit this hypothesis, such as the flare of drapery at the back of Charity's head, which is more in keeping with Mazzuoli than Bernini; see, for example, the younger sculptor's later *Charity* in the Chapel of the Monte di Pietà, Rome. ¹⁴ Still, an attribution can be advanced only so far, since Mazzuoli's modeling style around 1672 is very poorly understood (see cat. 34). It might have resembled Bernini's at that point, but it certainly did not later in life.

In assembly, the present model is perfectly characteristic of Bernini, which offers a final point in favor of his authorship. According to the pattern of shrinkage cracks on the bottom, it began as a column of wedged clay, as was his habit. Charity was modeled out of the

column, while the four children were added separately, an approach also seen on Bernini's Daniel in the Lions' Den at the Vatican (cat. 25). X-radiography shows a clear join between Charity and the child standing at her left, which must have been added at a later stage of modeling. That addition definitely occurred after the removal of a substantial clay buttress from the lower back, a step that would usually occur at the end of modeling. Once the child was added, clay was forcefully smeared across the join in stitchlike strokes to ensure adhesion (fig. 166). The fact that the model was constructed with a buttress represents another link with Bernini, as does the fact that it was not hollowed. The upper back, which was not trimmed, permits a view of how Charity's left arm and drapery were assembled of small pieces of clay, many only nominally integrated. Deep finger strokes were impressed down the center of her back to consolidate the added clay. This was done while the sculptor was standing behind the model, as indicated by the orientation of his fingertip and nail impressions. Other fingernail impressions are scattered across the back.

The model bears signs of extended storage under a damp cloth. Some finger impressions on the back are overlaid with fabric texture, indicating that the model was handled while draped. Overall, the model has a granular texture, which is probably due to time spent beneath a wetting cloth.



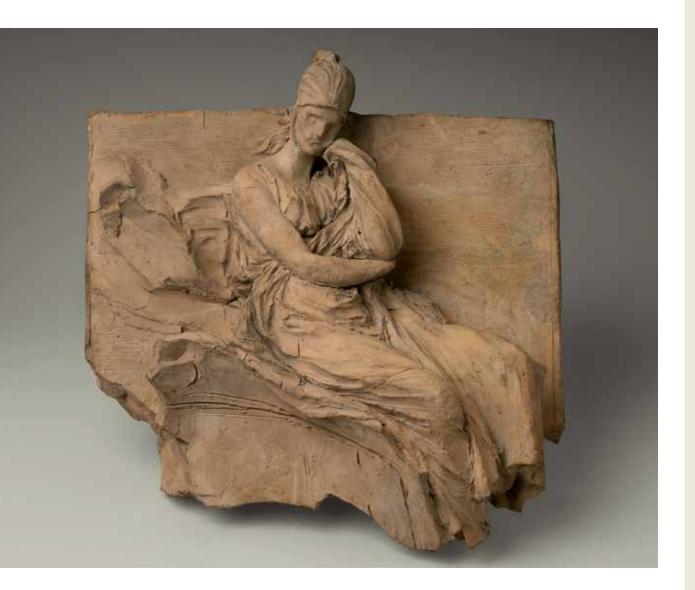
Fig. 166. Unfinished back, with buttress trimmed from lower half

Gian Lorenzo Bernini

2 · Allegorical Figure

1630/1631. Terracotta, $10\% \times 10\% \times 4\%$ in. (27 × 25.7 × 11.4 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.75)



CARLO BARBERINI, YOUNGER BROTHER OF Pope Urban VIII, died on February 5, 1630, while on a peace mission to Bologna as the chief military officer of the Church.² By the end of March, the Roman senate had voted him the honor of a commemorative plaque to be placed on the entrance wall to Santa Maria in Aracoeli, the church on Capitoline Hill where Rome's most important civic leaders were traditionally commemorated (fig. 167). The commission for the memorial went to Bernini, who received a payment for it on September 30, 1630.3 He delegated the carving to two assistants: Stefano INSCRIPTIONS, MARKS, AND STAMPS: 1937.75 written in black paint on the back

PROVENANCE: Possibly acquired by Bartolomeo Cavaceppi (d. 1799); possibly bequeathed to Accademia di San Luca, Rome (1799); possibly sold at auction (Accademia di San Luca, Rome, 1800); possibly purchased by syndicate composed of Giovanni Torlonia, Vincenzo Pacetti, and Giovanni Valadier (1800); possibly awarded through court decree to Giovanni Torlonia (1810-d. 1829); possibly by descent to Alessandro Torlonia (d. 1886); possible unknown intermediaries; Giovanni Piancastelli, Rome (before 1905); Mrs. Edward D. (Mary B.) Brandegee, Brookline, Massachusetts (1905-1937; sold to Fogg Art Museum, later Harvard Art Museums, Cambridge, Massachusetts)1

LITERATURE: Norton 1914, p. 46; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, pp. 8-9, 67-68; Wittkower 1955, p. 191; Nicola M. Courtright in Princeton and other cities 1981-82, p. 76 n. 10; Lavin, I. 1983, p. 10; Raggio 1983, pp. 370, 372; Bonnefoy 1994, p. 22; Bacchi and Zanuso 1996, pl. 133; Avery 1997, p. 255; Wittkower et al. 1997, p. 250; Ferrari and Papaldo 1999, p. 216; Sigel 1999, pp. 58, 62-63; Sigel and Farrell 1999, pp. 109-13; Sigel 2006, p. 229

EXHIBITIONS: Cambridge, Mass. 1980; Cambridge, Mass. 2007

CONDITION: There are losses associated with shrinkage cracks and other fractures to the bottom and lower side edges of the relief. The right hand, foot, and associated drapery, shield, and globe are also missing. After firing, buttress clay was removed by coarse sawing and breakage. There are inpainted fills in the neck loss and in shrinkage cracks emanating from the shoulders and hips. A modern hole is drilled near the left hand. There is a drilled claysampling hole on the back.

Speranza for the allegory on the left, and Andrea Bolgi for the allegory on the right.⁴ According to an inscription on Bolgi's contribution, he finished in 1632 or 1633.⁵

The present model, which is among Bernini's most expressive sketches, or *bozzetti*, reflects his planning for the allegorical figure that would decorate the upper right corner of the memorial. According to the figure's attributes—a shield with a laurel wreath and lightning bolts plus a globe showing the astrological sign of the scorpion—it symbolizes Virtue's victory over earthly strife; it is also routinely identified as the Church Triumphant.⁶ Once Bernini had finished the model, he would alter the design only minimally—most

noticeably, by eliminating the fluttering drapery that extends behind the figure, which would end up going over its left shoulder to make room for the coat of arms at center. The decision to represent the figure in this basic fashion had taken some time to evolve. A drawing in Leipzig shows a radically different earlier scheme (fig. 23): the ornamental frame is more square and classical, and it is flanked by trumpeting personifications of Fame rather than topped by seated allegories. Bernini would eventually pursue a more dynamic, three-dimensional approach, giving the dedicatory field a curvilinear shape and allowing it to bend as though made of leather. The two crowning figures pressing down on the plaque were instrumental to the conceit. This may be a case where the innate plasticity of clay helped inspire the final form.



Fig. 167. Andrea Bolgi and Stefano Speranza, after a design by Gian Lorenzo Bernini, *Memorial to Carlo Barberini* (detail), 1630–32/33. Marble, over lifesize. Santa Maria in Aracoeli, Rome

The top and sides of the model are unbroken and complete, which indicates that the model was executed as an independent study of the figure. Moreover, Bernini did not prepare the model flat on a table, as he did with his one other known terracotta relief, the Four Members of the Cornaro Family (cat. 16), but built it up vertically, as with his bozzetti for freestanding sculptures. The first step he took in preparing the model was to make a vertical stack of roughly rectangular masses of clay, each wedged and wire cut, to form a base and buttresslike support. X-radiography and visual examination reveal that strips of roughly equal thickness were wrapped around the sides and top of this core to create an enlarged flat modeling surface (fig. 168). Deeply impressed finger strokes on the back of the model confirm that the object was freestanding when Bernini modeled it (fig. 169). Beyond general smoothing, little effort was made to integrate the strips of clay, and there are shrinkage cracks where the joins between the strips have opened. After firing, the excess clay forming the buttresslike support was removed with a saw. The resulting breakage and losses between the poorly integrated layers of the central core have uncovered interlayer wire-cut textures and finger strokes that reveal the assembly process.

Once Bernini had prepared the relief face, he used a fine-tooth tool to give the upper portion an overall texture of horizontal lines. The texture may have been his way of indicating that, on the finished relief, he wanted the background to be a different shade of marble than the figure. Next, he loosely sketched the composition into the clay with a small oval-tip tool. Portions of these lines, seen behind the left chin, shoulder, and waist,





Fig. 168. X-radiograph of Allegorical Figure: note the central rectangular core wrapped with concentric strips of clay to create a flat modeling surface

Fig. 169. Back, showing finger strokes joining the strips as well as saw and wire-cut marks in the breaks between stacked layers of clay

follow the outline of the figure and are visible in the gaps between it and the background, where the shrinking clay has lifted. The lines describing the shield are clearly visible on the surface (fig. 170).

The figure was built up with small masses of clay pressed into the backing with a pressure sufficient to distort the poorly compacted layers. The method of assembly is confirmed by X-radiography and can also be observed through a gap between the figure and the back plane, where the right hand and the shield are missing. Bernini added forms and details with very small pads and strips of clay, integrating them with his fingers and a small oval-tip modeling tool. For the right arm, a cylinder of clay was rolled out, thinner at one end for the wrist. Bending it slightly at the elbow, Bernini attached it to the shoulder, shaping and refining it with his fingers and a fine-tooth tool. Shrinkage cracks have developed where the arm has pulled away from the drapery. Bernini first used his fingers to model the broader and more accessible areas of the figure, including the drapery, then drew and modeled the finer, splintered folds of the drapery with a small oval-tip tool. A fine-tooth tool was used to model the features of the face and helmet (fig. 171). The dedicatory field under the figure was made from a thick slab of clay, attached and integrated with the drapery then decorated with quickly sketched lines using the edge of a sharp oval-tip tool. These lines form a border similar to the one seen on the finished relief.

An example of the alterations that were common in such exploratory sketches is the evolution of the size and position of the now-missing shield, which served as a prop for the left elbow and the right hand. It was first lightly drawn into

the background clay as two partial, parallel arcs (see fig. 170). The doubling of the lines was likely decorative, intended to suggest a beaded edge. The lines, if continued, would terminate at a point on the left thigh just above the knee. There is evidence, however, that the shield was modeled not once, but twice. Bernini created the first shield with the same diameter as was drawn on the plaque. He then modeled a larger one over the first, enlarging the radius by approximately a third, so that the new shield intersected the leg just below the knee, as it does on the finished relief. Even though the revised shield is missing from the model, there are break edges that document the enlarge-



Fig. 170. Outline of missing shield sketched into the clay

ment, showing two gently curving superimposed forms, the larger in front of the smaller.

Before firing the model, Bernini drew vertical lines on the left and right sides of the relief face to define the edges of the plaque, using the edge of an oval-tip tool



Fig. 171. Head and helmet, detailed with a very fine-tooth tool

against a straightedge. After the relief was fired, a rasp was used to trim and square both sides to within a millimeter of these lines (fig. 151). Similar postfiring trimming can be found on other models by Bernini, including the Model for the Lion on the Four Rivers Fountain (cat. 7). A third vertical line, bisecting the relief, was lightly drawn from the top edge on the right side of the helmet through the neck, breast, hip, thigh, and onto the surface of the dedicatory field. This line may have been used for transfer or enlargement or to help create the opposing figure on the finished memorial, although no measuring marks were found on the model. The imprint of the straightedge used to guide the tool, less than half an inch wide, can be seen in the drapery overlapping the upper edge of the cartouche.

Gian Lorenzo Bernini

3 · Saint Longinus

ca. 1630–31. Terracotta with gilding over gesso, $20\% \times 15\% \times 6\%$ in. (52.5 × 38.2 × 17.2 cm) Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.51)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.51 written in red paint on lower back

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 46; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, pp. 64-65; Wittkower 1955, pp. 192-93; Kauffmann 1961, pp. 369-70; Hibbard 1966, p. 82; Harris 1968, p. 384; Lavin, I. 1968a, p. 36; Bindman 1970, p. 31; Bonnefoy 1970, p. 17; Kauffmann 1970, p. 101, pl. 70; Kauffmann 1976, pp. 101-7, fig. 14; Lavin, I. 1978, pp. 399, 401-2; Fort Worth 1982, fig. 6; Raggio 1983, p. 368; Di Gioia 1984; Mortimer 1985, p. 128; Di Gioia 1986a, pp. 174-75; Soussloff 1987, p. 115; Preimesberger 1989a, p. 152; Düsseldorf 1990, pp. 44-45; Scribner 1991, p. 18; Rome 1991-92, p. 27; Bonnefoy 1994, p. 23; Rome 1994, p. 123; Bacchi and Zanuso 1996, p. 778; Avery 1997, pp. 101–2, fig. 118; Wittkower et al. 1997, p. 251; Fenton 1998, p. 98, fig. 37; Wardropper 1998-99, pp. 36, 115; Ferrari and Papaldo 1999, p. 553; Roth 1999; Sigel 1999, pp. 52, 53, 61, 63, 64, 66; Sigel and Farrell 1999, pp. 73-75; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 777; Blandino 2001, p. 66; Preimesberger 2001a, pp. 95, 105, 107; Di Gioia 2002, pp. 51, 55; Montanari 2004a, pp. 106-8

EXHIBITIONS: Baltimore Museum of Art 1940, n.p., unnumbered; Cambridge, Mass. 1980; Cambridge, Mass. 2007

CONDITION: Repaired fracture of the neck and right shoulder; shrinkage cracks and losses to back of neck and shoulder on left side. Fracture losses to nose, left upper lip, chin, and beard. The right arm has been broken and repaired with dowels at shoulder and wrist. The left hand is missing from below the elbow. There is a dowel-repaired break through the model at ankle level that includes both legs and the drapery. The right foot has been separated and reattached to the shield. The losses at the neck and the legs are filled and inpainted. There are losses and abrasions to the gilded surfaces. There is a drilled clay-sampling hole on the base.

ON JUNE 7, 1627, THE Congregazione della Fabbrica di San Pietro—the committee in charge of administering Saint Peter's—ordered new altars to be erected in the niches of the four pillars supporting the dome. The purpose of the altars was to commemorate the relics kept in the piers: the lance of Saint Longinus, the head of Saint Andrew, and the veil of Saint Veronica. A fourth relic, a fragment of the True Cross found by Saint Helen, would be added in 1629. In April 1628 the committee was shown various models for the altars, with one certainly coming from Bernini.2 Minutes taken at a meeting held the next month indicate that Bernini had submitted a design for the northwestern niche, which at that point was dedicated to Saint Andrew. According to the minutes, the committee selected Bernini's design, which entailed placing a monumental statue of Saint Andrew, rather than an altar, in the niche.3 Likely under pressure from certain members of the committee, Bernini handed off the design for the Saint Andrew to François Du Quesnoy, who used it to elaborate a full-scale model in stucco, underway by May 1629.4 On December 10 of that year, with the program now expanded to include the fragment of the True Cross, the committee named the sculptors selected for the remaining three niches. Bernini was assigned the Saint Longinus, which was to go in the southeastern niche (where the Saint Andrew is today).



Fig. 172. Guido Ubaldo Abbatini, *Transferral of the Lance of Saint Longinus*, ca. 1630–31. Fresco. Southeastern grotto chapel, Saint Peter's Basilica, Vatican City

The present model is unlikely to date to any earlier than this moment, and there are good reasons to assign it to 1630 or 1631. On May 5, 1631, the committee decreed that the sculptors selected for the remaining niches must complete their fullscale models.6 According to payments, Bernini undertook his full-scale model for the Longinus between September 1631 and February 1632.7 Before starting work on it, he apparently felt the need to revamp an earlier design that is reflected in a fresco decorating the grotto

chapel beneath the southeastern niche (fig. 172). The fresco, which dates from 1630 or 1631, illustrates a scene from the history of the lance; it is by Bernini's close friend and colleague Guido Ubaldo Abbatini, who is unlikely to have depicted the statue without first consulting Bernini about his intentions for it. Bernini could well have shown him a model, although not the present one, which differs substantially from the fresco in having both arms fully extended. As Irving Lavin has argued, the decision to change the pose and depict the saint

in rapture must have come in late 1630 or early 1631, following a key iconographic change to the Baldacchino.9 Instead of a figure of the Risen Christ, the Baldacchino was now to carry a simple globe and cross. Therefore, as Bernini grasped, it no longer made sense for the Longinus to be looking up at the Baldacchino in a worshipful pose. A new, self-contained narrative was needed. The statue, through its own expression and gestures, had to imply Christ's presence, a conceit well developed in the present model: the saint does not just react to Christ, he imitates him, assuming his pose on the cross.

According to Lavin's chronology, Bernini was involved in a radical rethinking of the Longinus between the time of the fresco, certainly underway by the end of 1630, and the start of the full-scale stucco, ordered on May 5, 1631. The present model can be comfortably assigned to that period and not only because of its differences from the fresco; the similarities with the Andrew are also of crucial importance. In 1630 the full-scale model for the Andrew was already in place. 10 As we know from a contemporary illustration of the model, the saint stood in front of an X-shaped cross with his hands partially outstretched in reference to his crucifixion.¹¹ On learning that the Baldacchino was no longer to feature a statue of the Risen Christ at its apex, Bernini turned to the Andrew, recognizing that it made a natural partner to the *Longinus*, both iconographically and visually. Not only was the *Andrew* to stand directly opposite the Longinus in the northwestern niche (where the Helen is today), but it was also to be the only other male in the group. Bernini adopted the reference to Christ's



Fig. 173. Head and shoulders: note remnants of gesso and gilding, as well as punch marks in the cuirass

crucifixion by extending Longinus's arms, and he also changed the drapery so that it knots under the right arm, as on the Saint Andrew, and has the same gentle, flowing character. As discussed in the next entry, the drapery would undergo a marked transformation during a subsequent design phase. At that point, Bernini also shifted the feet in order to give the saint a more diagonal orientation within his niche, removed the shield beneath his right foot, and turned the helmet upright.

The differences from the finished statue (fig. 159) offer one of the surest signs that the model is by Bernini. Yet because the original surface is obscured by gesso and gilding, and because one of the most crucial elements, the face, is damaged (fig. 173), it is difficult to affirm the attribution through comparison with his surviving terracottas. Only general similarities can be pointed out. The wide, flat feet with blocky toes are fairly typical of Bernini, appearing on many of his models for the angels on Ponte Sant'Angelo. The hair, parted in the middle with two wavy tresses framing the



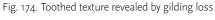


Fig. 175. Detail of marble carving in the *Saint Longinus*, showing differences in texture between mantle and flesh



forehead, also bears comparison to some of the same angels. However, the hair is markedly softer than we might expect from Bernini—at least to judge by some of his more highly finished models, such as the *Model for the Fountain of the Moor* (cat. 13). This is true of most of the details, in fact, and the gesso is to blame, blurring areas that were originally much crisper.

Several losses to the gilding and gesso on the model permit examination of the original clay surface. These areas reveal that Bernini used a fine-tooth tool to produce an overall striated texture (fig. 174). A finishing technique as well as part of the modeling process, the texturing anticipates the careful toothing that Bernini applied to the finished marble, where it plays an important aesthetic role (fig. 175). In order for the *Longinus* to convey the saint's rapture in as convincing a way as possible, its surfaces needed to shimmer in the light yet also give the impression of fleshlike softness. The toothed texturing provided the needed illusion—particularly when the statue was viewed at a distance within the cavernous Saint Peter's. On the present model, Bernini may have been testing the solution, or at least indicating how he intended to treat the finished statue. Interestingly, the one other known model for the *Longinus* (cat. 4) also has an overall toothed texture.

Another explanation for the toothed texture is that it was used to help secure the gesso layer. If so, this would be evidence that the gilding was part of the original conception for



Fig. 176. X-radiograph of Saint Longinus



Fig. 177. Back showing hollowing and the knifecut reduction of the buttress

the model. Two methods of gilding were employed. On flesh areas, the gold leaf was applied to the gesso over a layer of tinted oil size used as an adhesive.¹³ This method does not allow for burnishing, so it resulted in a matte gold appearance that contrasts with the shiny clothed areas. Those areas were gilded by a technique known as water gilding: gold leaf was applied to a layer of red bole over gesso and burnished to a highly reflective gloss. For added decoration, the cuirass was given a stippled texture with punch marks (see fig. 173). The contrast between matte and shiny on the model has an interesting parallel in the way Bernini differentiated between cloth and flesh on the finished Longinus. In giving the marble statue its toothed texturing, he used narrower and shallower grooves on the flesh than on the cuirass and the mantle (see fig. 175). Was the dual system of gilding a purposeful substitute for the dual system of toothed texturing? This is conceivable, although the practice of applying different degrees of burnish to gilded sculptures for purely decorative purposes was nothing new by this time and could have been the intent here.14

The main steps Bernini took to construct the model are easily traced. X-radiography suggests that the figure was built up from handfuls of clay or even smaller pieces (fig. 176). The arms, formed from rolled cylinders of clay (fig. 156), and the head were made separately and then attached to the torso. Drapery was added as small strips and sheets of clay. During modeling, a supporting rod would have been needed for the outstretched arm of the saint, and it is likely to have taken the form of the missing lance; the hand is pierced with a hole well suited to the task. Once the clay was leather hard, the interior was hollowed from the back with a large-tooth tool; the sides of the hollow and the back of the figure were then trimmed with a knife (fig. 177). After firing, but before gilding, the outside edge of the shield was trimmed or reshaped to a smaller radius by filing with a rasp.

Gian Lorenzo Bernini

4 · Saint Longinus

ca. 1634. Terracotta, H. 19½ in. (48.6 cm) Museo di Roma, Rome (MR 35746a-b)



PROVENANCE: Francesco Antonio Fontana (by d. 1700); unearthed in 1982 on the site of Fontana's house and studio under the auspices of the Soprintendenza Speciale per i Beni Archeologici di Roma and transferred to the Museo di Roma (1982)

LITERATURE: Di Gioia 1984; Giovanna Bandini in Rome 1986, pp. 218–19; Di Gioia 1986a, pp. 171-79; Lorenzo Lazzarini in Rome 1986, p. 223; Delfini Filippi 1989, p. 58; Di Gioia 1990, pp. 251-52; Ferrari and Papaldo 1991, p. 37; Bacchi and Zanuso 1996, p. 778; Avery 1997, pp. 101-2, 256, 258; Di Gioia 1997, p. 661; Bacchi and Tumidei 1998, p. 84; Ferrari and Papaldo 1999, p. 553; Hemingway 1999b, p. 35 n. 16; Sigel and Farrell 1999, pp. 64, 73; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 777; Fagiolo dell'Arco 2001, p. 311; Preimesberger 2001a, p. 107; Barberini 2001–2, pp. 49-50; Di Gioia 2002, pp. 49-61; Montagu 2008, p. 280

EXHIBITIONS: Rome 1986, no. 12

CONDITION: Extensive breakage and losses, including the head, the back and right side of the upper torso, the back and left side of the lower torso, both arms, the right leg from the drapery edge to the ankle, and the left leg. The proper left side of the base is also broken and partly missing; here the break edge is straight, which probably signals a join in the clay.





Fig. 178. Upper wire-cut surface of the drapery on the right rear side of the model

Fig. 179. Diagram of model showing wire-cut divisions

THIS MODEL, ALONG WITH THE ONE described in the previous entry, may have been among the twenty-two models for the Saint Longinus that the German artist Joachim von Sandrart observed in Bernini's studio during a visit sometime before 1635.1 The model, or at least what survives of it, was discovered in 1982 during excavations on the site of the former house and studio of the seventeenth-century sculptor and restorer Francesco Antonio Fontana.² Six fragments were recovered that, when joined together, yielded two principal sections of the figure—one for the upper half and one for the lower—with the division running below the knot at the waist.

Despite its many losses, the model can be assigned to the third and final stage of Bernini's planning for the Longinus. That it postdates the model at Harvard (cat. 3) is demonstrated by the drapery; the pattern of folds, including the knot at the left hip, is very close to the finished statue. (Perhaps the only true difference from the finished statue is that the sandal on the model lacks straps.) After elaborating the model at Harvard, which was presumably the basis for the full-scale model in stucco that Bernini undertook between September 1631 and February 1632, he rethought the drapery completely, adding a new element of drama to reinforce the high-keyed emotions expressed by the saint. Why Bernini suddenly chose to revamp the statue for a second time is unknown. A possible explanation is that he was responding to news that the *Longinus* was no longer to occupy the southeastern niche in Saint Peter's, for which it had been planned, but the northeastern niche, where it stands today. He may have felt that the change destroyed the visual relationship he had

established between the *Saint Longinus* and the *Saint Andrew* and that he needed to make the *Longinus* stand out in some way. The problem with this hypothesis is that the move was not decreed until 1638, right at the moment the marble statue was being brought to completion.³ Nevertheless, Bernini had begun to carve it years earlier, in 1635, and Elena Bianca Di Gioia is probably right in positing that he had learned of the change far in advance of the official announcement.⁴ In any case, the model is unlikely to have been made after 1635, once carving had started.

In terms of establishing a terminus post quem, the crucial detail is the same detail that proves that the model is not a later copy: the figure was modeled whole and then cut into several sections with a wire (figs. 178 and 179). One cut is at the right arm; another runs diagonally beneath the waist from the figure's upper left to bottom right. The reason for the cuts becomes apparent on recognizing that the finished *Longinus* consists of four blocks of marble: one for the right arm; one for the head, torso, left arm, and upper drapery; one for the lower body, the drapery falling from beneath the left armpit, the base, helmet, and shield; and one for the drapery falling from behind the right shoulder and down the back right side (fig. 180). The presumption must be that the model reflects a preliminary scheme for dividing the statue into marble blocks. Ultimately, Bernini would reposition the major cut between the upper and lower blocks; on the finished statue, it intersects the knot at



Fig. 180. Diagram of finished *Saint Longinus* with joins between the marble blocks

the right hip and descends more steeply. He began to receive the marble for the *Longinus* in late 1634, commencing the carving the next year.⁶ He is unlikely to have focused on the marble divisions until he had inspected the blocks he had been dealt.

Several indications of measuring offer further evidence that the model was preparatory for the Longinus. The marks, all struck, are confined to the lower section. One is found on the left side of the foot, just forward of the ankle bone. Another, barely visible, is located on the right knee. A final group of three appears on the right rear drapery just below the horizontal cut (fig. 181). If the figure were intact and these were the only marks found anywhere on it, we might dismiss them as accidental. But given the absence from the model of so many sections where marks are commonly found, such as the shoulders, wrists, and elbows, the surviving marks strongly suggest that a measurement campaign was undertaken.

In arguing that a terracotta is by Bernini, we would normally focus on style, technique, and modeling; here, owing to the many losses, we must rely on other factors. First, Bernini frequently used drawings and models to work out specifics of execution, such as how to section the marble. As we argue in the entry for the *Model for the Lion on the Four Rivers Fountain* (cat. 7), he often took it upon himself to solve such practical challenges arising from a commission.

Second, much of the toothed texturing was applied to the present model after the figure was shaped (fig. 182). This suggests that its function was decorative rather than just part of the shaping of the figure. Similar texturing is found not only on the model for the *Longinus* at Harvard but also on the finished marble, where it serves a crucial aesthetic function (see previous entry). On the present model, the texture runs in various directions; this is not the case on the finished statue, where it is highly regular, tracking along the circumference of the forms. This difference should not count against the attribution. Bernini is unlikely



Fig. 181. A group of three faint struck measuring marks just below the wire cut on the right rear drapery

to have taken the time to make perfect horizontal grooves on a small model; his intent was most probably to make some type of basic notation that indicated his ultimate intentions. Such notations can be observed on other of his models as well, including the *Allegorical Figure* (cat. 2), the *Study of a Horse* in Rome (cat. 22), and the *Head of Saint Jerome* at Harvard (cat. 30).

Finally, various elements of the construction can be related to Bernini's known techniques. The base was cut from the work surface with a wire, which obscures evidence of how the clay was pre-

pared at the beginning of modeling. Nevertheless, the particular method of wire cutting—outlining the periphery with a knife before pulling the wire—is duplicated on the *Lion*. The head and neck were formed as a separate piece and then inserted into a hole made at the top of the torso. This process is suggested by a shrinkage crack inside the hollowed area, which conforms to the shape of the hole. A similar technique was used on the *Pope Alexander VII* at the Victoria and Albert Museum, London (cat. 33). After the *Longinus* was formed, Bernini appears to have followed his normal practice of adding the drapery in sheets and strips; he used his fingers and an oval-tip modeling tool to place, shape, and integrate these additions. A view of the break where the right leg joins the drapery shows shrinkage cracks where a



Fig. 182. Drapery at midsection, with toothed texturing

sheet of drapery was wrapped around the leg. There are several marks in the clay on the right side of the base, where one end of a wooden prop might have been placed to hold up the figure's outstretched right arm. A similar device was used on the *Longinus* at Harvard, and there are other instances of wooden props among Bernini's models (fig. 150). Once the model was finished with the toothed textures, cut into sections, and nearly dry, the interior of the torso was hollowed with a small wood-carving chisel with a slightly curved tip. The hollowing progressed inward from the exposed, wire-cut surfaces on the upper and lower sections. The model was also hollowed through a hole in the upper back, as was the *Model for the Fountain of the Moor* (cat. 13), although we cannot be certain if a plug was inserted after hollowing, as in the *Moor*.

The two fragments forming the torso differ slightly in color, which likely means that they were separated in the kiln and subjected to uneven firing conditions. That the model may have broken before firing is evident from some break edges in the drapery folds on the front and sides of the torso that were smoothed flat with a chisel or a knife when the clay was dry but not yet fired. Once the edges had been smoothed, and after firing, an assistant could reassemble the broken sections with an adhesive. According to chemical analysis, a tree resin adhesive was used, and it is still visible on break edge surfaces.⁷

After a model by Gian Lorenzo Bernini

5 · Countess Matilda of Tuscany

ca. 1633–34 (model); ca. 1635–late 1640s (cast). Bronze, $15\frac{3}{4} \times 8\frac{3}{6} \times 4\frac{3}{4}$ in. (40 × 22.4 × 12.1 cm) Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Partial gift of Max Falk and partial purchase through the Director's Acquisition Fund (1998.1)



INSCRIPTIONS, MARKS, AND STAMPS: CONTESSA MATILDA stamped into the metal at the front of the base

PROVENANCE: Mrs. Henry Walters, Baltimore (until 1941; sold, Parke-Bernet Galleries, New York, April 30-May 3, 1941, lot 1306); [N. Sakeil & Sons Antiques, New York, until January 6, 1966]; Max Falk, New York (1966-1998; by partial purchase and partial gift to Harvard Art Museums, Cambridge, Massachusetts)

LITERATURE: Wittkower 1966, p. 202; Wittkower 1971-72, p. 13; Schlegel 1978, pp. 165-66; Vatican City 1981, p. 111; Wittkower et al. 1981, p. 202; Wittkower et al. 1997, p. 235; Bewer 1999; Black 2000, pp.

EXHIBITIONS: Northampton 1974, no. 15; Fort Worth 1982, no. 2; Cambridge, Mass. 2007

CONDITION: Some wear to highrelief edges of what appears to be an original dark resinous patina. Baton in the right hand has been bent upward from its original orientation

THIS IS THE ONLY WORK IN BRONZE to receive a catalogue entry in these pages. Known in eleven versions, it represents what is widely agreed to be the only surviving small bronze to be cast after one of Bernini's preparatory models in clay. As a rule, all bronze figures, small or large, are cast from models. Those models are usually prepared with the understanding that they are to be cast. With the present bronze, which depicts the Countess Matilda of Tuscany, there is a crucial difference: the clay model for the bronze appears to have been made for some purpose other than casting. The bronze likely reflects a model that Bernini made to show to his patron, Pope Urban VIII, as he planned the countess's tomb, erected between 1633 and 1642 in the right aisle of Saint Peter's (fig. 183). Once that model had fulfilled its initial role, it was probably set aside. When the tomb was later unveiled, the pope may have asked Bernini to provide a memento of it, at which point he could have taken the model off

The present bronze is exceedingly close to the finished statue, which might initially suggest that it is a reduction rather than a cast after a preparatory model. Reductions are usually faithful copies of finished sculptures, whereas preparatory models normally reflect changes that stem from the way designs evolve over time. Rudolf Wittkower was the first to recognize that many of the bronze Matildas (including the present one) cannot be reductions, as their backs are not treated like normal bronze statuettes (fig. 184). He also observed that the proportions of the bronze figure are slimmer than those of the marble.

the shelf and had it cast.

Regarding the back, the forms are greatly simplified, and there are clear traces of toothed tooling on the lower third of the figure (oriented vertically) and around the base (oriented horizontally). The tool marks are of a type that appears regularly on Bernini's models, especially on their backs and sides, as demonstrated by the *Angel with the Superscription* in Rome (cat. 38). It seems

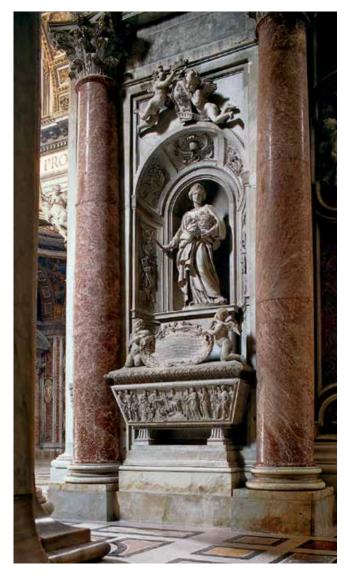


Fig. 183. Gian Lorenzo Bernini and assistants, *Tomb of Countess Matilda of Tuscany*, 1633–42. Marble, lifesize. Saint Peter's Basilica, Vatican City



Fig. 184. Back: note toothed-tool marks, made in the original clay model, as well as the vertical mold line at left

to be a firm rule that whenever Bernini undertook a model for a niche figure like the *Matilda*, he would leave its back unfinished, with tool marks still showing (see cat. 25). This is one reason to see the present bronze as representing a cast after a preparatory model. Another is Wittkower's point that bronze statuettes were normally finished on all sides, as they were meant to be rotated or to sit on tables and be walked around. Thus, if the original clay model for the bronze had been specially made for that purpose, we should expect it to conform to taste and be more resolved at the back.

Determining when the toothed-tool marks on the back of the bronze were made demands an awareness of how the bronze was cast. As Francesca Bewer has demonstrated, the present model bears clear signs of having been cast indirectly, including thin walls, mold lines on its outer surface, and brushstrokes and drip marks on its inner surface. As Bewer argues, a reusable plaster piece mold must have been used, meaning that the *Matilda* was cast from a wax intermodel taken from the plaster mold. Before casting, the wax intermodel would have been "fettled," or touched up. That process yielded some of the fine-tooth tool marks visible on the bronze,

such as the faint parallel lines on the back (fig. 185). Their character, shallow and shimmering, identifies them as having been made in the wax. They differ from the wider, deeper marks nearby, which convey a strong impression of directly modeled clay and can be assigned to the original terracotta model. Furthermore, those deeper marks reappear on other versions of the *Matilda*, which is likely only if they first existed in the original model.

Once the statuette was cast, its surface would have been worked over again, details strengthened through chasing, and the metal smoothed with abrasives, chisels, and hammers. By now, the statuette was a couple of generations removed from the original model, which explains why caution must be exercised in assuming that it perfectly reflects a lost model by Bernini. One conclusion that does seem permissible, however, is that the original model was a *modello*, not a *bozzetto*. Some of the *Matilda* bronzes are less finished than others, but they are all more refined than any of the known *bozzetti* attributed to Bernini. Indirect casting may have permitted some changes to the original model during the wax stage but none so radical as the transformation of a *bozzetto* into a *modello*.

The lost *modello* by Bernini that the present bronze appears to record likely dates to 1633–34. The commission for the tomb was awarded during the first of those years, and

payments indicate that work was underway by the spring of the second.³ During the interim, Bernini presumably produced a model that he showed to Urban VIII, who was the driving force behind the project. Matilda, a medieval noblewoman who had fought against the Holy Roman Empire on behalf of the papacy, was originally buried in Mantua. Urban, one of her staunchest admirers, decided to move her body to Saint Peter's and to give her a stately tomb. He must have followed the planning attentively as Bernini developed the tomb, which leads to the supposition that Urban was shown a presentation model sometime before the spring of 1634. If that was not the lost *modello* reflected in the bronze, then it is likely to have been one that Bernini created for his own use during the final carving.

The earliest record of any of the *Matilda* bronzes dates to 1648–49. One is described in the death inventory of Urban VIII's nephew Taddeo Barberini, taken during those years.⁴ More than likely, the bronze had been cast sometime before, perhaps as early as 1635, when Matilda's body is thought to have been interred in the new tomb.⁵ The other date of significance for the tomb is 1637, when it was unveiled. The pope could have chosen either moment to issue a commemorative bronze. The dating also makes sense given that the model used to cast the bronze seems to have been made just a year or two earlier. It was not a model that had been lying around for many years and that just happened to be repurposed, but one that was still relatively fresh in the minds of Bernini and the pope.

That the first of the bronzes may date to a short time after the lost *modello* was made is not to presume that Bernini undertook the casting in the same personal way he would have undertaken the *modello*. The commission for the bronzes may have come to him, but we can assume that he outsourced their casting and finishing to specialists. As a young



Fig. 185. Tool marks on back, made during the wax stage (left) and in the clay (right)

sculptor, he did sometimes attend to his own bronzes, although apparently only in the case of portrait busts.⁶ By contrast, the mature Bernini, who used bronze a great deal in his sculptural ensembles, chose to manage his bronze sculptures mainly at a distance, controlling only the design phase (see Andrea Bacchi's essay in this volume). With the Matilda bronzes, there is also the fact that Bernini was not a sculptor of bronze statuettes.7 He stayed almost entirely clear of that genre throughout his career, seeming to recognize that his style of sculpture did not translate well to small scale. On very rare occasions—usually when the patron was well known to him and important—he might accept a commission for a small bronze, which is not to say that he troubled himself with the model.8 The job still went to assistants, which underscores the uniqueness of the Matilda: it represents a Bernini bronze after a Bernini model.

Gian Lorenzo Bernini

6 · Elephant with an Obelisk

ca. 1632 or ca. 1658. Terracotta, $23\% \times 21\% \times 10\%$ in. (59.5 × 54.5 × 27 cm) Corsini collection, Florence (NOT EXHIBITED)



INSCRIPTIONS, MARKS, AND STAMPS: Inscribed B on left haunch; a circular paper label, with 1673 written in blue pen, affixed to the back right side of the pedestal

PROVENANCE: Cardinal Francesco Barberini, Rome (by May 8, 1666-d. 1679); his nephew, Prince Don Maffeo Barberini, Rome (1679-d. 1685); by descent in the Barberini family; transferred to the Corsini family in either 1758 on the marriage of Bartolomeo Corsini to Vittoria Felice Barberini-Colonna or 1858 on the marriage of Tommaso Corsini to Anna Barberini-Colonna, Florence; by descent in the Corsini family

LITERATURE: Fraschetti 1900, p. 305; Muñoz 1917, p. 80; Wittkower 1928; Brauer and Wittkower 1931, vol. 1, pp. 145-46; Hecksher 1947, p. 155; Lavin, I. 1955, pp. 144-47; Wittkower 1955, p. 231; Wittkower 1966, p. 247; D'Onofrio 1967a, p. 231, fig. 124; Wittkower et al. 1981, pp. 247–48; Avery 1997, p. 190; Wittkower et al. 1997, p. 287; Ferrari and Papaldo 1999, p. 446

CONDITION: The tip of the trunk and both tusks are broken and missing. Calcium inclusions have caused chip losses on the left ear, the left flank, and elsewhere. There are restored cracks along the back, across the midsection on both sides, and on the legs. The surfaces bear remnants of varnishlike coatings and an unevenly applied silver-colored wash. Red shellac or wax was applied to the corner brackets surrounding the obelisk.

IN 1632, AS WORK ON THE Palazzo Barberini was nearing completion, a large obelisk was brought from near the Porta Maggiore to decorate the western forecourt.1 For unknown reasons, the obelisk was left lying in several pieces in front of the western walls.2 It remained there until 1658, when Cardinal Francesco Barberini considered placing it on axis with the bridge that led from the palace to the hanging gardens on the south.3 According to a letter of February 9, 1658, written by Leonardo Agostini (the cardinal's antiquarian), the obelisk was to stand on a base resembling an elephant, for which Bernini had already prepared a drawing.4 According to the wording of the letter, the drawing was probably fairly recent, although the possibility cannot be excluded that Bernini was relying on much older designs, ones he had created about 1632, when the obelisk was originally delivered. At the time, the base must have been a matter of discussion, with Bernini (then architect of the palace) likely solicited for plans.⁵ Some twenty-five years later, Cardinal Francesco may have remembered these plans, asking Bernini to resurrect them. If so, the artist may have relied on the drawings and models he had prepared around 1632. Whatever the reality, the project ended up being canceled. The obelisk was left where it was, still in pieces, until 1773, when it was given to Pope Clement XIV and transferred to the Vatican.6

The present model, an impressively large and highly finished *modello*, joins a drawing in the Royal Collection, Windsor Castle, as all that survives from Bernini's preparations for the Barberini obelisk (fig. 25; cat. D.14). Fortunately, the project did not end up a complete loss. In 1665 Pope Alexander VII asked Bernini to design a base for another obelisk, recently discovered near Santa Maria sopra Minerva, that he wished to erect in front of the church (fig. 186). Bernini proposed the elephant design he had developed



Fig. 186. Ercole Ferrata, after a design by Gian Lorenzo Bernini, *Elephant with an Obelisk*, 1666–67. Piazza della Minerva, Rome

for the Barberini, and it was enthusiastically accepted. Before turning to execution—which was delegated to Ercole Ferrata—he made fresh studies, as proven by a series of drawings in the pope's family archives at the Vatican.8 They bear a clear relation to the present model and raise an important question: how can we be certain that the present model—in addition to the aforementioned drawing at Windsor-belongs to Bernini's earlier preparations for the Barberini obelisk? With the drawing, the answer is simple: Barberini bees can be seen in profile at the apex of the obelisk. For the model, the answer is twofold. First, the model displays key differences from the finished monument. Most noticeably, the model bears a much simpler howdah, like the relatively plain one seen in the drawing at Windsor, without the long hangings at the sides decorated with heraldic emblems. A second difference is that, on the model, the plinth beneath the obelisk is tapered and fairly substantial; on the finished monument, it is rectangular and barely noticeable. This is significant in that the plinth on the model is, again, similar to the one in the drawing at Windsor, whereas all the drawings related to the finished monument anticipate the final, minimalist solution in showing no plinth at all.

Provenance provides more definitive proof that the present model originated with the Barberini. In the household ledgers of Cardinal Francesco Barberini, a model fitting the description of the present one is recorded as having been delivered to Bernini on May 8, 1666.9 The reason is most likely that he wanted to use the model as a guide during preparations for the Minerva obelisk. (Work on it began that spring and was concluded in the summer of 1667.)10 That Bernini only borrowed the model is confirmed by its presence in the death inventory of Prince Don Maffeo Barberini, Cardinal Francesco's heir. 11 The model, which the inventory describes as being fitted with a wooden obelisk (now missing), does not appear in subsequent inventories of the Barberini family. It came to its current owner, the Corsini family of Florence, through the marriage of Bartolomeo Corsini to Vittoria Felice Barberini-Colonna in 1758 or that of Tommaso Corsini to Anna Barberini-Colonna in 1858. Given that we can definitively link the present model to the Barberini, and given that a member of the family owned it by May 1666—before the start of substantial work on the Minerva obelisk—two questions remain: did the model originate around 1632 or 1658, and is it all by Bernini? A consideration of style and technique, if no help in resolving the date, provides evidence in support of the attribution.

The model, which has not been X-rayed, is unlikely to have been created solid and hollowed afterward, as the weight of the clay would have placed too much stress on the malleable legs. Most probably, the heavy model was made of thick sheets of clay that were cut into sections and assembled to form a hollow body; several shrinkage cracks may signal the joins between the sheets. These cracks include the ones running down the spine of the animal, across the straps of the howdah on both sides, and down the middle of the elephant on both flanks. This method of construction may not have eliminated the need for further hollowing, which could have been done through holes at the bottom and the top of the elephant. The hole at the top can be seen in the center of the tenon over which the nowmissing obelisk was fitted (fig. 187). The hole was left open to serve as a vent during firing.



Fig. 187. Tenon used to secure the missing obelisk on top of the howdah; the hole reveals the hollowed interior of the elephant

Fig. 188. Back, with toothed texturing for skin: note tail, which started as a piece of clay rolled between fingers before being shaped and attached

Another hole, located on the belly of the elephant, was plugged and smoothed, although not so completely as to erase its edges.

The body was initially shaped with toothed and oval-tip tools. The surface was then smoothed with fingers, readying it for final texturing with a toothed tool, applied in long, curving strokes that generally move horizontally on the legs and more vertically on the torso. The technique proved ideal for simulating the tough, wrinkly hide of a mature elephant (fig. 188). Bernini usually matched his technique very carefully to the material being represented, which is one reason to see the modeling as by his own hand. Another is that the model is astonishingly precise in its portrayal of elephant anatomy. Great sensitivity was paid to rendering the thick, bulging muscles that form the legs and the folds of loose skin that surround the neck. Moreover, the model depicts a particular kind of

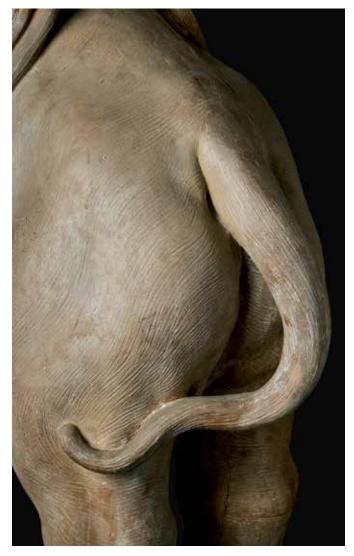




Fig. 189. Frontal view: note eye with rolling, M-shaped eyebrow

elephant, an Asian one, identifiable by the shape and size of the ears, the convex back, and the single finger at the end of the trunk (partially chipped in the model). Elephants were extremely rare in Europe during the seventeenth century, and the only one Bernini is likely to have seen came to Rome in 1630.12 The idea for the obelisk base might well have occurred to him then, when the project could have already been in the works. If so, we can assume he took time to draw the animal from life and that the present model is based on these drawings. Alternatively, if the idea for the obelisk came after the elephant's visit, Bernini would probably have turned to prints and paintings for source material, although none—including examples by Nicolas Poussin and Pietro Testa—come close to the current model in presenting a convincing likeness of a real elephant.¹³ This again underscores the model's high level of artistry—a level in keeping with Bernini.

Details such as the eyes reinforce the attribution to Bernini (fig. 189). The dramatic rolling eyebrows are highly reminiscent of those on the Constantine the Great on Horseback at the Hermitage (fig. 271). The eyes are also characteristic of Bernini in the complex sequence of steps that their formation entailed: initial shaping with toothed and oval-tip tools, finger smoothing, texturing with toothed tools, brush smoothing, and final strengthening with oval-tip tools. Perhaps the only problematic aspect of the model is its fairly uniform level of finish. What must be taken into account, however, is that if the model were to be cleaned, the pattern of toothed and brushed texturing on the hide would certainly convey more energy. The surface looks much duller than it would have originally—not only is it heavily soiled, but it is also obscured by restoration materials and various coatings, including an unevenly applied silver-colored wash.

The howdah—formed of sheets of clay that were cut into shape, laid in place, and modeled—was added to the model only after the elephant was substantially completed. This is confirmed by gaps between the elephant and the howdah at the front and the back. The tapered plinth was added on top, with the final part being the crowning tenon, the boxlike feature over which the missing obelisk (hollow at bottom) would have been fitted. The tenon appears to have been formed inside a temporary square frame, presumably of wood, with interior dimensions that would have matched those of the wooden obelisk, ensuring a snug fit. The frame would have been set on top of the plinth, with thick sheets of clay pressed against its interior walls to form the sides of the tenon. As the clay dried, shrinking slightly, the frame would have been lifted off, leaving the hollow tenon. The howdah and the plinth were both extensively smoothed with fingers and a brush before the model was left to dry. Most of the body of the elephant was also given a final smoothing with a stiff brush.

After the clay had become almost totally hard, but before firing, the letter B was incised with a sharp instrument on the left haunch of the elephant, a little over an inch above the tip of the tail (fig. 190). Measuring less than half an inch long, and visible only in raking light, the letter is composed with double outlines, leaving no doubt it was intentional. It may stand for Bernini, although more probably for Barberini.



Fig. 190. Inscribed B on left haunch



II. Fountains

Bernini was a friend of water ("un amico delle acque")—or so he is reported to have proclaimed in 1665, while visiting Paris and gazing at the Seine. He had left ample testimony to that friendship back in Rome: an array of magnificent new fountains unlike any Europe had ever seen. Water did not merely trickle from them, it gushed—transformed into a sculptural material of the highest nobility. Bernini also brought important changes to the parts of fountains that shaped the water, designing figures and bases with unprecedented boldness and naturalism. In another break with tradition, he took pains to ensure that his fountains passed beyond mere urban decoration by enlivening them with clever poetical conceits. Like his mythological and religious sculptures, they activated the spaces within and around them and engaged viewers with their drama.

Piazza Navona, in Rome, is where Bernini's talents as a fountain designer shine brightest. At the center of the piazza is his masterwork in this medium, the Fountain of the Four Rivers, executed in 1649–51 (fig. 191). Soon after its completion, he turned his attention to the southern end of the piazza, where his Fountain of the Moor now stands. Neither commission proved straightforward. Both required models—even before they had been commissioned. For the Four Rivers Fountain, Bernini is said to have created an elaborate presentation model in silver that he secretly slipped into a palace where Pope Innocent X would be attending a dinner party. Seeing the impressive model compelled the pope to award the commission to its maker. For the Moor Fountain, Bernini tried to impress the pope with two earlier designs—one of a large snail shell, the other of tritons and dolphins (cat. 11). The pope evidently wanted something more. Bernini redoubled his efforts, producing his largest and most finely wrought model known today (cat. 13), which secured him the commission.

Fountains like the Four Rivers were more than sculptures. They were feats of engineering. Beyond the hydraulics, Bernini had to design these heavy marble structures carefully in order to make sure they would not collapse under their own weight. He sometimes used models to help solve practical matters of construction (see cat. 7). He also used them to communicate his ideas to his assistants (see cats. 8–10). It took a large team to realize the Four Rivers Fountain, and Bernini used drawings and models to guide their efforts.

Fig. 191. Gian Lorenzo Bernini (design) and assistants, Fountain of the Four Rivers, 1649–51. Travertine and marble, over lifesize. Piazza Navona, Rome

Gian Lorenzo Bernini

7 · Model for the Lion on the Four Rivers Fountain

ca. 1649–50. Terracotta, $12\% \times 23\% \times 12\%$ in. (32 × 59 × 32 cm)

Accademia Nazionale di San Luca, Rome (258)



THIS MODEL IS FIRST RECORDED in the minutes of a meeting held at the Accademia di San Luca on March 17, 1748.² The document records that Bernardino Conati, a jeweler from Piacenza, had donated the *Lion*, along with a terracotta representing Bernini's statue of the *Moor* in Piazza Navona, to the Academy's study collection the previous year. The model next appears in an inventory of the collection produced in 1756 by the Academy's newly elected *principe*, the sculptor Pietro Bracci. He describes it as "a lion, study by the Cavaliere Bernini for the fountain in Piazza Navona." A later inventory, of 1834, also attributes it to Bernini: "lion by the Cavaliere Bernini."

From 1834 until 1980 there was no trace of the terracotta. It was brought to public attention for the first time in 1980 by Angela Cipriani, who noticed it in the storerooms of the Academy and recognized its relationship to the menacing lion that forms part of the base of the Fountain of the Four Rivers. After careful scrutiny—observing differ-

INSCRIPTIONS, MARKS, AND STAMPS: 258 written in black paint on the edge of the base underneath the lion's back left paw

PROVENANCE: Bernardino Conati (until 1747; his gift to the Accademia di San Luca, Rome)

LITERATURE: Cipriani 1980; Cipriani 1987; Harris 1990, p. 501 n. 43; Avery 1997, p. 201; Wittkower et al. 1997, p. 270

EXHIBITIONS: Rome 1984–85, no. X.27; Rome 1991, no. 5; Rome 1999b, no. 114; Madrid and Aranjuez 2003–4, no. 207; Rome 2004, pl. III.1; Bonn and Berlin 2005–6, no. 172

CONDITION: The model is secured to a wooden platform (removed for the exhibition) with three screws using modern holes drilled into the terracotta base. Painted plaster covers a shallow depression on the proper left side of the base—likely applied to reinforce broken terracotta underneath. The lion is broken in half and was rejoined near its center, with breaks in its right rear leg at the hip and ankle and in its left rear leg below the knee. A roughly oval loss atop its left haunch has been reattached. The tail and tip of the tongue are missing. The right sides of the nose and muzzle also show losses. The mane bears traces in interstices of gold-colored paint or gilding as well as remnants of a dark green coating, which is probably tarnished goldcolored paint. The gilding is likely not original, as it covers loss areas. Under the belly and on other protected areas, such as between the legs, are remnants of a transparent brown coating.1 A similar clear coating can be seen flaking elsewhere, and there are also remnants of a modern pink toning that resembles clay slip.

ences from the finished statue and noting the high quality of the modeling—she reached the conclusion that it was by Bernini himself. She also pointed out the difficulty that anyone else would have had in re-creating the entire lion in clay based only on those parts visible on the fountain.

A wealth of new technical information affirms the view that Bernini—not some assistant, nor some later copyist—made the terracotta. Even though the model may look suspiciously similar to the finished statue (figs. 72 and 192), there is evidence that the broken tail on the model originally curled over and was attached to the lion's right haunch, rather than the left one as in the finished statue (see fig. 194). On the right flank of the terracotta, just behind the vertical crack, are several areas of raised clay with clearly fractured surfaces that bear adhesive residues from an earlier repair (fig. 193). The smoothing strokes in the area move around these remains, suggesting that the raised clay was originally part of a larger feature, such as a tail, now broken off and lost. There is nothing similar on the lion's upper left leg, the spot on the fountain where the tail brushes the lion's body before running up the adjacent rockery. If the tail had gone in that direction on the model, there should be some sign of the original attachment point, but there is not.

The most persuasive evidence that the statue was preparatory for the fountain is a pair of faint intersecting horizontal and vertical lines that appear under raking light on each side of the rear haunches (see fig. 193). The lines were drawn with a sharp instrument and



Fig. 192. Giovanni Maria Fracchi, after a design by Gian Lorenzo Bernini, the lion from the Fountain of the Four Rivers, 1649–51. Travertine, over lifesize. Piazza Navona, Rome

a ruler, and on turning to the finished sculpture their purpose immediately suggests itself. The vertical lines correspond to the intersection between the lion's flank and the travertine rockery, while the horizontal lines match the join between the two blocks of travertine that form the rockery and the animal's rear (fig. 194). A copyist might have used the joins as coordinates to establish the proportions of the copy but would have had no reason to draw such lines at the very end of the modeling, which is when the lines on the terracotta were applied, after the clay was already leather hard and had been carefully smoothed with a brush and a cloth. This makes it virtually certain that the model, after completion but before firing, was used to plan construction of the fountain—to determine the size of the travertine blocks and where the joins should run. Another faint incision running down the center of the lion's back between its shoulders and hips may also relate to the ultimate arrangement of the travertine (fig. 110).

Concerns over how the lion was to be translated into stone are reflected on the base as well. On each side of it, there is a sunken and smoothed area with an irregular outline (fig. 195). On the animal's left, the much larger of the two depressions has been covered with painted plaster, likely to repair breakage underneath. One explanation for these recesses is that they were used to plan where, in relation to the lion, the travertine rockery would rise on the fountain. This seems particularly likely for the recess on the left, seeing that a pillar of rockery abuts the animal's left side on the completed fountain. Perhaps the same plan was initially envisioned for the animal's right side, although we should admit a second possibility:

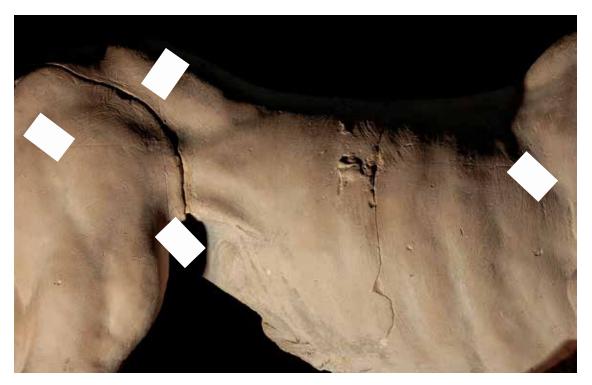


Fig. 193. Right side of lion, with possible remains of tail: note the horizontal and vertical lines faintly incised on rear of lion (arrows) and the adjacent cloth-smoothing patterns in the clay

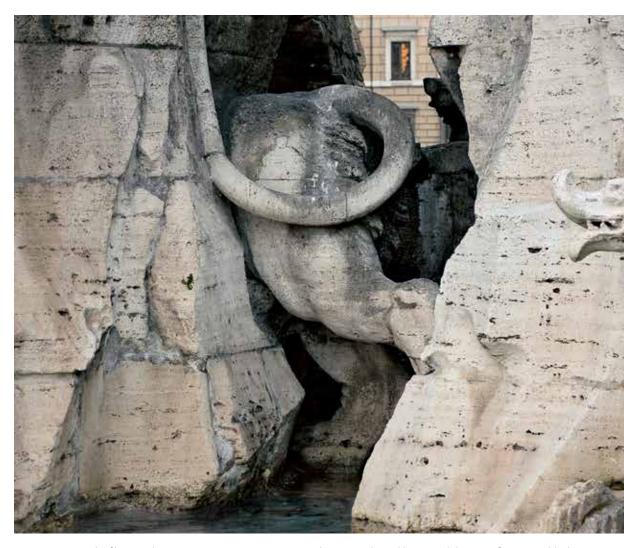


Fig. 194. Back of lion on the Four Rivers Fountain: note vertical join at rocks and horizontal division of travertine blocks corresponding to lines on model

that the recesses were meant to suggest where water would flow. On the fountain, water does flow under the animal's right side, lapping at the rocks on which it steps.

The base did not begin as a single rolled slab of clay—which is certainly how a copyist would have proceeded—but as individual pieces of clay that were pressed together and built out from the lion once it was already fairly well advanced. Before final drying, a series of straight lines was incised in the clay along the edge of the base, from the lion's front right paw to behind its back right paw (see fig. 195). These are likely notations indicating where the base might be trimmed. After firing, the opposite side of the base was in fact trimmed with a saw, probably along another such guideline. Various horizontal guide marks, of unknown purpose, were incised on the hewn edges—particularly on the back right.

Normally, a model of this size and finish would have been hollowed before firing if there were any plans to keep it or to present it to an important patron, as with



Fig. 195. Right side of base with recess (for water or rockery?) and other guidelines

the *Model for the Fountain of the Moor* (cat. 13). The *Lion* seems instead to have served a more practical function, and we find ample evidence that whoever made it was more concerned with solving design challenges than with creating a lavish model for presentation. To begin with, the model is solid, not hollow. The animal was initially built up by piling together several solid, wedged masses of clay to form two compacted heaps for the front and the back of the sculpture. The shoulders and hips were enlarged and shaped with strips and smaller

pieces of clay, then the legs, head, and support under the chest were added. The process is apparent in the X-radiograph, which also reveals an unusual detail (fig. 196): near the end of modeling, the lion was cut in two just forward of the rear haunches, behind the large crack (which is unrelated to the cut). A V-shaped wedge of clay was then inserted, lengthening the torso by a few centimeters. The modification suggests that elements of the design were still evolving during the course of modeling. Bernini seems to have massed the animal, partially shaped it, and then determined that he had misjudged the dimensions of the torso, which he remedied with the insert.

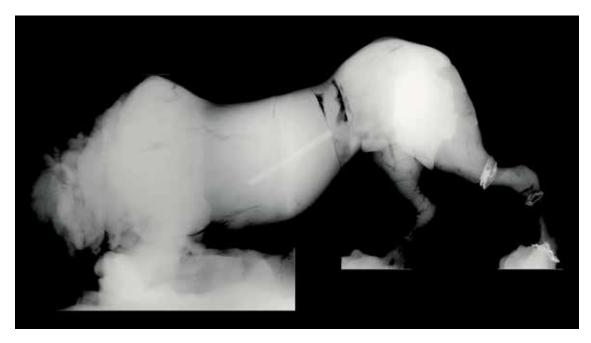


Fig. 196. X-radiograph of Model for the Lion on the Four Rivers Fountain

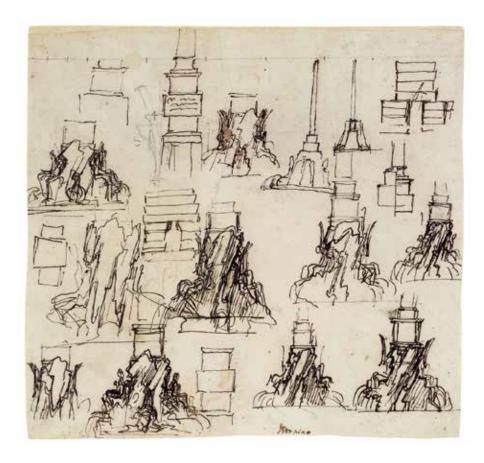


Fig. 197. Gian Lorenzo Bernini, Studies for the Four Rivers Fountain, ca. 1648. Pen and ink and black chalk, 12% x 13¾ in. (32.9 x 35 cm). Museum der Bildenden Künste, Leipzig (NI.7907r)

That it was Bernini who made the change, and who was responsible for the model from beginning to end, would seem the obvious conclusion were it not for the fact that someone else carved the marble statue, an assistant named Giovanni Maria Fracchi. Could Fracchi have made the model? He must have worked from one, and we can also assume that he was concerned with practical issues like those documented on the model, such as how to arrange the travertine blocks. The argument against Fracchi is that there is no indication he could produce a model as impressive as the *Lion*. He is virtually unknown, which returns us to Bernini.

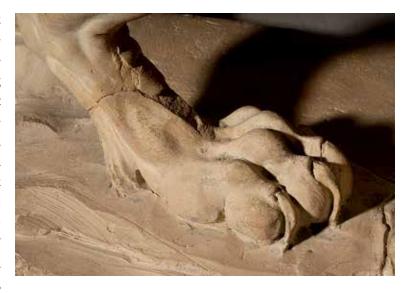
The Four Rivers Fountain came at a moment in Bernini's career when his reputation as a structural engineer was in jeopardy, and the fountain was at the center of his strategies to rehabilitate it.⁶ His first objective was to devise a daring solution that, when realized, would showcase his engineering prowess—hence his idea of placing a weighty obelisk atop a tall, rocky support pierced with multiple large openings. His second goal was to ensure that his seemingly gravity-defying design would stand up, which meant careful structural planning. This is particularly suggested by a sheet in Leipzig in which he sketched the fountain twenty times (fig. 197). Several of the renderings show him thinking about the fountain in terms of the travertine blocks that would be used to make it. This affords a close parallel to the intersecting vertical and horizontal lines found on the rear of the *Lion*, which we believe were made to figure out how the finished statue should be divided into travertine blocks.



Fig. 198. Detail of mane, each curl formed with the oval-tip tool and attached separately

Fig. 199. Right rear paw, with claws extended: note striations from dry brush smoothing

Reinforcing the notion that Bernini was used to thinking about those divisions—particularly when planning for fountains—is his chalk study for the Triton Fountain at The Metropolitan Museum of Art, in which he indicated with a faint line the main travertine seam that was to bisect the figure (fig. 38; cat. D.15).7 In view of drawings such as the *Study for a Triton*,



and considering the special circumstances of the Four Rivers Fountain, it makes perfect sense that the *Lion* model, so deeply engaged with practical concerns, came from Bernini's own hands.

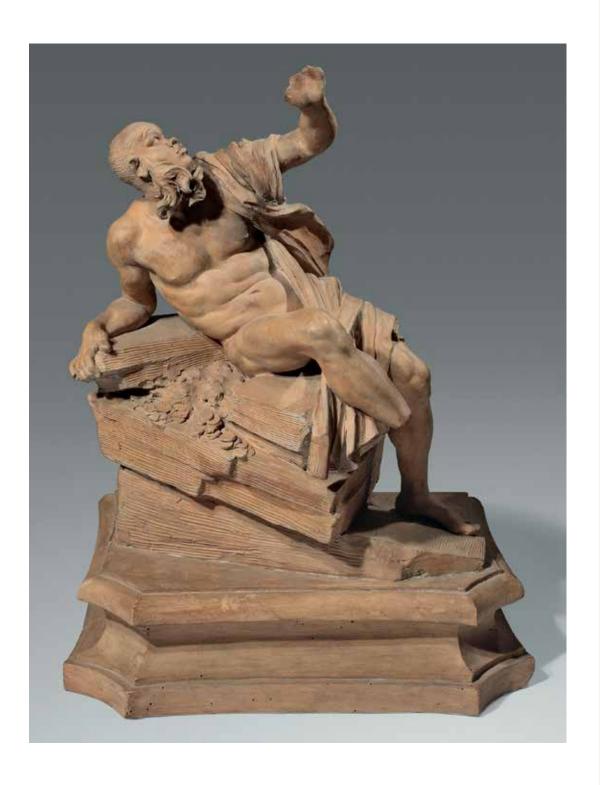
Final proof that the model is by Bernini is the modeling, which exhibits his customary liveliness. In the mane (fig. 198), the major strands are formed of individual bands of clay, which is how Bernini typically added such elements to his models. An oval-tip tool was used to give each curl its delicate yet expressive shape; details were finished with a light smoothing using a dry brush. The body of the lion was also smoothed, with a cloth. In shaping it, Bernini gave full attention to the play of skin over muscles, in an exceedingly naturalistic way that recalls the *Moor*. The animal's tensed paws, with claws unsheathed, also deserve mention, as they reinforce its fierceness (fig. 199). Here the *Moor* offers another parallel in the clenched toes of the figure, which are vividly described and help to convey his imminent movement (fig. 223).

The model was likely made between late 1649 and early 1650, when work on the base of the fountain was fully underway.⁸

Gian Lorenzo Bernini

8 · Model for the Rio de la Plata

ca. 1649–50. Terracotta, $22\frac{7}{6} \times 14\frac{9}{6} \times 10\frac{1}{4}$ in. (57 × 37 × 26 cm), including base Galleria Giorgio Franchetti alla Ca' d'Oro, Venice (78)



PROVENANCE: Filippo Farsetti,
Venice (d. 1774); his cousin,
Daniele Farsetti, Venice (d. 1787);
his son, Anton Francesco
Farsetti, Venice (1787–1805);
sold to Emperor Francis I of
Austria (1805–7); transferred
to the Accademia di Belle Arti,
Venice (1807); transferred to the
Museo Archeologico, Venice (by
1872–1925; transferred to the
Galleria Giorgio Franchetti alla
Ca' d'Oro, Venice)

LITERATURE: Venice 1788, p. 22; Levi 1900, p. 252; Voss 1910a, pp. 111–12; Fogolari 1913, pp. 389–90; Brinckmann 1923– 24, vol. 2, pp. 45-47; Fogolari, Nebbia, and Moschini 1929, p. 180; Lavin, I. 1955, pp. 94-95; Wittkower 1955, p. 210; Pope-Hennessy 1966, vol. 1, pp. 120-22, vol. 2, pp. 445-46; Wittkower 1966, p. 220; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 132; Zamboni 1968, pp. 15-16; Mariani 1974, p. 44; Białostocki 1981, n.p.; Wittkower et al. 1981, p. 220; Valcanover 1986, pp. 72-73; Nepi Scirè 1987, p. 58; Harris 1990, pp. 496-97; Androsov 1991, p. 292; Avery 1997, p. 201; Wittkower et al. 1997, p. 269; Ferrari and Papaldo 1999, pp. 447-48

EXHIBITIONS: Rome and Venice 1991–92, no. 61b; Rome 1999b, no. 115b; Turin and other cities 1999–2001 (Turin only), no. 70

CONDITION: The left hand is missing all the fingers, and there is restoration to the left arm. The right foot is missing from above the ankle. The big and little toes of the left foot have chip losses. There are red lines drawn around the waist and the buttocks.'

THE FOUNTAIN OF THE FOUR RIVERS takes its name from the four river gods that lounge and gesture on the travertine rockery that forms its base. They represent what were then considered the four great rivers of the world—the Danube, the Ganges, the Nile (fig. 205), and the Rio de la Plata (fig. 200)—and were included on the fountain to communicate the global reach of Catholicism. Bernini understood their vital importance to the composition and appears to have begun planning for them by making *accademie* (drawings of posed figures). Two of these survive (figs. 40 and 41; cats. D.18 and D.19), the one with the raised hand (fig. 40) possibly being the inspiration for the Rio de la Plata. From the drawings, Bernini is likely to have turned to models, although the direct evidence is limited to two *modelli* in Venice: the present one, for the Rio de la Plata, and its companion, for the Nile (cat. 9).

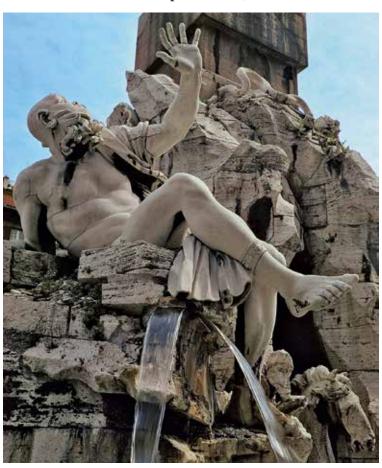


Fig. 200. Francesco Baratta, after a design by Gian Lorenzo Bernini, the Rio de la Plata from the Fountain of the Four Rivers, 1649–51. Marble, over lifesize. Piazza Navona, Rome

Fingerprint analysis, combined with the presence of measuring marks, provides confirmation that neither model is a copy. They definitely originated within Bernini's workshop and are almost certain to be by Bernini himself. The present model is one of only five in Bernini's oeuvre to bear an identifiable fingerprint (fig. 98). It is impressed in the clay just beneath the overhang dividing the two lowest rock masses (fig. 201). That the fingerprint is Bernini's is proven by its reappearance on four other models, each unquestionably by him (see figs. 95-97, 99). Thus, at the very least, Bernini handled the present model. Proving his authorship solely on the basis of the fingerprint is more challenging. The fingerprint does not necessarily document active sculpting. It was left at the end of a short finger stroke that pushed some clay into the seam between the two rock masses. This could be a deliberate act of modeling or just the result of casual handling. Perhaps an assistant asked Bernini to inspect his model, and Bernini made the stroke in the course of doing so. What is essential to an

understanding of the stroke, however, is that it was applied during the creation of the model and not after: the bottom of the fingerprint is overlaid with faint toothed texturing. In light of this, and in consideration of the fact that the heavy model is unlikely to have been lifted or turned at any point during its execution, we believe that the fingerprint can be used to assign the model to Bernini with reasonable confidence.



Fig. 201. Fingerprint identifiable as Bernini's

The quality of the modeling is exceedingly high, which is another reason, of course, to accept the model as being by Bernini. The musculature is skillfully rendered, inviting comparison with the *Moor* (cat. 13), although there are variations in the ways the figures were finished, which could be attributable to their different sizes. The much smaller *Rio de la Plata* is sketchier in its details, as demonstrated by comparing the toes of the two models

(figs. 202 and 224). The cuticles on the present model are not articulated as finely, although the basic formulation is the same. Comparing the faces is also informative (figs. 203 and 222). Even though the face of the *Rio de la Plata* is not as detailed as the *Moor*'s (especially the side away from the viewer), they share a very similar structure. This seems another demonstration that Bernini, when creating a *modello*, would tolerate a wide range in the extent of completion. The face of the *Rio de la Plata* comes a lot closer to that of the *Daniel in the Lions' Den* at the Vatican (cat. 25), a *modello* that falls into Bernini's midrange—neither as sketchy as a pure *bozzetto* nor as highly finished as the *Moor*.

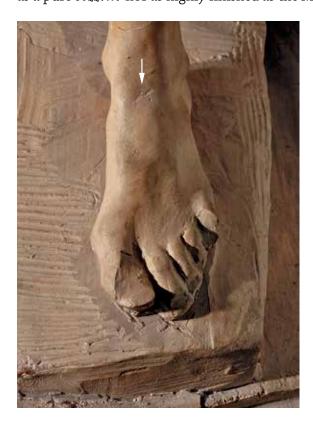


Fig. 202. Left foot: note partially erased measuring mark below ankle



Fig. 203. Face: note that the side facing away from the viewer is less finished and shows more tool marks

From a distance, the rocks on the present model might appear overly neat for Bernini, yet they bear a style of toothed texturing comparable to those on the *Moor*. The same size of toothed tool was used; the strokes on both models are long and flowing; and the depth of the striated marks is similarly variable. As on the *Moor*, there are areas where the strokes overlap and where fingers have been used to apply touches of smoothing—all to provide textural variation. Moreover, the coins at the side of the river god display a wonderful looseness in



Fig. 204. Coins, modeled more loosely than other parts of the model

execution (fig. 204). They began as flattened balls of clay that were then raked with a small-tooth tool to yield a lively, shimmering texture. Toward the back, the coins lose definition, appearing to melt.

Support for the attribution to Bernini also comes from the *Rio de la Plata*'s companion model, the *Nile* (the subject of the next entry). They are linked not only by provenance but also by authorship; there can be no question they are by the same hand. If this hand is an assistant's, then it means that one of the four assistants selected to carve the four river gods made at least two models, which in turn means that one of the others was

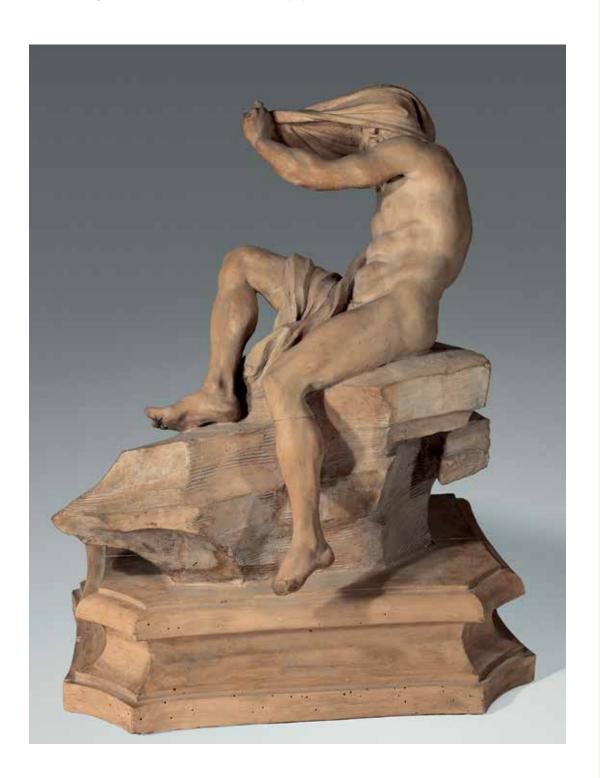
not allowed to make his own. It seems far more probable that Bernini made both. The carving of the Rio de la Plata and the Nile was delegated to the weaker two of the four assistants: Francesco Baratta for the former and Giacomo Antonio Fancelli for the latter. The other two river gods were carved by sculptors who had proven themselves as modelers: Antonio Raggi for the Danube and Claude Poussin for the Ganges. Bernini may have sensed that Baratta and Fancelli needed help with their models, deciding it best to undertake them himself. It is possible that he did the same with Raggi and Poussin, but he is more likely to have considered them capable enough to produce their own *modelli* based on a *bozzetto* or a drawing he supplied. In fact, according to the contract for the Danube, Raggi was required only to follow Bernini's "*pensiero*"—in all likelihood, a drawn sketch.²

That the present model—like the one for the Nile—was intended for use by assistants is suggested by the numerous measuring marks on its surface. These take the form of sharp points, struck lines, and one pyramidal mark under the right hand. The marks, totaling over twenty, are also found on the thumb of the right hand, both shoulders, the left ankle (see fig. 202), and the middle of the throat. Unlike the *Nile*, there is no nexus. It was likely effaced, along with other marks, during a process of tidying up before the model was dried and fired. There is also a faint line running down the left arm that must have been part of the measuring process. The presumption must be that the model was the direct basis for the carved figure or for a full-scale model (if there was one). Either way, a few changes would be made to the design, including the shape of the rocks and the addition of the band to the right calf. The wood and terracotta model in Bologna (cat. 10) is closer to the finished fountain in these respects and must postdate the present model.

Gian Lorenzo Bernini

9 · Model for the Nile

ca. 1649-50. Terracotta, $21\frac{7}{4}\times15\frac{3}{8}\times10\frac{7}{4}$ in. (54 × 39 × 26 cm), including base Galleria Giorgio Franchetti alla Ca' d'Oro, Venice (77)



PROVENANCE: Filippo Farsetti,
Venice (d. 1774); his cousin,
Daniele Farsetti, Venice (d.
1787); his son, Anton Francesco
Farsetti, Venice (1787–1805);
sold to Emperor Francis I of
Austria (1805–7); transferred
to the Accademia di Belle Arti,
Venice (1807); transferred to the
Museo Archeologico, Venice (by
1872–1925; transferred to the
Galleria Giorgio Franchetti alla
Ca' d'Oro, Venice)

LITERATURE: Venice 1788, p. 22; Levi 1900, p. 252; Voss 1910a, pp. 111–12; Fogolari 1913, pp. 389-90; Brinckmann 1923-24, vol. 2, pp. 45-47; Fogolari, Nebbia, and Moschini 1929, p. 180; Lavin, I. 1955, pp. 94-95; Wittkower 1955, p. 210; Pope-Hennessy 1966, vol. 1, pp. 120-22, vol. 2, pp. 445–46; Wittkower 1966, p. 220; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 132; Zamboni 1968, pp. 15-16; Mariani 1974, p. 44; Wittkower et al. 1981, p. 220; Valcanover 1986, pp. 72-73; Nepi Scirè 1987, p. 58; Harris 1990, pp. 496-97; Androsov 1991, p. 292; Avery 1997, p. 201; Wittkower et al. 1997, p. 269; Ferrari and Papaldo 1999, pp. 447-48

EXHIBITIONS: Rome and Venice 1991–92, no. 61a; Rome 1999b, no. 115a; Turin and other cities (Turin only) 1999–2001, no. 71

CONDITION: The right arm is missing below the shoulder, as are the three outside fingers on the left hand and all but the little toe on the left foot. There are red lines drawn around the left arm, the left calf, the stomach, the hips, and the drape over the head.

IN DISCUSSING THE Fountain of the Four Rivers, Filippo Titi, author of an early guidebook to Rome (1763), states unequivocally that, even though Bernini entrusted the carving of the four river gods to assistants, he undertook the models himself.² Not only does the *Model for the Rio de la Plata* (cat. 8) appear to corroborate Titi's story, but so too does the present one, preparatory for the Nile (fig. 205). Because the models are identical in all technical regards,



Fig. 205. Giacomo Antonio Fancelli, after a design by Gian Lorenzo Bernini, the Nile from the Fountain of the Four Rivers, 1649–51. Marble, over lifesize. Piazza Navona, Rome

Fig. 206. Nexus of measuring marks



the attribution to Bernini hinges on the recognition that whoever modeled the *Nile* also modeled the *Rio de la Plata*. In the previous entry, we argued that the *Rio de la Plata* should be assigned to Bernini. It bears a fingerprint matching his; it is compatible with his style and technique; and the possibility that Bernini would have asked one assistant to make a model for another assistant seems remote. Thus, to attribute the *Rio de la Plata* to Bernini is to claim the *Nile* for him, too.

Giacomo Antonio Fancelli was the assistant assigned to carve the Nile, and so he can be presumed to have been the recipient of the model. That he referred to it during carving is proven by the more than sixty measuring marks on its surface. Almost all are clustered near the left buttock and take the form of sharp points (fig. 206). This was certainly the nexus for the measuring system. The remaining marks (all struck lines) are few: four on the left shoulder, three on the drapery behind the left thumb, one on the left ankle, and two on the drapery covering the forehead. What doubtless happened to the rest of the reciprocal markswhich, to judge by the nexus, must have totaled more than fifty—is that they were smoothed away when the surface of the model was tidied up at the conclusion of measuring. During tidying, the corner of the rocks near the

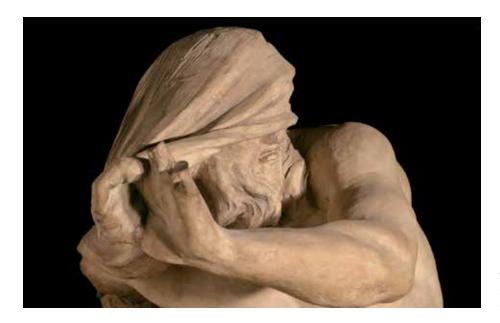


Fig. 207. Lower half of face; the head was covered with a sheet of clay to form the drapery

nexus was remodeled: clay was added, then smoothed and sharpened with fingers and an oval-tip tool. The purpose may have been to remove a scale or other marks connected with the measuring.

Because the *Nile* is highly finished, many of the details that might shed light on how it was constructed—such as joins—are generally absent. Like the *Rio de la Plata*, the figure was formed of solid clay and hollowed later. Large oval-tip tools were used for most of the



Fig. 208. Excavated base, with access hole used to hollow the figure

preliminary shaping, as suggested on the back of the drapery, which was left incompletely smoothed. On the *Rio de la Plata*, the legs were modeled separately, butted against the torso, and attached with toothed and oval-tip tools; gaps above and below the limbs make the process clear. The same technique was almost certainly used on the *Nile*, but the gaps there were more completely smoothed. On both, the drapery was added as strips, including the one partially covering the figure's beautifully modeled lower face (fig. 207). A final brush smoothing was given to flesh areas. The rocky bases were assembled from slabs or sheets of clay and left open at the back. Before drying, they were hollowed from behind with a toothed tool (fig. 208). Unlike the *Rio de la Plata*, the *Nile* offers evidence of how it was hollowed. A small curved spatula was used to excavate the torso to the level of the neck through a hole underneath the rocky seat. The *Rio de la Plata* was almost certainly hollowed as well, but the only visible evidence is that several holes were punched into recesses in the figure, presumably to vent the hollowed area.

Gian Lorenzo Bernini and assistants

10 · Model for the Four Rivers Fountain

ca. 1649–50. Wood, terracotta, wax, and metal, $22\%6 \times 38\%4$ in. (56 \times 98.5 cm) Accademia di Belle Arti, Bologna



wooden models were a staple of the architect's profession in Bernini's Rome, and he appears to have been fairly typical in his use of them.¹ They are mentioned in documents for his projects,² and some of his terracottas even show signs of having been trimmed for placement on them—or so we have hypothesized (see cats. 33, 49, and 50). In terms of surviving examples, however, there appears to be only one: the present model, which is generally agreed to have been preparatory for the Fountain of the Four Rivers. Assuming it is authentic—not a copy—it can be safely assigned to the end of the design process,

PROVENANCE: Luigi Ferdinando Marsili, Bologna (by 1713; his gift to the Accademia Clementina, Bologna, now Accademia di Belle Arti)

LITERATURE: Zanotti 1739, vol. 1, p. 54; Zamboni 1968; Fagiolo dell'Arco 1969, pp. 199–200; Brandi 1970, p. 123; Sestieri 1970, pp. 17, 31 n. 37; Zamboni 1971; Preimesberger 1974, p. 158; D'Onofrio 1977, p. 469 n. 31; Cipriani 1980, p. 78; Nicola M. Courtright in Princeton and other cities 1981–82, p. 117 n. 29; Harris 1990, pp. 492, 495; Avery 1997, pp. 200–201; Fagiolo dell'Arco, ed. 2002, pp. 109–12

EXHIBITIONS: Bologna 1968, no. 1; Bologna 1979, no. 547; Rome 1984–85, no. X.26; Rome 1999b, no. 113; Turin and other cities 1999–2001, no. 67

CONDITION: Approximately onethird of the wooden base is missing. Wood-boring insects have attacked much of the wood, resulting in other loss areas, some repaired with wooden splines and inserts. The base shows warping and shrinkage cracks and has been reinforced with modern plywood. Areas of the rockery have suffered losses of various sizes where the glue-assembled wood has separated. Numerous terracotta elements are missing, including three of the four river figures. There are remnants of a gesso coating on the wood under a layer of reddish toning, both layers possibly original. Most surfaces also show an applied dark reddish toning, clearly added later.

as it is a virtual replica of the fountain as executed. Those who have written about the model and claimed it as preparatory maintain that it does exhibit crucial differences from the finished fountain: on the model, the basin is round not oval; the openings between the rocks are more regular; and the palm tree leans at a shallower angle. These are all very subtle and, in our view, do not exclude the possibility of a copyist. This is true even of the first distinction; the basin on the finished fountain is just barely ovoid, not something a copyist would necessarily be able to discern from street level. That the model was preparatory for the fountain must be substantiated on different grounds. These emerge from a consideration of provenance and technique.

The model is first recorded in 1713 in an inventory of the Accademia Clementina, Bologna—precursor to the modern Accademia di Belle Arti, which still owns the model.3 The inventory describes the model as having recently arrived from Rome. A later inventory, of 1803, clarifies the circumstances, indicating that the model had been donated by the engineer and naturalist Luigi Ferdinando Marsili, founder of the Academy, formally chartered in 1711.4 The next year he pledged his entire collection to the senate of Bologna, and it went to the recently formed Academy. The collection was filled with curiosities that Marsili had gathered during his travels through Europe, and he appears to have gone on collecting after his initial donation—hence the indication in the inventory of 1713 that the model had just arrived from Rome. That Marsili donated the model, that it came from Rome, and that it was in existence by 1713 greatly reduce the odds that it is a copy. There is no evidence that Marsili was in the business of commissioning copies, and the Academy was not yet at the point in its history when it was sending students to Rome to make small models of famous buildings or fountains. There is a final detail worth mentioning. According to a description of 1739, the model was given the place of honor in the lecture hall for architecture. This does not seem the kind of treatment reserved for a copy, and it is likely to reflect the belief that the model was original. The model's fortunes would gradually decline. During the early nineteenth century, it was relegated to storage and allowed to decay, rediscovered only in 1968.

A consideration of technique underscores the likelihood that the model was preparatory for the Four Rivers Fountain. Of central importance to the argument is the best preserved of the remaining terracotta elements, the figure of the Rio de la Plata (fig. 209). It is solid and was almost certainly modeled as an independent sculpture away from the wooden base, which had been prepared first. After the figure was formed, and while the clay was still plastic, it was likely pressed into place, with all excess clay trimmed with a toothed tool. Once dry, the figure was removed and fired, then reattached with dowels. Dowel holes are visible where the three missing figures originally sat.

Of all parts of the figure, the face is the least successful—at least when judged frontally (fig. 210). The almost caricatural expression is not very convincing, which is difficult to reconcile with Bernini. That said, the modeling is accomplished, and the use of the oval-tip tool exhibits his customary looseness. We must also factor in that the face (especially the left side) was to be hidden from view. When the figure is considered from below—the intended viewpoint—all parts read coherently, and we recognize that the figure is very effective



Fig. 209. Figure of the Rio de la Plata: note the toothed texturing in the clay between the rocks and the figure

at its role: combining with all the other elements of the model to provide a detailed impression of how the overall fountain would look. Should the figure be attributed to Bernini? Several details suggest so. First, at the end of modeling, after the face and the head had been smoothed with a brush, certain details were reinforced, or redrawn, with an oval-tip tool, a technique also found on the Model for the Fountain of the Moor (cat. 13). Second, the negative space beneath the figure was raked with a toothed tool, leaving a striated texture. This is how Bernini commonly represented negative space on his models, as demonstrated by the Study of a Horse (cat. 22) and the earliest Angel with the Crown of Thorns at Harvard (cat. 35). The final detail is the one, however, that makes an attribution to Bernini seriously tempting. Within several of the folds of drapery are lines of marks impressed by the end of a toothed tool (fig. 211). These are directly comparable to the rows of stamped, drill-like holes in the hair and elsewhere on the Moor (fig. 226), the Model for the Equestrian Statue of Louis XIV (fig. 276), the Angel with



Fig. 210. Frontal view of the face

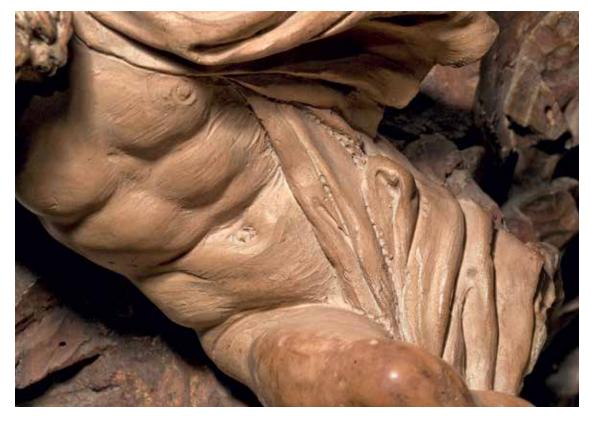


Fig. 211. Stamped toothed-tool marks in drapery

the Crown of Thorns at the Kimbell (cat. 40), and the Angel with the Superscription (fig. 369). (The last example is particularly appropriate in that the stamped rows appear in the drapery.) The technique is very peculiar, and there seems to be a very reasonable chance that it is exclusive to Bernini, as discussed elsewhere (see cat. 13).

With the exception of the horse, the rest of the terracotta elements on the present model are fairly crude, and there is a possibility that they are by assistants. The horse is much finer and shares two interesting traits with the figure of the Rio de la Plata. First, the curls of the tail are stamped in two places with three round holes from the pointed end of a modeling tool in a manner recalling the rows of holes in the drapery. Second, the negative space beneath the horse is represented with toothed-tool marks, also like the figure. The horse and other creatures on the rockery were doubtless modeled in place, as their backsides conform to its contours.

The wooden elements, which constitute the bulk of the model, can be separated into two main parts: the circular base with basin and the rocky superstructure. Two wooden disks of different diameters were used for the base. Each disk was assembled from four strips of wood that, once joined, were cut into a circle. The smaller and thicker of the two disks is the upper one, and it was turned on a lathe to create the raised lip of the basin and the bowl of the basin itself. Initially, for reasons described below, a raised section was kept in reserve at the center.

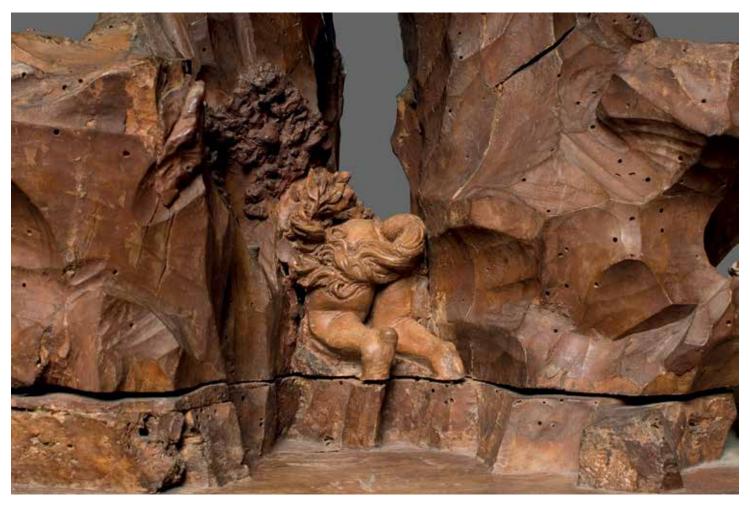


Fig. 212. The horse, with added foliage in red wax

The rocky superstructure was assembled from pieces of wood glued to a solid core of wood. The initial assemblage would have been oversize in anticipation of the carving, which was carried out almost entirely with crescent-shaped gouges. The shape of the blade is indicated by the concave surfaces, which reappear on the finished fountain—a likely instance of Bernini's selecting a tool he knew would perfectly simulate the effect he desired for the final execution. This leads to the question of whether he tackled the carving of the model himself. There is no reason to think not, as he must have had a very specific plan for how he wanted the rockery to look, a plan that would have been difficult to communicate to an assistant. Even though there were doubtless many models for the fountain that came before the present one, none is likely to have presented the rockery with equal specificity.

After the superstructure was carved, the terracotta animals around the base were likely formed, fired, and attached with glue. The entire assemblage was then set on top of the flat, raised disk at the center of the basin; its irregular footprint was traced onto the disk with pen and black ink (portions of the tracing are still visible). The raised area was then trimmed in accordance with the tracing. Where the bottom of the superstructure was

uneven, slivers of wood were inserted and glued. Only dowels (without glue) were used to join the superstructure to the base, meaning that the entire superstructure—including all the terracotta elements—could be easily lifted off. This would have been helpful in the event the design needed changing, and it represents an aspect of functionality that no copyist is likely to have incorporated. The model is also unlike a copy in its representation of what would lie beneath the waterline. The waterline falls at the separation between the superstructure and the raised area left in reserve at the center of the basin. This is seen clearly in the detail of the horse (fig. 212), where the terracotta comes to an abrupt end at the waterline. One reason Bernini may have felt it important to separate the above-water portion of the model from the below-water portion was that he wished to communicate that none of the creatures surrounding the base were to be more than roughly carved beneath the waterline. A copyist is not likely to have dwelled on such details.

Among the finishing steps was the addition of a red wax and resin mixture to parts of the rockery that were modeled to suggest vegetation. The cacti were carved separately in wood and attached with an adhesive made of the same mixture of red wax and resin. A square recess was carved into the top of the superstructure to receive the now-missing obelisk; empty dowel holes indicate its means of attachment. Preparations were also made for the attachment of two coats of arms. There are two recessed areas—one above the horse, the other on the opposite side—that received the coats of arms. How they were originally

attached is unknown. Currently, on the horse side, a piece of sheet metal (unlikely to be original) is nailed to the wood; the nails are a mixture of old and newer. On the opposite side, there is no sheet metal, just four iron nails that are clearly old. Maurizio Fagiolo dell'Arco has convincingly demonstrated that a terracotta coat of arms in the Museo Nazionale del Palazzo di Venezia, Rome, is one of the missing coats of arms (fig. 213). The dimensions are right, and the frame relates closely to that of the coat of arms on the south side of the finished fountain. The main difference is that the heraldic field is blank on the terracotta.

As stated above, the present model is exceedingly close to the finished fountain and was probably created sometime between 1649 and 1650, during the first full year of carving—one of several guides used (see also cats. 7–9).8



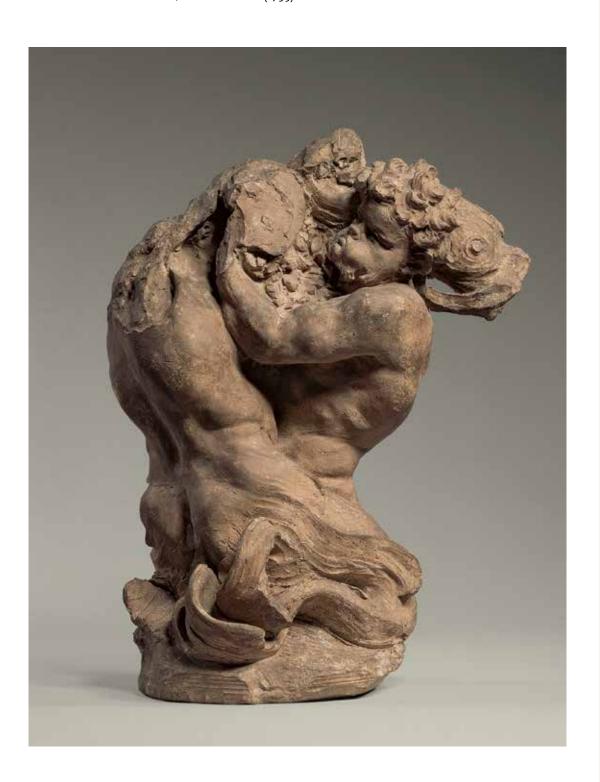
Fig. 213. Gian Lorenzo Bernini or an assistant, Coat of Arms for the Four Rivers Fountain, ca. 1649–50. Terracotta, $4\frac{1}{2} \times 4 \times 15\frac{1}{8}$ in. (11.5 x 10 x 4 cm). Museo Nazionale del Palazzo di Venezia, Rome (13473)

Gian Lorenzo Bernini

11 · Tritons with Dolphins

ca. 1652–53. Terracotta, 14% \times 11% \times 7% in. (36.6 \times 29 \times 19.5 cm)

Staatliche Museen zu Berlin, Bode-Museum (1795)



INSCRIPTIONS, MARKS, AND STAMPS: JN1715 written in blue ink on the bottom; G. L. Bernini written in black paint on the bottom

PROVENANCE: Donated by Wilhelm Itzinger, Berlin (1889)

LITERATURE: Fraschetti 1900, pp. 123-25; Posse 1909, p. 464; Voss 1910a, p. 107; Schottmüller 1913, p. 188; Bode 1922, pp. 196, 200-201; Brinckmann 1923-24, vol. 1, pp. 102-3; Brauer and Wittkower 1931, vol. 1, p. 52; Delogu 1932, p. 30; Bange 1933, pl. 84; Schottmüller 1933, pp. 219-20; Pane 1953, p. 50; Richardson 1953, p. 8; Santangelo, ed. 1954, p. 80; Lavin, I. 1955, pp. 98-100; Wittkower 1955, p. 216; D'Onofrio 1957, p. 73; Wittkower 1966, p. 226; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 142; Huse 1967, p. 57; D'Onofrio 1977, p. 506; Schlegel 1978, pp. 10-13; Wittkower et al. 1981, p. 226; Wittkower et al. 1997, p. 273; Rome 1999b, p. 382; Avery 2002-3, p. 22

CONDITION: Substantial losses include three of the dolphins and the tail of the fourth. One of the tritons is missing his head, left hand, right arm and hand, and the left side of his tail from the waist down; the other triton is missing his left hand and the right side of his tail from the waist down. There are chip losses to the dolphin's mouth and to the edge of the octagonal base, with one side of the base missing completely. There are remnants of an overall gesso and gilding layer, applied over earlier repairs consisting of pinkish fill materials in cracks.

ON JUNE 12, 1651, BERNINI unveiled to the public his masterful Fountain of the Four Rivers in Piazza Navona. In reporting on the event, the local news bulletin, the *Avviso di Roma*, noted that Pope Innocent X was so delighted with the fountain that he ordered Bernini to renovate the two earlier fountains that stood at the piazza's ends. The charge set into motion a chain of events that resulted not only in the present model but also in the spectacular *Model for the Fountain of the Moor* (cat. 13), which continued the marine theme—despite its nickname, it represents a sea god not a Moor.

On receiving the commission for the two fountains, Bernini first turned his attention to the southern one, which stood opposite the pope's palace. The original fountain, created during the late 1570s, consisted of a raised basin adorned with four statues of tritons blowing conchs, all surrounded by a balustrade.² Bernini eliminated the balustrade, added an outer basin at ground level, and began work on designing an appropriate centerpiece for the inner basin. His initial idea, dubbed the Fountain of the Snail, is recorded in a drawing in the Royal Collection, Windsor Castle, showing three entwined fish lifting a large shell in the air with their tails (fig. 26; cat. D.21). Bernini was apparently confident enough in the design that he proceeded to execute it, which proved a big miscalculation. His patron—not only the pope but also the pope's powerful sister-in-law, Olimpia Maidalchini—had Bernini remove the statue on seeing it installed.³ The rejection, which appears to have come during the late spring or early summer of 1652, sent Bernini in search of a replacement design.⁴



Fig. 214. One of the backs, with finger-smoothing strokes: note remnant of attached whiskers

That design would be the present model, which is also reflected in a drawing at Windsor Castle (fig. 27; cat. D.22). The identification is confirmed by an undated estimate, written by Bernini himself, for the new fountain's construction in which the fountain is described as "the group of two tritons and four fish." Although not obvious today, the present model did once fit this description, as discussed below. How the Pamphilj family felt about the design is clear from the fact that they sent Bernini back to the drawing board for a third time. With the pressure now truly on him, he redoubled his efforts, producing the dazzling *Moor*, which did win the Pamphiljs' approval.⁶

The compromised condition of the present model makes attribution a challenge. Many parts are missing, and the surface is obscured by heavy soiling as well as by layers of gesso and gilding. Only a few places on the model reveal Bernini's hand. One is the musculature on the back of each triton (fig. 214), which is rendered

with a sensitivity that invites comparison with the *Moor*. The muscles show a similar sense of resolution, and it is also noteworthy that, as in the *Moor*, they do not call attention to themselves. They look natural, which cannot be said of the muscles on the *Tritons with Dolphins* at the Hermitage (cat. 12). Bernini's hand can also be recognized in the comma-shaped curls on the head of the complete triton, applied as individual balls of clay and shaped with



Fig. 215. Detail of triton's face: note faint line on the forehead, above the nose

a medium oval-tip tool and a small-tooth tool (fig. 215). In appearance and technique, they are highly similar to those given to the *Model for the Lion on the Four Rivers Fountain* (fig. 198). The face is equally characteristic of Bernini. It was executed in a direct, abbreviated manner, with quick jabs of an oval-tip tool used to carve out the mouth, render the eyes, form the upturned nose, and suggest the facial hair. The level of finish is in Bernini's midrange, which is typical of many of his larger models, such as the *Daniel in the Lions' Den* at the Vatican (cat. 25).

The composition, with its many intertwined parts, is complex and demanded some creativity in its assembly. Many of the techniques are typical of Bernini, including the decision to carry out the construction in a completely additive way. Like so many of his other models, the present one began as a single column of clay, probably wedged. This formed the lower half of the model and served as a central core. The tritons and the dolphins were added individually, as

can be seen where portions of them have broken away, revealing finger and tool marks on the underlying clay. Bernini began each triton with a smaller core of clay for the torso, around which he wrapped sheets of clay like skin. He then shaped and smoothed the musculature with tools and fingers. Creating the tritons as separate entities gave Bernini a degree of flexibility in positioning them: he could try out different orientations until he found one that expressed the right mixture of power and sensuousness.

The heads came next, then the dolphins, then the arms. The heads were attached

separately and modeled in place. Bernini formed the dolphins from rolls of clay, attaching their heads and tails together at the center, like spokes on a wheel (fig. 216). Where the missing dolphin's head has broken off, the oval break surface reveals the process (see plate 11): the break is relatively flat because it represents the point of attachment, where Bernini had added the dolphins' heads. This is additionally proven by the



Fig. 216. View from top of assembled elements: head, dolphin, hair, arms

fingerprints on the underlying clay, which would not be there if the break had interrupted a solid, rolled length of clay. Once the dolphins had been arranged, the arms could be formed and set into place. Gaps under the right and left arms of the complete triton indicate that they were rolled and attached rather than modeled out of existing clay. In shaping and finishing the arms, Bernini followed habit, pushing the clay around their circumferences.

Among the finishing steps was to decorate the recesses next to each triton's head with a foliate pattern. Bernini picked out the individual leaves with an oval-tip tool. At that

point, he might also have attended to the tritons' tails (if he had not done so already), giving them their beautiful striated texturing, accomplished with oval-tip and toothed tools (fig. 217). As the model approached completion, the backs of the tritons were smoothed. That the smoothing came at a late stage in the modeling is demonstrated by the way the finger strokes move around the remnant of broken clay found on the left shoulder blade of the damaged triton (see fig. 214). The protuberance marks where the whiskers of one of the dolphins originally attached to the triton's back. In navigating around the whiskers, Bernini was unable to smooth in a single



Fig. 217. Tritons' entwined tails modeled with oval-tip and toothed tools

direction, which explains why the smoothing given to the upper back is somewhat more random than seen on the *Moor*, where there were no obstacles to interrupt the process.

That the present model deserves to be considered Bernini's autograph contribution to the failed dolphins and tritons phase of the Fountain of the Moor is also supported by the measuring marks on the surface. There is a definite group of struck marks on the outside left shoulder of the damaged triton, and a second group of more rounded marks above the right elbow of the complete triton. These are logical places to find such marks on a measured model, and there were doubtless more; some may be hidden under gesso, while others are probably lost with missing parts. The model also bears several faint incised lines that could be tied to measurement or layout. One appears down the center of the surviving face, while several are found on the outside of the right bicep of the complete triton. Since the model failed to generate a commission for a marble, the purpose of the measuring is not clear. Perhaps whoever made the *Tritons with Dolphins* at the Hermitage copied it from the present one, taking measurements in the process.

At some point after firing, the present model was gilded with gold leaf that appears to have been attached with an oil size over a thin layer of gesso. It is unlikely that the gilding is original to the model; since it can be seen over a pink material used to fill cracks, it must date to a later restoration. The remaining dolphin shows no traces of gilding. Its surface ranges in color from dark gray to brown, which could be oxidized silver leaf or bronze-colored paint.

Assistant of Gian Lorenzo Bernini

12 · Tritons with Dolphins

ca. 1653. Terracotta, H. 181/8 in. (46 cm)

The State Hermitage Museum, Saint Petersburg (602)



INSCRIPTIONS, MARKS, AND STAMPS: H.ck. 606 written in white paint on edge of base; illegible Cyrillic written in pencil on top of one corner of the base

PROVENANCE: Filippo Farsetti, Venice (d. 1774); his cousin, Daniele Farsetti, Venice (d. 1787); his son, Anton Francesco Farsetti, Venice (1787–1799); gift to Czar Paul I of Russia, Saint Petersburg (1799); placed on deposit at the Academy of Fine Arts, Saint Petersburg (until 1919; transferred to the State Hermitage Museum, Saint Petersburg)

LITERATURE: Venice 1788, pp. 21, 22; Petrov 1864, pp. 600, 603; Treu 1871, p. 42; Androsov 1989, p. 69; Androsov 1990, p. 9; Rome 1999b, p. 382

EXHIBITIONS: Leningrad 1989, no. 16; Rome and Venice 1991-92, no. 17; Chicago, Philadelphia, and Washington, D.C. 1998-99, no. 14; Massa 2005, no. 5

CONDITION: Three of the dolphin heads and four of the raised dolphin tail fins are missing. One dolphin is missing a portion of its head, and one triton a set of its tail fins. There are repaired joins and filled shrinkage cracks throughout. Two corners of the base were broken off and reattached with plaster.

THIS MODEL MAY BE HIGHLY SIMILAR in composition to the previous model, but they differ substantially in their modeling. The present model is far cruder—and not in a way that suggests it could have been Bernini's initial sketch for the design. The modeling lacks his customary sophistication, as illustrated by the backs of the two tritons. Modeled in a slack, tentative way, the muscles are doughy rather than taut (fig. 218). The backs are also unlike Bernini in the rigid spine given to the straight-haired triton (unlike the version in Berlin,

here the spine does not conform to the bend of the body; compare fig. 214) and in the unsightly gouge used to reinforce the left shoulder blade of the curly-haired triton (and also his right buttock). Bernini was not one to draw his muscles in clay, preferring to shape and smooth them, even when working quickly. The faces of the tritons are more successful, though still far from Bernini (fig. 219). Although modeled with an oval-tip tool in a quick style that mirrors his, they look unnecessarily labored, as though deliberately sketchy rather than effortlessly so. That other details are equally far from Bernini is underscored by comparison with the model in Berlin. The vegetation and the dolphin fins and bodies, for example, show different sculptural vocabularies.

The present model comes from the collection of Filippo Farsetti, who remains one of the greatest collectors ever of seventeenth-century terracottas. Although a resident of Venice, Farsetti acquired most of his terracottas in Rome, making trips during the 1750s and 1760s.¹ He was interested not only in authentic preparatory models—including several by Bernini (see cats. 8, 9, 23, and 44)—but also in copies of famous sculptures, ancient and modern, that he could take back to Venice to show to aspiring artists. While his views on the present model are unrecorded, we can safely assume he bought it as a preparatory model, not as



Fig. 218. Back of straight-haired triton, with crudely modeled musculature

a copy. There were no finished sculptures of which it could be a copy, something he would have known. This point helps to elucidate when the model was made and why. Whoever created it can have done so only by looking at one or more of the preparatory designs that Bernini had prepared for his failed Tritons with Dolphins, the fountain described in the previous entry. This is much more likely to have happened around 1653, when the design was fresh and under discussion, than years or decades later, when it had lost its novelty.

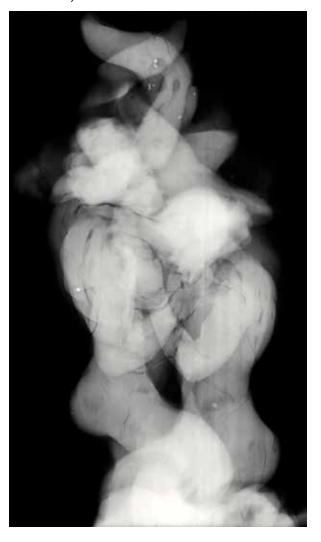


Fig. 219. Face of straight-haired triton: note the crude modeling of the face and of the hand gripping the vegetation

Fig. 220. X-radiograph of *Tritons with Dolphins*

Most probably, the model is by an assistant who, on seeing Bernini's original model (the one now in Berlin), decided to copy it. The assistant may even have tried to transfer the design through measuring, as suggested in the previous entry.

The present model was constructed in the same basic fashion as the version in Berlin, which might be expected of a workshop copy. The principal difference concerns the formation of the base. The present model sits on a square base surmounted by a low cylinder. Those two shapes were cut from a sheet of clay and assembled on a piece of paper to prevent adhesion to the work surface; the wrinkled texture of the paper can be observed on the bottom. From there, assembly proceeded for the most part according to the description provided in the previous entry for the model in Berlin. With both models, the torsos of the figures were formed of a central clay core to which pieces of clay were added in layers (fig. 220). The arms, the heads, and the dolphin tails and bodies were shaped separately (sometimes rolled) and attached. There are also a few changes from the model in Berlin: the limbs were not smoothed around their forms, which is uncharacteristic of Bernini, and there was no brush smoothing.

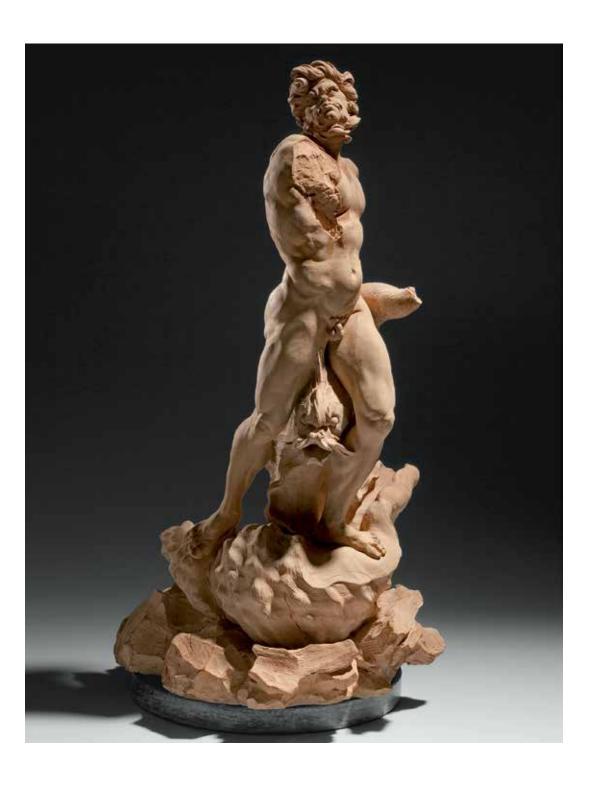


Gian Lorenzo Bernini

13 · Model for the Fountain of the Moor

1653. Terracotta, $31\% \times 16\% \times 16\%$ in. (80.5 × 42.5 × 41.9 cm)

Kimbell Art Museum, Fort Worth (AP 2003.01)



PROVENANCE: Private collection, Europe; (sale, Sotheby's, London, July 9, 2002, lot 54); [Salander-O'Reilly Galleries, New York]; purchased by Kimbell Art Foundation, Fort Worth (2003)

LITERATURE: Avery 2002–3; Sigel 2002–3; Weil, M. 2002–3; Montanari 2004c, pp. 176, 178, fig. 7; Montanari 2005, p. 272

EXHIBITIONS: New York 2002-3; Cambridge, Mass., 2007

CONDITION: Both arms of the figure, the dolphin's tail, smaller areas of the shell, and parts of the rocky base are missing. A section at the proper front right of the base is a restored loss, as is an area of the figure's upper right back. A weathered, insoluble resin known as soluble nylon has darkened the surface in some areas.

THE SAGA OF BERNINI'S ATTEMPTS to design a suitable fountain for the southern end of Piazza Navona (see cat. 11) found triumphant resolution in early 1653 with this, his largest and most highly finished terracotta model known today. Having failed to impress his patrons, the Pamphilj family, twice before—first with his Fountain of the Snail, then with his model of tritons and dolphins in Berlin (cat. 11)—Bernini faced an embarrassing situation.¹ He could not allow the Piazza Navona commission to go to a rival, such as Francesco Borromini (a Pamphilj favorite), and so his next design had to dazzle. He proposed a striding, muscular sea deity who grapples with a dolphin and balances on an overlarge conch, and he determined that his model must be equally powerful, both in scale and in technical bravura.

Likely weighing on Bernini during the planning of the model were his experiences with the Pamphilj regarding his earlier Fountain of the Four Rivers (see cat. 7). According to various sources, he had won the commission by presenting one or more members of the family with an astonishing model in silver.2 If the stories are true, Bernini is likely to have concluded that the Pamphilj were unusually receptive to beautiful large models and that to reingratiate himself with them he must cater to their tastes. In the case of the present model, however, he seems to have preferred that his raw abilities as modeler take center stage. There is no evidence that the model was ever cast, covered in gold leaf or silver foil, or painted.3 At its unveiling, the model was evidently well received, for Bernini was awarded the commission on or shortly before May 2, 1653.4 The model must date to earlier that spring; the fountain was completed two years later (fig. 221).5

Fig. 221. Giovanni Antonio Mari, after a design by Gian Lorenzo Bernini, Fountain of the Moor, 1653–55. Marble, over lifesize. Piazza Navona, Rome



The nickname "the Moor" was attached to the fountain later, inspired by the exotic features of the sea deity's face.

In a letter to the papal treasurer regarding payments for the finished fountain, Bernini wrote that it conformed to "the model made by me." That this can only be the present model, and that Bernini was being entirely truthful about his authorship of it, becomes clear on analysis of style and technique. First, the model cannot be a copy after the finished foun-

tain because the terracotta is more complex. This is particularly true of the base: the model incorporates a mass of rocks beneath the conch that gives the composition an energetic upward thrust. By contrast, in the finished fountain the conch rests like a boat on the placid waters of the basin. What prompted the change is unknown, but it must have been at Bernini's instigation, as he is unlikely to have allowed the assistant chosen to carve the fountain, Giovanni Antonio Mari, to eliminate so prominent a feature on his own. Mari can be credited with other changes, however-albeit unintended ones. The model is superior to the finished fountain in many subtle ways that expose Mari's weaknesses as a carver. The musculature is more generic on the finished fountain, the sinews less taut, the face not as expressive. In the model, Bernini was characteristically sensitive to how real muscles look when flexed and forced to bear great weight, and he paid similar attention to the anatomy of the face, which bursts with life thanks to details such as the furrowed brow, flared nostrils, and lively hair (fig. 222). Other parts of the model are equally astounding, including the clenched toes, which struggle to gain purchase on the slippery shell, and the right heel, which is subtly lifted to suggest movement (fig. 223). The lifted heel, which came to light only during the recent restoration (fig. 87), is a feature common to Bernini,

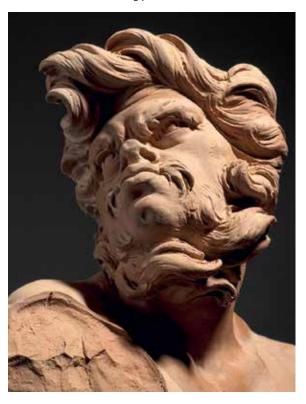


Fig. 222. Detail of face

Fig. 223. Lifted right heel and clenched toes



seen also in his *David* and *Pluto and Proserpina* (figs. 2 and 14). Tellingly, in the finished fountain, Mari ignored the detail, carving a flat-footed Moor.

The intelligence that pervades the model extends to the surface, which is masterfully rendered and incorporates a wide range of textures. The conch and the rocks are much more crudely modeled than the figure and the fish, creating a textural contrast that directs the viewer's attention toward the centerpiece of the composition—the sumptuous figure. Not only did Bernini have a highly calibrated sense of when to loosen or tighten his modeling style for visual effect, but he was also a master at creating textures appropriate to the substance being represented. For the flesh of the figure, he used a stiff brush to produce a pattern of parallel striations around the curved surfaces (fig. 224). By going in this direction—rather than straight up and down the length of the legs—Bernini accentuated



Fig. 224. Left leg with directional, cross-hatched brushstrokes

the rounded forms, creating an impression of softness. He also allowed the directional brushstrokes to overlap at their ends, resulting in a cross-hatched pattern that was another way of avoiding the lifeless, overly smoothed surfaces characteristic of lesser sculptors. For the conch, he took his cues from nature, using toothed and oval-tip tools to impart the rippling texture found on real shells. The skin of the dolphin demanded a different approach, and he applied a pattern of repeating semicircular lines for scales (fig. 225). These were executed with a pointed instrument and fairly rapidly, as indicated by the raised, rough edges of the lines and the displaced clay at the ends.



Fig. 225. Scales of fish, with raised clay at the end of each stroke, not smoothed

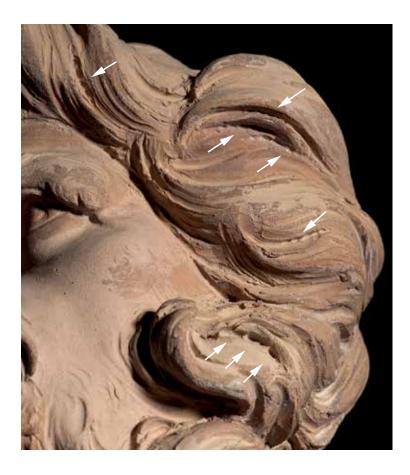


Fig. 226. Series of holes impressed in the curls of hair

The effect is to give the scales added freshness. A lesser sculptor might have thought the goal was tidiness and smoothed the raised edges away.

However crisply the scales are rendered, they would not have been beyond the capabilities of a talented assistant. This is not true of the directional brushstrokes, which are extraordinarily deft and must reflect Bernini's personal touch, a touch also evident elsewhere on the model. On the face, after bringing the features into relief and giving them an initial brush smoothing, he continued where most sculptors might stop, working back into the moustache and the beard with blunt and oval-tip modeling tools that he used like drawing instruments (see figs. 136 and 222). The calligraphy of these lines is impressive, as are the bold, direct tool marks in the hair (fig. 76). Rather than smoothing the hair, he again let the sharp edges and tiny crumbs of clay kicked up by his modeling tools remain. Light reflecting off the crumbs gives the surface an added freshness, as with the dolphin's scales.

Closer examination of the hair reveals a surprising feature: at least six groups of tightly aligned holes, or punch marks, are set within the curls (fig. 226). Each row of holes was formed either with a single stamp from a toothed tool or with multiple impressions from a small oval-tipped tool. The technique—which also appears elsewhere on the statue, as in the folds of skin around the mouth of the dolphin (fig. 227)—must have been deliberate. The holes enliven the surface and provide additional contrast. This is also how they function



Fig. 227. Holes stamped in the dolphin's whiskers

in Bernini's carved works, where such holes appear regularly and most often in the hair. A good example is his *Bust of Louis XIV*, which features multiple instances of the piercing technique (fig. 67). In carving a set of curls, Bernini would normally drill a line of tightly spaced holes, then excavate any marble remaining between the holes in order to turn them into a channel. Sometimes, however, he clearly preferred to leave the holes intact, and the best explanation for his choice is that he appreciated the way that light playing off the punctuated pattern helped make carved hair look more like real hair—at least when seen at a distance. That Bernini developed an analogue in clay for a favorite technique in marble is hardly surprising. Nor is it surprising that the technique can be located on other terracottas in his oeuvre, including one of the *Angels with the Superscription* at Harvard (fig. 369). This suggests that the technique might be useful in assigning models to Bernini. Even though other sculptors might have noticed it on his marbles and attempted to reproduce it in theirs, they are unlikely to have internalized it to the point that it became part of how they modeled in clay.

Even though the *Moor* seems totally autograph in terms of design and surface, questions do remain as to the extent to which Bernini was involved in its basic construction. The model took some time to build up, and he may have preferred to guide the initial assembly via drawings or verbal instructions rather than tackling it himself. As we have argued with other models (see cats. 15 and 27), he appears to have been comfortable letting assistants work up models (partially or in full) that were to bear his name. Why not here—at least at the beginning? The possibility cannot be excluded but seems extremely remote, as virtually every stage of the construction, from the initial massing on, is characteristic of Bernini.



Fig. 228. X-radiograph of *Model for the Fountain of the Moor*: note hollowed head and torso, solid shell and base

The base of the model was formed first, with handfuls of clay quickly mashed together. This is clear from the network of shrinkage cracks visible on the rocks and the shell. For the dolphin and the central figure, the clay was compacted more carefully, to avoid trapped air that might lead to damage during firing. Shrinkage cracks between the dolphin and the thigh of the figure indicate that the two parts were modeled separately and assembled. The limbs also appear to have been added separately to the torso, as was Bernini's frequent practice. Where the right arm has broken off, the resulting fracture plane is relatively clean and flat, which is evidence that the arm had been attached at that spot. The break also provides a cross-section view of the clay. The outer layer is more compacted from shaping and smoothing, and it forms a dense skin. X-radiographs reveal that, while the base and the shell appear to be solid, the torso and the head of the figure were carefully hollowed (figs. 100 and 228). The head was scooped out through a small hole on top, later closed, while the torso was excavated through an opening cut into the back at the right shoulder. The edges of the opening were later scored to ensure proper adhesion for a clay plug (now lost). That Bernini took

time to hollow the figure is another indication that the model was slated for presentation. He did not want unsightly cracks anywhere in his delicately modeled figure. His attitudes toward preservation were more relaxed when the model was to be seen only by him or his assistants. All his sketch models are solid, which is also how he left this base, so he seems not to have minded if cracks formed amid the rocks.

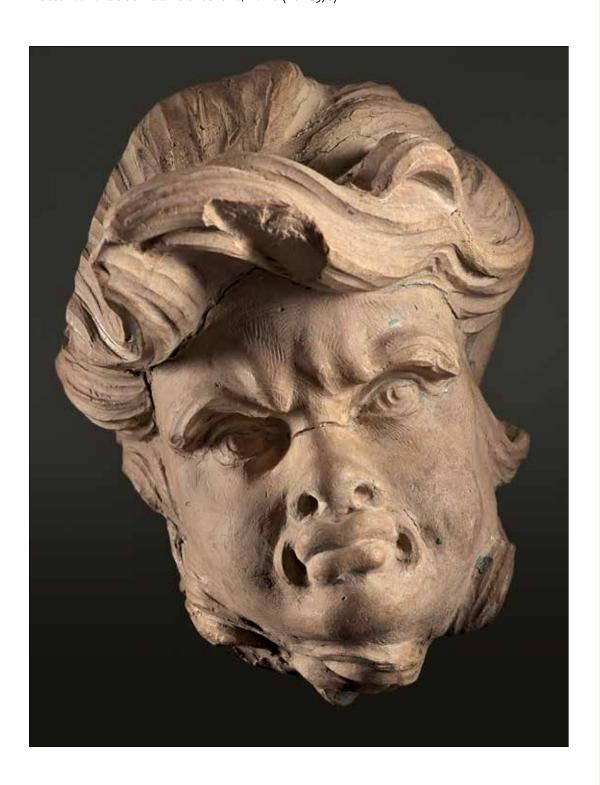
The model bears no measuring marks, a further sign that Bernini intended it to serve one principal function: presentation model. If the model was returned to Bernini after fulfilling its initial purpose, it may have been given to Mari for reference during carving.

Associate of Gian Lorenzo Bernini (Giovanni Antonio Mari?) or later copyist

14 · Head of the Moor

ca. 1653 or later. Terracotta, $4\frac{1}{2} \times 4\frac{1}{8} \times 3\frac{3}{8}$ in. (11.5 × 10.5 × 8.5 cm)

Museo Nazionale del Palazzo di Venezia, Rome (PV 10378)



PROVENANCE: Evan Gorga (until 1948; his gift to the Museo Nazionale del Palazzo di Venezia, Rome)

LITERATURE: Brinckmann 1923–24, vol. 1, p. 57; Mariani 1929; Riccoboni 1942, p. 161; Hermanin 1948, p. 279; Santangelo, ed. 1954, p. 92; Lavin, I. 1955, p. 103; Wittkower 1955, pp. 215–16; Wittkower 1966, p. 226; D'Onofrio 1977, p. 505; Schlegel 1978, p. 11; Wittkower et al. 1981, pp. 226-27; Wittkower et al. 1997, p. 273; Angelini and Montanari 1998, p. 382 n. 120; Ferrari and Papaldo 1999, p. 503; Weil, M. 2002-3, pp. 45-46; Mancini, M. 2004, pp. 288, 298; Montanari 2004a, pp. 176, 178; Carolina Vigliarolo in Barberini and Selene Sconci 2009, p. 86; Giometti 2011, pp. 51-52

EXHIBITIONS: Rome 1986–87, no. 14; Rome 1991–92, p. 40; Rome 1999b, no. 120; Madrid and Aranjuez 2003–4, no. 208

CONDITION: Traces of green paint remain on the surface, mainly in interstices. There are several large firing cracks in the hair and one across the nose. A section of the hair above the right ear is missing, with smaller chip losses at the front. There are five modern drill holes under the neck at the break, likely for sampling and mounting purposes.



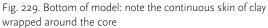




Fig. 230. Loss at back of head, with fingerprints left during assembly still visible on core

SINCE FIRST BEING PUBLISHED in 1923 by A. E. Brinckmann, this model has been consistently attributed to Bernini, identified as an autograph head study for the sea deity adorning the Fountain of the Moor (cat. 13). Analysis of style and technique suggests otherwise. The model is most probably a fragment of a complete figure that was produced as a reduced copy after the fountain was finished. If, instead, it was preparatory, one possibility is that it was by Giovanni Antonio Mari, the assistant hired to carve the fountain.

The first step in removing the model from Bernini's oeuvre is to recognize that it is inferior in all respects to the head on his *Model for the Fountain of the Moor* at the Kimbell. The expression is much weaker, as is the quality of the modeling. The details are not only more schematic but also lack the same crispness of execution. An instructive feature is the hair, which is rendered in a bland, linear style with an oval-tip tool. On the Kimbell *Moor*, Bernini employed more diverse tools in a greater variety of ways, and the results are correspondingly more interesting. Gould we possibly be dealing with just a rough sketch, which might explain the simplification of forms? If so, it would be a very prosaic one by Bernini's standards. Consider any of the heads on his sketch models for the Ponte Sant'Angelo (cats. 36–44). They display considerably more character, even though much smaller and more schematic in their execution. Finally, if Bernini was truly interested in studying the facial expression of the figure, why did he not choose a larger format that would have allowed him to refine the subtleties with greater ease? We might expect something on the order of the *Head of Saint Jerome* (cat. 30), an undisputed head study by the master, which approaches lifesize.

The small size of the model leads us in another direction. First, it is important to recognize that the head of the Kimbell *Moor* is almost identical in size to the present one. If the present head were affixed to an appropriately scaled body, the resulting figure would be as large as the Kimbell *Moor*. This is doubtless how the head should be imagined, joined

to a full figure—not as an independent head study. Among the indications are the tilt of the head and the twist of the neck, which convey a larger bodily context, especially since they repeat the posture of the figure on the finished fountain. Second, at the bottom, where the neck has fractured, the cross section reveals a solid interior core wrapped in a skin of clay (fig. 229). This was a method of construction typical of full figures, as demonstrated by the Kimbell *Moor*: an X-radiograph of it shows a central core of clay running from the torso up into the head (fig. 228). Had the *Head of the Moor* been initiated as a simple head study, it almost certainly would have been hollowed from the back or up from the neck. The core extends all the way to the top of the head, where it was enlarged with strips and pieces of clay for the hair and the dome of the head. The edges of the applied sheets are visible where a section of the hair has separated at the top right side of the head. The separation also permits a view of the underlying core, where fingerprints can still be seen (fig. 230).

Recognizing that the head is a fragment from a full figure does not alter the view that it is not by Bernini. Beyond its inferior quality relative to the Kimbell *Moor*, two details make it exceedingly unlikely that he was the author. The first is that the irises of both eyes are rendered as spirals (fig. 231), a device not found elsewhere in Bernini's oeuvre. Second, the head has no left ear. This would not be an issue if there were an appropriate mass of hair covering it, as on the right side, but all that covers the left ear is a single curling sideburn that looks more like an afterthought than an intelligent plan for dealing with the ear. On



Fig. 231. Detail of face: note paint remnants above the eyebrow, cross-hatched rasp marks, and spiral iris

the Kimbell *Moor*, Bernini took exceptional pains to render the right ear, while hiding the left one beneath a mass of wavy hair.

Who made the head, then, if not Bernini, and when? There are several known reductions of the finished *Moor*, all appearing to be early. These include a bronze at the Museo Schifanoia, Ferrara; another bronze formerly in the Rosenberg collection, Vienna; a terracotta that recently passed through Arnoldi-Livie Fine Art Dealers, Munich; a terracotta (now lost) that entered the collection of the Accademia di San Luca, Rome, in 1748; and a silver version (now lost) recorded in the collection of King Louis XIV in 1684.¹ The present head is almost certainly another of these copies. At some point it was painted to look like a bronze or a gilded bronze. Remnants of paint—now greenish in color, likely from corrosion of brass- or copper-based pigments—are visible in many areas, such as above the left eyebrow (see fig. 231). As discussed elsewhere (see Tomaso Montanari's essay in this volume), many of the first terracottas to be collected in Rome during the seventeenth century were small replicas of famous sculptures. These were often painted to resemble bronze or gilded bronze.

The likelihood that the present model was part of a copy does not exclude the possibility that it originated within Bernini's workshop near the time of the finished fountain. This would make it like the Habakkuk and the Angel (cat. 26), which, as argued in that catalogue entry, is a copy done at Bernini's instigation by an assistant, possibly Ercole Ferrata. With no certain provenance for the *Head of the Moor* before 1923, however, and with nothing connecting it to a specific hand, attributing it is trickier. One possibility that would keep it within the workshop is that it is by Mari, the sculptor hired by Bernini to execute the fountain. If Bernini knew he would have to surrender his original model (the Kimbell *Moor*) to the Pamphilj, he may have instructed Mari to make a copy that could be used for reference during carving. This may explain a curious feature of the model. After it was dry, but before firing, much of the face—such as the forehead—was reworked with a small rasp (see fig. 231). The rasping was done in short, controlled, cross-hatched strokes, a technique familiar to any experienced marble carver. That the marks were made in dry clay, before firing, is indicated by their character. In fired clay, the rasp would not have bitten as deeply, and the marks would likely have displayed a slight sheen. If they had been made in moist clay (where a rasp would have been ineffective), a small-tooth tool would have been used, leaving deeper marks as well as clay crumbs—none of which are seen here. Knowing when the rasping was done helps suggest why it might have been done. If the rasping came after firing, we would be less sure it had any connection with Bernini. With its coming before firing, however, it seems more likely to be related to some process of refining the flesh areas, which invites the following question: might Bernini have been editing Mari's model? This is conceivable, although we have no good way to confirm Mari's modeling style. Only one model has been plausibly assigned to him—a figure in the Bode-Museum, Berlin, that relates to a statue Mari carved for the colonnade of Saint Peter's. It shows only generic similarities with the present head. Moreover, if Mari did use the present model during carving, he was not entirely faithful to it. The carved head represents an improvement over it.

Attributed to Antonio Raggi (Italian, 1624–1686)

15 · Sea Deity with Dolphin

ca. 1652–53. Terracotta, $26\% \times 18\% \times 14\%$ in. (67.5 × 46 × 36 cm)

Collection of Gerolamo and Roberta Etro, Milan



INSCRIPTIONS, MARKS, AND STAMPS: Round paper label on lower back with *Collezione / Etro* printed above and below *SA / 458* written in black ink

PROVENANCE: [Moatti S.A., Paris, 2004]; Gerolamo and Roberta Etro, Milan

LITERATURE: Bacchi 2004, pp. 50, 53

CONDITION: The figure's right foot and ankle are missing, as is the dolphin's tail. There are remnants of a flaking dark brown coating in interstices and a transparent coating on some surfaces. Some areas of the surface show spalling.

THIS BEAUTIFULLY MODELED SEA DEITY—splayed over an outcropping of rocks, with a writhing dolphin in its muscular arms—was preparatory for the fountain occupying the central niche in the main courtyard of the Palazzo Ducale at Sassuolo (fig. 232). The property was owned by the Duke of Modena, Francesco I d'Este, a great admirer and important client of Bernini. The first work of art the duke commissioned from him was the sensational portrait bust now in the Galleria Estense, Modena. Delivered in November 1651, it immediately inspired the duke to think of new projects for Bernini, and the ducal palaces at Modena and nearby Sassuolo furnished the answer. As revealed in a letter from the duke's agent in Rome, Francesco Gualengo, dated August 14, 1652, Bernini had been asked some months prior to suggest improvements to the palaces.¹ The letter makes clear what Bernini had in mind: fountains, including the one at Sassuolo of a sea deity with a dolphin.

The idea took hold quickly, and within weeks of the letter, Bernini was sending off designs to Modena. These were not only for the Sea Deity with Dolphin Fountain but also for two others that were to go in the same courtyard. Among the various drawings for the

fountains that survive, two can be connected with the Sea Deity with Dolphin, either one of which (or both) could have been sent to the duke. One shows Bernini at his best, a sublime sketch in black chalk at the J. Paul Getty Museum, Los Angeles (fig. 22; cat. D.20). It provides indisputable proof that the design for the fountain originated with Bernini. The other, in the Victoria and Albert Museum, London, is more finished and can be attributed to an assistant (fig. 28).2 It gives a more complete idea of the setting for the fountain and must have been intended for presentation.

Whichever drawings the duke saw, he appears to have liked them. The next phase of negotiations centered on how the fountains were to be carved. Another adviser, Geminiano Poggi, wrote to the duke on November 30, 1652, that he should not count on Bernini, who had complained of being too old and too busy to leave Rome.³ A week or so later, Poggi came back with better news, that Bernini

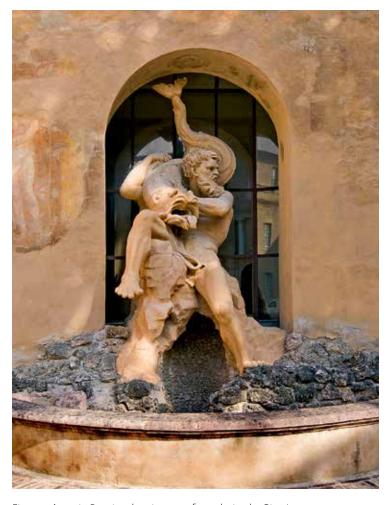
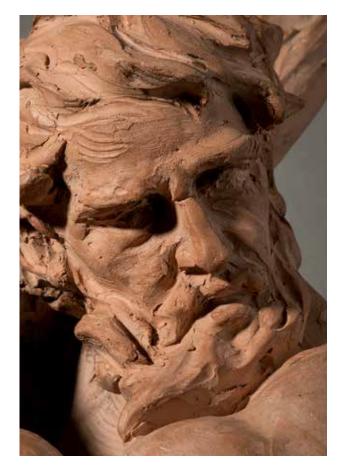
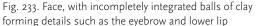


Fig. 232. Antonio Raggi and assistants, after a design by Gian Lorenzo Bernini, Sea Deity with Dolphin Fountain, 1653. Stucco and stone, Palazzo Ducale, Sassuolo





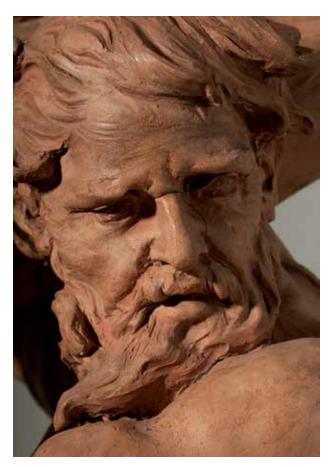


Fig. 234. Face of Modena model: note greater refinement in comparison with fig. 233 and point marks below the lower lip

was happy to send an assistant and that he had provided four names: Antonio Raggi, Giacomo Antonio Fancelli, Cosimo Fancelli, and Claude Poussin. Poggi relates that Bernini's preference was Raggi, whom he thought was the best. A crucial detail then emerges in the letter: according to Poggi, if Raggi were selected for the commission, Bernini promised that all the models would be executed in Rome, as though suggesting he would be doing them himself. By December, Raggi had been selected. Did Bernini undertake the models?

To judge by the present model, he did not. He delegated the models to someone else, and this must have been Raggi. Confirmation lies in several technical details that are inconsistent with Bernini. Many of the finer features on the model—such as the hands and the face—were built up of extremely small balls and strips of clay that were pressed into place and integrated with oval-tip tools. Many of these additions were not fully integrated or smoothed, and their edges show it, as with the right eyebrow and lower lip (fig. 233) and the tips and knuckles of the fingers (fig. 235). Bernini used different methods when modeling hands, feet, and faces. Another difference from Bernini is that the limbs of this model were shaped and smoothed up and down their lengths, in contrast to his habit of smoothing around circumferences.

The model also departs from Bernini in the treatment of the rocks, which were modeled first with tools, then with fingers. Afterward, a toothed tool was used very sparingly to provide some texture. Nonetheless, a sense of smoothness predominates, and the model suffers, especially in the way the smooth legs sink into the rocks when viewed from afar. Bernini was highly attuned to issues of legibility, making regular use of contrasting textures to draw attention to the more important parts of his compositions. The *Model for the Fountain of the Moor* provides one of the clearest demonstrations of his approach, with the roughly toothed rocks setting off the sumptuously smoothed figure (cat. 13). The *Moor* also makes the point that Bernini thought carefully about matching textures to the materials being depicted. The rocks on the *Moor*, with their dynamic texturing, are palpably convincing. Those on the present model look inert, more soft putty than fractured stone.

With the commission for the fountain going to Raggi, speculation regarding the author of the model must center on him. Verification is difficult, however, as no models can be reliably ascribed to Raggi, even though he is richly documented as a modeler and clearly one of the best in Rome.⁶ The attribution must therefore stand on the logic that Bernini is unlikely to have delegated the model to some other assistant when the commission was Raggi's. What is more, the project seems to have been destined for him from the start. In designing the Sea Deity with Dolphin Fountain, Bernini selected a composition that Raggi

knew well: it is a variation on the Danube, carved by Raggi just a few years earlier for the Fountain of the Four Rivers.

The present model shines a particularly bright light on Bernini's workshop practices. It suggests that he expected his best assistants to be able to look at one of his drawings (or possibly a bozzetto) and to work up a model based on it—a model that Bernini could then pass off to clients as his own. The ruse was effective because the modelers in his employ—such as Raggi—were phenomenal talents in their own right, as the present model demonstrates. It is a work of enormous power and technical brilliance, and those who might mistake it as Bernini's are easily forgiven.

The model illuminates another aspect of the way that Bernini and other seventeenth-century sculptors used models to facilitate their work. It is one of two nearly identical models that survive for the Sea Deity with Dolphin Fountain. The



Fig. 235. Fingers with the head of the dolphin, showing tiny balls of clay that were not completely integrated



Fig. 236. Attributed to Antonio Raggi, *Sea Deity* with Dolphin, ca. 1652–53. Terracotta, H. 29½ in. (75 cm). Galleria Estense, Modena (4191)

other is in the Galleria Estense, Modena (fig. 236). Careful comparison reveals that they are both by the same hand—thus Raggi's. What makes them instructive are their differences. Both should be considered *modelli*, but the present model is a lot sketchier than the one in Modena. The forms (especially the more intricate ones) were not smoothed as extensively here, retaining all the tool and finger marks from their execution. This becomes clearest in the faces (compare figs. 233 and 234). To look at the Milan model's face is like going back in time and seeing what the version in Modena looked like prior to smoothing. Curiously, the present model appears to have been assembled more carefully than the version in Modena, with fewer shrinkage cracks and related damage. The opposite might have been expected,

that greater care would have been taken in forming the more finished model in Modena. But what if that model was the first in the series? In that case, Raggi could have drawn on his experiences in forming it, assembling the present model more efficiently and more skillfully. Of course, this would mean that the sketchier model is the later one, which runs counter to intuition. Might Raggi have prepared the present model first and shown it to Bernini, at which point the master might have requested that he make a more finished version for the duke? There is no sure answer.

Even the fact that one model was extensively measured while the other was barely measured does not resolve the question of order. The present model bears only a few scattered measuring marks, while the version in Modena bears more than a dozen, with many more likely effaced. Was the other model measured to make the present model, or did the opposite occur: the present model measured to make the other one, and then most of the marks smoothed away? A third possibility, and perhaps the most likely, is that the measuring marks on the version in Modena came from the process of transferring the design during the execution of the stone and stucco fountain. This would suggest that it came after the present model and was created once Raggi had arrived in Modena; he is unlikely to have traveled all the way from Rome with an unfired model. In this case, the present model may have been sent in advance as a presentation model for the duke. Other scenarios can be imagined, however. When Raggi accepted the commission, he was still in Rome. The duke might have demanded a presentation model for the Sea Deity with Dolphin Fountain immediately, which could be the model now in Modena. Before entrusting it to the long journey to the duke, Raggi could have made the present model as an insurance policy against loss. Alternatively, he might have assumed that he would be carving the fountain in Rome, in which case he is likely to have known that he would never see his presentation model again and that he must copy it for use during final execution.8

As indicated, Raggi did go to Modena, arriving by the spring of 1653.9 He may have made both models in Modena—one for the duke, one for assistants—but neither model appears in any ducal inventory, which complicates the argument that the duke was the recipient. Nothing is known about the provenance of the present model before 2004. As for the version in Modena, a first attempt to acquire it was made in 1914 by Giulio Bariola, director of the Galleria Estense, from the Milanese collector and architect Luca Beltrami. In 1920 Bariola succeeded in arranging for the model to be donated to the museum by the Cavaliere Francesco Baggi of Modena. According to Bariola's notes, the model had come to Beltrami from the Chiericati family of Vicenza, who had found it at Sassuolo.



III · Chapels and Saints

With Pope Urban VIII's death in 1644, Bernini's professional life changed. Urban had treated Bernini as *his* artist, keeping him on a short tether. Now, with a new pope in place—and one less favorable toward him—Bernini could invest more of his energies in private commissions. The opportunities were plentiful. Bernini had become a celebrity, and the Roman elite clamored for his creations. He was open to all types of commissions, but one in particular appears to have excited his imagination: the private chapel, where he could combine painting, sculpture, and architecture into a unified whole.

In 1647 the Venetian cardinal Federico Gornaro approached Bernini about just such a project. Cornaro had bought the rights to a chapel in Santa Maria della Vittoria, in Rome, and wanted Bernini to decorate it. The result is a landmark in the history of art. Over the altar, Bernini placed his spellbinding *Saint Teresa in Ecstasy*, as powerful a sculpture as ever issued from his chisel (fig. 237). The saint is depicted during a mystical vision she claimed to have had, in which an angel pierced her with a golden arrow, infusing her with the divine. That sense of the divine is apparent to any visitor to the chapel. The vaults appear to open to the heavens behind stucco angels and painted clouds; light from a hidden window casts the sculpture in a celestial glow; and the lateral walls are decorated with figures who appear to be reacting to the event before them, like spectators at the theater. Absorbed in the drama, the worshipper loses track of what is real and unreal.

The closest Bernini ever came to matching the intensity of the Cornaro Chapel was with the Altieri Chapel in San Francesco a Ripa. Its centerpiece was also a statue of a female in the midst of experiencing the divine, Blessed Ludovica Albertoni (fig. 255). Pope Clement X, who claimed a distant relationship to her, determined that she deserved a stately chapel to commemorate her life of charity. Bernini was given the commission in about 1671, taking the next two or three years to carve his gripping portrayal of the saint's death. Like the *Saint Teresa in Ecstasy*, it achieved instant fame. The numerous small copies, many in terracotta, that were inspired by the two statues are sometimes difficult to distinguish from Bernini's own models (see cats. 17, 18, 20, and 21).

Fig. 237. Gian Lorenzo Bernini, Saint Teresa in Ecstasy, 1647–52. Marble, lifesize. Cornaro Chapel, Santa Maria della Vittoria, Rome

Gian Lorenzo Bernini

16 · Four Members of the Cornaro Family

ca. 1647–49. Terracotta, $12\% \times 15\%$ in. (31.2 × 40 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.73)



THE CORNARO CHAPEL IN SANTA MARIA DELLA VITTORIA, Rome, holds arguably the most mesmerizing of all Bernini's religious sculptures: the *Saint Teresa in Ecstasy* (fig. 237). Resting on clouds, bathed in warm light, the saint is shown in the midst of a vision that she describes in her writings. With an angel hovering above her, she melts into spiritual rapture, pierced in the heart by divine love, represented by the golden arrow in the angel's hand. As anyone who enters the chapel quickly realizes, however, the *Teresa* is only one part of the decorations. Bernini conceived the chapel as an immersive experience, in

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 47; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, pp. 73-74; Wittkower 1955, pp. 207-9; Wittkower 1966, p. 217; Kauffmann 1970, pp. 166 n. 139, 168 n. 154; Lavin, I. 1980, vol. 1, pp. 102, 201; Wittkower et al. 1981, p. 217; Barberini 1994, pp. 130-31; Bacchi and Zanuso 1996, pl. 159; Avery 1997, p. 254, fig. 369; Wittkower et al. 1997, pp. 266-67; Napoleone 1998, pp. 177-78; Ferrari and Papaldo 1999, p. 356; Sigel 1999, pp. 62-63; Sigel and Farrell 1999, pp. 107-9; Barcham 2001, p. 366; Sigel 2006, p. 229

EXHIBITIONS: Cambridge, Mass. 1980; Princeton and other cities 1981–82 (Boston only); Cambridge, Mass. 2007

CONDITION: The relief is fractured into sixteen fragments, with losses. These losses include interior shards in the upper background, the back of the head of the left figure, the ear of the figure to his right, and a section from the raised right edge of the relief. The relief is restored and embedded in a plaster backing.

which painting, architecture, and sculpture combine to create a visually unified and stirring whole. The worshipper becomes a spectator, witness to the mystical drama above the altar. The facing reliefs on the side walls of the chapel contribute to the illusion (figs. 238 and 239). Resembling theater boxes, they are filled with onlookers—although not just any onlookers. These represent specific individuals who held special importance to the chapel's patron, Cardinal Federico Cornaro. The present model was preparatory for the left, or east, relief and provides evidence that Federico played a key role in determining not only who would be portrayed but also how.

The idea of decorating the walls of the chapel with facing reliefs of Cornaro family members—some engaged in conversation, some beholding the altar—had no direct precedent in funerary art.¹ In Federico's native Venice, tombs decorated with representations of the interred were sometimes arranged symmetrically, facing each other along the walls of a church—a type that Federico would have known from his own family tombs in San Salvatore, Venice. A key difference, however, is that the Cornaro Chapel was to be the burial site for only one individual: Federico. This suggests that the idea for the reliefs came from secular decoration. One influence to which Bernini would have been particularly susceptible is the tradition, then flourishing in Rome, of including incidental bystanders or witnesses in depictions of events. An example of special importance to the sculptor would have been



Fig. 238. Gian Lorenzo Bernini and associates, *Members* of the Cornaro Family, east wall, ca. 1649. Marble, lifesize. Cornaro Chapel, Santa Maria della Vittoria, Rome



Fig. 239. Gian Lorenzo Bernini and associates, *Members* of the Cornaro Family, west wall, ca. 1649. Marble, lifesize. Cornaro Chapel, Santa Maria della Vittoria, Rome

his own father's *Coronation of Clement VIII* in Santa Maria Maggiore, where three half-length figures stand in a balcony setting, discussing the ceremony above.²

Bernini could not have determined without Federico's input who was to be depicted in the relief and why, and as the model helps to show, Federico had a very clear plan from the beginning. Undoubtedly, though, he left it to Bernini to work out the specifics of the design—a design that had to make formal and iconographic sense in the context of the whole chapel. Of the eight men shown in the two reliefs, seven were cardinals, including Federico himself, whose portrait appears on the right-hand, or west, relief, second from the right (see fig. 239). The odd man out was Federico's father, Doge Giovanni Cornaro, who is the least prominent in the present model, placed farthest in the background and with only his face visible. He would be minimized even more in the finished relief, forced to the right edge and tucked into the small opening next to the cardinal with the book (likely Marco Cornaro), who looms over him. As William Barcham has observed, that change is persuasive evidence that Federico included the portraits primarily to advertise his distinguished cardinalate lineage.3 Although Federico did owe a debt to his father (Giovanni had resigned as doge to allow his son to become cardinal), it was Federico's ecclesiastical ancestors who, in his view, were most responsible for his professional success. They were his exemplars, and he wished them to be perpetually present at his tomb, reminders to all that he was practically fated to become the great cardinal he did.4

Ensuring that Federico's entourage of cardinals made an appropriately strong impression on visitors to the chapel fell to Bernini, who had resolved all the crucial elements of design by the time he made the present model. One key to his strategy was to present the pair closest to the chapel entrance (here, on the left) as engaged in discussion, presumably about the mystical event taking place before them—Saint Teresa's vision. A second key was to have the remaining figures look either toward the statue or toward the worshippers in the church. Bernini's intention was no doubt to use these figures to help persuade the viewer that everything around him or her was real. In the present model, the figure on the far right peers down on the *Saint Teresa* (perhaps over a book, now missing), while Federico's father looks toward the nave of the church. This echoes the arrangement on the opposite relief, where one figure (on the far left) looks toward the statue, while the one next to him glances toward the nave. Interestingly, between the present model and the finished relief, Bernini changed his initial plan of having one figure in each relief look toward the nave. In the final relief, the doge, like the young cardinal next to him, faces the altar. The reason for the change was presumably to accommodate Federico's decision to downplay his father's visibility.

The model began as a rectangular slab of clay that was probably prepared on a wooden stand, since a fragment from the original bottom, preserved from an earlier restoration, has a visible wood grain impressed into one side. Strips of clay, rectangular in section, were then added to form the raised edge on the right (fig. 92) and the lower balcony wall—and possibly also the left and top edges, now missing. Bernini appears to have focused next on sketching the low-relief architecture, using medium-tooth and oval-tip tools. Toothed tool marks from the background sketch can be seen emerging from under the modeled heads

of the central and rightmost figures. These marks, which are partially obscured by later tool marks that accompanied the attachment of the heads, imply that Bernini sketched the architecture—and possibly the rest of the composition—into the clay before beginning the three-dimensional modeling (fig. 240). This would conform to the techniques of the *Allegorical Figure* (cat. 2), where remnants of the preparatory sketch appear in the textured upper half of the panel.

Several elements of the architecture, including the three nearest columns with their capitals and the entablature they support, were detailed with small pieces of clay. A fourth column likely stood in the area of loss at the far end of the colonnade. Before turning to the figures, Bernini assembled strips of clay to form the lower balustrade and the cushions on top of it. He then added and shaped clay with his fingers to build the upper bodies and heads of the three principal figures. Medium oval-tip and toothed tools were used to shape the smaller drapery folds, the fingers, and the facial features. Despite the economy of means used to define the

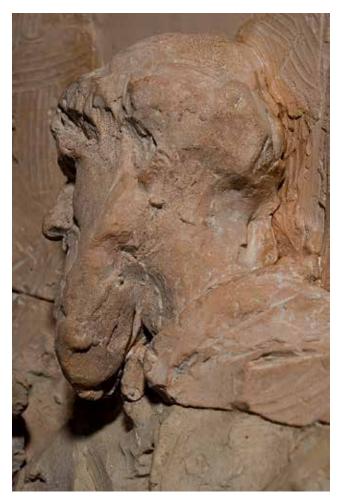


Fig. 240. Tool marks underlying the applied head

faces, Bernini clearly intended each one to be recognizable as a different individual. The head of the figure on the far left, turned in profile to engage his neighbor, is among the more subtle; his ear and beard were added and delicately patted into shape (fig. 241). His right arm, hand, and extended index finger were modeled and attached separately.

After the model was completed, it may have endured a prolonged and overly wet storage period. This is suggested by areas of deteriorated clay where the surface shows spalling and flaking (fig. 92). There are also numerous shrinkage cracks on the surface, some of which have broken completely, accounting for further damage and losses. Some of the breakage appears to have occurred during firing; one shard, comprising the torso of the central figure and associated balcony elements, has turned a slightly different color, suggesting it may have broken and fallen to another part of the kiln, subjecting it to different firing conditions.

The model was subjected to several modifications after firing. Spanning the large diagonal crack immediately above the figure on the far left, a modeled clay formation and the surrounding surface were ground away with a rasp (fig. 242). (The area is slightly redder because of the differing oxidation states between the surface and the exposed interior of the



Fig. 241. Bearded figures at far left; torsos modeled on the slab, with heads added separately and then detailed with small additions of collars, ears, and beards

Fig. 242. Upper left background, where a feature may have been ground away



clay.) In the finished relief, an angel occupies the same location and could well have been the now-missing feature. Lastly, excess clay, as well as edges damaged in firing or later, were trimmed with a saw at the top, sides, and bottom (fig. 152) to make them neater—or, less likely, to make the panel fit into a wooden architectural model of the chapel.

The model is likely to date to about 1649, when Bernini received his first payments for the chapel.⁵ Conceivably, however, he had already designed the reliefs by 1647, when work on the chapel began.6

Gian Lorenzo Bernini or later copyist

17 · Saint Teresa in Ecstasy

ca. 1647–before the 1760s. Terracotta, $18\% \times 16\% \times 8\%$ in. (46 × 41 × 21 cm)

The State Hermitage Museum, Saint Petersburg (619)



INSCRIPTIONS, MARKS, AND STAMPS: *H.ck.* 619 written in white paint on edge of base.

PROVENANCE: See cat. 12.

LITERATURE: Venice 1788, p. 24; Petrov 1864, p. 604; Treu 1871, p. 50; Zaretskaia and Kosareva 1960, no. 22; Matzulevitsch 1963, p. 69; Wittkower 1966, p. 216; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 130; Kauffmann 1967a, p. 227; Kuhn 1967, p. 5; Kauffmann 1970, p. 152; Zaretskaia and Kosareva 1970, nos. 38-39; Zaretskaia and Kosareva 1975, nos. 38-39; Androsov, Kosareva, and Saverkina 1978, no. 37; Lavin, I. 1980, vol. 1, p. 202; Wittkower et al. 1981, p. 216; Ilana Dreyer in Princeton and other cities 1981-82, p. 89 n. 4; Bacchi and Zanuso 1996, p. 781; Avery 1997, p. 149; Kalveram 1997, p. 137; Wittkower et al. 1997, p. 266; Giometti 2011, p. 50

EXHIBITIONS: Leningrad 1984, no. 370; Leningrad 1989, no. 16; Rome and Venice 1991–92, no. 16; Chicago, Philadelphia, and Washington, D.C. 1998–99, no. 13; Rome 1999b, no. 68; Turin and other cities 1999–2001, no. 66; Madrid and Aranjuez 2003–4, no. 4.5; Bonn and Berlin 2005–6, no. 256

CONDITION: The angel is missing its head, right arm, left wing, and fingers on its left hand; the right foot is restored. There is a loss to the drapery near Teresa's right shoulder, as well as chip losses to her cowl. Her left foot is missing, as is the middle finger of her right hand; the little finger on the left hand is a restoration. The ribbon of cloth running between the angel's waist and wing has broken off. The bottom section of the sculpture is missing.





Fig. 243. Head: note the toothed-tool marks left in the freshly modeled fabric and the reinforcement with a blunted oval-tip tool to the drapery, bottom lip, and eyes

Fig. 244. Wing, both shaped and decorated with a small-tooth tool

THIS MODEL REPRESENTS ONE of the most debated attributions in Bernini scholarship. About half the scholars who have published on it have expressed doubts that it could be by Bernini; a few, including Irving Lavin, have rejected it outright. The other half have been more inclined to see it as a modello made by Bernini, likely for presentation, in preparation for his spectacular Saint Teresa in Ecstasy, carved between 1647 and 1652 for the Cornaro Chapel in Santa Maria della Vittoria, Rome (fig. 237). Our analysis of the model suggests that either side could be right: nothing disqualifies the model from being by Bernini, but neither does any evidence provide indisputable proof of his authorship.

The case for Bernini must begin with the exceedingly high quality of the modeling. The surfaces are fresh, not overworked, and retain many tool marks, as demonstrated by one of the looser passages—the cloth, or wimple, beneath Teresa's chin (fig. 243). Clay crumbs can be seen inside many of the folds, kicked up during modeling with a small oval-tip tool and left unsmoothed; occasional marks from a small-tooth tool enliven the fabric. The clouds and the angel's wing were also decorated with toothed tools (fig. 244). The use of a toothed tool for initial shaping—which can be seen on other parts of the model as well, including the back and sides—provides another link to Bernini. Normally, as demonstrated by any one of his angels for the Ponte Sant'Angelo (cats. 35-44), his preference was to shape with toothed tools before refining with oval-tip tools and his fingers. The surfaces of the present model were smoothed with a brush at the end of modeling, in a manner typical of Bernini. The brushing was used to activate the surfaces, not to deaden them, which is certainly how he approached the brush smoothing on his most finished *modello*, the *Model for the Fountain of the Moor* (cat. 13). On the present model, the face is one of the more delicately smoothed areas (see fig. 243). After smoothing, certain details were reinforced with a blunted oval-tip tool, including the indentation at the center of the lower lip and the arch above the left eye. This technique of working back into a face is one favored by Bernini, as demonstrated by the *Moor*. Here, the folds of Teresa's drapery were similarly restated in places.

The model differs from the finished statue in slight ways, which has indicated to some that the model must be preparatory. Tod Marder notes that the irises were made by jabbing a sharp modeling tool into the center of each eye. In the finished statue, the eyes are blank. Marder believes a copyist would have been faithful to this detail, although we are not so sure. Another difference from the finished statue—and one more significant—is the position of the index finger on the saint's right hand (fig. 245). Here the finger points not outward but almost backward in self-reference. There are also changes to the thumb, which does not rest on the middle finger (now missing) but floats free. A strut was inserted for support under the thumb (as well as under three of the small fingers), a device sometimes used by Bernini (see cats. 24 and 35).

The slightness of the differences from the marble also works against the attribution. The model is essentially a reduction of the finished statue, with the few changes well within the limits of a good copy. A consideration of how the model was constructed keeps that possibility open. The model originally included a bottom section, which explains why it now leans more toward its proper left than the finished statue. That section separated along a poorly adhered join, and the remaining break



Fig. 245. Right hand, with thumb and fingers supported with struts

surface is covered in a texture left from a cloth likely draped over the worktable as the clay was being prepared. When the sections were joined, the clay had likely dried out a bit, and this, combined with the fabric texture, probably prevented secure adhesion. X-radiography, along with visual analysis, shows that the surviving upper section was mostly assembled from smaller pieces and handfuls of clay (fig. 246). The clouds, the saint's lower body, and the angel from the knees down were the first parts to be built on top of the base. The rest of the composition—the saint's upper body and the angel from the knees up—was then added. The joins are clear in the X-radiographs, and prominent shrinkage cracks on the front and the back also signal them. This technique of assembling figures in separate parts was rare for Bernini; he more commonly formed his figures from single wedged masses of clay. Occasionally, though, he did build them from smaller handfuls or pieces, as with the earliest *Angel with the Crown of Thorns* at Harvard (cat. 35) and the *Angel with the Scourge* (cat. 37).



Fig. 246. X-radiograph of Saint Teresa in Ecstasy: note the joins at Teresa's head suggesting the head was removed and repositioned during modeling (perhaps several times)

Fig. 247. Back, with view of the interconnected chambers built into the clouds and the figure of Saint Teresa



The clouds and the figure of Teresa were built with hollows from the start. There is an irregularly shaped chamber within her torso, accessed through an opening on her back, as well as an opening underneath her that connects to a larger chamber within the clouds (fig. 247). The angel was left solid. The lack of hollowing-related tool marks on the back indicates that the hollowing was not saved for the end. In fact, instead of removing clay, whoever made the model added it—undoubtedly to shore up the walls between the chambers. This is opposite to the approach to hollowing seen in other of Bernini's modelli. He did not create cavities as he went; instead, he modeled directly in solid clay, then hollowed as needed. When he did hollow, he excavated the clay either from the back (in the case of niche figures) or through holes, later plugged. The only possible exceptions are the Rio de la Plata and the Nile (cats. 8 and 9). The rocky bases on which these figures sit may have been assembled from slabs of clay in a way that left the backs of the bases open. If so, those initial cavities are unlikely to have been very deep; the toothed-tool marks indicate that a lot of clay was subsequently excavated. More important, both figures were created solid; the Nile ended up being hollowed, and the Rio de la Plata likely did as well.

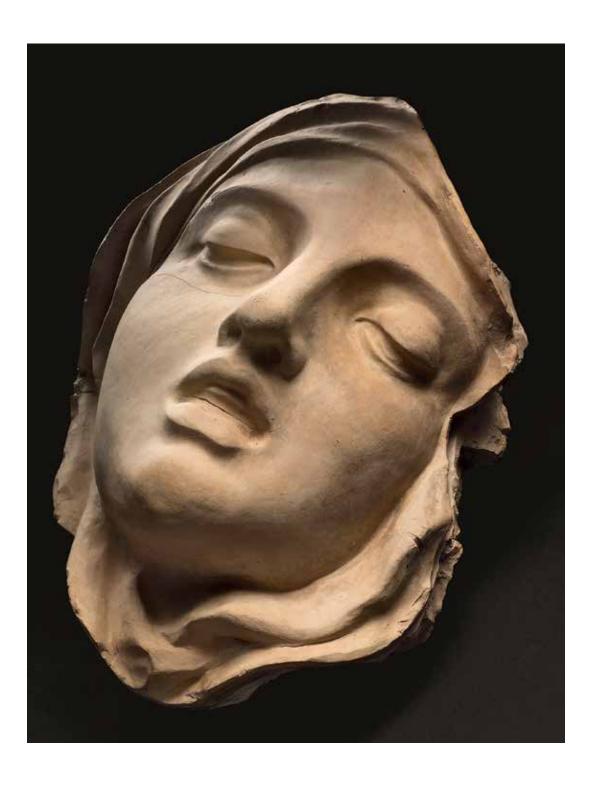
In terms of the attribution, how much weight should be given to the fact that the present model was built hollow? We agree the technique is uncharacteristic of Bernini (particularly in its apparent laboriousness), but that does not mean he never used it. Too few of his models survive for us to know for certain how he worked at all times. Moreover, the present model, with its large size and highly complicated composition, might have required Bernini to break with his usual habits and to improvise new approaches.

Associate of Gian Lorenzo Bernini or later copyist

18 · Head of Saint Teresa of Avila

ca. 1647–52 or later. Terracotta, $5\% \times 12\% 6 \times 8\%$ in. (15 × 31 × 22 cm)

Museo Nazionale del Palazzo di Venezia, Rome (PV 13270)



INSCRIPTIONS, MARKS, AND STAMPS: Indecipherable letters (perhaps an insignia or monogram) inscribed into the clay on the left cheek

PROVENANCE: Evan Gorga (until 1948; his gift to the Museo Nazionale del Palazzo di Venezia, Rome)

LITERATURE: Giometti 2011, pp. 50–51

EXHIBITIONS: Rome 1999b, no. 66; Vatican City 2003–4, no. 67; Bonn and Berlin 2005–6, no. 257; London 2009, no. 82; Forlì 2012, no. 119

CONDITION: An original flat slab of clay surrounding the model has largely broken away. There are large, stable firing cracks throughout the model, many now filled. The right eyebrow shows chip losses, as does the drapery edge over the left eye. There are white plaster residues under the chin from earlier repairs. Pencil marks can be seen in the left corner of the mouth.

THIS MODEL IS OBVIOUSLY RELATED to Bernini's celebrated statue of Saint Teresa of Avila, carved between 1647 and 1652 for the Cornaro Chapel in Santa Maria della Vittoria, Rome (fig. 237). In publishing the model for the first time, in 1999, Pietro Cannata reported a surprising discovery: the model is a virtual replica of the finished face, even in size. Among the measurements he found to be precisely matching are the overall length of the face (20.9 cm) and the distance between the eyes (12 cm). According to him, the only discrepancy is that the distance between the cheekbones on the model is a centimeter less than on the marble. Cannata goes on to argue that, when clay is fired, it tends to shrink about 10 percent, suggesting that if someone were to make a precise freehand copy of the head in clay, it should be noticeably smaller than the original, once fired. This leads him to reason that the only way the model could be so nearly identical to the finished statue in size is if it came before it and provided guidance during carving. While this remains a definite possibility, we think there is a much greater likelihood that the model is a copy.

The first step in assessing Cannata's hypothesis is to recognize that the model is unlike Bernini in many crucial ways. First, the model shows uncharacteristic weaknesses in design that are especially apparent in comparison with the finished statue. The nose on the model is less nuanced; the eyelids bulge somewhat more; the anatomy of the eye (particularly around the tear duct) is not rendered as precisely; the nostrils and the mouth are only shallowly excavated; and none of the features are rendered as crisply. A second way the model departs from Bernini is in its absolute uniformity of finish. As discussed elsewhere (cat. 13), he made a habit of employing contrasting levels of finish on his more detailed models, evidently recognizing that making certain parts sketchier than others would increase the visual energy overall. Here, not only are there no contrasts in the level of finish, but there are hardly any distinctions in texture—even between surfaces meant to represent different materials. In the finished statue, certain surfaces were given texture, as in the veil, which is carved in a rough, faceted style that sets off the beautifully smooth flesh. Normally, in making the transition from model to final execution, Bernini toned down textures; he did not amplify them, as would have been the case here—which provides another reason to be dubious of the attribution.

An analysis of how the model was made yields other inconsistencies with Bernini. The model was created solid and wire cut from its modeling stand (fig. 248). The back was not hollowed—which is unlike the one certain head study in Bernini's oeuvre, the *Head of Saint Jerome* (cat. 30). Even if this head of Saint Teresa had been made in a mold, it would likely not be solid; instead, sheets or handfuls of clay would have been pressed into the mold to create a thin-walled hollow form. The present model was made very differently, as confirmed by shrinkage cracks and X-radiography (fig. 249). Handfuls and thick sheets of clay were built up in layers during the initial stages of modeling; these were used to form the head and to model the features. The nose was made by building up thin layers of clay, rather than by modeling it subtractively from a larger piece of clay. This time-consuming method, which conveys a degree of tentativeness, is hard to reconcile with Bernini, who favored faster, more direct means of assembly.



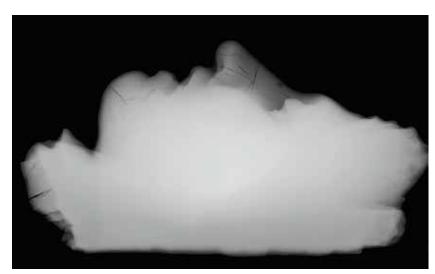


Fig. 248. Bottom, with texture from being wire cut and remnants of perimeter slab, intentionally broken away

Fig. 249. X-radiograph of Head of Saint Teresa of Avila: note use of additive layers to build up nose

The head was initially shaped with oval-tip and toothed tools. Most of these tool marks were later smoothed away, the one exception being around the eyes, which do retain traces of toothed marks. Areas of detail, including the mouth and the eyes, were carefully worked with an oval-tip tool. After being allowed to dry to a leather-hard state, the model was submitted to extensive final smoothing. The surfaces were first compacted—practically burnished, in fact—with an oval-tip tool. The technique, not one Bernini is known to have practiced, left a minutely faceted surface in certain areas, including the forehead near the veil. Afterward, most surfaces were further smoothed with fingers and a brush, and possibly also a cloth, leaving a striated pattern on the cheeks and elsewhere. After the smoothing, the eyes were subtly revised. Small bits of clay were added under the eyelids with an oval-tip tool (fig. 250). The new clay was only nominally integrated and not smoothed, which explains why the revisions stand out.

On the basis of the foregoing analysis of style and technique, there seems little chance the model could be by Bernini. Thus, if it was indeed preparatory for the *Teresa*, its author must be an assistant. But why would an assistant be allowed to create the model that was to guide Bernini during the carving of the marble? Perhaps Bernini created an initial head study that he asked an assistant to remake at a larger size or in a more finished style for presentation to his patron. After the model had fulfilled its initial function, it may have





Fig. 250. Left eye: note postsmoothing revisions at edge of eyelid and eyeball

Fig. 251. Left cheek with possible monogram

been returned to Bernini for use during carving. There are not many other plausible scenarios, and we are again left to wonder about the measurements. If Cannata were only slightly off in the ones he reported, there would be less need to assume that the model preceded the marble. Moreover, clay does not always shrink 10 percent after drying and firing. In low-fired clay—which is the case here—the percentage can be a lot smaller, closer to 5.2 This opens a pathway for seeing the model as a very good copy. If an experienced copyist set out to duplicate the original head in all ways, including size, he can be expected to have known the shrinkage characteristics of clay and to have allowed for them from the beginning.

What might decide the question of preparatory or not is whether the model shows signs of having been measured for transfer. A careful inspection of the surface suggests it was not—at least while the clay was still moist. The only marks that might be construed as having been made in the course of measuring are several small holes and two short diagonal lines on the tip of the nose, as well

as another short diagonal line on the chin, all made before the model was fired. They look more accidental than deliberate. If the model had been submitted to a standard measurement campaign, there should be more marks in a greater variety of locations. This assumes, of course, that the clay was moist at the time of the measuring. In fired clay, there is unlikely to be any trace of the process at all, because the tips of the measuring instrument would not register. Cannata argues that the model must, in fact, have already been fired when it provided the measurements for the *Teresa*, or it would be consistently smaller than the finished face due to shrinkage. Thus, the absence of measuring marks on the model does not furnish decisive proof that it was not measured for transfer.

Adding to the mystery is a final detail. When the clay was virtually dry, lines resembling an insignia or monogram were lightly scratched with a sharp instrument into the left cheek, just above the mouth (fig. 251). With some imagination, the lines might be interpreted as forming an overlapping G and L for "Gian Lorenzo." But even if this is the correct reading, the inscription is unlikely to come from Bernini's hand, as he is not known to have used any such mark to identify his works or writings.

Gian Lorenzo Bernini

19 · Saint with Book (Saint Luke or Saint Leonard?)

ca. 1647 or ca. 1659–60. Terracotta, $11\% \times 5\%$ in. (28.1 × 13.6 cm)

Museo di Roma, Rome (MR 35747)



PROVENANCE: Francesco Antonio Fontana (by d. 1700); unearthed in 1982 on the site of Fontana's house and studio under the auspices of the Soprintendenza Speciale per i Beni Archeologici di Roma and transferred to the Museo di Roma (1982)

LITERATURE: Francesco Burragato and Carlo Aurisicchio in Rome 1986, p. 223; Di Gioia 1990, p. 43; Di Gioia 1997, p. 661; Farrell, Lie, and Young 1999, p. 40; Ferrari and Papaldo 1999, p. 553; Hemingway 1999b, p. 35 n. 16; Barberini 2001–2, p. 45; Di Gioia 2002, pp. 49–61; Montanari 2009, pp. 37–38

EXHIBITIONS: Rome 1986, no. 14

CONDITION: Substantial losses, including the head, the right arm, the upper part of the book, the proper left half and proper right rear corner of the base, the left foot, and portions of the drapery and rear buttress. The clay on the upper right shoulder and the back of the model is deteriorated, with surface losses due to spalling.

THIS MODEL SUFFERED THE SAME FATE as the Saint Longinus at the Museo di Roma (cat. 4). It was part of the rubble discovered in 1982 in the chimney of the former house and studio of the seventeenth-century sculptor and restorer Francesco Antonio Fontana (1641–1700). The present model was broken into six pieces, which are now rejoined. Despite its compromised state, it can be plausibly connected to two separate projects with which Bernini was involved: a statue he planned for San Giovanni in Laterano, Rome, which was never realized, and one of the figures adorning the colonnade in front of Saint Peter's. These links, combined with



Fig. 252. Foot, with toothed texture on base

an analysis of the technique, make it likely that the model is by Bernini.

The model is like all of Bernini's sketch models in being solid. The break at the front right corner shows a horizontal clay grain, indicating that the base was formed of a flat slab. Bernini added clay on top of the slab (probably in handfuls) to build the central mass of the figure. This approximates how he went about forming the *Angel with the Scourge* (cat. 37), which also began with a slab of clay laid horizontally for a base. The buttress was attached separately, formed from thick sheets of clay that were partially wrapped around the initial mass. The limbs and the drapery came next. The

two arms were attached separately, with the shoulders enlarged with pads of clay. The drapery was applied in strips, as though Bernini were dressing a doll, which conforms to his normal practice. Gaps between the drapery and the flesh are evidence that the folds were not modeled out of the central mass of clay. As Bernini applied the drapery, he articulated the folds with an oval-tip tool. For the V-shaped folds that descend the front of the figure, he pressed the strips of clay into the recesses between the arm and chest on each side, as though tucking in fabric. A deep tool mark at the sternum may be some type of guideline. The left foot was modeled out of the base clay, which is similar to the way he formed the surviving foot on the *Longinus* at the Museo di Roma (cat. 4). Also like the *Longinus* is the overall toothed texture on the present model's surface, although the treatment is somewhat livelier here and confined largely to the drapery. A closer comparison may be a *Kneeling Angel* at Harvard (cat. 51). Toward the end of the modeling, Bernini trimmed the buttress area on the back and right sides with a sharp knife, giving it a faceted appearance, a technique not uncommon among his models (figs. 352 and 372).

In composition, the *Saint* clearly resembles the statue of Saint Leonard that stands on top of the colonnade in front of Saint Peter's, above the entrance to the north wing, which was carved by Bernini's assistant Lazzaro Morelli in about 1666 (fig. 253). As Elena Bianca Di Gioia explains, there is substantial evidence that Bernini took personal responsibility for designing those statues that were to stand above the principal entrances to the colonnade. Between January 1659 and April 1660, a large wooden model of the colonnade, complete

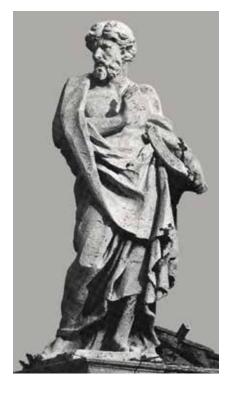


Fig. 253. Lazzaro Morelli, after a design by Gian Lorenzo Bernini, Saint Leonard, ca. 1666. Travertine, lifesize. Colonnade of Saint Peter's, north wing, Vatican City

Fig. 254. Oblique view: note the rounded protrusion resembling an ox's head, behind the right foot



with wax figurines, was prepared.³ By December 1660, construction of the north colonnade was sufficiently advanced that full-scale models of

some of the figures planned for the entrance began to be installed.⁴ One could well have been the *Leonard*, in which case Bernini is likely to have already produced its model.

In 2009 Tomaso Montanari put forward an alternative identification. While admitting the close similarities with the *Leonard*, he suggests that the model was originally conceived for a different, much earlier project: Bernini's unrealized statue of Saint Luke, planned for the nave of San Giovanni in Laterano in 1647. As Montanari reasons, if the present model is to be connected with the *Saint Luke*, we should expect to find the saint's traditional attribute of an ox. He points to the rounded protrusion behind the saint's right leg, which, when viewed obliquely from the left, certainly resembles a bovine head turned backward (fig. 254). One question, however, is why Bernini did not make the form more readable from the front, since he surely knew that the statue was destined for a deep, narrow niche (designed by Francesco Borromini) that would not permit an oblique view.⁵ The simplest answer is that he had yet to factor in the niche and was prepared to revise his design. As for the connection with the *Leonard*, it is certainly possible that, on learning that the *Luke* was to be put on indefinite hold, Bernini shelved the model, only to reuse it over a decade later on the colonnade.

Gian Lorenzo Bernini

20 · The Blessed Ludovica Albertoni

ca. 1672. Terracotta, $7\% \times 18\% \times 7\%$ in. (19.5 \times 46 \times 20 cm) Victoria and Albert Museum, London (A.93-1980)



ON JANUARY 28, 1671, Pope Clement X beatified Ludovica Albertoni, setting the stage for a major refurbishment of her burial chapel in San Francesco a Ripa, Rome.¹ A Franciscan nun famed for her charity and piety, Albertoni had died in 1533. The pope was distantly linked to her through his adopted nephew, Cardinal Paluzzo Paluzzi degli Albertoni, and was obviously eager to bring prestige to his family, the Altieri, by seeing her beatified. Cardinal Albertoni took charge of her chapel, commissioning Bernini (perhaps as early as late 1671) to execute the recumbent statue of the holy nun that would be the centerpiece of the new chapel decorations (fig. 255).² The sculpture appears to have been finished by late 1674, and Bernini is reported to have done it for free—likely to curry favor with the pope, who had recently banished Bernini's brother Luigi from Rome.³

The finished sculpture, one of the last by Bernini to be autograph, has enjoyed enormous celebrity since its unveiling. The many small copies it has inspired are one

PROVENANCE: Probably by descent through the Altieri family in Rome to Princess Cristina Altieri (b. 1852); probably Girolamo Theodoli through his marriage to Cristina Altieri (1873–his d. 1926, her d. 1930); Theodoli-Braschi family, Bologna (sold, Heim Gallery, London, 1980; purchased by the Victoria and Albert Museum, London)

LITERATURE: Burlington Magazine 1981, pp. 63–[64], fig. 99; Steven F. Ostrow in Princeton and other cities 1981–82, p. 306 n. 5; Soussloff 1987, p. 115; Perlove 1990, pp. 16–17, 25–26; Avery 1997, p. 152; Wittkower et al. 1997, p. 295; Boucher 1998, pp. 142–43; Sergei Androsov and Nina Kosareva in Chicago, Philadelphia, and Washington, D.C. 1998–99, pp. 82–83; Ferrari and Papaldo 1999, p. 86; Malgouyres 2002, pp. 25–26

EXHIBITIONS: Fort Worth 1982, no. 10; Rome and Venice 1991–92, no. 24; Edinburgh 1998, no. 124; Houston and London 2001–2, no. 55; London 2009, no. 83

CONDITION: The lower half of the face, including the nose, is missing. There are smaller losses to the curl of drapery above the left hand, the front right corner of the pillow, the front left corner of the base, and the drapery on the mattress below the left knee. The left foot is missing, and there is a small chip loss to the left little finger.



Fig. 255. Gian Lorenzo Bernini, *The Blessed Ludovica Albertoni*, 1672–74. Marble, lifesize. Altieri Chapel, San Francesco a Ripa, Rome

measure of its fame; these survive in bronze, marble, and especially in terracotta.⁴ The present model is not thought to be one of those copies, although it does come very close to the finished marble. The most substantial differences are that the pillow on the model is slightly rounder and lacks a decorative border. While these could have resulted from a design change and might serve as proof that the model was preparatory for the finished statue, they are well within the limits of a good copy, which is also true of the minute variances between the draperies. What tips the scales in favor of the attribution is the quality of the modeling, which rises above that of the known copies. Comparison with its nearest rival, which survives at the Hermitage and is undoubtedly not by Bernini (cat. 21), underscores the great subtlety brought to the execution of the present model. The forms are slightly rounder, the surfaces are fresher, and details such as the fingers are more delicately rendered (fig. 256).



Fig. 256. Fingers, outlined and carefully smoothed

The backs of the two models also hold important information that may help answer the question of attribution. Bernini typically expended little energy in finishing the backs of his models when he knew that the finished sculpture would be seen only from the front. The Ludovica is one such sculpture, suggesting that if the present model is by Bernini, we should expect to find a back that is incompletely finished, which does prove to be the case (fig. 257). By contrast, on the model at the Hermitage, the back is carefully smoothed, with



Fig. 257. Back of model, which is less completely finished

even the pillows decorated (fig. 263). Another difference may be more telling. On the back of the present model, the shape of the body is perceptible through the drapery and reads coherently, however abbreviated the forms may be. This points in the direction of Bernini, who would have had an implicit understanding of the composition and was not one to muddle passages—no matter how invisible they might ultimately be. The back of the other model—grossly schematized, with missing or truncated forms (the left arm is not detectable at all)—shows the characteristic approach of a copyist or an assistant.

To go step by step through the construction of the present model is to find some parallels with Bernini, although none that offer unequivocal proof of his authorship. It was modeled solid on a wooden platform. Shrinkage cracks, such as the one that runs under the back of the head, indicate that he built up the figure as well as the pillows from smaller masses of clay, all added on top of the bed, which probably began as a flat slab. The larger drapery elements were loosely shaped and integrated with fingers and a large oval-tip tool. Initially, Bernini would have brought the model to an overall level of completion comparable to that seen on the back. The zigzag pleat under the back of the left leg—applied, pinched, and squeezed with fingers and tools—is a good example of his approach.

The next phase of modeling was one of refinement. The bunched drapery at the waist was thinned and articulated with oval-tip tools and fingers, as were the folds descending from Albertoni's head and the contours of her mattress. Bernini also modeled the shoes, added drapery around them, and made edits to certain parts, including the outside left sleeve, which was enlarged. This enlargement is particularly significant because it is invisible from the front, which reinforces the notion that Bernini took an interest in ensuring that the back of the model made visual sense. As he refined the drapery, he also began to give preliminary form to areas of detail, such as the face. Before bringing these areas into final focus, however, he let the clay harden somewhat, knowing that a firmer surface provided more resistance to his tools, resulting in crisper details. The drapery also received more attention, and one tool he employed for the purpose was a small, rounded carving gouge, approximately three millimeters wide. Its tip left a clear impression on the mattress beneath the right knee, and we see from it that the tool was well suited for rendering the curved edges of the drapery folds. The use of this tool is not evident on any of his other models, but Bernini seems to have used it fairly consistently here, which explains the generally uniform shape of the fold bottoms and ridges.

The right arm and hand were added late during modeling, built from smaller pieces of clay that Bernini then draped with more clay (fig. 258). He smoothed and shaped the folds by pushing the clay around the circumference of the limb in a manner repeated on many of his models. The left hand was also built up with small additions of clay. Bernini created the spaces between the fingers with a blunt-tip tool, possibly made specifically for the task, that he pressed down between them. The fingers of both hands were outlined with an oval-tip tool in crisp, direct strokes. The left hand pushes into the fabric, while the right arm and hand are raised over Ludovica's heart; only its fingertips press into the cloth. A small clay strut was inserted beneath the right arm to support it.



Fig. 258. The attached and draped right arm: note strut at elbow



Fig. 259. Face, with oval-tip tool used to detail the eyes

Little final smoothing was done to the model, with the exception of flesh areas. Bernini appears to have been aware that the drapery should not be oversmoothed because his tool marks gave it vibrancy. The face was a different matter (fig. 259). After letting the clay harden further, he finalized the features. The eyes are particularly delicate, detailed with upper and lower lids and pupils. The face is also noteworthy for its stylization. The brow

forms a crisp, nearly perfect arc, merging with the nose. All flesh areas were smoothed with fingers or a cloth; the clay was too hard at this point to register finger or cloth textures. Before turning to hollowing, Bernini finished the mattress, even enlarging it on the front. This can be seen from below, where the added clay overlaps the original front edge (fig. 260).

The difficulty with hollowing the model is that it could not be turned over and excavated from beneath without risking damage to the completed sides or top. Bernini (or perhaps an assistant) began by cutting a square hole on the left end, beneath the pillows. Clay was then removed through the hole as far down as the upper torso. Once no more progress could be made, the hole was fitted with a square plug of clay, the outside join carefully smoothed over. Later, the model was turned on its less finished side, coming to rest on the left elbow, which was somewhat flattened in the process. With access to the base now possible, a new hole was opened, and the rest of the hollowing completed. In what appears to be a late alteration, a thick strip of clay was added to the back edge to make the figure tilt more steeply toward the viewer. Finally, as attested by cloth impressions on the left arm, the model was draped with a damp cloth to control drying.

What, then, did Bernini do with the model, which is also to ask: why did he make it? It is not a sketch model, as it comes too close to the finished design, and the level of finish is too high. More than likely, it served as a presentation model. If he retained it for reference during carving, he did not take measurements from it—at least before it was fired.



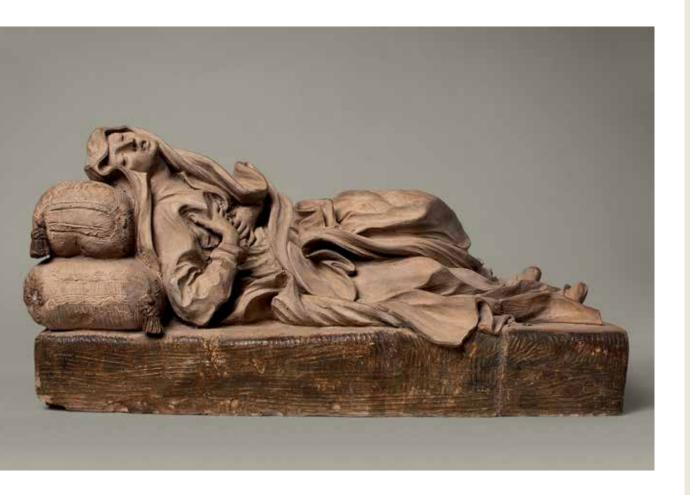
Fig. 260. Underside of model: note enlarged front edge of the mattress (arrow), the strip on the back edge to adjust the tilt of the model, and the hole for hollowing

Associate of Gian Lorenzo Bernini or later copyist

21 · The Blessed Ludovica Albertoni

ca. 1672–before 1760s. Terracotta, $9\% \times 19\% \times 7\%$ in. (24 × 48.5 × 20 cm)

The State Hermitage Museum, Saint Petersburg (614)



UNLIKE THE MODEL FOR *The Blessed Ludovica Albertoni* described in the previous entry, the present version displays clear differences from the finished statue (fig. 255). The figure lies on a hard, rectangular base rather than a cushioned mattress; none of the pillows are draped; and the drapery covering the figure displays many small changes in its pattern of folds. The differences, combined with the high quality of the modeling, have suggested to some—including Nina Kosareva and Sergei Androsov—that the model must have preceded the finished statue and must have been made by Bernini. Others have contested the attribution, judging the model to be a copy. Most recently, Philippe Malgouyres has proposed that the model was indeed preparatory for the statue—but not by Bernini. Malgouyres suggests that it could be by Bernini's trusted assistant Giulio Cartari. Too little is known about Cartari to sustain the attribution, but the hypothesis

INSCRIPTIONS, MARKS, AND STAMPS:
Illegible Cyrillic inscrption
written in pencil on back of base

PROVENANCE: See cat. 12.

LITERATURE: Venice 1788, p. 23;
Petrov 1864, p. 603; Treu 1871,
p. 50; Kosareva 1974, p. 481;
Androsov, Kosareva, and
Saverkina 1978, no. 37; Princeton
and other cities 1981–82,
p. 306; Fort Worth 1982, n.p.;
Perlove 1990, p. 72 n. 10; Mellini
1996–97, p. 207; Avery 1997,
p. 152; Edinburgh 1998, p. 159;
Ferrari and Papaldo 1999, p. 86;
Malgouyres 2002, pp. 26–27

EXHIBITIONS: Leningrad 1987, no. 119; Leningrad 1989, no. 23; Rome and Venice 1991–92, no. 24; Chicago, Philadelphia, and Washington, D.C. 1998–99, no. 20; Rome 1999b, no. 106; Houston and London 2001–2, no. 56; Vatican City 2003–4, no. 65; Massa 2005, no. 7

CONDITION: Base broken at ankles and reattached with a viscous brown shellac adhesive. Several pillow tassels missing. There is a dark varnish or resinous coating and traces of gold paint on the front and sides of the bed.

that the model originated within Bernini's workshop and was used during the planning of the statue is not unreasonable, although impossible to prove.

The principal reason to question Bernini's authorship is that the model bears certain details and forms that betray a different hand. One is the drapery, modeled in an uncharacteristically stiff style and with uniformly thick and squared-off edges. A second example is the fingers (fig. 261). Although excavated from the surrounding clay with repeated jabs of a blunted oval-tip tool in a manner recalling the *Blessed Ludovica* in London (fig. 256), they are unlike the fingers on that model in execution and shape. They are much longer and

somewhat gnarled. The tips of some (such as the left thumb) do not even come to true ends, being smears of added clay that merge with the underlying drapery. The face, too, is not totally successful (fig. 262). If it were by Bernini, it should speak with more life, yet it does not convey the same sense of spiritual release as the finished statue. The open mouth looks blocked by the tongue, and Bernini is unlikely to have rendered the pupils with multiple jabs of an oval-tip tool when he knew the finished eyes would be blank.

The back of the model displays other inconsistencies with Bernini (fig. 263). It is completed to almost the same extent as the front, which is odd considering that the back of the finished statue was to be hidden from view. Normally, when preparing a model for a niche figure, Bernini would expediently neglect the back, as in the Blessed Ludovica in London (fig. 257) and the Daniel in the Lions' Den at the Vatican (fig. 286). What is more, on the present model, the back was not merely tidied but also decorated, with tassels added to the pillows and lines inscribed to suggest embroidery. For all the effort put into the back, however, certain forms





Fig. 261. Hands, with fingertips ending in smears of clay: note differences from fig. 256

Fig. 262. Face: note jabs of an oval-tip tool to indicate the pupils

are still surprisingly illegible—a failure hard to reconcile with Bernini, who always took pains to resolve passages before refining them. The legs are convincingly rendered, but the left arm appears to be missing (the drapery makes no allowance for it). This differs from the *Blessed Ludovica* in London, where the drapery yields to the left arm in a logical way. Another source of visual confusion is the broad, rather awkward fold of schematized drapery that runs along the figure's lower back. Bernini always brought greater clarity than this to his compositions, even when his modeling was at its loosest.

The techniques used to construct the model neither confirm nor deny Bernini's authorship. The model was assembled on a sheet of paper, as indicated by the pattern of laid lines impressed on the bottom. The joins between the three or four masses of clay used to assemble the base are still visible. Before being shaped into a perfect rectangle, the base was first flattened, with the figure assembled on top of it from small and large pieces of clay. The drapery was added as clay strips, then built up with additional clay. Joins illustrating the assembly technique are still visible—underneath the right armpit, for example. The pillows were modeled solid out of a round ball of clay, squeezed with fingers into an ovoid. Much of the initial shaping was done with a toothed tool. Later smoothing has eliminated most of the marks, but a few can still be seen on portions of the drapery and the back of the head. Various oval-tip tools were then used to impart detail to the figure. The drapery was smoothed with fingers and a dry brush.

At the completion of modeling, the task of hollowing could begin. The model was left upright to prevent damage to the still-moist figure. Four or more holes were cut into the sides of the base, with two more into the pillows. Small scooplike tools were used to reach inside the model through the holes and pull out the clay. X-radiography reveals that the base was hollowed in partitions and that the hollowing extended into the pillows



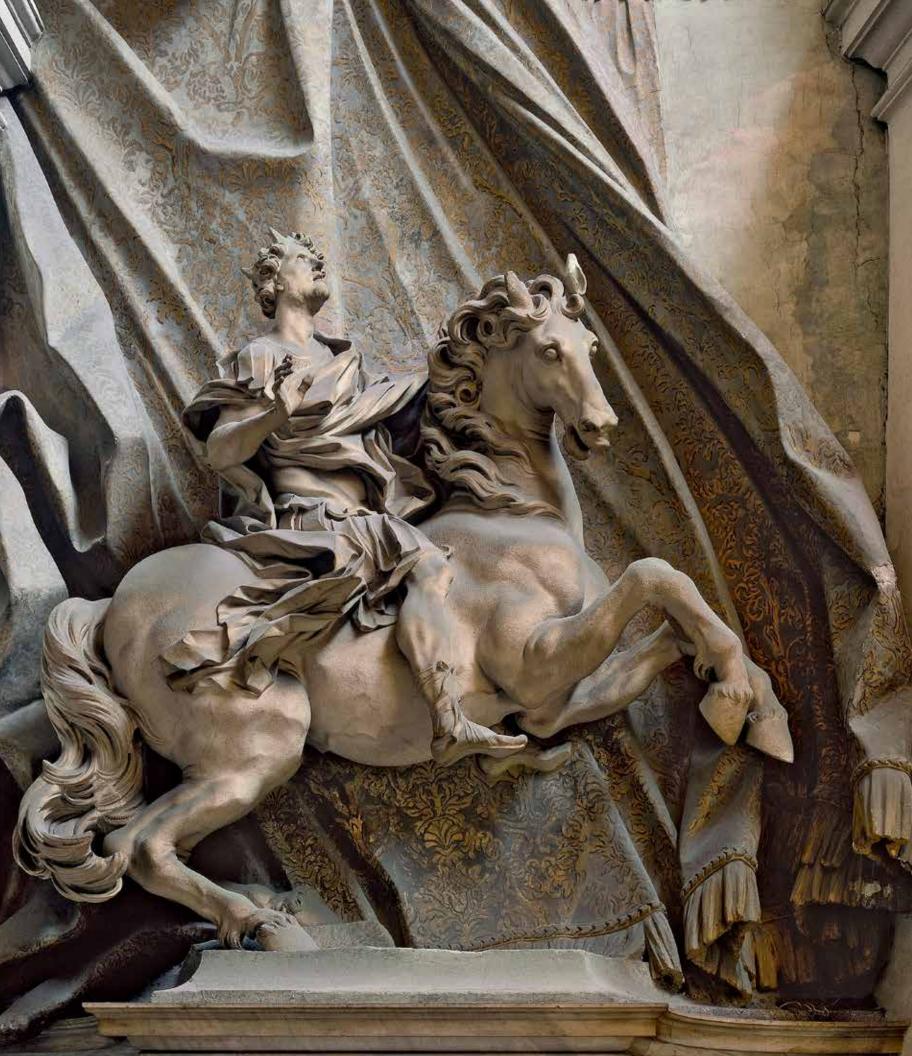
Fig. 263. Simplified and overly finished back



Fig. 264. X-radiograph of Blessed Ludovica Albertoni: note that the hollowing extends into the pillows

(fig. 264). The partition walls were left intact to give the model added stability. After hollowing, the holes were carefully plugged. The edges of the plugs were scored to promote adhesion, a method seen on several models by Bernini, including the *Model for the Fountain of the Moor* at the Kimbell and the *Blessed Ludovica* in London (figs. 100 and 101). Once the plugs were in place and smoothed, the base appears to have been made perfectly rectangular with additions of clay at the corners and along the base. The final step would have been to apply the toothed texturing to the sides. Late in the modeling process, clusters of fingernail impressions were left on the completed surfaces of the base and pillows. These impressions may have been left as the hollowing holes were plugged or during reshaping of the pillows. Such clusters are not uncommon on models, including ones by Bernini (see cats. 22, 25, and 40). This is not to say, however, that they identify the present model as being by him. Like the scored plugs, they could come from any sculptor.

With the model appearing to be neither by Bernini nor a copy (at least not a straightforward one), the final challenge is to explain why it was made. One possibility is that it preceded the model in London and represents a response to an earlier, now-lost bozzetto by Bernini. Perhaps Bernini, on finishing that bozzetto, handed it to an assistant and asked him to prepare a more finished version suitable for presentation. A second possibility is that the model followed the one in London and represents an alternative design for the bed, although we must wonder why Bernini would suddenly revert to an utterly plain mattress, which weakens the drama of the composition. Thus, if the model is to be assigned to an assistant and seen as preparatory for the statue, it most likely came fairly early in the design process, but there is still no way to rule out the possibility that it is, instead, a copy. Perhaps the only reason to question that possibility is that the copyist would seem to have made some strange choices in preparing his copy. If he was focused on the figure and chose to ignore the elaborate mattress, why did he then apply all the intricate detailing including the tassels—to the pillows, even on their backs? The most likely answer is that, having made the copy, he decided to dress up the back so that the terracotta would work better if displayed as freestanding.



IV · Equestrian Monuments

During the Renaissance, the equestrian monument was reborn. In imitation of the ancients, rulers from Florence to Venice commissioned magnificent sculptures of themselves astride horses for display in public squares. Few of these commissions were actually realized, however. In addition to being enormously costly, equestrian monuments represented the ultimate sculptural challenge, whether carved in marble or cast in bronze. First, sculptors had to master the horse's anatomy. Second, they had to determine how the horse's spindly legs would support the mass of the statue, rider and all. In 1670 Bernini would join the prestigious list of sculptors who overcame these difficulties with his marble *Constantine the Great on Horseback* (fig. 265). A decade later he would add a second equestrian statue to his résumé, one representing King Louis XIV (fig. 279).

The commission for the *Constantine* came in 1654 from Pope Innocent X, who intended to place it opposite Bernini's *Countess Matilda of Tuscany* in Saint Peter's (fig. 183). Marble was ordered, but the commission was halted after Innocent's death the next year; apparently, no carving had been completed at that point. Pope Alexander VII restarted the project in 1661, although prescribing one major change: the statue was no longer to be sited in Saint Peter's but on the main landing of the Scala Regia, the monumental staircase that serves as the formal entrance to the Vatican Palace. Before turning to the carving, Bernini took account of the new location by modifying aspects of the design—changes that may be reflected in models (see cats. 22 and 23). The statue depicts Constantine in the midst of his battlefield conversion to Christianity, when he experienced a vision of the cross. The finished statue, with its soaring energy and dramatic narrative, opened a new chapter in the history of the equestrian monument.

The *Louis XIV* left much less of a mark. On its arrival in Paris in 1684, the king declared it a failure, ordering the rider to be recarved as the ancient Roman hero Marcus Curtius (fig. 279). Bernini was spared the ignominy, having died four years earlier. The large model he had produced in preparation remains one of his unquestioned masterpieces in clay (cat. 24).

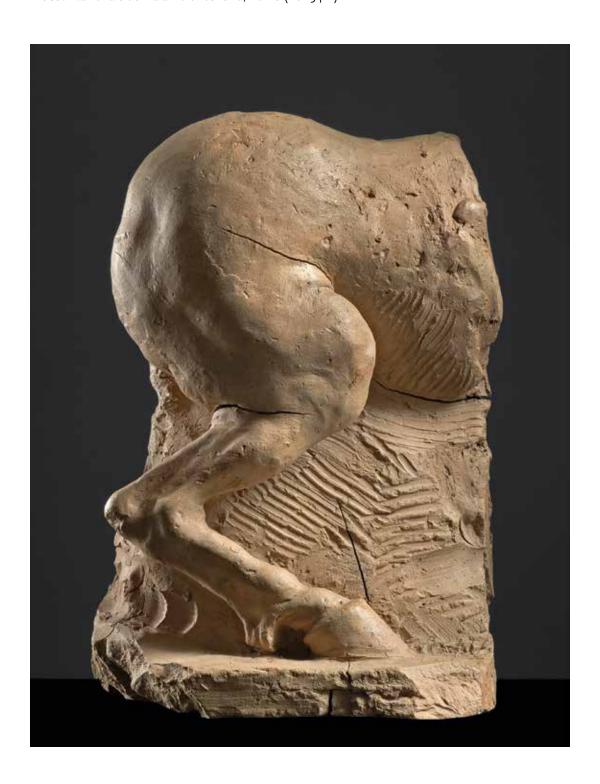
Fig. 265. Gian Lorenzo Bernini, Constantine the Great on Horseback, 1662–70. Marble, over lifesize. Vatican Palace, Vatican City

Gian Lorenzo Bernini

22 · Study of a Horse

ca. 1662. Terracotta, $8\% \times 5\% \times 5\%$ in. (22 × 14 × 13.5 cm)

Museo Nazionale del Palazzo di Venezia, Rome (PV 13421)



PROVENANCE: Evan Gorga (until 1948; his gift to the Museo Nazionale del Palazzo di Venezia, Rome)

LITERATURE: Gasparri 1993, p. 29; Marder 1997, pp. 579-80; Kristin Herrmann Fiore in Rome 1998, pp. 314-15; Ferrari and Papaldo 1999, pp. 503, 579; Chiara Savettieri in Pinelli, ed. 2000, Notes vol., p. 474; Barberini 2001–2, p. 52; Giometti 2011, pp. 52-53

EXHIBITIONS: Rome 1991–92, p. 49

CONDITION: Both front corners of the model are missing, as is the tail. There are extensive shrinkage cracks attributable to how the clay was massed. A shallow hole, possibly for clay sampling, is drilled into the

BERNINI EXECUTED TWO EQUESTRIAN STATUES during his career—the Constantine the Great on Horseback (fig. 265) and the Equestrian Statue of Louis XIV (fig. 279)—and this subtle rendering of the hindquarters of a rearing horse could have been preparatory for either. Although the model is equally close to both, two factors favor the Constantine. First, the Constantine is the earlier. Bernini is less likely to have prepared a careful anatomical study such as this one after he had already produced a horse of the same type. Second, the model is like the Constantine in having been conceived as a relief. The reverse is partially hollowed and was trimmed so that the model could fit flush against a flat surface (fig. 266). The front also gives the impression of a relief, with the negative space beneath the horse's belly consisting of a flat plane. On the finished Constantine, the back plane is more elaborate, taking the form of a stucco curtain. Bernini used it to disguise the fact that he had been forced to partially embed the statue in its niche to ensure an open view up the Scala Regia.1 If the identification with the Constantine is correct, then the model likely dates to early 1662, when Bernini is first recorded as working on the statue.2 Presumably, he had learned by then that the statue was no longer to be sited in Saint Peter's, where it had been intended to be basically freestanding, within a narrow niche, with its head and rump slightly extending on each side (see fig. 29; cat. D.23). Instead, it was to be sited on the base landing of the Scala Regia, where

it would need to be treated as a high relief.3

That the model was constructed on a wooden surface is indicated by the woodgrain textures on the bottom. As the model dried, large shrinkage cracks formed. Their pattern suggests that Bernini began the model by heaping together several small handfuls of clay, on top of which he positioned a large ball of clay to form the haunches. He then added to and subtracted from the main mass. Clay was removed from beneath the belly and in front of the leg and added in other places to fill out the forms. The rump was enlarged with layers of clay; that passage recalls the same area on the Model for the Equestrian Statue of Louis XIV (cat. 24). As for the now-missing tail, Bernini had added it separately—likely as a rolled cylinder, judging by the circular shrinkage crack where the tail broke off.

Most of the initial modeling was done with the fingers. The leg displays one of Bernini's characteristic shaping methods, that of pulling the limb out of the clay and then



Fig. 266. Back of model, trimmed flat: note clay scooped from the back with fingers

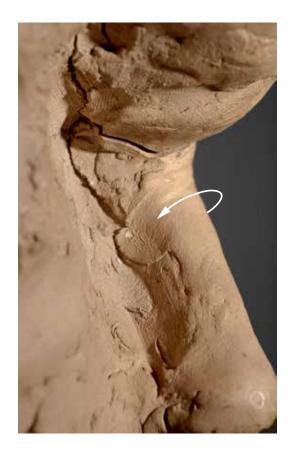


Fig. 267. Back of leg, with clay pushed around the circumference to refine and finish the shape

Fig. 268. Oblique view: note modeled truncation



pushing more clay around it to refine and complete it, leaving a distinct fingerprint at the end of the stroke (fig. 267). The backside of the haunch near the tail was formed in a similar manner. His use of fingers in these areas left large clusters of opposing fingernail prints on the back. Similar clusters are found on his model for Constantine (fig. 272).

Few tools were used, mostly at the end of the modeling process. Marks from two types of toothed tool, small and large, appear on and beneath the belly and in front of the leg. The small-tooth tool was used to integrate the clay added to the belly: the large-tooth tool was used to excavate clay from beneath the belly and in front of the leg. Bernini did not bother to efface the marks. He doubtless liked the visual contrast between the toothed texturing in front of the leg and the smoother surrounding clay. As for the marks on the belly, they recall those on on the right cheek and left eyebrow and temple of the *Head of Saint Jerome* (fig. 311) and on the pectorals of the *Angel with the Crown of Thorns* at Harvard (fig. 341). As discussed in those entries, these may have been later alterations, or Bernini may have left the marks as some kind of notation to himself—perhaps that the area would need to be carved more deeply. Details of the leg—including the fetlock, hoof, tendons, and various creases at the joints—were carefully refined with a small oval-tip tool.

After completing the model, Bernini scooped the back out with his fingers to reduce the clay thickness to prevent cracks during firing (see fig. 266). Once the clay had reached a leather-hard state, he used a knife to carve away the buttress left from the original heap of clay and to trim the back flat. It is significant that the model did not begin as a complete horse that was then cut in half; the truncation is clearly modeled rather than cut (fig. 268). From the outset, Bernini intended to focus solely on the back half of a horse, underscoring the model's function as a purely anatomical study.

Sometime after the model was completed, measurements were taken from it. A cluster of six or more mostly triangular points is located on top of the base (fig. 269). A cluster of sharp point marks from the other end of the compass or dividers is found just above the fleshy fold of the haunch. Perhaps the resulting measurements were used to create the model at the Hermitage (cat. 23).



Fig. 269. A group of measuring marks beneath the fetlock

Gian Lorenzo Bernini

23 · Constantine the Great on Horseback

ca. 1662. Terracotta, H. 17¾ in. (45 cm)

The State Hermitage Museum, Saint Petersburg (673)



INSCRIPTIONS, MARKS, AND STAMPS: 96 written in black paint on the front, near the base; illegible Cyrillic inscription and 140 written in pencil on the back. A large letter—perhaps an M—inscribed on the back

PROVENANCE: See cat. 12.

LITERATURE: Venice 1788, p. 24; Petrov 1864, p. 602; Matzulevitsch 1963, p. 71; Wittkower 1966, p. 254; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 198; Rossacher 1967, p. 9; Herding 1970, p. 122; Kauffmann 1970, pp. 283–84; Nicola M. Courtright in Princeton and other cities 1981-82, p. 144 n. 30; Bacchi and Zanuso 1996, p. 783; Marder 1997, pp. 171–72; Bacchi and Tumidei 1998, p. 53; Ferrari and Papaldo 1999, p. 579; Chiara Savettieri in Pinelli, ed. 2000, Notes vol., p. 473; Giometti 2011, p. 52

EXHIBITIONS: Leningrad 1989, no. 17; Rome and Venice 1991–92, no. 20; Chicago, Philadelphia, and Washington, D.C. 1998–99, no. 16

CONDITION: The rider is missing his head and neck, right wrist and hand, and right foot; losses to the horse include its front legs, rear lower leg, tail, and left ear.

UNLIKE THE MODEL DISCUSSED in the previous entry, this one was undoubtedly preparatory for Bernini's statue of Constantine the Great, as proven by the many similarities in design between it and the marble (fig. 265). The two principal differences are that, in the terracotta, the horse rears higher and Constantine is pressed more closely against its mane. In composition, the model is therefore more vertical and compressed than the marble, which has suggested to Tod Marder that the model may have been made for the original site of the statue in Saint Peter's. That site took the form of a narrow niche, as indicated by a drawing in the Real Academia de Bellas Artes de San Fernando, Madrid (fig. 29; cat. D.23). Marder may be correct, but there are at least equal grounds for seeing the model as transitional

and hence belonging to the second phase of the project, which commenced during the spring of 1662 with the announcement that the statue was no longer to be sited in Saint Peter's but on the base landing of the Scala Regia.² Because the model is much closer to the executed monument than to the drawing in Madrid, it most probably dates to very early in the second phase, when Bernini may still have been thinking in terms of a somewhat constricted niche. In 1662 he was still in the midst of planning the Scala Regia and may not have determined yet how wide the landing would be.

The model, one of the most vigorously worked in Bernini's oeuvre, was created solid and not hollowed, as was his usual approach. The massing was done rapidly, with handfuls of clay compacted loosely, resulting in the large shrinkage cracks now visible on the back and the base. The assembly method is also evident in the X-radiograph (fig. 270). Bernini formed the model over a square peg, which must have been inserted into his



Fig. 270. X-radiograph of Constantine the Great on Horseback: note shrinkage cracks from poor adhesion of loosely compacted clay

modeling stand. None of his other models show a similar technique, and it is unclear why he decided to use it here. As the model progressed, Bernini built up the central mass by adding slabs and handfuls of clay for the horse's body. The rider and the neck of the horse were formed with more pieces of clay, some of which, according to the X-radiographs, appear to have been wedged. The rump was gradually enlarged with handfuls and strips of clay. By this stage in the execution, the lower third of the model likely resembled an untidy heap, with the horse and the rider rising out of it. To bring the entire composition into focus, Bernini shifted to a more subtractive approach, using his fingers and an assortment

of toothed tools to shape the horse's underbelly and to excavate the legs. The leg of the rider was formed similarly, modeled out of the clay mass rather than rolled and attached. In finishing the limbs, Bernini applied bits of clay that he pushed around the circumference of the curved forms with his fingers—his usual manner of shaping and smoothing such parts.

The face of the horse displays an enchanting wildness, with its flared nostrils, open mouth, wide eyes, and curling eyebrows (fig. 271). In rendering the expression, Bernini worked quickly with oval- and blunt-tip tools, drawing and shaping the features, some of which were first added as strips of rolled clay. All areas of detail, including the mane, were only cursorily finished and retain considerable freshness. Like the mane, the rider's clothing was initially added in strips and sheets before being detailed with tools. This is also true of the drapery that extends behind the rider's thigh. As Bernini brought the model to completion, he adjusted the horse's chest, enlarging it slightly; the additions of clay overlap previous smoothing. Another noteworthy aspect of construction is the small strut that supports the horse's chin (fig. 77); a similar strut was used on the Model for the Equestrian Statue of Louis XIV (cat. 24).

Marks from Bernini's fingers and nails cover the back of the present model, bearing witness to how extensively he relied on the power of his hands to shape the initial clay mass (fig. 272). There are two main clusters of fingernail impressions—one behind the mane and another on the back of the rider's left shoulder. They result from Bernini's having repeatedly pinched and squeezed the clay as he worked the model from the front. (The impressions are convex side

Fig. 272. Back, with impressed finger marks from compressing of the clay: note cluster of fingernail impressions on the horse's neck



Fig. 271. Horse's head: note use of blunt- and oval-tip tools, which left clay crumbs and sharp ridges in the



down because he was reaching over the top of the model.) Similar clusters appear on the *Study of a Horse* (cat. 22), which, as we argue, is likely also to have been preparatory for the *Constantine*. Finger impressions have made deep parallel gouges that run from top to bottom on the back (see fig. 272). They bear a close resemblance to those on the earliest *Angel with the Crown of Thorns* at Harvard (fig. 340) as well as the *Model of an Angel and Cherub for the* "*Celestial Glory*" (fig. 319). Yet those came at the end of modeling, whereas these are almost certain to have been made at the beginning, when Bernini was compressing the initial handfuls of clay into a mass suitable for the horse and the rider. Sometime much later, a large letter—perhaps an M—was roughly inscribed into the back near the center.

After the clay had been allowed to become fairly hard, the model was brought to completion with a chisel, used to trim the edges of the base and to remove clay from areas between the horse's legs and under its chest. As with the *Study of a Horse*, only part of the clay under the horse's belly was excavated, with the rest left in place as a support. The model was then draped with a damp cloth for an extended period, as indicated by the worn high-relief areas on the surface. There are also finger impressions made through fabric, evidence that the model was being handled during the time it was kept moist. During this period, it was used to provide

measurements for transfer. Groups of measuring marks (all sharp points) are found on the rider's shoulder (six), the side of his waist (ten), his calf (two or more), and his knee (nine). His throat has the greatest concentration of points (more than fifteen) and must have been the nexus for the measuring system, as in other models by Bernini. Lines were also lightly incised over the rider's right shoulder and on the horse, running from its cheek to before the rider's knee. These, too, are likely to have been done in conjunction with the measuring campaign. Bernini could have used the measurements in several ways: to realize another model or in preparation for enlarging the composition to either a full-scale model or the finished statue. In progressing to these next steps, he seems to have undertaken drawn studies of individual parts of the composition, including Constantine's head (fig. 273).



Fig. 273. Gian Lorenzo Bernini, Study for the Head of Constantine, ca. 1662. Black chalk, 9% x 7% in. (25.1 x 18.6 cm). Istituto Nazionale per la Grafica, Rome (FC 127503). Cat. D.34

Gian Lorenzo Bernini

24 · Model for the Equestrian Statue of Louis XIV

ca. 1669–70. Terracotta, $29\% \times 36\% \times 14\%$ in. (76 × 92 × 36 cm)

Galleria Borghese, Rome (269) (NOT EXHIBITED)



the IDEA THAT BERNINI MIGHT CARVE an equestrian statue of Louis XIV first surfaced during the sculptor's stay in Paris in 1665.² Initial discussions did not advance very far, and Bernini returned to Rome assuming the project would not progress further. Two years later, however, in December 1667, he received a letter from Jean-Baptiste Colbert, the king's superintendent of buildings, asking him to undertake the statue and promising him complete freedom in determining the design.³ Bernini's response is lost, but he was clearly interested. Sometime during 1668 he let himself be persuaded. By February of

PROVENANCE: Possibly Mattia de Rossi (by d. 1695); unknown intermediaries; Ernest Crosnier (d. 1905); [Galerie Georges Petit, Paris, December 5, 1905, lot 119]; Édouard Aynard, Lyon (1905–1913); [Galerie Georges Petit, Paris, December 4, 1913, lot 308]; Alessandro Contini Bonacossi (1913–1926; his gift to the Galleria Borghese)¹

LITERATURE: See page 383.

EXHIBITIONS: Rome 1998, no. 32; Turin and other cities 1999–2001 (Turin only), no. 109

CONDITION: The model has undergone much restoration, resulting in numerous plaster fills and restored losses that include portions of both of the horse's front legs, the bottom half of its tail, and the rider's baton, as well as both of the rider's legs and feet below the calf. The restorations were attached with metal dowels. Many of these restorations, in addition to other areas, are covered with a skin of restoration material tinted to resemble terracotta and given a toothed texture in several areas. The front and sides of the rocky base are entirely re-skinned. A network of fine lines cut into the surfaces after restoration resulted from the use of a flexible gelatin mold to cast a replica during the early twentieth century. The surface contains numerous light-colored areas of fill material or gesso, all obscured by a later dark reddish coating.

the next year, the marble block for the statue had been quarried and was awaiting transport to Rome.⁴ It arrived at Bernini's house that summer but would not see a chisel for years.⁵ As Bernini makes clear in a letter of December 30, 1669, to Colbert, he had not yet even begun the model. He does assure Colbert, however, that the model (in clay) will be "of his own hand" (di sua mano), meaning that he would not entrust it to assistants—unlike his plan for the carving.⁶ The present model is universally agreed to be that model, even if there was no further mention of it during Bernini's life. The attribution is secure, and there is no reason to question that the model served as the principal reference during carving.

In designing the statue, Bernini turned first to an obvious source: his recently completed *Constantine the Great on Horseback* at the Vatican (fig. 265). In a letter of December 6, 1669, Colbert even told Bernini that the *Louis XIV* should be similar to the *Constantine.*⁷ Bernini countered that important changes had to be made, as Constantine was shown worshipping the cross, which would be inappropriate for the king, who should be depicted in a posture of majesty and power.⁸ Still, Bernini could not help referring to the *Constantine*, duplicating the horse almost precisely. The rider and the base did, however, receive his fresh attention. At least one drawing survives from his preparations (Museo Civico, Bassano), and there may also have been *bozzetti*, although with the *Constantine* recently behind him he may have felt confident enough to forgo some of his normal sketching and turn almost immediately to the present *modello*.⁹

In terms of sheer mass, the model is the largest terracotta by Bernini known today. Its assembly presented challenges that were all artfully resolved in ways characteristic of him. Despite the model's size, X-radiographs show no evidence that an internal armature was used (fig. 274). That said, some of the projecting elements—such as the horse's forelegs and the rider's right arm—are likely to have needed support during modeling. Temporary wooden

props were almost certainly used, and several clay struts also remain. One supports the rider's right elbow from the adjacent drapery; another similarly supports the rider's left forearm. There is no evidence that any of the projecting elements were cut off, or sectioned, prior to firing, then fitted with a dowel and reassembled afterward. All the dowels seen in the X-radiographs represent later restorations.

According to the X-radiographs, the model was mostly assembled not of wedged masses of clay but of numerous large handfuls as well as smaller pieces and strips. These were first made into a solid core, which was then built up in



Fig. 274. X-radiograph of *Model for the Equestrian Statue of Louis XIV*: note hollowing of horse's neck, rump, and rider's head

layers to give shape to the horse and the rider. As Bernini proceeded, he likely integrated the clay with his fingers and oval-tip tools, adding more as needed for details. The exact process is difficult to know for certain, however, as the smoothing and texturing of the surface in the final stages of modeling have erased most of the evidence.

Once the model had been shaped, parts of the horse and the rider were hollowed to prevent damage from shrinkage. As confirmed by X-radiographs, the rider's head and torso and the horse's head, neck, and rear were hollowed. (The horse's middle was likely also hollowed, but existing X-radiography does not cover that part of the model.) 10 X-radiographs also confirm that the hollowing was done by using tools to scoop out the clay through access holes, leaving distinctively shaped hollows. The cavity in the rider's head tapers



Fig. 275. Mane and head of the horse: compare with fig. 271

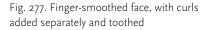
downward with a rounded bottom, indicating that the head was cut into at the top, and the clay then excavated from above. Where the horse's neck and chest were hollowed, the interior cavity bears the characteristic scalloped indentations of a wire-loop tool. The resulting holes were carefully plugged and smoothed over. The hole used to hollow the horse's rump lies between the horse's rear legs. Another hole, still visible though partially covered with drapery, is cut into the horse's body under the rider's left hand and may have been used to excavate the central areas of the body. X-radiography indicates that the rocky base was left solid, which is also how Bernini treated the rocky base on the Model for the Fountain of the Moor (cat. 13).11

After hollowing the model, plugging all the access holes, and smoothing them over, Bernini could turn his attention to details. The horse's face and wind-

swept mane are among the most striking passages and entirely characteristic of Bernini (fig. 275). The model for the Constantine the Great on Horseback at the Hermitage (cat. 23) provides more verification. The anatomical forms of the two models are almost identical, as is the design of the mane. Its curls divide similarly, while also blowing forward in the same way, coming to sharp points. Elements of facture reinforce the certainty of Bernini's authorship. In shaping the mane, Bernini first worked with a large oval-tip tool. He then added texture with a toothed tool—and not simply linear texture. In the spaces between



Fig. 276. Impressions from the end of a toothed tool within a curl of the mane





several of the curls, he impressed the end of the toothed tool to form series of holes (fig. 276). This technique, found on the *Moor* (fig. 226) and elsewhere, is likely to be unique to him.

In turning to the rider, Bernini had to contend with the drapery, which he formed in his usual way, by adding sheets and strips of clay. Where the drapery projects out the farthest, temporary wooden props may have been needed; circular impressions underneath the billowing drape on the rider's back may record some of these props. The rider's face must have been modeled first, with the framing ringlets of hair added as individual ribbons of clay (fig. 277). As with the mane, Bernini shaped and textured the hair with toothed and oval-tip tools. He took less time with the rear of the head, leaving it more loosely modeled. He finished the face as he did the horse's muzzle, by smoothing it with his fingers.

The face, when compared to that of the *Moor* (fig. 222), reveals a principal weakness: it is not very expressive. One reason has to do with the subject. Bernini knew he must portray the king as serenely self-possessed and in command. Another reason is likely that the present model was never intended to rival the *Moor* in detail or finish. It is much rougher, as becomes apparent on examining how the surfaces were finished—not with careful brush smoothing but with medium- and large-tooth tools as well as with his fingers. Bernini worked the toothed tools forcefully over most of the model, imparting a striated texture. In a few places, such as the rider's face, he opted for fingers only. Why he did not treat most of the other areas with equal refinement—including the horse's body and the rider's cuirass, arms, and legs—is difficult to know. He must have found the toothed texture visually appealing—particularly

the way it helped activate the broad surfaces of the large model. He likely stopped short of further refinement because he considered the extra work unwarranted: the model was for studio use only, not for presentation. As discussed by Rudolf Wittkower, Bernini refused to send a presentation model to the French court, afraid his ideas would be stolen and the commission transferred to local artists. Thus, he anticipated that the only people to see the model would be himself and his assistants. The level of finish did not matter. What mattered was that the model communicated his design.

From the beginning, Bernini intended to use assistants to carve all but the face of the statue. These were not, however, to be his usual assistants.¹³ Colbert specified that Bernini delegate the work to students at the French Academy in Rome.¹⁴ In 1666 Bernini had begun to receive a pension from the French court. In return, he was expected to fulfill certain



Fig. 278. Throat: note possible nexus at pit (arrow) and rasp marks from post-firing alteration

obligations, one of which was to participate in the curriculum of the Academy.15 As Colbert doubtless recognized, the equestrian statue would be a perfect teaching exercise, an opportunity to take full advantage of Bernini. The fact that the statue was to be carved by students—not by experienced assistants-may have weighed on Bernini as he produced the model. Perhaps he made it as large as he did to facilitate copying. There is only one possible indication of measuring, however—a circular depression (roughly 3 mm in diameter) at the pit of the rider's throat, which was likely made in leatherhard clay. This could have been done to establish the nexus for a measuring system (fig. 278). The throat would be a typical location for one, and perhaps Bernini thought it would facilitate copying if he established a spot for the nexus before firing. Given the lack of other measuring-related marks on the surface, the model was undoubtedly measured only after firing: the tips of the dividers could

not have penetrated the fired clay. Of course, even if there had been marks, they would be exceedingly difficult to find now because the surface has been so obscured by restoration materials and the reddish coating (fig. 88). After firing—and perhaps before copying—one alteration was made: the shape of the rider's cheek, jaw, and throat was subtly adjusted with a rasp (see fig. 278).

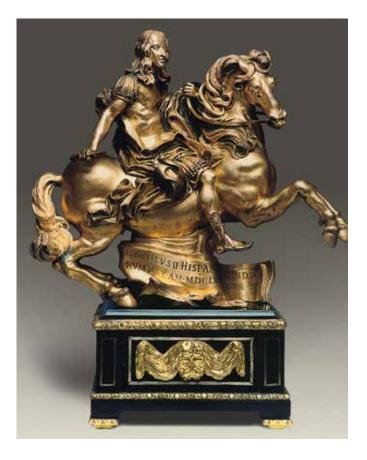
Work on the marble had begun by May 1671 and was conducted in Rome. ¹⁶ Bernini is assumed to have made good on his promise to employ Academy students. The statue was not completed until 1677 or 1678. ¹⁷ At the time of Bernini's death in 1680, the statue was still awaiting transport to Paris, which occurred only in 1684. ¹⁸ By March of the following year, the statue was in Paris, under royal eyes for the first time, and those eyes were unimpressed. ¹⁹



Fig. 279. Gian Lorenzo Bernini with assistants, Equestrian Statue of Louis XIV (later recarved as Marcus Curtius by François Girardon), ca. 1671–78 (recarved 1688). Marble, over lifesize. Châteaux de Versailles et de Trianon, Versailles

Louis XIV ordered the statue destroyed, although he would later recant, agreeing to have it recarved as the ancient Roman hero Marcus Curtius (fig. 279). The portrait and headgear were changed; the mass of rocks became flames. Bernini's masterpiece was no more. Fortunately, back in Rome, it survived in the form of the present model—the most accurate threedimensional record of how the statue originally looked. Before the statue left Rome, it provided the basis for a gilded-bronze statuette representing the Spanish king Charles II (fig. 280).20

Fig. 28o. Gian Lorenzo Bernini or associate, Charles II on Horseback, 168o. Gilded bronze, $16\% \times 7\% \times 7\%$ in. (41 x 49 x 19 cm). Private collection





V·Working for the Chigi

On April 7, 1655, Fabio Chigi was elected pope, taking the name Alexander VII. A new golden age had just dawned for Bernini. Alexander came to the papal throne with a vision of restoring Rome's ancient grandeur through an ambitious program of buildings and statues. Bernini was doubtless the first artist to be summoned, and he surely responded with enthusiasm to the prospect of multiple papal commissions. Alexander's papacy lasted twelve years, during which a warm bond developed between the two men. Bernini was back to where he had found himself with Pope Urban VIII: working for a sympathetic patron who was passionate about architecture and sculpture and prepared to spend lavishly on them.

The sculptures Alexander commissioned from Bernini are of two types: those, for Saint Peter's, that bore the full stamp of the papacy; and those that represent Chigi propaganda—privately funded and intended to celebrate Alexander and his family. The unquestioned star of the first type is the Cathedra Petri with the surmounting *Celestial Glory* (fig. 281). A work of enormous complexity that was planned and executed between 1656 and 1666, it gave the apse of Saint Peter's what it had sorely lacked: a visual climax. The Cathedra, surrounded by the four Church Fathers in bronze, occupies the bottom half of the composition. For the upper half, Bernini conceived a burst of heavenly light, with sculpted angels and cherubs hovering amid golden clouds and rays. Bernini turned to models in planning both halves.

Models were no less important to Bernini's preparation for some of his other sculptures for Alexander, including the *Daniel in the Lions' Den* (cat. 25) and the *Saint Jerome* (cat. 30). Both feature in projects motivated by Alexander's desire to raise his family's profile. The *Jerome* went to a chapel he had renovated in his native Siena; the *Daniel* to his family's chapel in Rome, which he also had renovated. Thanks to Alexander's many commissions to Bernini, sculpture saw its fortunes rise. Appreciation for models appears to have experienced a related increase. Alexander's cardinal nephew, Flavio Chigi, is generally credited with being the first serious collector of terracotta models in Rome, owning several works that are either by Bernini himself or copies that reflect his compositions (cats. 1, 25, and 26).

Fig. 281. Gian Lorenzo Bernini, Cathedra Petri and Celestial Glory, ca. 1661–66. Gilded bronze and stucco. Saint Peter's Basilica, Vatican City

Gian Lorenzo Bernini

25 · Daniel in the Lions' Den

ca. 1655. Terracotta, $16\% \times 8\% \times 5\%$ in. (41.6 × 22 × 14.5 cm) Musei Vaticani, Vatican City (2424)



INSCRIPTIONS, MARKS, AND STAMPS: 62424 written in black paint on lower back; C written in pencil on the bottom

PROVENANCE: Cardinal Flavio Chigi, Casino at the Quattro Fontane, Rome (d. 1693); by descent in the Chigi family, Rome (until 1918); Kingdom of Italy (by purchase, 1918; donated to the Vatican, 1922)

LITERATURE: Brinckmann 1923-24, vol. 2, pp. 60-61; Lavin, I. 1955, pp. 59-60; Wittkower 1955, p. 218; Wittkower 1966, pp. 233-34; Kauffmann 1970, p. 266; Weil, M. 1974, pp. 39, 108; Weil, P. 1978, p. 129 n. 102; Wittkower et al. 1981, pp. 233-34; Steven F. Ostrow in Princeton and other cities 1981-82, p. 164; Raggio 1983; Avery 1997, pp. 158, 260; Petrucci 1997, pp. 176-77; Wittkower et al. 1997, p. 277; Ferrari and Papaldo 1999, p. 318; Morello 2008, pp. 93-104; Villani 2008, pp. 452-53

EXHIBITIONS: Vatican City 1981, no. 105; New York, Chicago, and San Francisco 1983-84, no. 31; Ottawa and other cities 1986-87, no. 21; Rome 1999b, no. 77; Bonn and Berlin 2005-6, no. 193

CONDITION: The tips of the little fingers of both hands are missing. There is a repaired firing crack at the neck. There is a pronounced prefiring craquelure and deterioration of the clay surface in many areas. Many interstices retain remnants of red bole or paint; a sample of that material covered with a darker coating is preserved on the back at lower left.

THIS MODEL, WHICH RELATES TO BERNINI'S marble Daniel in the Lions' Den in the Chigi Chapel in Santa Maria del Popolo, Rome (fig. 282), is first recorded in the death inventory of Cardinal Flavio Chigi, which was completed in 1694. Listed in the section detailing the contents of the Casino at the Quattro Fontane, where Flavio kept part of his art collection, it is described as follows: "A model in terracotta of the Daniel at the Popolo, made by Bernini." Curiously, it is not listed in the two earlier inventories of the Casino, the first from about

1666, the other slightly later.² This makes it possible that Flavio acquired it through inheritance from his uncle, Pope Alexander VII, who died in 1665 and whose estate presumably took some time to settle. Alexander was the patron of the *Daniel*, and he is known to have been the recipient of models from Bernini (see cat. 27).

In modern times, the model was first published in 1924 by A. E. Brinckmann, who attributed it to Bernini. Irving Lavin and Rudolf Wittkower, both writing in 1955, expressed their doubts, although Wittkower would change his mind in 1966, accepting the model as autograph. Subsequent scholars have tended to agree, with the balance shifting decidedly in favor of the attribution in 1980, after the model was cleaned. Previously, the model had been coated with two layers of paint that greatly obscured the quality of the modeling.³

Fingerprint analysis provides some of the most persuasive evidence that the model is by Bernini. The model is one of only five in his oeuvre to bear an identifiable fingerprint—impressed in the clay on the back at lower left. That the fingerprint is Bernini's is confirmed by its reappearance on four other models, each unquestionably by him (see figs. 95–99). The fingerprint, which does not appear to document a modeling stroke, was probably left while Bernini was handling the model. This does, of



Fig. 282. Gian Lorenzo Bernini, *Daniel in the Lions' Den*, 1655–57. Marble, over lifesize. Chigi Chapel, Santa Maria del Popolo, Rome

course, leave open the possibility that he could have been handling someone else's model, but that possibility all but disappears once other considerations are taken into account.

First, the model was unquestionably preparatory for the *Daniel*; it is not a copy. This is proven by the differences between it and the finished statue. In the completed marble, Daniel's stance is more upright, not leaning as far back toward his right. The angle of his raised arms was also adjusted. In the marble, Bernini shifted Daniel's hands to his left, framing his face neatly between his arms. By contrast, on the model, the face is concealed

behind the left arm. A series of drawings at Leipzig proves that Bernini was deeply concerned with the relationship of the arms to the face when viewed from below, as intended (figs. 42 and 43; cats. D.26 and D.24). Two of the drawings even illustrate the solution tried in the present model (figs. 43 and 283). A third difference concerns the lion. In the model, the animal is turned more sidewise and not tucked as far behind Daniel's right leg. Finally, no two passages of drapery in the model and the marble are exactly alike.



Fig. 283. Gian Lorenzo Bernini, Study for Daniel, ca. 1655. Red chalk on gray paper, 1415/6 x 7½ in. (38 x 19 cm). Museum der Bildenden Künste, Leipzig (NI.7892r). Cat. D.27

Additional confirmation that the model was preparatory for the Daniel comes from the various measuring marks on the terracotta surface. Located in logical places, they leave no doubt that the model was submitted to an extensive campaign of measurement before being fired—likely for the purpose of elaborating a subsequent model. The marks take two forms, struck lines and sharp points, which record the different tips on the dividers used to make them. The marks are clustered on the right shoulder (nine lines), under the clasped hands (two lines), on the right elbow (two points), on the left elbow (four points), on top of the right ankle (four points), and on the side of the right knee (three lines). The nexus for the measuring system is located at the pit of the throat, which features numerous points and struck lines (later partially smoothed over), as well as a faintly inscribed X. A similar X marks the nexus on Bernini's large Angel with the Crown of Thorns at Harvard (fig. 379).

Despite the evidence of the fingerprint, the differences from the finished Daniel, and the measuring marks, some aspects of the attribution to Bernini are not straightforward. Many of the flesh areas on the model are less finely finished than we might expect of him—at least to judge by his terracottas that can be firmly categorized as modelli, such as the Model for the Lion on the Four Rivers Fountain and the Model for the Fountain of the Moor (cats. 7 and 13). Typically, when creating large and detailed models such as those, Bernini shaped and smoothed the limbs and other rounded

forms by generally pushing the clay around their circumferences with his fingers. Here, he was much less systematic, with many finger strokes running down the forms and in multiple directions and creating a patchy look. The consequences for the anatomy are notable. In many places, such as the right thigh, the musculature fails to look convincing, weakening the appearance of the entire figure. Another departure from his usual technique is that no apparent effort was taken after the final shaping to smooth the surfaces with a brush or a cloth—only with fingers. This, too, contrasts with the Lion and the Moor, where Bernini carefully brushed the surfaces in a regular pattern to emphasize the underlying anatomy.





Fig. 284. Face, showing evidence of clay deterioration

Fig. 285. Lion's head and mane: note the curls modeled with an oval-tip tool

He was highly aware that by brushing a curved surface around its circumference he made it appear rounder and more supple—key to depicting flesh effectively. Even many of his *bozzetti* display directional smoothing with a brush (see figs. 145, 224).

A second area of concern is that not all details on this model find direct equivalents among Bernini's other models. The face is perhaps most problematic (fig. 284), with the features neither crisp and detailed like those of the *Moor*, nor summary and quick like those on one of his true *bozzetti*, such as the *Half-Kneeling Angel* at Harvard (cat. 48). The level of finish occupies a middle range, and this is also true for the lion at Daniel's side. The blocky paws with their toothed texturing are completely unlike the rounded, sumptuously rendered paws on his terracotta *Lion* for the Four Rivers Fountain (compare fig. 199 with fig. 285). This is somewhat odd, given that the mane of Daniel's lion is beautifully detailed, with comma-shaped curls recalling those on the lion for the fountain (compare fig. 198).

The condition of the model provides a partial explanation. In many crucial areas, including the head and the left shoulder, the clay is seriously deteriorated, resulting in dulled forms, coarse surfaces, and a kind of *craquelure* (fig. 86). Fabric impressions confirm that the model was kept moist with a cloth, while the deterioration is evidence that the clay was wetted and then rewetted over a prolonged period. There are also fresh finger marks in the deteriorated areas, which point to post-deterioration handling prior to firing. Other marks that may be tied to handling are the unusual oval impressions on the back of the model and along the bottom rear edge; these may document one means by which the model was conveyed around the studio: a wicker basket or tray.

A second matter to bear in mind when assessing the model is that, even though it is the size of a typical modello, we should not assume that Bernini was fixed on giving it the same level of finish as the Moor or the Lion. His notion of what constituted a modello was fluid, which makes it unsurprising that the present model is related not only to Bernini's other modelli but also to his bozzetti. Take Daniel's toes, executed with quick jabs. They do not look anything like the Moor's (compare fig. 224); instead, the formulation is nearly identical to those on bozzetti such as the Angel with the Scourge at Harvard (cat. 37). A different case is the



Fig. 286. Back of model: note sketched-in drapery forms and the lower buttress

hair, which is more similar to the *Moor*'s, with the wavy tresses at front and the pattern of locks radiating from a central point on the crown. Even the back of the model has a hybrid quality (fig. 286). The upper third is finished like a normal modello, but the bottom third is left as rough as a bozzetto. Furthermore, the model is not hollowed. Bernini typically hollowed his more finished models—but almost never his bozzetti.

In terms of construction, the model is consistent with Bernini's practice, having begun as a single column of clay. On the underside is a semicircular shrinkage crack (located beneath the figure's back left), which indicates the initial column. The remaining shrinkage cracks, some of which radiate outward from the semicircular one, describe the joins of smaller masses of clay used to form the front and sides of the model, including the flat base and the rocks. The additions are also evident on the back of the model, which features a concentration of shrinkage cracks at lower right, where clay for the lion was attached. This use of a main wedged column in combination with clay additions is encountered frequently in Bernini's oeuvre.

The assembly of the model is characteristic of Bernini in other ways. When forming models, he often rolled the arms separately and attached them to the torso, and that is true here, as indicated by the shrinkage cracks at both armpits. To ensure

that the arms did not slump after their attachment, Bernini inserted a wooden prop under the clasped hands, a device he used with some frequency when modeling. The prop was likely left to burn out during firing; the hole where it was inserted can be seen underneath the hands (fig. 150). Finally, after modeling the arms, Bernini added the right leg and strips of clay for the drapery (fig. 157). Many models in Bernini's oeuvre bear a parallel technique, including the two Half-Kneeling Angels (cats. 48 and 49).

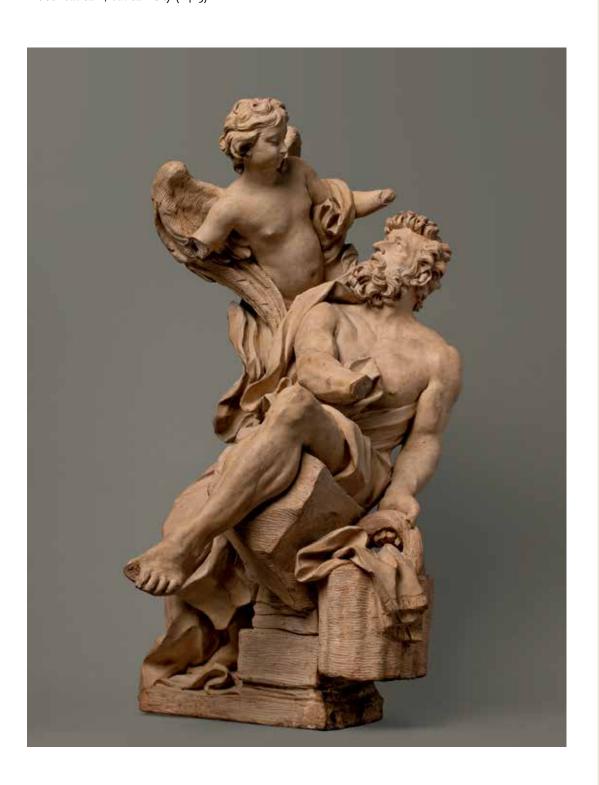
The model was likely produced in 1655, although it could well have come a year earlier and thus closer to the time when the commission was probably awarded. The statue was finished by the summer of 1657, when Bernini received his final payment for it.5 The measuring marks on the model suggest that it was not created specifically as a presentation model; more likely, it fulfilled some workshop role and was later given to the Chigi.

Associate of Gian Lorenzo Bernini (Ercole Ferrata [?], Italian, 1610–1686)

26 · Habakkuk and the Angel

ca. 1661. Terracotta, 20½ × 10½ × 13 in. (52 × 25.6 × 33 cm)

Musei Vaticani, Vatican City (2425)



INSCRIPTIONS, MARKS, AND STAMPS: 2425 written in black paint on the back at bottom center; *B* written in pencil underneath the model

PROVENANCE: Cardinal Flavio
Chigi, Casino at the Quattro
Fontane, Rome (by about 1666–d. 1693); by descent in the Chigi
family, Rome (until 1918); Kingdom of Italy (by purchase, 1918; donated to the Vatican, 1922)

LITERATURE: Brinckmann 1923–24, vol. 2, pp. 60–61, pl. 29b; Lavin, l. 1955, pp. 116–17; Wittkower 1955, p. 218; Wittkower 1966, p. 233; Kauffmann 1970, p. 230; Weil, M. 1974, pp. 39, 108; Raggio 1983, pp. 376–77; Martinelli 1994, p. 384; Avery 1997, p. 154; Petrucci 1997, pp. 176–77; Angelini and Montanari 1998, p. 141; Ferrari and Papaldo 1999, p. 317; Lothar Sickel in Bonn and Berlin 2005–6, p. 335; Villani 2008, pp. 454–56

EXHIBITIONS: Vatican City 1981, no. 106; New York, Chicago, and San Francisco 1983–84, no. 32; Ottawa and other cities 1986–87, no. 22; Rome 1999b, no. 78

CONDITION: The angel's right arm and left hand and wrist are missing, as are Habakkuk's right hand and left big toe. Remnants of red and brown-to-black paint are found in interstices.

THIS MODEL REPRODUCES ALMOST PRECISELY Bernini's *Habakkuk and the Angel* in the Chigi Chapel in Santa Maria del Popolo, Rome (fig. 287). A. E. Brinckmann first published the model in 1924, expressing doubts that it could be by Bernini. Irving Lavin and Rudolf Wittkower agreed, although writing at a time when the model was still covered in thick black paint, which was not removed until the early 1980s. Since being cleaned, the model has been routinely attributed to Bernini, with Olga Raggio and Marc Worsdale among the staunchest



Fig. 287. Gian Lorenzo Bernini, *Habakkuk* and the Angel, 1656–61. Marble, over lifesize. Chigi Chapel, Santa Maria del Popolo, Rome

advocates.¹ To our eyes, Brinckmann was correct: the model is not by Bernini. The more probable author is someone like Ercole Ferrata, a superb modeler who was working with Bernini around the time of the *Habakkuk*.

The points against the model being by Bernini are few but noteworthy. First, the angel departs from the marble in ways that are more likely due to poor copying from the finished sculpture rather than experimentation during the planning of it. Habakkuk's face matches the marble almost precisely, but the angel's is blander, even saccharine (fig. 288). As a consequence, the angel fails to interact with Habakkuk as meaningfully as in the marble. The model also differs from the marble in the angel's drapery. Because the folds are simplified and less faceted on the model, they more closely resemble Habakkuk's garment, thus losing a crucial design feature: the sense that the angel is fluttering in midair while the earthbound Habakkuk is draped in less active garb. That Bernini undertook the model knowing precisely how he wanted Habakkuk to look but not the angel is difficult to believe. Such differences are more characteristic of an inattentive copyist.

A second reason to question the attribution to Bernini is that the level of detailing is equally high across all parts of the model, whereas Bernini appreciated variation, leaving certain parts sketchier than others. Our eyes are invited to consider a subtle detail wherever they turn: the tuft of hair on Habakkuk's chest (fig. 289),

the vein on his left bicep, the tasseled fringe on the cloth tucked into the basket, the feathers on the angel's wings (fig. 290). Bernini recognized the need for detail but also understood that not every detail was of equal importance. Some could be modeled in a more summary style than others. On the *Rio de la Plata*, for example, he did not bother to bring the coins into the same sharp focus as the river god (fig. 204). He merely suggested them, which is probably more in keeping with how he would have treated the rocks on the present model: more loosely and thus more like those on the *Model for the Fountain of the Moor* (cat. 13).



Fig. 288. The angel's face: note the sparkle of mica flakes in the clay

Instead, the rocks here are very carefully toothed in a horizontal direction, and the same pattern is applied to the adjacent basket. On the *Moor*, the rocks are toothed much more energetically and in a greater variety of directions, and there is no confusing them with the shell above, which was given its own more rippling toothed texture.

The present model is not only meticulously detailed but also meticulously smoothed—another reason to question the attribution to Bernini. What texture there is—across Habakkuk's chest, for example (see fig. 289)—is very fine and extremely even in its application. The smoothing was doubtless done with a soft, moistened brush, a technique Bernini did not generally use. When he smoothed with a brush, he made a decisive effort to impart texture, often preferring dry, stiff brushes and working them energetically. We do not mean to imply, however, that the smoothing on the present model is somehow inferior to Bernini's. It shows enormous skill, in fact, with the striated brush marks—however faint—tracking over the rounded forms in a manner consistent with Bernini (see fig. 224). Nonetheless, the wet brushing lacks differentiation, with areas of detail, such as the angel's face, brought to the same silken finish as Habakkuk's legs and torso, as well as the drapery.



Fig. 289. Habakkuk's chest, with sprouting hair and faint striated brush marks from smoothing



Fig. 290. Wing feathers, showing the vanes rendered with a small-tooth tool

The techniques used to construct the model are in line with Bernini, although none is sufficiently specific to prove his authorship. The model began with a wedged column of clay, and then the figure of Habakkuk was largely modeled out of that core. The parts of the figure that extend beyond it—such as the left leg, the left arm, and the basket—were added as modeling progressed. The right corner of the base was also added. The construction is evident from an examination of the underside of the model, where the network of cracks on the left signals the loosely compacted clay of the added corner; the core occupies the right, under Habakkuk; the plaster-filled crack at the center represents the edge of the core's periphery (fig. 291). The angel was entirely built up of added pieces.

The marks of only two tools appear on the model—a fine-tooth tool and a small oval-tip tool. Others would have been used to shape the model at an earlier stage, but all traces of those have been erased. The back of the present model was not brought to the same level of completion as the front, which is not surprising for a model related to a niche figure, where the back is unseen (fig. 292). A cursory smoothing was given to flesh areas, while all other parts were worked with a fine-tooth tool and left unsmoothed. The model was later hollowed by scooping out clay



Fig. 291. Base, with circular wedged column visible on right, additions on left

from the back with an oval-tip tool. Only one other model in Bernini's oeuvre shows similar hollowing, the *Pope Alexander VII* (cat. 33). In terms of size and finish, however, a closer parallel might be Bernini's model for the *Daniel in the Lions' Den* (cat. 25), the companion to the *Habakkuk and the Angel*, which he left solid.

The model's provenance sheds light on who might have made the model and why. It is first recorded in the collection of Cardinal Flavio Chigi, appearing in the earliest known inventory of his Casino at the Quattro Fontane, generally thought to have been drawn up in 1666.² That is just about five years after the marble *Habakkuk and the Angel* was installed in the Chigi Chapel, although this is not necessarily the earliest the model could have been made—that date would likely be closer to 1655, around when the commission was probably awarded.³ That the model is documented within eleven years of the commission and perhaps within only five years of the finished statue increases the possibility that the model was produced in Bernini's workshop and had his approval. The fact that its first documented owner is Flavio Chigi strengthens the argument. Flavio's uncle, Pope Alexander VII, was the patron of the *Habakkuk and the Angel*. Among Flavio's many responsibilities was to work

with Bernini on papal projects such as the Chigi Chapel. Flavio was also one of the first serious collectors of terracottas in Rome (see Tomaso Montanari's essay in this volume). If he wanted to commemorate the *Habakkuk* with another terracotta for his collection, he would not have hesitated to go to Bernini, who would surely have been amenable to the request. In filling it, he would have understood that what mattered to Flavio was not whether the terracotta was autograph or not but whether it reflected the finished design. Thus, Bernini likely would not have worried too much if there was no preparatory model available as a gift for Flavio, since the artist could always commission a copy from an assistant, which is probably the case here. Otherwise, the model must be a presentation model, and Flavio was certainly in a position to receive one. That it may have served as a presentation model, however, does not change the fact that Bernini seems to have delegated it to an assistant.



Fig. 292. Hollowing from the back with an oval-tip tool

Knowing that the model can plausibly be attributed to an assistant working close to Bernini between about 1655 and 1666 helps narrow the field of potential authors. During these years, Bernini had several talented modelers at his side, including Ercole Ferrata, Antonio Raggi, and Lazzaro Morelli.4 Based on their known models, Ferrata might be the strongest candidate although not by much. The model for the Angel with the Cross (cat. 46), which we attribute to Ferrata, bears a couple of similarities, including the use of a wet brush for smoothing, which gives the face the same diluted quality as the angel's face on the present model. The toes, boneless and tubular, also invite comparison. Still, for each similarity there are differences, not least the styles of the hair. What makes the attribution particularly tricky is that whoever made the model was likely suppressing his own style in order to follow Bernini's. Ferrata is also a difficult case in that his surviving models vary considerably by style, which could be due to his reported habit of soliciting models from assistants for use in his own projects.5

Gian Lorenzo Bernini and associates

27 · Model for the Cathedra Petri

ca. 1658. Terracotta, $23 \times 11\frac{1}{2} \times 10\frac{5}{8}$ in. (58.4 × 29.2 × 27 cm) Detroit Institute of Arts (52.220)



INSCRIPTIONS, MARKS, AND STAMPS: White-and-blue paper stamp applied to upper back; rubber stamp applied to bottom: ZOLL / N-69 / + in a circle in blue ink

PROVENANCE: Cardinal Mario Mattei, Rome (1792-1870); by descent in the Mattei della Pergola family (possibly to his nephew, Conte Marco Mattei [d. 1907]); Alexander von Frey, Europe and New York (1881-1951); Dr. Paul Drey, New York (by 1952; from whom purchased by the Detroit Institute of Arts, 1952)1

LITERATURE: See pages 383-84.

EXHIBITIONS: Detroit 1965, no. 25; Fort Worth 1982, no. 7; Bonn and Berlin 2005-6, no. 81; London 2009, no. 84

CONDITION: The two angels at the front of the armrests are later replacements. The proper left angel retains its original wings and feet. On the proper right angel, the lower half of the inner wing and the upper half of the outer wing are restorations; both feet are original. The chair surfaces bear remnants of an incompletely removed whitish coating (likely gesso), with traces of gilding or gold-colored paint. Interstices throughout retain remnants of a dark brown coating. Filled losses include portions of the back and the two rear corners at the volutes. Repaired joins and shrinkage cracks circumscribe the chair, bisecting the three lower reliefs. Some of the joins contain a reddish brown adhesive that predates the later restorations, the gesso, and the gilding. There are large, unfilled cracks in the bottom and the back. There are losses to the projecting ends of both legs, more pronounced on the proper right. A drilled claysampling hole is on the bottom.

IN HIS DIARY UNDER APRIL 14, 1658, Pope Alexander VII wrote that Bernini had presented him with a terracotta model for the Cathedra Petri—the name given to the monumental throne in the apse of Saint Peter's that serves as a reliquary for the wooden and ivory chair believed to have been used by Saint Peter during his time as first bishop of the basilica (fig. 281).² The pope noted that the model was two palmi (17½ inches) in height, which would have made it approximately six inches shorter than the present model. Despite the discrepancy, there is general agreement that the present model is the one described in the diary. It is consistent in design with the state of planning around 1658, when Bernini was in the process of expanding an earlier scheme, reflected in a drawing at the Royal Collection, Windsor Castle (fig. 300; cat. D.28). Meanwhile, differences from the finished chair indicate

that the model must have come before the third and final stage of planning, which is datable to between 1660 and 1662.³ The finished design eliminates the pair of cherubs at the bottom holding a scallop and the relief at the front depicting Saint Peter and the Miraculous Catch of Fish. Bernini would also lengthen the two legs at front.

One issue surrounding the model is the extent to which it reflects Bernini's own work. That it may have been shown to the pope does not mean Bernini modeled every part of it himself. In dissecting how the model was made and scrutinizing the figurative elements, it becomes clear that there are grounds for seeing the model as a collaboration with assistants. Fundamentally, the Cathedra Petri is a work of architecture, and its model reflects this in its manner of construction. The model was built from the ground up, using carefully cut sheets of clay as walls, and it has four primary levels—labeled 1 to 4 on the accompanying diagram (fig. 293). Level 1 is the most basic, a rectangular box—including a bottom—with

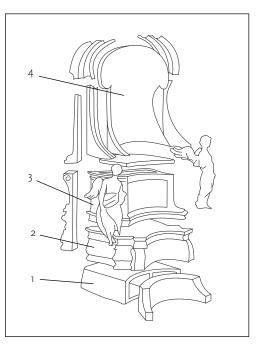


Fig. 293. Diagram illustrating proposed method of assembly

a concave slab at front that also forms the projecting legs. Additional walls may have been inserted inside the box as reinforcements. Level 2 is the platform on which the actual chair sits, and it was initially constructed of five sheets: one concave for the front, two curving for the sides, one flat for the bottom, and one flat for the top. Level 3 comprises the chair itself and began with a horizontal slab for the bottom trimmed slightly smaller than the top of level 2. The front and the side panels were then cut, given their curved shapes, and joined together on top of the slab. Bracing was probably added to the interior, and the slab for the bottom cushion was attached. Level 4 is the seat back. A large sheet of clay, with an arched top and tapered sides for the curved wings, was cut to form the front of the chair back, which would receive a rear-facing element at a later stage.

Each level appears to have been substantially decorated on its front and sides before assembly. This is true not only of the moldings but also of the reliefs, as they would have





Fig. 294. Moldings, with a gap at the join between the top of level 2 and the bottom of level 3

Fig. 295. Central relief on seat back, representing the "Pasce oves meas"

been much easier to execute while laid flat on a table as opposed to upright on the assembled chair. Layout lines were almost certainly used in the formation of the moldings, as the courses maintain extremely accurate spacing from top to bottom. There are several incised lines on the bottom of level 1 that are probably remnants of layout lines meant to facilitate some type of decoration. (The lines were not used because level 1, with the exception of the legs, represents negative space on the finished Cathedra and thus went unadorned on the model.) Once the moldings had been given their basic shape, oval-tip tools were used to model the various patterns on them (fig. 294). The slight irregularities in the repeating forms, which include eggs and darts and acanthus leaves, confirm that no mold was used. This was tedious work and probably assigned to an assistant.

Less easy to determine is who might have executed the four reliefs on the chair. They are certainly all by the same hand, which could be Bernini's—as thought by Olga Raggio and others—although a definitive attribution is difficult. The main point in favor of his authorship is that they bear a basic resemblance to the one surviving model in his oeuvre that can be considered a true relief, the Four Members of the Cornaro Family (cat. 16). Its faces and draperies are simplified in approximately the same way as those on the present model. Nevertheless, the comparison is not a perfect one: the present reliefs are much smaller and were executed in much lower relief and in much firmer clay. They were also made more by drawing and impressing with tools than by modeling through additive means, which could account for their more faceted and graphic character. The possibility must remain that Bernini only designed the reliefs and then furnished drawings to an assistant; there were certainly plenty of very talented ones working for him on the Cathedra, even in the capacity of model makers—including Ercole Ferrata and Lazzaro Morelli.4 Another candidate might be Melchiorre Cafà, judging by the stylistic and technical similarities between certain of his reliefs and those on the present model. His relief portrait of Lelio Falconieri on the model of Faith at the Fitzwilliam Museum, Cambridge, strongly recalls the head of Christ at the center of the main relief, representing the "Pasce oves meas"—Christ's charge to Peter to "Feed my sheep" (fig. 295).⁵

Initially, levels 1 through 4 would have been assembled without backs. Access to the interior was important for securing the joins, and it allowed the clay boxes for each level—still soft and somewhat flimsy—to be positioned without touching the delicate exteriors, already decorated. Exterior joins were sealed by drawing an oval-tip tool over them (see fig. 294). Once the seat back was formed and fitted into place, the chair would finally have looked like a chair. The rear corners remained to be formed and installed. These are the vertical members,

decorated with moldings and volutes, that begin at level 2 and continue to the raised keystone at the top of the chair. They were probably assembled as a pair to ensure symmetry, beginning as blocks and rectangular strips of clay that were then decorated. Before they were attached to the chair itself, the joining edges were neatly mitered. Shrinkage cracks have opened along some of the joins, revealing the process. As the installation of the corners neared the top, a problem arose. The proper left side was higher by an inch or so, likely because the corners had been formed as separate, stacked elements, which allowed room for accumulated errors (fig. 296). Since the seat back was hollow and already decorated, the asymmetry was left as is. To cut the model apart, fix the mistake, and reassemble it would have been laborious and risked significant damage to the entire model. Where the mismatched sections meet at the apex of the chair, the join between them was smoothed with fingers, but there is no mistaking the difference in heights—although it wasn't visible from the front, which probably explains why Bernini let it stand. Once the corners were in place, the back of the chair could be closed with concave sheets of clay, one per level (fig. 297). The moldings, hidden from the front, were only loosely sketched. A toothed tool was used on the back of levels 1 and 4 to trim the central portion.

The final steps in decorating the chair would have been to finish the front legs and to add the various garlands, the pair of cherubs with a shell, the palm fronds, and the standing angels. The cherubs and angels offer further opportunities for assessing the extent to which the model represents Bernini's direct work. The cherubs are fairly generic and could be by an assistant—even Cafà again. The angels are a different matter. They are not original to the sculpture but cast replacements, and we believe there is virtually no chance they duplicate original figures by Bernini or an assistant. They are too crude, cast from models (likely in clay) made by someone with very little experience as an independent sculptor. That the angels were cast



Fig. 296. Top of chair, seen from the front, showing misaligned left and right sides

Fig. 297. Back of chair



in plaster from molds is confirmed by the air bubbles on their surface and by the raised lines on their sides from the seams of a piece mold. The mold appears to have comprised two pieces (a front and a back), in which case the molding material is likely to have been flexible (gelatin or latex) to accommodate undercut passages. Flexible molds are generally thought to represent a nineteenth-century technology, which could be when the current angels were made.6

Not every part of the angels is a replacement. Three of the feet and three of the wings are original, still attached to the chair. They offer further confirmation that the current angels are unlikely to have anything to do with Bernini. The proper left angel is the more



Fig. 298. View of left angel from above: note incorrect orientation of shoulders relative to wings, air bubbles indicating that the angel is made of plaster, and raised mold lines along right arm, shoulder, and top of head (arrows)

instructive, as it retains both of its original wings (fig. 298). Its right wing is higher than its left, suggesting that the angel's shoulders should slope outward (toward the left), which is not the case. Whoever made the replacements appears to have misunderstood the stance Bernini intended, which makes it unlikely that the angels represent replacements executed on his orders or to his designs. Most probably, the original angels were damaged sometime after the model had fulfilled its initial use; during the nineteenth or early twentieth century, the owner of the model may have ordered the replacements perhaps in an attempt to ready the model for sale. Curiously, during this presumed restoration, what remained of the original angels was almost totally effaced through chiseling. If the angels had been so seriously damaged that they needed to be replaced, how did the chair itself escape without any signs of the accident? One possibility is that the angels that were damaged were replacements themselves—perhaps made by Bernini as edits to his original model. This might explain how they could break off so easily; it might also explain the chiseling, since Bernini modified other of his models through chiseling after firing.

The model bears a complicated record of surface coverings. The front and sides of the chair appear to have been gessoed and gilded at one time. This was done after a

campaign of repair to the back and elsewhere that employed a dark, reddish brown adhesive. Scattered remains of a blue-green material—possibly a corroded brass-powder pigment used to simulate gilding—is found in some interstices. There are also vestiges of a brown coating in the relief of Saint Peter and the Miraculous Catch of Fish, among other places. Conceivably, the model (like the finished chair) originally featured two shades of toning bronze and gold. The replacement angels have no decorative coatings, although they do show a few flecks of gold. They are unlikely to have been part of the model when it was originally gilded or painted to resemble bronze or gold. Faint traces of a grid drawn in pencil can be found on each relief; the grids postdate the removal of the original coat of gesso.

Gian Lorenzo Bernini or associate

28 · Saint Ambrose

ca. 1660. Terracotta, $14\frac{14}{10} \times 10\frac{1}{10}$ in. (36.2 × 26.5 × 19 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Richard Norton,

Richard Norton Memorial, William M. Prichard Memorial and Louise Haskell Daly Funds (1995.60)



PROVENANCE: Unknown antiquarian dealer, via del Babuino, Rome; Valerio Mariani, Rome (before 1940–d. 1982); his sons, Andrea and Luca Mariani, Rome (1982–1995); [Peter Laverack, London, 1995; sold to Fogg Art Museum, later Harvard Art Museums, Cambridge, Massachusetts]

LITERATURE: Battaglia 1943, p. 56 n. 1; Mariani 1974, p. 96; Rome and Venice 1991–92, p. 62; O'Grody 1999a; Roth 1999, pp. 126–27; Sigel and Farrell 1999, pp. 116–18

EXHIBITIONS: Cambridge, Mass. 2007

CONDITION: The head, neck, and right hand are missing; a wooden dowel projects from the right wrist. There is a two-centimeter-long chip in the cope fringe. The base is broken across the left ankle and reassembled, with small losses on the adjacent cope. The proper right rear corner of the base, the right foot, and the right drapery are missing; this loss introduced a backward and sideways lean to the model, now corrected with a new base. The remaining corners of the base, originally square, were removed with a saw.

THIS MODEL RELATES TO THE BRONZE Saint Ambrose on the front left of the Cathedra Petri (fig. 299). Bernini flanked the Cathedra with statues of the four Church Fathers, each one posed to look as though he were helping to lift the mammoth throne. In the most recent analysis of the model, Jeannine O'Grody argues that it should be connected with Bernini's planning for the Cathedra in about 1658. On April 7 of that year, Pope Alexander VII noted in his diary that Bernini had visited him that day and shown him "the second model of Saint Ambrose for the Cathedra." O'Grody raises the possibility that the present model is to be

identified with that one. Key to her argument is that the model differs from the finished *Ambrose* in having a more upright pose. This does not appear to be correct. To our eyes, with the aid of new photography, the model actually bends forward slightly more than the finished statue. This suggests that the model, if not a later copy, dates to the third and final phase of planning, undertaken about 1660.

When Bernini began work on the Cathedra in late 1656 or early 1657, he proposed a design in which the four Church Fathers stood substantially erect.² This is reflected in a workshop drawing in the Royal Collection, Windsor Castle, in which the saints support the chair at shoulder height, standing up straight (fig. 300). After producing an architectural model based on that drawing, Bernini appears to have been distracted by other projects.3 On resuming the Cathedra the following spring, he reconsidered the design, lowering the position of the chair relative to the saints.4 The change forced them to assume new postures. Their hands come down to grip the chair, while their knees flex and stances widen. This is seen in a group of drawings in Leipzig that focus on the two saints at the front corners of the chair, Saints Ambrose and Augustine (figs. 69, 301, and 302).5 The drawing reproduced in fig. 302 comes closest to the finished Ambrose, although it depicts the saint in reverse—perhaps Bernini was exploring how it might look on the opposite side of the composition. More important, in the drawing, the saint does not lean as far forward as he does in the finished statue. The model of the Ambrose that Bernini presented to the pope on April 7,



Fig. 299. After a design by Gian Lorenzo Bernini, *Saint Ambrose*, ca. 1662–63. Bronze, over lifesize. Saint Peter's Basilica, Vatican City

1658, was presumably based on the drawing and would have incorporated the more upright pose. If so, this would seem to rule out that the present model dates to the same moment.

After reviewing the small architectural model of 1658, the pope gave permission to Bernini to erect a full-scale model of the Cathedra.⁶ This was finished in 1660, and Bernini faced criticism over the design, which was thought to be too small in scale.⁷ Bernini



undertook important changes, including the addition of the oval window above the Cathedra for the *Celestial Glory*.⁸ He also rethought the architecture, widening the stage on which the four Church Fathers stand. In their new space, they could move more freely, and Bernini responded by giving them more open postures. In the case of the *Ambrose*, this meant the increased twisting and bending forward seen in the present model and in the final sculpture. Preparations for casting the *Ambrose* do not appear to have begun until early 1662.⁹ The present model must date to before then, assuming it is not a later copy.

The differences between the terracotta and the finished statue are not, in fact, significant enough to exclude the possibility that the model is a later copy. Moreover, its compromised condition makes the style and the quality of the modeling difficult to judge. Not only are the head and right hand missing, but the model is covered

Fig. 300. Gian Lorenzo Bernini or workshop, *Design for the Cathedra Petri*, ca. 1657. Penand-ink wash, brown wash over black chalk, 9½ x 5% in. (24.1 x 14.5 cm). The Royal Collection, Windsor Castle (RL 5614). Cat. D.28

Fig. 301. Gian Lorenzo Bernini, Study for a Church Father, ca. 1658. Black chalk, 16% x 10 in. (42.9 x 25.4 cm). Museum der Bildenden Künste, Leipzig (NI.7898v). Cat. D.29

Fig. 302. Gian Lorenzo Bernini, Study for a Church Father, ca. 1658. Black chalk, 16% x 10 in. (42.9 x 25.4 cm). Museum der Bildenden Künste, Leipzig (NI.7898r). Cat. D.29





with remnants of five layers of paint and gilding; the only way to evaluate the original terracotta surface is through breaks in the coatings. The top four layers are definitely nineteenth century or later; the lowest, or first—consisting of varnish over gold leaf applied to a brown ground with glue—could be seventeenth century and may have been applied shortly after the model's creation, as there is no dirt layer between the gilding and the terracotta (fig. 94). This might suggest that the model could be a very early copy. Not only were terracotta copies of famous compositions produced in Rome during the seventeenth century, but they were also sometimes gilded, or made to look like bronze, for collectors such as the pope's nephew, Flavio Chigi (see Tomaso Montanari's essay in this volume). If the model was a copy, however, it was an exceedingly fine one. In areas of paint loss, the modeling can be seen to be of very high quality. Surfaces were brush smoothed; the fringe of the cope was modeled in a lively manner with an oval-tip tool; and the folds come to crisp edges—just like those on the finished bronze. Given the quality and the fact that the back of the model was not totally ignored, we are hesitant to identify the model as merely a copy.

Even if the model could be absolutely confirmed as preparatory for the *Ambrose*, there is still no guarantee that it is by Bernini. Documents show that, for the first small architectural model of 1657, Bernini assigned the Church Fathers to three assistants: Ercole Ferrata, Lazzaro Morelli, and Antonio Raggi.¹¹ The same three assistants were entrusted in 1658 with the full-scale models of the Church Fathers, and they would later be responsible for the final models used for casting.¹² Furthermore, on the model for the Cathedra in

Fig. 303. Base, with chisel and knife marks left from the removal of excess clay; the outline indicates the original shape of the base before removal of the corners

Detroit (cat. 27), Bernini appears to have again turned to assistants.

Analysis of how the model was constructed reveals general connections with Bernini, but nothing that can be considered unique to him. The type of modeling platform is not obvious from what little remains of the original base. A knife with an upward curve at the tip was used at the leather-hard stage to carve away a four-sided pyramid of clay from inside the base, leaving blade impressions in the interior (fig. 303). Bernini did use the same tool for excess clay removal on many of his models, but he cannot have been the only sculptor to do so, nor is it certain that he did his own trimming in every case.

Losses and modifications to the base had altered the posture of the figure so that it leaned backward and to the side. This was corrected in 1997 with a new, molded base. The three corners more or less facing the viewer had been sawn off, possibly during the nineteenth century, when the last repairs were made to the broken base and the model was mounted on a wooden base. The event is datable from



Fig. 304. X-radiograph of Saint Ambrose: note wine-bottle shape of hollowed cavity and the metal dowel at bottom

later paint applied to both the model and the base: where the base has been altered, the nineteenth-century paint was applied directly to the terracotta. Another indication of the original shape of the base is evident underneath. The square footprint of the hollowed area would have followed the shape of the original base exterior. It is now rotated forty-five degrees in relation to the base exterior because of the truncated corners (see fig. 303).

The pattern of shrinkage cracks and trapped air visible within the excavated base clay has a somewhat radial pattern, which supports the idea that the initial clay mass was a wedged column. The X-radiograph is less clear on this point, as the figure has been hollowed, but the pattern of clay grain visible in the upper areas does tend to support the hypothesis (fig. 304). These grain patterns also suggest that the larger drapery folds were added both from sheets and from smaller masses of clay.

X-radiography shows the hollowed interior to have a shape resembling a wine bottle. Further examination of the interior with a flexible videoprobe

revealed bottom-to-top tool marks on the interior walls, drips of adhesive (see below), a metal dowel (also seen in the X-radiograph), and venting holes. These details indicate that, following substantial completion of the modeling, the head was removed—probably wire cut to avoid distorting it—and set aside. A long-handled, scooplike tool was used to remove clay from the opening in the neck, forming a cavity ending at about the knees. The clay was removed to leave a generally consistent wall thickness. In three deeply recessed areas of exterior drapery, holes were made to allow the venting of gases during firing. Hollowing that was similar in technique, if slightly different in execution, is found on Bernini's model for the *Saint Longinus* at the Museo di Roma (cat. 4). The metal dowel rests in the bottom of the cavity in a small pool of brown adhesive, probably shellac; it may have fallen inside the figure during an attempt to reattach the head in an earlier restoration. Stuck in place as the viscous adhesive cooled, it was simply left there.

Later copyist

29 · Saint Ambrose

after 1666-before 1760s. Terracotta, H. 181/8 in. (46 cm)

The State Hermitage Museum, Saint Petersburg (624)



INSCRIPTIONS, MARKS, AND STAMPS: Cn6 Ak. X . 91 k [?] written in pencil on right side of base; H.ck / 624 written in white paint on back of base

PROVENANCE: See cat. 12.

LITERATURE: Venice 1788, p. 20; Petrov 1864, p. 600; Treu 1871, p. 50; Zaretskaia and Kosareva 1970, no. 40; Zaretskaia and Kosareva 1975, no. 40; Bacchi and Tumidei 1998, p. 142; O'Grody 1999a, p. 139; Harris 2001, pp. 123-24

EXHIBITIONS: Leningrad 1989, no. 19; Rome and Venice 1991-92, no. 18; Chicago, Philadelphia, and Washington, D.C. 1998-99, no. 15; Saint Petersburg 1999, no. 3; Bonn 2002–3, no. 232; Ann Arbor 2003, no. 39; Massa 2005, no. 6

CONDITION: The right arm and the tips of the beard are missing. The head has been reattached, with brown fill material at the neck. There are scattered remnants of an earlier gesso coating. A dark brown toning layer remains in some interstices. The model is covered in later translucent coatings, possibly animal glue.

THIS MODEL, WHICH IS RELATED to the *Saint Ambrose* on the Cathedra Petri, was catalogued as a copy by the young Georg Treu, who undertook the first catalogue of sculpture at the Imperial Academy of Fine Arts, Saint Petersburg, published in 1871. He tended to dismiss most of the seventeenth-century terracottas in the collection as copies after famous works in Rome, meaning that many of his attributions are wrong. But in the present case, he was almost certainly right. Few have doubted his conclusion. Among those who have is Sergei Androsov, who judges the modeling as being up to Bernini's standards.

Comparison with the version at Harvard (cat. 28), even though it is not necessarily by Bernini, underscores the various shortcomings in design and technique of the present model. One of the sharpest differences is that when the present model is rotated its composition falls almost completely apart. Seen head on, the saint appears unduly flat and tilted sidewise at his waist (fig. 305). By contrast, in the version at Harvard the underlying body (including the left shoulder) is more fully developed, and there is a credible suggestion of a left arm underneath the massive cope. The approach evident in the present model is characteristic of a copyist, who would have had access only to the primary view and relied on imagination to fill in the rest.

The present model is also weaker in its drapery. The modeling is heavy-handed, with



Fig. 305. Secondary view, underscoring unresolved composition

thicker folds and rounder edges. As a result, the cloth has none of the crackling, energized quality seen in the version at Harvard. Additionally, there is a lot less delicacy in the finer details; see, for example, the fringe on the back of the cope, where the tassels are rendered less precisely. The facial features are oversimplified in a comparable way (fig. 306). The eyelids are thick and the tufts of the beard broad, with no effort made to work back into these details after they were smoothed. They would have benefited from such refinement, given that the smoothing was done very coarsely with a stiff brush. The brushing was carried out mechanically, while the clay was still fairly moist and with enough force to produce crumbs of clay. In places, the brush also appears to have been used to shape the clay, which points up the fact that shortcuts had been taken during the initial modeling; such reliance on the brush was something Bernini never did. At a later stage perhaps even after firing—parts of the face and miter were reshaped by filing with a rasp. The resulting texture often cuts across the coarse brush smoothing, giving certain areas (such as the cheeks) a particular roughness.



Fig. 306. Face, with excessive clay crumbs and file marks from later rasping on nose, forehead, and cheeks



Fig. 307. X-radiograph of Saint Ambrose

X-radiography indicates that the present model was made solid, without hollowing. Although that is not necessarily inconsistent with Bernini, the way the clay was massed is. The model was formed not from wedged clay or a single column but from individual pieces of clay stacked together. Horizontal joins between masses of clay can be seen crossing the chest, waist, and ankle (fig. 307). Elsewhere, the clay is multidirectional. The bottom is impressed with a wood grain from having been modeled and left to dry on a rough wooden surface. Also worth noting is that even though some of the drapery was applied in sheets, most of it was modeled out of the central mass—a technique uncharacteristic of Bernini.

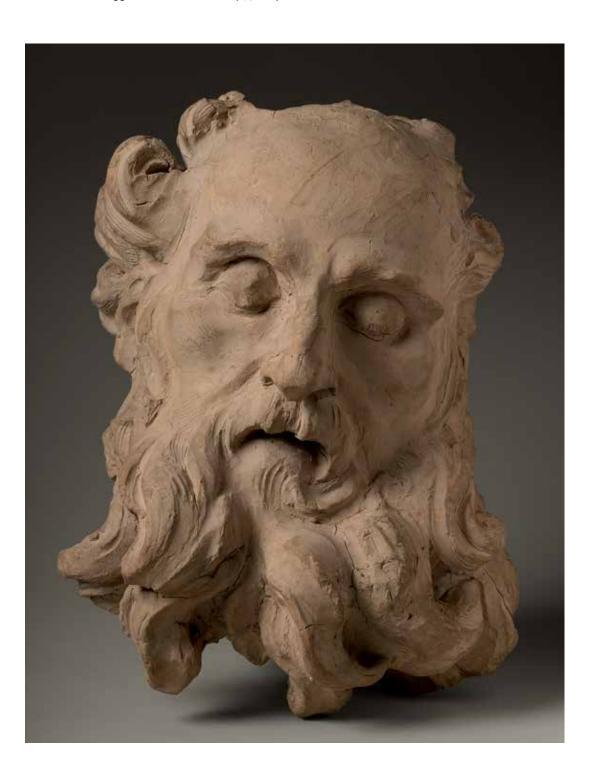
Sometime after completion and firing, the entire model was given a thick coating of gesso, over which was applied a layer of dark brown toning, still visible in the miter and other interstices. This was doubtless intended to make the model resemble bronze. Two minute traces of gilding have been discovered on top of the gesso—one on the fringe behind the right shoulder, the other on the drapery folds below. The gilding may have been intended to duplicate the appearance of the finished statue, parts of which are gilded and parts of which have an applied dark bronze patina. An inventory of 1668 suggests there was an early fashion among Roman collectors for painting models to make them, if not two toned, at least the color of metal.1 The inventory is doubly fascinating for a model it lists as being the color of metal: a Church Father from the Cathedra. Whether the present model is that one cannot be proven. What does appear certain is that Bernini's four Church Fathers (especially the two at the front, which include Saint Ambrose) inspired many early copies, of which the present model is a fine example.2

Gian Lorenzo Bernini

30 · Head of Saint Jerome

ca. 1661. Terracotta, $13\frac{1}{6} \times 11\frac{1}{6} \times 9$ in. (35.1 × 28.7 × 22.9 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.77)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.77 written in red paint on lower back

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 47; Art News 1938; Opdycke 1938, pp. [25], 29; Lavin, I. 1955, pp. 138-41; Wittkower 1955, p. 226; Brugnoli 1961, p. 293; Wittkower 1966, p. 242; Kauffmann 1970, pl. 129; Lavin, I. 1978, pp. 398, 402; Wittkower et al. 1981, p. 242; Steven F. Ostrow in Princeton and other cities 1981-82, p. 232; Mortimer 1985, p. 129; Siena 1989, pp. 230, 232; Rome 1994, p. 125; Avery 1997, pp. 158–60; Wittkower et al. 1997, p. 282; Angelini and Montanari 1998, pp. 167–68; Sigel 1999, pp. 59, 62, 70-72; Sigel and Farrell 1999, pp. 113-16

EXHIBITIONS: Cambridge, Mass. 1980; Cambridge, Mass. 2007

CONDITION: Extensive shrinkage cracking throughout, with many losses, including two hair curls on top of the head, and a third on the right side of the beard. Shrinkage cracks on the surface of the face and elsewhere have been partially filled and inpainted. An iron mounting armature has been attached to the hollowed interior of the head with plaster of paris, filling much of the cavity. The shrinkage cracks in the back edges of the head have been consolidated with a modern acrylic resin adhesive. There is a drilled claysampling hole on the back.

POPE ALEXANDER VII HAILED from the Tuscan city of Siena, which had been his family's home for centuries. On being elected pope in 1655, Alexander embarked on an ambitious program of art patronage designed to celebrate his family, the Chigi. After giving orders to Bernini to renovate the Chigi Chapel in Santa Maria del Popolo, Rome, with his sculptures Daniel in the Lions' Den and Habakkuk and the Angel (see cats. 25 and 26), Alexander turned his attention to his hometown, to Siena Cathedral. He agreed to decorate, at his family's expense, the Chapel of the Madonna del Voto, which houses a miraculous image of the



Fig. 308. Gian Lorenzo Bernini, Saint Jerome, 1661-63. Marble, lifesize. Chapel of the Madonna del Voto, Siena Cathedral

Madonna and is one of the holiest sites in the church.1 Bernini was put in charge of the decorations, which included an elaborate gilded-bronze frame for the image as well as four statues of saints—two flanking the altar; two flanking the entrance. Bernini chose to carve the pair by the entrance, representing Saint Jerome (fig. 308) and Saint Mary Magdalen.² The present model was preparatory for the Jerome and is unique among Bernini's surviving models: it is his only full-scale head study.

The practice of making head studies in clay in preparation for marble sculptures must have been relatively frequent in Bernini's Rome, but few examples survive and none is like the Head of Saint Jerome in being lifesize and a bozzetto. Furthermore, most of the survivors relate to portrait busts, with only a handful having been preparatory for a historical or religious subject.3 Proof that there were once a lot more comes from documents. Ercole Ferrata, according to the death inventory of his workshop from 1686, owned more than thirty head studies, including twelve in clay that can be presumed to have been preparatory for nonportrait heads.4 Nearly all are listed as being by his mentor, Alessandro Algardi, to whom many of the surviving ones can also be attributed.5

It seems likely that Bernini—like Algardi turned to three-dimensional head studies whenever confronted with a particularly challenging face for

one of his mythological or religious figures. The present model is only part of the evidence. Bernini almost always made separate models of heads in preparation for portrait busts (see C. D. Dickerson III's essay in this volume). The practice was so ingrained that it must have seemed natural to do for all faces what he was used to doing for portraits: study the expressions in clay. He also turned to drawing when studying faces. Among his drawings are five that are specifically preparatory for nonportrait heads—more than by any other sculptor of the seventeenth century; four of these are included in "Bernini: Sculpting in Clay" (cats. D.16, D.17, D.34, and D.40). Together with the *Jerome*, they demonstrate the considerable care Bernini took in planning faces of all types.

Analysis of the finished statue suggests how the present model may have served Bernini. The power of the statue lies in the saint's tender embrace of the crucifix he cradles in his hands. In order for the gesture to strike the right spiritual chord, Bernini knew that the crucifix must nestle against the saint in the most intimate way and that he must express total devotion toward it. In the model, Bernini paid particular attention to the eyes, making them look weighed down, filled with sorrow over past sins. The lids are not perfectly rounded but faceted, like those on the finished statue. Possibly intended to suggest





Fig. 309. Face, with finger and tool working at tips of eyelids: note toothed texturing on right cheek and left eyebrow

Fig. 310. Beard, with bottom-to-top finger strokes: note excavated area at the left neck

a dangling teardrop, the shape was clearly deliberate: the lower edges of both lids show extensive finger and tool working (fig. 309). Bernini also carefully shaped the mouth, giving it a slight downturn at the corners, as though the saint were groaning in penitential pain.

Before Bernini could concentrate on the nuances of the expression, he had to attend to more basic matters, such as the massing of the clay. X-radiographic evidence, examination of visible clay layering, and the pattern of shrinkage cracks suggest that the modeling began with a somewhat random assembly of large handfuls of clay used to form a solid, head-size mass. This was then joined to a heap of excess clay, later removed, that supported the head at a convenient angle for working. Once the structure of the head was established, Bernini began to add details, including the curls. An area at the crown of the head where two hair curls have been lost reveals the sequence. Large-tooth tool marks in the underlying surfaces where these hair curls are missing reveal the tool's role in the initial shaping of the head. Bernini used his fingers to add and integrate numerous sheets, strips, and smaller masses of clay to develop the structure and the features. In the case of the beard and the hair, the forms were integrated and shaped with fingers and a large oval-tip tool. Small additions and

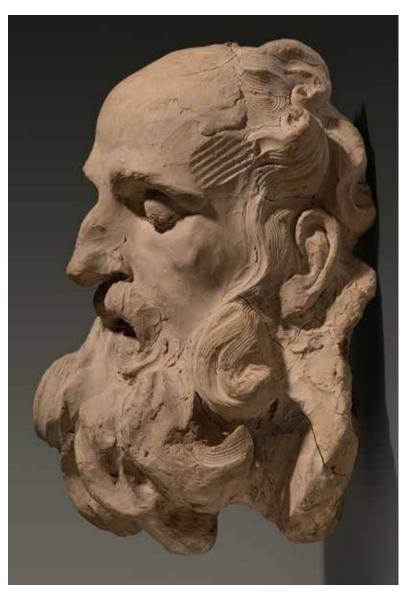


Fig. 311. Left side of face, where a powerful stroke of the large-tooth tool deepened the temple

alterations were made with fingerfuls of wet clay, added in linear smears that are particularly visible in the beard under the mouth. The direction of the finger strokes is from bottom to top (fig. 310).

As work on the model progressed, Bernini used a large oval-tip tool to shape and draw into the hair and beard, adding sinuous S-curve accents and removing clay from the center of each tightly wound curl. He used his fingers, along with the oval-tip tool, to smooth and integrate the hair into the plane of the face. The oval-tip tool also proved valuable in enlarging, deepening, and defining those features inaccessible to his fingers, such as the eye sockets, nostrils, ears, and mouth. The mouth was modeled open, with Bernini detailing the upper teeth, knowing that they would be visible on the finished statue from below. After smoothing the features with his fingers, he used a medium-tooth tool to produce textural effects, such as those seen in passages of the hair and the beard.

After an initial completion phase, which involved a final smoothing of skin areas with fingers, Bernini returned to the head, making several alterations that illuminate some of the design ele-

ments of particular concern to him. Among the more obvious is the striated hollow at the left temple, which was enlarged and deepened with one clean, upward stroke of the largetooth tool (fig. 311). Bernini adjusted the right cheek and the left eyebrow in a similar manner, reducing their profiles with a fine-tooth tool (see fig. 309). The alterations are particularly noteworthy in that he chose to leave the toothed texturing intact. A close parallel to this approach is evident in the Angel with the Crown of Thorns at Harvard (cat. 35), in which the pectorals feature similar post-smoothing, fine-tooth texturing (fig. 137). As suggested in that entry, Bernini may have used the texturing to remind himself to consider making the chest thinner in future versions. As a portraitist, he was preoccupied with giving the impression of color to white marble, and he often manipulated forms to heighten areas of shade and light.7

The right cheek, the left eyebrow, and the left temple of the *Jerome* could be areas that he targeted for such special treatment. In the finished statue, the right cheek is one of the highest features on the face, exposed to maximum light, which exaggerates its size. In texturing the cheek, Bernini may have been anticipating the problem, knowing that he would need to carve it back as a substitute for shading it. The left temple and the left eyebrow may have presented the opposite problem. In the finished statue, they are cast in shadow. In texturing them, Bernini may have been making a note to himself that he needed to carve them in a special way to make them appear as he intended. Again, such compositional notations are not unusual in his models.

A different type of alteration is found under the beard at lower left, where a coarsely textured straightedge tool was used to cut away a slab of clay (see fig. 310). The rough marks left by the tool are reminiscent of the buttress trimming on other models by Bernini. The purpose of the cutout may have been to accommodate a crucifix inserted to test how it should be oriented in relation to the saint's face. The position was crucial, as the saint had to hold the crucifix in just the right way to bring Christ's slumped head next to his cheek, arguably the most poignant passage in the entire sculpture. Perhaps experimentation of the sort suggested here is how Bernini decided to lower the crucifix in the finished statue.

The model bears two further alterations. Bernini gave the nose a more curved profile by pushing his thumb and index finger from bridge to base, leaving fingerprints at the end of the stroke (see fig. 309). This was accompanied by a squeeze to flatten the nostrils. From forehead to hairline, Bernini enlarged the dome of the skull by applying layers of clay with upward-sweeping finger strokes. That the alteration occurred after the attachment, model-

ing, and texturing of the hair is proven by the edges of the added clay, which overlap but do not completely obscure the fine hair textures seen above and behind the right temple (fig. 312).

As a last step, Bernini hollowed the back of the head by scooping out excess interior clay with his fingers. The clay was left very thin in deeply modeled areas, causing shrinkage cracking from uneven drying. Impressed cloth marks indicate that the clay was draped to retard or regulate drying, further evidence that Bernini created the model over multiple sessions.



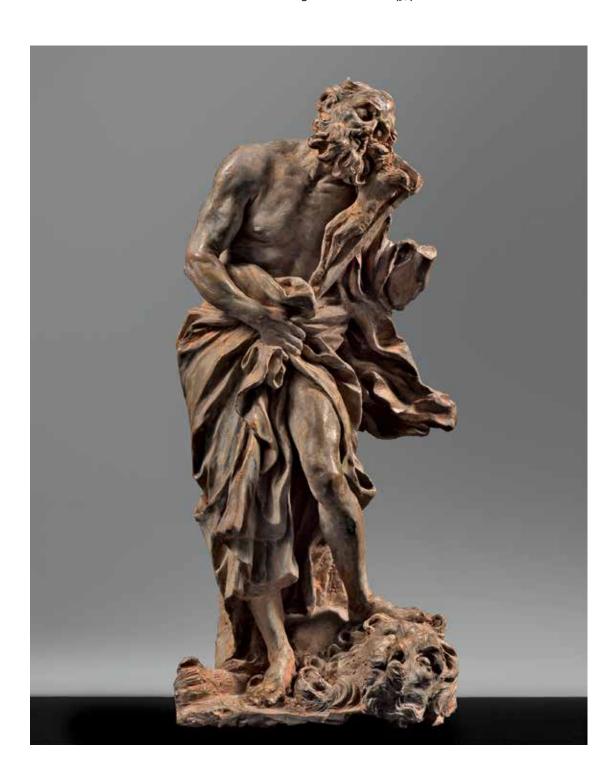
Fig. 312. Top left of head: note curls shaped with an oval-tip tool and texture applied with a toothed tool; added clay overlaps both of these features (arrows)

Gian Lorenzo Bernini or later copyist

31 · Saint Jerome

ca. 1661 or later. Terracotta, $14\frac{3}{8} \times 6\frac{1}{4} \times 5\frac{1}{2}$ in. (36.6 × 16 × 14 cm)

Banca Monte dei Paschi di Siena, Collezione Chigi Saracini, Siena (37)



PROVENANCE: Collezione Chigi Saracini, Siena (by 1931)

LITERATURE: Bacci 1931, p. 56 n. 1; Lavin, I. 1955, p. 141; Wittkower 1966, p. 242; Salmi 1967, p. 239; Wittkower et al. 1981, p. 242; Siena 1989, vol. 1, pp. 229-37; Wittkower et al. 1997, p. 282

CONDITION: There are losses to the figure's right eyebrow, the bottom of the right ear, the edge of the beard to the right of the mouth, and the left arm from the wrist to the hand holding the cross. The cross is missing its vertical section above the horizontal, as well as its left horizontal arm. The figure of Christ is missing the left arm from the shoulder. Traces of gold leaf and of red and orange bole remain in interstices.

THIS IS ONE OF SEVERAL TERRACOTTA statuettes that have been proposed as being preparatory for Bernini's statue of Saint Jerome in the Chapel of the Madonna del Voto in Siena Cathedral (fig. 308). Most are now recognized as copies of the statue. This is one of perhaps only two that continue to be given serious consideration as being autograph. Not only does it come closer in technique to Bernini than any of the others, but it also rises well above them in quality. At issue is whether these are sufficient for proving the attribution. In our view, doubts must remain—albeit doubts that reflect the challenges of trying to recognize Bernini's hand in those models that are not sketch models but *modelli*. His oeuvre offers few solid comparisons, and they range in degree of finish from the exquisite *Model for the Fountain of the Moor* (cat. 13) to the rougher *Daniel in the Lions' Den* (cat. 25).

Seen from the front, the present model is unquestionably a *modello*, highly finished in all areas and full of detail. Seen from the back, it is more characteristic of a *bozzetto*, trimmed

and hollowed aggressively with a knife (fig. 313). After completion of modeling, when the clay was leather hard, cuts were made in the back at opposing angles of approximately forty-five degrees, creating a top-to-bottom wedge of clay that was then extracted from left of center. The manner of trimming is highly reminiscent of Bernini, as demonstrated by one of the Half-Kneeling Angels (cat. 49), where a similar wedge of clay was sliced from the side with a knife (fig. 410). The comparison has a principal weakness, however, in that the Half-Kneeling Angel is not a modello like the Jerome, but a bozzetto. Therefore, it may not offer a reliable guide to how Bernini trimmed or hollowed his modelli. That he normally took more care with them is suggested by the Daniel at the Vatican (fig. 286). Like the Jerome, it is a modello and was preparatory for a niche figure, meaning its back did not need to be finished. Even so, Bernini gave it a basic neatening, sketching the lower drapery and taking some time to model the muscles on the upper back. He made no attempt to trim or hollow the Daniel, which marks the most significant difference from the Jerome. But did the Jerome's back look a lot more like the Daniel's prior to trimming? This answer is almost certainly yes. On the untrimmed right side of the back, folds of drapery are clearly visible, especially around the waist. Above the waist, the exposed back was modeled to an even higher degree, with the flesh smoothed and the muscles articulated. That the entire back once looked like the right side is suggested by the way the strokes from the hollowing knife interrupt the completed parts. Using the right side as our guide, we may therefore conclude that the back



Fig. 313. Hollowed back: note how knife strokes interrupt completed elements

was similar to the Daniel's, even in the way it becomes gradually sketchier toward the base.

Why the model was subsequently hollowed in such a crude fashion is difficult to know. The hollowing would have been undertaken to reduce the thickness of the model in order to prevent damage from shrinkage during firing. There were certainly neater ways to do this, however, as demonstrated by the Saint Longinus at Harvard (fig. 177)—also by Bernini and also for a niche figure. In making this observation, we do not mean to suggest that Bernini cannot be the author—only that he may not have carried out the hollowing. Whoever did, an important question remains: how might the model have served Bernini? There are only a few credible options. The model could have functioned as a guide during



carving, although the surface bears no measuring marks. The model could have been intended for presentation, but we must wonder if Bernini would have allowed it to go to an important patron with the back the way it is. All his other known presentation models—which likely include the Longinus—adhere to a basic standard of neatness. This leaves a third possibility, that the model was for presentation, but a different kind of presentation: in an architectural model, where the back would have been totally unseen. In this case, Bernini might have allowed an

assistant to hollow the model however he wanted. The flutter of drapery that extends out from the saint's left may bear evidence of the model's use in an architectural model. On the back of that part of the drapery, corresponding to where it overlaps the niche in the finished statue, the clay is thinned and stepped, as though impressed against a square edge, which could have been that of a wooden niche made to scale. Additionally, the base was trimmed thin, as would have been required for the model to function as an accurate mock-up.

Whatever scenarios can be imagined for how the model functioned for Bernini, there is no escaping that it is almost a perfect replica of the finished statue. An analysis of style and technique leaves open the possibility that it is a copy: some aspects point to Bernini, others point away. The method of massing falls into the latter category. The model was built of smaller masses of clay assembled together, rather than Bernini's habitual single column of wedged clay. Confirmation is provided on the back, where the trimmed section reveals gaps in the interior from the incomplete compacting of the clay pieces. If the model had begun as a single wedged column, there should not be these gaps. We again refer to the Daniel, which is



Fig. 314. The brush-smoothed chest Fig. 315. The face

comparably sized and also a *modello*. Unlike the *Jerome*, it began as a wedged column of clay to which Bernini added individual pieces of clay for the parts extending outside the column.

The modeling of the *Jerome* is of very high quality. The drapery, applied mostly in strips and sheets, is finely modeled and expressive. The skin over the chest is depicted taut, with the underlying ribs visible (fig. 314). Like most of the flesh and drapery areas, it was carefully smoothed with fingers and a brush (fig. 139). The face exhibits comparable delicacy, although it was not smoothed; it displays crumbs of clay and displaced edges from crisp execution with a sharp instrument (fig. 315). Most details, including the feet, were executed in very hard clay and thus more carved than modeled, which allowed for greater precision. This is true of the lion's mane, where the curls come to such sharp edges that they appear almost faceted. The crucifix is also interesting from the standpoint of carving, as the corpus is clearly meant to resemble a carved work, likely of wood. On the finished statue, the corpus gives a similar impression, carved in a rough style. For unknown reasons, after the model was fired, the top part of the crucifix was trimmed at the back with a chisel.

Of all parts of the model, the lion is possibly the most relevant to the question of attribution (fig. 316), as it forms a natural comparison to the lion on the *Daniel*. While the

paws bear an undeniable similarity, blocky and decorated with toothed texturing, the manes and the faces are less close. On the *Daniel*, the curls are rendered more fluidly, and the face is more abbreviated. A comparison of the eyes underscores this last point. The eyes on the present model, which were carefully worked with an assortment of fine modeling tools, feature eyelids and tear ducts. Those on *Daniel's* lion are sketchy, showing no detail, just a few tool strokes above and below the eyeball that serve to bring it into relief (fig. 285). Under normal circumstances, such dissimilarities



Fig. 316. The lion

might suggest we are dealing with different hands. But there is a reason to be cautious. As discussed elsewhere, the several *modelli* that can be reliably attributed to Bernini (cats. 3, 7–9, 13, and 25) display a range of styles and finishes. The *Jerome* does not fall outside that range.

The fact that the model's provenance can be associated with the Chigi, the family that originally commissioned the *Saint Jerome* from Bernini, should not be allowed to influence the attribution. The Saracini collection, formed mainly during the late eighteenth and early nineteenth centuries, became the Chigi Saracini collection only in 1877, when the last Saracini died and the name (along with the palace and the collection) was bequeathed to Fabio di Carlo Corradino Chigi.³ On receiving the collection, Fabio Chigi (who belonged to a different line of Chigi than the illustrious Chigi of late seventeenth-century Rome) is not known to have enriched it with any works that might have descended to him from any of the Chigi for whom Bernini worked. The model is totally undocumented until the mention of it by Pèleo Bacci in an article of 1931.

Gian Lorenzo Bernini

32 · Model of an Angel and Cherub for the "Celestial Glory"

ca. 1663. Terracotta, $12\% \times 9\% \times 9\%$ in. $(32 \times 23 \times 24 \text{ cm})$

Museo Horne, Florence (117)



PROVENANCE: Possibly Torlonia collection, Rome; unknown intermediaries; Luigi Grassi, Florence (until 1910); Herbert Percy Horne, Florence (1910– d. 1916); Kingdom of Italy (by bequest, 1916–17); transferred to Museo Horne, Florence (on its founding in 1917)

LITERATURE: Gamba 1920, p. 176; Museo Horne 1926, p. 24; Lavin, I. 1955, p. 231; Gamba 1961, p. 27; Rossi 1967, pp. 154-55; Morozzi 1988, pp. ix, 304

CONDITION: Chip losses along lower edges of model, front and back; small losses to the drapery over the right elbow of the angel, whose right wingtip is broken and missing.

HERBERT PERCY HORNE, FOUNDER OF THE Museo Horne in Florence, acquired this model in 1910, possibly after it passed through the Torlonia collection in Rome—the same collection, it is thought, that once housed the Bernini models now at Harvard. All guidebooks to the Museo Horne—including the first one, published in 1926—have listed the model as by Bernini, which makes it difficult to explain how the model has escaped serious scholarly inquiry until now. Irving Lavin gave it a passing mention in his dissertation of 1955, dismissing it as a creation of the late seventeenth or eighteenth century. This seems to have been enough to convince most scholars of Bernini not to bother with investigating the model for themselves. An exception is Stefano Tumidei, who was convinced of the attribution to Bernini and, at the time of his death in 2008, planning to write an essay on it. Anthony Sigel learned

of the model independently and, on inspecting it for the first time in 2008, came to the same conclusion.²

The model depicts an angel, on the left, and a cherub; they turn toward one another while clasping their hands near their chests. The angel kneels on a form resembling a raking cornice, while the cherub emerges from behind it. Clouds engulf the angel's left wing. That the model is by Bernini can be proven through stylistic and technical analysis. The face of the angel (fig. 317), with its absent eyes and mouth, is virtually identical to that of the less-finished Half-Kneeling Angel (fig. 401). It also bears a strong resemblance to the face in the *Pope Alexander VII* (fig. 328). The cherub's face is slightly more resolved, although it too offers close comparisons with Bernini's other models, including the two angels for the Ponte Sant'Angelo at the Kimbell (cats. 39 and 40). The drapery of the angel, especially when seen from the side (fig. 318), is equally characteristic of Bernini, as the same Half-Kneeling Angel makes clear. The draperies could almost be copies of one another.



Fig. 317. Detail of the angel's face

More proof of the attribution is offered by the presence of two of Bernini's idiosyncratic modeling gestures. One is found on the back of the angel's head, where the clay was shaped and smoothed with a single swipe of his finger (fig. 121). The gesture is duplicated on several of the angels for the Ponte Sant'Angelo and for the Sacrament Altar (see figs. 122–24, 376). The second characteristic gesture is where Bernini has taken a large oval-tip tool and impressed a deep, gently curving line to separate the back right side of the angel's neck from the descending hair (fig. 119). One of the *Half-Kneeling Angels* (cat. 49) bears the identical technique (fig. 409), which is a variation on the fingernail pinch that Bernini often employed to render the back of a neckline (see figs. 115–18).

In following the steps Bernini took to create the model, we find nothing that disputes



Fig. 318. Side view: note similarities in drapery design with the Half-Kneeling Angel (cat. 48)

his authorship, only further affirmation of it. The pattern of shrinkage cracks on the bottom indicates that he began with a large mass of solid clay for the angel. He added another mass of clay to the front left corner for the cherub and the cornicelike form, while building up the back buttress with at least two more large masses. The torso of the angel, which projects forward, was likely modeled out of the existing clay rather than added. Bernini did attach the head of the angel separately, however, as evidenced by shrinkage cracks and visible joins. The ears were formed from bits of rolled clay that were bent into C shapes and then attached. Bernini used his typical shorthand for other features: a series of rapid strokes impressed with an oval-tip tool for the eyes and the mouth; a bit of attached clay, quickly squeezed, for the nose. The right wing and accompanying clouds were built up from pieces and strips of clay that were joined to the shoulder and the buttress. The inner wing feathers were made following Bernini's habitual methods. The arms were formed from rolled clay, the ends pressed into simple, mittlike hands. Bernini dressed the angel in typical fashion, first applying the drapery in strips, then integrating, shaping,

and smoothing the folds with his fingers and an oval-tip tool.

Exceptionally vigorous, the model must have been made in a single session, perhaps in a couple of hours. Bernini used only his fingers, a large oval-tip tool, and a large-tooth tool. There was no final smoothing with a brush or a cloth. One consequence of this approach is that his process—especially the use of his hands—is readily discernible on the surface. On the buttress, which he left untrimmed, he compacted the top portion by pulling his fingers through the clay in powerful downward strokes that recall those on the Constantine the Great on Horseback (fig. 319; compare fig. 272). Another link with the Constantine is several clusters of fingernail impressions; one of the more prominent is found on the right-shoulder drapery, where Bernini shaped the clay with his fingers in repeated pinching motions. The Constantine bears several such clusters, which are fairly common on his models; one even appears in the same drapery location on one of the *Kneeling Angels* (cat. 50).

The present model was doubtless preparatory for the *Celestial Glory*, the gilded-stucco decorations above the Cathedra Petri in the apse of Saint Peter's (fig. 281). Designed by Bernini between about 1660 and 1662, and executed by assistants between 1663 and 1666, the *Celestial Glory* consists of modeled rays of light that emanate from a central source: an actual window, oval in shape, above the Cathedra.³ Angels and cherubs hover among clouds that spill down behind the throne and cling to the rays. We now can see that the sloping form on the present model is not one side of a pediment but these rays, which Bernini has faintly textured with the parallel marks of a large-tooth tool. He has separated the rays into upper and lower bundles, with a dividing line made of short toothed marks turned in the opposite direction. Bernini has acknowledged that rays of light might be pliable:



Fig. 319. Back of model: note powerful downward strokes used to attach the clouds and compact the buttress

they give way like a sponge as the angel kneels on them, recalling other of his models, such as the *Allegorical Figure* for the *Memorial to Carlo Barberini* (cat. 2), in which the dedicatory field looks as though it is bending under the figure's weight. Taking visual note of the materiality of substances is a recurring theme in Bernini's art.

The part of the finished *Glory* to which the model most closely relates is in the eight o'clock position—precisely where we might expect to find it, judging by the angle of the rays (fig. 320). There is one angel near the window, with a cherub to its right, that is almost identical in pose to the angel in the terracotta. Even details of drapery, such as the accordion folds of the sleeve, are a virtual match. Where the differences come are in the cherub—only his head is visible and he does not look directly at the angel—and in the fact that there are no rays of light directly underneath the finished figures, just clouds and more bodies. Still, the

similarities are sufficiently close—certainly for the angel—that we can safely assume the model was the basis for this passage.

Further support for the hypothesis that the model provided the design for a specific group on the *Glory* is the appearance of measuring marks on the terracotta surface. They are confined to the angel and exist mainly as struck lines, located as follows: on the pit of the throat; higher on the outside of the throat; on the right wrist and elbow (three or more); between the knees on the ray edge; on the right knee (ten); on the right side of the head; and on the drapery of the left leg. There are also several deep incised lines that might be tied to the measuring; another option is that they are some kind of layout lines, as observed on the *Allegorical Figure*. These vertical lines are found on the base edge just below the angel's right



Fig. 320. Detail of the Celestial Glory

knee, on the angel's midriff, and on the cherub's left temple. The fabric impressions on the surface confirm that the model was stored beneath a moist cloth at one time.

The *Glory* incorporates over twenty complete figures, both angels and cherubs, in addition to many more partial figures of the type seen on the model—not to mention dozens of heads. For Bernini to have taken the time to produce the present model, which focuses on one of the simpler, more obscure groups in the composition, makes it seem certain that he made others. But how many? On one hand, Bernini was possessed of extraordinary diligence and patience as a planner and may have considered it no chore—even a pleasure—to make a model for each of the groups. On the other hand, he was a ruthlessly efficient head of a workshop who appreciated the time savings that came with delegating. As he likely appreciated, because the *Glory* was to be seen at a distance and because its design was based on repeating elements, he did not have to plan it minutely. He could follow a template approach, working up a few representative models for an assistant who was free to vary them.⁴ Still, there is no denying that the present model relates to a *very* obscure group. This suggests to us that if Bernini went by templates he must have made a lot of them: perhaps one or two models for the more obscure groups (like this one), four or five for the more prominent.

Drawings may have been even more crucial to how the *Glory* came to be realized. During both the design and the execution phases, Bernini would have needed to convey to his assistants how he intended the entire composition to look, and he likely found it more



Fig. 321. Gian Lorenzo Bernini, Study for Angels and Clouds in Glory, ca. 1663. Black chalk, 1178 x 85% in. (30.2 x 22.7 cm). Museum der Bildenden Künste, Leipzig (NI.7900r). Cat. D.33

convenient to put his plan on paper than to model it. Being highly pictorial, the *Glory* would have readily lent itself to two-dimensional study. A partial compositional drawing for the *Glory* does exist in the Royal Collection, Windsor Castle, although dating to a much earlier stage in the project.⁵ We can assume that there was also a later, fully complete drawing that Bernini's assistants consulted during execution. Such a drawing would have helped them understand the general disposition of the figures, the clouds, and the rays of light. For specifics of form, however, they would have needed to consult models such as the present one or comparable drawings. A few of the latter do survive at Leipzig, including one in chalk that comes fascinatingly close in character to the present model (fig. 321).⁶ It is a study of a cherub with his back to us who floats among clouds and rays of light. The rays are like those on the model in being easily mistaken for a raking cornice. They also recall the model in their technique: Bernini rendered them as tightly spaced parallel lines, the graphic equivalent to the model's toothed texturing.

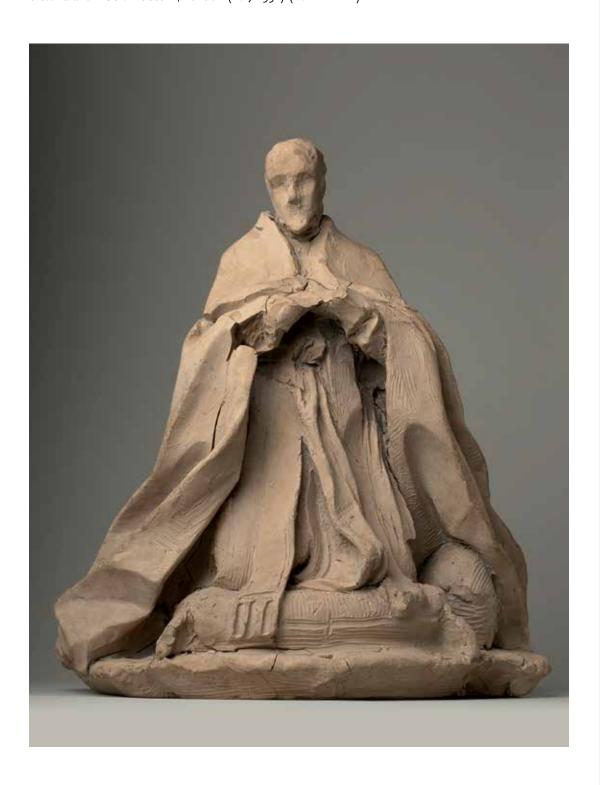
The first payment for work on the *Glory* dates to November 1663 and went to Bernini's trusted assistant Lazzaro Morelli.⁷ The present model must date to that time.

Gian Lorenzo Bernini

33 · Pope Alexander VII

ca. 1670–71. Terracotta, $12 \times 10\% \times 7\%$ in. (30.5 × 27 × 18 cm)

Victoria and Albert Museum, London (A.17-1932) (NOT EXHIBITED)



PROVENANCE: Probably in Miss Elwes's family (since ca. 1860-70); Miss M. E. Elwes, London (until 1932; sold to Victoria and Albert Museum, London)

LITERATURE: Maclagan and Longhurst 1932, p. 159; Lavin, l. 1955, pp. 10, 32, 77, 155–57; Wittkower 1955, p. 238; Pope-Hennessy 1964, vol. 2, pp. 606-7; Wittkower 1966, p. 259; Raggio 1968, p. 103; Kauffmann 1970, p. 317; Wittkower et al. 1981, p. 259; Montagu 1986, pp. 11-12, 24; Bernstock 1988, p. 175; Montagu 1989, pp. 111-14; Zollikofer 1994, p. 12; Bacchi and Zanuso 1996, p. 783; Avery 1997, pp. 133, 254; Wittkower et al. 1997, p. 296; Angelini and Montanari 1998, pp. 193, 196; Bacchi and Tumidei 1998, p. 61; Ferrari and Papaldo 1999, pp. 569-70; Hubbard and Motture 2001–2, p. 87

EXHIBITIONS: London 2009, no. 95

CONDITION: Extensive shrinkage cracks with small losses to the drapery at the right elbow. Both hands are missing.

NOT LONG AFTER BEING ELECTED POPE in 1655, at the age of fifty-six, Alexander VII communicated to Bernini that he wanted a lavish tomb for himself to be erected in Saint Peter's within his lifetime.¹ According to various sources, Bernini went straight to work, preparing drawings and models for the pope's approval.² These appear to have met with general satisfaction, as building materials were already on order by the following April.³ Why the project was then put on hold is unknown. The pope may have hesitated over the cost or been undecided over aspects of the design.⁴ Whatever the reason, he would never lay eyes on his monument, dying in 1667, four years before construction began.⁵ The tomb was not completed until 1678.

The present model can be assigned to the final stages of design, which took place several years after the pope's death, between 1670 and 1671. The model approximates the finished statue fairly closely, particularly in how the pope looks to his right and how the papal tiara is tucked under his cope. The most obvious difference concerns the stole. On the finished statue (fig. 322), the left side hangs down more prominently, reversing the scheme on the model. Bernini may have made the change to balance the figure's rightward gaze. The gaze is another clue to the date. Bernini had not always intended the effigy to look rightward.

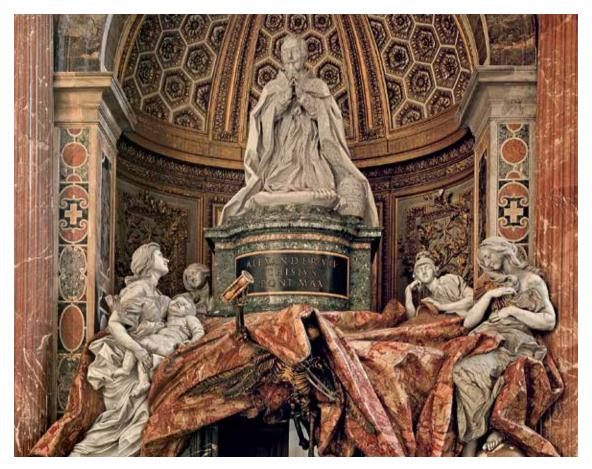


Fig. 322. Gian Lorenzo Bernini, *Tomb of Alexander VII*, 1672–78. Marble and gilded bronze, over lifesize. Saint Peter's Basilica, Vatican City



Fig. 323. Workshop of Gian Lorenzo Bernini, Tomb of Alexander VII in Saint Peter's Basilica, probably ca. 1656-58. Pen and bister wash over black chalk, 175/6 x 121/6 in. (44 x 30.7 cm). The Royal Collection, Windsor Castle (RL 5603). Cat. D.31

Fig. 324. Saw-cut base, showing square section of the core to which clay was added



As demonstrated by two workshop drawings for the tomb—one in a private collection, New York; the other in the Royal Collection, Windsor Castle (fig. 323)— Bernini had at one time considered turning the pope to his left.6 This moment can be dated to the pope's lifetime, as the drawings seem to situate the tomb in what must have been the pope's preferred location for it: the over-

door niche immediately to the left of the entrance to the apse in Saint Peter's, the most prestigious spot then remaining.7 For the effigy to engage with the processional traffic, it had to face leftward. At the pope's death, the tomb was briefly shifted to Santa Maria Maggiore.8 When it was returned to Saint Peter's in 1670, a new site was selected—the current



Fig. 325. Hollowed back, with truncated finger strokes and imprint from a square-sectioned stick

Fig. 326. Reconstruction of model with hypothetical pedestal



one, which favored a rightward-looking pope. Accordingly, the model must date to after 1670, when the switch was made. Payments indicate that a full-scale model of the tomb was underway by December of the following year. Presumably, all design work was concluded by that date—including all small models.

The model is one of the most compelling examples in Bernini's oeuvre of how, with the most abbreviated of formal means, he could take handfuls of clay and transform them into a visual statement of the greatest eloquence. This might suggest that making the model required little effort, but in truth it entailed multiple, carefully considered steps. The first was to create a core, or central mass, for the figure's body. This took the form of a tall block with rounded edges, and it was likely wedged, as the saw-cut surfaces on the base show the characteristic vertical grain of air trapped in wedged clay—albeit in cross section (fig. 324). The base was formed next, with rectangular slabs attached for the sides and a curved one for the front. This was augmented with thinner strips of clay for the projecting lip. The attachment of the lip is indicated on the left by a shrinkage crack at the join. Originally, the base was much taller than it is now, as proven by a detail on the inside of the hollowed back, where a series of top-to-bottom finger-smoothing marks are truncated, cut

midstroke (fig. 325). There is no way of knowing how far the marks continued originally, but they were clearly part of a longer gesture. This, combined with the sawed base, raises the possibility that the model originally included a large pedestal of the type seen on the finished tomb and in the workshop drawing at the Royal Collection (see fig. 323). At a later stage, for reasons discussed below, Bernini may have cut off the pedestal, replacing it with a new one, likely made of wood (fig. 326).

Assuming the theory of the base is correct, the model at this stage resembled a large box with a curved front, short lateral wings, and a mass of clay projecting out its top. Bernini began to bring the upper portions of the composition into focus by modeling the pope's torso, the inner drapery, and the cushion on which he kneels. For the inner drapery, he shaped the overlapping folds with a large oval-tip tool and added texture with a toothed tool. For the tiara, he rolled an egg-shaped ball of clay, which he attached to the base and textured. The figure was then given its cope, applied in strips and sheets of clay that were shaped and smoothed with broad finger strokes from front to back. The back hem was secured at the rear. As Bernini approached the front of the model where the cope clasps, he attached the forearms and modeled the hands, draping the cope over them. To prevent the arms from sagging, he inserted a wooden prop that left a square mark in the base and a vertical impression on the front of the cushion (fig. 327). The use of props is common with Bernini—a good example is the Daniel in the Lions' Den (fig. 150). Additional decoration was added to the cushion, the tiara, and the front drapery, including the stole; Bernini picked out its bottom fringe with a small oval-tip tool.

The head and neck of the model were created as a separate unit, inserted into a hollow between the shoulders. Bernini was careful not to attach the head too firmly at first, trying out different angles. This is proven by the multiple pairs of pinched fingernail impressions on the neck, formed as he maneuvered the head into the preferred orientation (fig. 328). The head was further secured with a wedge of clay pushed between the back of the neck

Fig. 327. Front cornice, cushion, and tiara (at right): note impressions from the prop for the arms (arrows)



and the cope and pinched on the left side against the collar. The face was modeled after the attachment, as some of the shaping strokes overlap the pinches used to secure the head. The face is notable for its blurred, generalized features, giving it a ghostlike air that recalls other faces in Bernini's oeuvre, including those of the angel on the *Celestial Glory* at the Museo Horne (fig. 317) and one of the *Half-Kneeling Angels* at Harvard (fig. 401). The right rear jawline offers a more specific comparison (fig. 91). It is modeled in a manner almost

identical to the corresponding jaw on the *Angel with the Crown of Thorns* at the Louvre. All forming strokes on the sides of the head move from front to back, terminating in small mounds of fingerprinted clay. The nose was pinched out of the face between two fingers, with a fingerprint left on each side. The same pinch created hollows for the eyes.

While the clay was still moist, the model was hollowed from the back with a toothed tool in a manner recalling the Saint Longinus at Harvard (cat. 3; see fig. 325). The resulting texture was later effaced with finger smoothing. (This is the same finger smoothing that resulted in the strokes that are now truncated.) The model was then carefully dried, as evidenced by the many fabric impressions found on the surface. A square-sectioned tool was stabbed into the back of the model; its purpose may have been to keep the wet draping cloth from touching the head and damaging or moving it.



Fig. 328. Side of head: note clay wedge at back and pinch marks from positioning

The model does not appear to

have been used for measurements, as there are no measuring marks on the surface. A possible clue to its use within the studio is the way the base and back were trimmed after firing. The depth of the model was reduced by chiseling away parts of the back to either side of the hollow, while the height of the base, as discussed above, was lowered by careful sawing. As we have suggested, the reduction is likely to have been quite radical, the elimination of an entire tall pedestal. The alterations are not inconsistent with the model's having been fitted for use on a wooden architecture model of the whole tomb; Bernini did sometimes trim his models for this purpose (see cats. 1 and 50).

Attributed to Giuseppe Mazzuoli (Italian, 1644–1725)

34 · Charity

ca. 1672. Terracotta, H. 13¾ in. (34 cm)

Istituto Statale d'Arte "Duccio di Buoninsegna," Siena



PROVENANCE: Giuseppe Mazzuoli (1644-1725); by descent in the Mazzuoli family to Francesco Mazzuoli (1763–1839); by donation to the Regio Istituto di Belle Arti, Siena (1816; now Istituto Statale d'Arte "Duccio di Buoninsegna")

LITERATURE: Viligiardi 1920; Brinckmann 1923–24, vol. 2, pp. 74-77; Lavin, I. 1955, pp. 157-60; Wittkower 1955, pp. 238–40; Pope-Hennessy 1964, vol. 2, p. 607; Wittkower 1966, pp. 259-60; Schlegel 1967, p. 391; Kauffmann 1970, p. 317; Vatican City 1981, p. 149; Wittkower et al. 1981, pp. 259-60; Bernstock 1988, p. 175; Butzek 1988, pp. 87-88; Koortbojian 1991, p. 272 n. 34; Zollikofer 1994, p. 12, pl. 16; Wittkower et al. 1997, p. 296; Angelini and Montanari 1998, p. 196

EXHIBITIONS: Sienna 2000-2001, no. 112; Petroio 2007, no. 1

CONDITION: Charity's head, right wrist, left ankle, and parts of the drapery are missing. The child's head, left hand, left foot, and right leg are missing, as is the proper right edge and back of the base. There are drilled mounting holes on the bottom. AS BERNINI APPROACHED HIS SEVENTY-THIRD BIRTHDAY, on December 7, 1671, he must have taken satisfaction in knowing that his plans for the *Tomb of Alexander VII* were on the brink of realization (fig. 322). For the past several years, he had concentrated on the design. He was now ready to give orders to erect a full-scale model of the tomb, which would be completed over the course of 1672.¹ The task fell to various assistants, including Giuseppe Mazzuoli, who would be responsible for the allegorical figure of Charity, on the front left of the tomb (fig. 329).² After completing the full-scale model, Mazzuoli was hired in 1673 to carve the figure, whose success helped launch him to a position of relative renown among the sculptors of his generation.³

The present model bears an undeniable relationship to the *Charity* on Alexander's tomb. Since the model was discovered in 1920, it has been almost universally identified as a sketch by Bernini for Alexander's *Charity*. The main voice of dissension has been Ursula Schlegel's.⁴ She maintains that it is a model by Mazzuoli, citing perceived similarities between it and his other models. To our eyes, the attribution to Mazzuoli cannot be sustained on purely



Fig. 329. Giuseppe Mazzuoli, after a design by Gian Lorenzo Bernini, *Charity*, from the *Tomb of Alexander VII*, 1672–78. Marble and gilded bronze, over lifesize. Saint Peter's Basilica, Vatican City



Fig. 330. Back, with deep finger impressions at bottom left from attaching the child and the architecture to the main mass

stylistic or technical grounds. His certain models are too few, and they vary too widely in style and technique. What increases the possibility that the model *does* represent Mazzuoli's work is that it was once owned by him and that it is unlike Bernini in several key ways.

To understand how the model departs from Bernini is to follow how it was made. The model began as a central, solid mass of clay, from which the figure of Charity was formed. The child and the architectural element beneath the child were added as a separate mass, secured to Charity by squeezing the clay from the back between fingers and a right palm, as though clenching a fist (fig. 330). The join is visible at the bottom of the back. Modeling was carried out with small and medium oval-tip and toothed tools. Charity's arms were rolled and

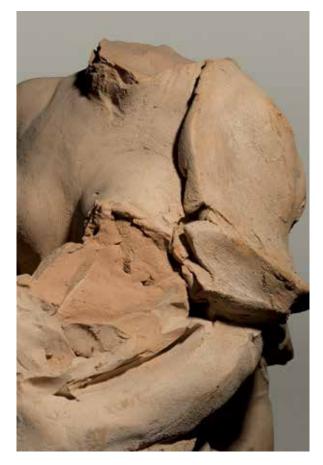




Fig. 331. Drapery over shoulder formed as added sheet of clay: note outlining of left forearm

Fig. 332. Upper drapery on back, loosely integrated

attached, and the drapery over her left shoulder was added as a sheet of clay (fig. 331). These are not uncharacteristic techniques for Bernini, but modeling so much of a figure out of the existing clay is. Charity's legs, feet, and lower drapery and the child were all extracted from the clay. Bernini tended to work in a more additive way. Moreover, he generally refrained from outlining forms as a means of defining them. Here, many of the forms (especially the limbs) received that treatment: first extracted from the clay, then worked around their edges with an oval-tip tool to help round them. Sometimes the edges were drawn, as with the child's outside left arm; sometimes they were stabbed, as with Charity's fingers. The folds of the lower drapery, after being extracted from the clay, were also rendered in a linear manner with an oval-tip tool. The modeling is fluid but not as active as in comparable passages on Bernini's angels for the Ponte Sant'Angelo and the Sacrament Altar. The folds are also treated more broadly and shallowly—even compared to those on the finished Charity. The drapery on the back is considerably cruder; less time was spent integrating the attached strips of clay (fig. 332). At the end of modeling, only flesh areas received any smoothing, and fingers were the primary tool. If a brush was used anywhere on the model, the evidence is hard to find, though it may be obscured by the overall granular texture. The smoothing is unlike Bernini in its degree of regularity. This is evident around Charity's breasts, where the strokes are highly even, perfectly circular (fig. 333).

The model displays one peculiarity that could be a useful indicator of authorship. Where the skin bunches under Charity's right arm, under the child's left arm, and at the top of the child's gluteal cleft, a Y-shaped crease was drawn in the clay (fig. 334). The device also appears on one model that we attribute to Bernini, Charity with Four Children (cat. 1), although an important distinction can be made. On the present model, the Ys show little variation in shape or line; on Charity with Four Children, they are more nuanced, drawn more



Fig. 333. Smoothing around breast, done in concentric strokes

calligraphically. This reinforces the notion that the models are by separate hands. And Ys do appear on Mazzuoli's models.5

One reason for usually assigning the present model to Bernini is that an inventory of 1767 describes it as "originale del Bernino" (the original of Bernini).6 The inventory lists all the models (about three hundred) belonging to Giuseppe Mazzuoli's grandnephew Giuseppe Maria Mazzuoli, also a sculptor. The collection had begun three generations earlier with Giuseppe, who can be assumed

to have owned the present model. That the inventory deserves to be taken with utmost seriousness is clear by who wrote it: the grandnephew, Giuseppe Maria. His attributions carry the weight of family knowledge, which is not to suggest that every attribution he reports has to be right. If the attributions were part of an oral tradition, they were susceptible to misremembering. The present model could easily be a case of a model of a Bernini becoming a model by Bernini. Giuseppe Maria could not ask Giuseppe for confirmation; their lives never overlapped. Finally, Giuseppe Maria undertook the inventory for a very particular reason, one that may have colored his sense of objectivity. He was out to convince the Grand Duke of Tuscany that his collection of models was sufficiently important that Mazzuoli should be allowed to use it to found the first public arts academy in Siena.7 Having a Bernini would have helped his cause.

Assuming the inventory is wrong and the model is not by Bernini, how certain can we be that it is by Mazzuoli? His presumed ownership of the model represents one of the surest signs. Why would he own a copy by some other sculptor of a figure he had carved? Because the model differs from the finished Charity on Alexander's tomb—particularly in the drapery and the architectural form under the child—it seems plausible that Mazzuoli created the model as the statue was being planned. The model may represent his first step in translating Bernini's initial ideas for the Charity into a suitable model for copying. If so,

Mazzuoli likely based his model on a drawing or a *bozzetto* by Bernini, which is how Bernini appears to have worked with his assistants on some of his other projects (see cats. 25, 45, and 46). The decision to represent the architectural form in so nondescript a way reinforces the hypothesis. Mazzuoli's focus would have been on the figure, not on what Bernini planned to put next to it. Moreover, Bernini was not one to represent architecture in his models. In cases like the present one, he normally relied on wooden models to provide the architecture (see cats. 1, 10, 33, and 50). Had he made the present model, therefore, we might assume he would have removed the clay under the child—perhaps even chiseling it away after firing.

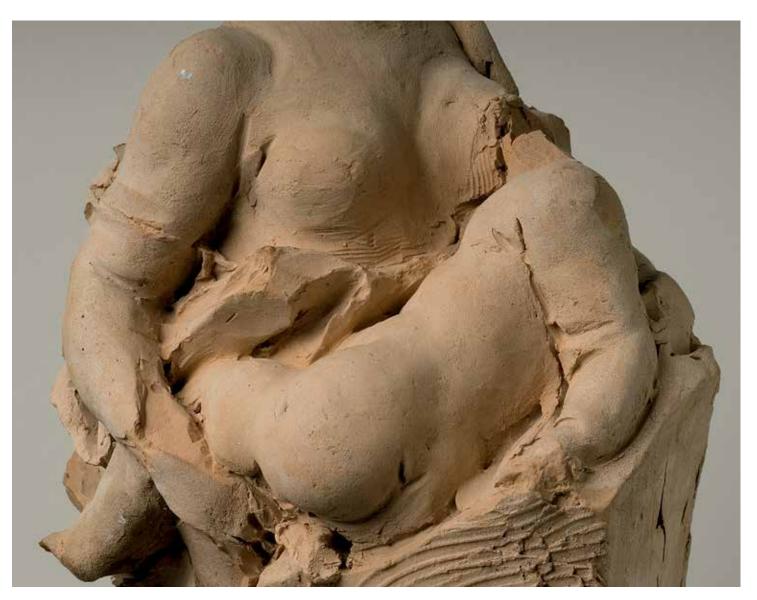


Fig. 334. Y-shaped markings used to represent juncture of child's left arm and body and the gluteal cleft, and Charity's right arm and body



VI·The Ponte Sant'Angelo

Among Bernini's last projects was the renovation of the most important bridge in Rome, the Ponte Sant'Angelo (fig. 335). Crossing the Tiber River at the pope's fortress, the Castel Sant'Angelo, it served as the chief link between the Vatican and the city's main population center. The bridge was constructed during the reign of Hadrian, dedicated in A.D. 134. Its structure remained substantially unchanged over the next fifteen centuries, and by all accounts, the bridge was still in fine shape in 1667, the year its overhaul was ordered. The man behind the order was the newly elected pope, Clement IX, who was apparently sympathetic to his predecessor's vision of restoring Rome to its ancient grandeur. The Ponte Sant'Angelo was an obvious candidate for embellishment, at a time when the whole experience of visiting Saint Peter's was being profoundly altered. Bernini was about halfway finished with the elliptical piazza and surrounding colonnade that he had designed for the front of Saint Peter's. Visitors were to be welcomed into the basilica as never before. As Clement apparently recognized, the Ponte Sant'Angelo could play a part in that welcome, making the walk to Saint Peter's more of a true procession.

The plan Bernini hatched was to adorn each side of the bridge with five over-lifesize statues of angels, each holding a different instrument of Christ's Passion. The statues would be placed on regularly spaced travertine parapets, with a high balustrade, pierced with iron grills, running between the parapets. If the plan had a principal difficulty, it was that Bernini could not carve all ten angels by himself. The ambitious plan required delegating some of them—which is not to suggest that Bernini was willing to give up complete control over how they looked. They were to be *his* angels in general composition, as his intent was for the angels to form a visually unified ensemble when viewed at a distance. He began by focusing on the two angels he would carve himself: the *Angel with the Superscription* (fig. 336) and the *Angel with the Crown of Thorns* (fig. 337). Models appear to have been his chief instrument of exploration. More models survive for these two angels than for any other sculpture by Bernini (cats. 35, 36, and 38–43). The rest of the angels would be variations on these two. Bernini prepared drawings for them as well as at least two models,

Fig. 335. Ponte Sant'Angelo, Rome



Fig. 336. Gian Lorenzo Bernini, *Angel with the Superscription*, 1668–69. Marble, over lifesize. Sant'Andrea delle Fratte, Rome



Fig. 337. Gian Lorenzo Bernini, Angel with the Crown of Thorns, 1668–69. Marble, over lifesize. Sant'Andrea delle Fratte, Rome

in order to guide his collaborators (see cats. 37 and 44). He expected his collaborators to conform to his basic designs, but he did allow them wide latitude in choosing how to treat details of facial expression, drapery, and hair.

Payments indicate that the first of the angels was underway by the summer of 1668. The marble for all ten had been ordered the previous fall. Presumably, by the time the first block of marble was delivered that April, Bernini had already invested considerable effort in his two angels—by making models. He was probably also close to finalizing the designs of the other eight. As summer passed into fall, the project was well advanced, with the carving begun on all but two of the angels. According to a report of January 3, 1669, Bernini (no doubt with the help of assistants) was nearly finished carving his two angels when the story took an unexpected turn. Finding them too beautiful for display outdoors, the pope proposed sending them to a church in his native Pistoia. By that summer his decision was final, and marble was ordered for their replacements on the bridge. Giulio Cartari received the commission for the second *Angel with the Superscription* (fig. 382); Paolo Naldini was hired to copy the *Angel with the Crown of Thorns* (fig. 386). Models related to both versions survive—one by Bernini; one by Naldini (cats. 44 and 45).

Pope Clement IX died on December 9, 1669, with only six of the ten angels in place on the Ponte Sant'Angelo. Among his last acts as pope was to award possession of the two angels carved by Bernini to his cardinal nephew, Giacomo Rospigliosi. For unknown reasons, Rospigliosi left the angels with Bernini, who still had them at his death. In 1729 Bernini's grandson donated them to Sant'Andrea delle Fratte, where they flank the nave in front of the altar area. By then, the replacements had been in place on the bridge for almost six decades, since October 1672, which marks the moment the bridge was finally completed.

Gian Lorenzo Bernini

35 · Angel with the Crown of Thorns

ca. 1667–68. Terracotta, 13% × 10% × 8 in. (33.5 × 25.6 × 20.3 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.58)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.58 written in black paint on lower back

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, pp. 11, 16, 181; Wittkower 1955, p. 250; Hibbard 1966, p. 202; Wittkower 1966, p. 250; Kauffmann 1970, pl. 175; Weil, M. 1974, p. 49; Lavin, I. 1978; Wittkower et al. 1981, p. 250; Princeton and other cities 1981-82, pp. 288-89; Fort Worth 1982, fig. 45; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, p. 62; Tratz 1988, p. 446; Scribner 1991, p. 43; Barberini 1994, p. 124; Bacchi and Zanuso 1996, pl. 173; Avery 1997, pp. 165–69; Wittkower et al. 1997, p. 289; Chicago, Philadelphia, and Washington, D.C. 1998-99, p. 80; Ferrari and Papaldo 1999, pp. 26-27; Sigel 1999, pp. 50-52, 59-62, 66-68; Sigel and Farrell 1999, pp. 81-83; Weil, M. 1999, pp. 144-48; Boucher 2001–2a, p. 63; Sigel 2002-3, p. 63

EXHIBITIONS: Cambridge, Mass. 1980; Cambridge, Mass. 2007

CONDITION: Missing head, neck, hair, left wing, little finger of right hand, right fingertips, limbs from the shin level down, edge of the drapery between left hand and crown, and the base. There is extensive shrinkage cracking. There is a drilled clay-sampling hole on the base.

OF ALL THE SURVIVING TERRACOTTAS that Bernini made in preparation for the angels on the Ponte Sant'Angelo, this is almost certainly the earliest, the only one in which the figure is depicted unclothed. As a nude study, it relates closely to two drawings in pencil in the Istituto Nazionale per la Grafica, Rome, for the *Angel with the Superscription* (fig. 338). These appear on the left and right sides of the same sheet and are likely the earliest surviving studies for any of the angels on the bridge. The drawing on the right is doubtless the earlier of the two, a partial study of a nude male in a classical *contrapposto*. The figure supports his weight

with his left leg, forcing his hips in the same direction. On the left of the sheet, Bernini completed the figure, adding arms, wings, a head, and the superscription. He also appears to have given some preliminary thought to the drapery: a faint, curving line that starts above the figure's left hip, passes over his upper right thigh, and emerges between his legs probably represents the leading edge of a flowing drape.

After completing the study on the left, Bernini is likely to have produced a model (or a series of models) based on it. Once he was satisfied with the pose, he probably turned his attention to the companion figure, the *Angel with the Crown of Thorns*, producing the present model. It is like the drawings in Rome in being focused on the basics of pose. The only indication of cloth is a ribbon of clay that winds around the angel's hands, falling

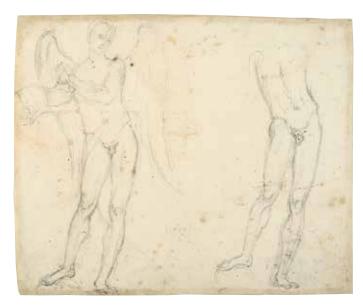


Fig. 338. Gian Lorenzo Bernini, *Two Studies for the Angel with the Superscription*, ca. 1667-68. Pencil, $67\% \times 83\%$ in. (17.4 × 21.2 cm). Istituto Nazionale per la Grafica, Rome (FC 127500). Cat. D.39

onto his left thigh. That Bernini should begin his design for the angels by concentrating on their pose is not surprising. Nor is it surprising that he would seek inspiration from a specific classical source—possibly the famous *Belvedere Antinous*.² In terms of the torso and the position of the legs, the terracotta adheres closely to the *Antinous*, as do the studies on the sheet in Rome—albeit in reverse. It was Rudolf Wittkower who first noted that Bernini typically began his sculptures by reflecting on a particular antiquity.³ Wittkower also observed that Bernini, once he had taken certain elements from a classical model, tended to discard his source and move in a highly personal, anticlassical direction. The elongated legs of the present model mark the beginnings of this evolution, the full course of which can be traced in the following entries (cats. 36–44).

The present model is significantly larger than all but one of the surviving models for the Ponte Sant'Angelo (cat. 43). Bernini may have chosen the large size because he felt that he had reached a point where he could elaborate the pose with some definitiveness, even though he ended up reversing the weight-bearing leg and changing which hip thrusts outward. X-radiographic examination of the basic massing and assembly of the clay reveals



Fig. 339. Left bicep, which Bernini modeled by pushing clay around the circumference

many directional shifts in the grain, suggesting a somewhat random initial assembly from smaller masses of clay, rather than Bernini's more customary technique of starting with a wedged, cylindrical main mass. The atypical method is confirmed by the pattern of shrinkage cracks on the buttress, as well as by the multidirectional grain of the clay visible on the bottom of the model, at the cross section of the break. A wedged mass has an inherent stability, making it unlikely to have fractured in this manner.

In terms of order of assembly, the massive buttress, running up the small of the back, is certain to have come first. Bernini formed it by piling up and compacting handfuls of clay. He next turned to the torso, working it out of the buttress and building it up with small additions of clay. The legs and arms were rolled separately and joined to the figure. This is evident in the X-radiographs, which show a faint parallel grain running down the legs. The shrinkage cracks also provide confirmation—for example, two form a V at the groin area, which represents the joins between the rolled legs and the torso (fig. 85). Shrinkage cracks

along the arms and the wings confirm that they were applied as well. After the initial attachment, Bernini shaped the limbs by pushing small additions of clay around the circumference of each form. This characteristic gesture is especially obvious on the right forearm (fig. 113), the left inner calf, and the left bicep (fig. 339). For the wings, Bernini formed slabs of clay and pressed them onto the torso. A particularly prominent shrinkage crack runs down the inside edge of the right wing at the junction with the torso.

The model bears several interesting features, including the clay strut supporting the angel's left arm near the crown. Bernini formed the strut by rolling a cylinder of clay with his fingers and attaching it to the model (see fig. 340); shrinkage cracks at top and bottom indicate the joins. Two other models bear similar struts: the *Constantine the Great on Horseback* at the Hermitage (cat. 23) and the *Model for the Equestrian Statue of Louis XIV* (cat. 24). Nevertheless, those struts are much less prominent than the one on the present model, which says something about Bernini's approach here. His overriding objective was to establish pose. Had he been concerned with a pleasing appearance, he could easily have removed the strut, perhaps substituting a temporary wooden prop, as he did on some of his other models (fig. 150).

In finishing the model, Bernini continued to focus on resolving the stance and perfecting the anatomy. On the front and sides of the buttress, he used a large-tooth tool to remove excess clay. Rather than smoothing the resulting striations, he deliberately left them, and we can assume that his main reason for doing so was to provide a contrast between the figure's legs and the background so that he could more easily evaluate the shape of the





Fig. 341. Measuring marks at pit of the throat, overdrawn with a small oval-tip tool: note texturing on the pectorals

Fig. 340. Back, with impressed finger and palm prints from handling: note the strut supporting the arm at left

legs. The result was particularly effective because the legs are so smooth. Bernini carefully finished all skin surfaces, including the legs, using his fingers and a dry, moderately stiff brush. After the initial completion, he revisited the stomach and the pectorals, reworking them with a fine-tooth tool. Curiously, he bothered to re-smooth only the center of the stomach, applying a single swipe with his finger and leaving the striated texture on the pectorals intact (fig. 137). The texture may have been intended to remind Bernini that these parts needed further thought or that, in the final execution, they were at risk of appearing too large. Another possibility is that, having applied the striated texture, he simply decided it was time to move on to the next model in the series. Whatever his thinking, such toothed "notations" are not uncommon on Bernini's models (see cats. 22 and 30).

That Bernini undertook this model with the aim of finalizing the pose is suggested not only by its large size and high finish but also by the heavy use it received after completion. The model was not set aside and left to dry, never to be touched again; it was kept moist and handled extensively, suggesting that it served an ongoing role as a reference work. The raised surfaces have a granular appearance that is probably due to prolonged post-modeling wetting and the repeated draping of the model with a wet cloth to retard drying. The left side of the buttress has fingerprints and several palm prints (partially effacing the linear toothed texture), indicating that the still-damp model was lifted and moved around the studio (fig. 340). These are to be distinguished from the deeply impressed diagonal finger marks that Bernini made on the buttress as he tidied up the model. Finally, measurements were taken from the model. There is a group of extremely faint but definite swung marks and sharp points (from a compass or dividers) at the throat of the model, made when the clay was leather hard (fig. 341). The area was subsequently overdrawn with a small oval-tip tool.

Gian Lorenzo Bernini

36 · Angel with the Crown of Thorns

ca. 1667–68. Terracotta, $13 \times 5\% \times 7\%$ in. (33 × 13 × 19 cm)

Musée du Louvre, Paris (RF 2312)



INSCRIPTIONS, MARKS, AND STAMPS: RF2312 written in red paint on the bottom

PROVENANCE: Paul-Albert Besnard (d. 1934; sold at auction, Galerie Charpentier, Paris, May 31 and June 1, 1934, lot 106, to Musée du Louvre, Paris)

LITERATURE: Paris 1934, p. 15; Lavin, I. 1955, p. 182; Wittkower 1955, p. 233; Wittkower 1966, p. 250; Weil, M. 1974, p. 48; Hunisak 1977, p. 122; Wittkower et al. 1981, p. 250; Fort Worth 1982, nos. 8, 9; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, p. 62; Tratz 1988, p. 447; Bresc-Bautier et al. 1989, p. 339; Bresc-Bautier et al. 1991, p. 271; Athens, Ga. 1996, pp. 28-29, 37; Bacchi and Zanuso 1996, p. 783; Bondil 1996, p. 52; Avery 1997, p. 166; Ferrari and Papaldo 1999, pp. 26–27; Weil, M. 1999, p. 148; Boucher 2001-2a, p. 62; Bresc-Bautier et al. 2006, p. 80

EXHIBITIONS: Rome 1999b, no. 103; Houston and London 2001-2, no. 44

CONDITION: The right wing is missing; the reattached stub may be a fired-clay replacement. The bottom of the right hand is broken, and the upper portion of the crown is missing.

THIS MODEL LIKELY FOLLOWED CLOSELY upon the nude Angel with the Crown of Thorns at Harvard (see previous entry). In that model, Bernini was focused exclusively on pose. Here, he has adopted the pose and taken up the challenge of how to drape it. Before doing any modeling, however, he appears to have prepared a quick pen-and-ink sketch, now in Leipzig (fig. 46). While certain details—such as the angle of the head—differ between this model and the drawing, there are marked similarities in the drapery. This is true for the way it blows out behind the left leg, uncovering it; also, in both the model and the drawing, the drapery seems especially diaphanous, a quality that would recede in subsequent designs as Bernini experimented with heavier, more volumetric forms. Another parallel between the drawing and the model touches on technique. In shaping the drapery, Bernini took a particularly graphic approach, as though sketching in pen and ink. Using a small oval-tip tool like a pen, mostly with the convex side down, he drew repeated, tightly spaced lines in the clay that

flow gently downward. The technique comes especially close to that seen on the *Angel with the Scourge* at Harvard (cat. 37), which, as discussed in that entry, must have been made shortly after the present model. Not only do they share many technical features, they are virtually duplicates in pose and drapery (fig. 342).

This model is solid and was cut from its modeling platform with a somewhat bent wire that left a wavy pattern in the clay. Large firing cracks on the sides and the back indicate that Bernini assembled the buttress from small masses and strips of clay (fig. 343). In shaping the limbs and other parts of the body, Bernini employed several of his habitual





Fig. 342. Drapery blown over the right lower leg and behind the left—virtually identical on cats. 36 (left) and 37

modeling techniques. The right forearm and bicep and the left leg show his characteristic pushing of the clay around the circumference of the curved forms (fig. 114). On the back of the head, he ran his finger in a gentle arc that recalls the S-shaped finger or tool strokes in the same location on the *Angel with the Scourge* (compare figs. 344 and 349). Another typical gesture is the continuous finger sweep around the right side of the neck that ends in an over-the-shoulder shaping stroke. Evidence that the head was added separately, not modeled out of the figure, is the area of incomplete attachment at the back of the right jawline.

The face of the model complements the drapery in the delicacy of tool use (fig. 345). A very fine-tooth tool was used to shape the sides of the nose, with no later smoothing. With simple jabs of a small blunted oval-tip tool, Bernini formed the chin, the mouth, and



Fig. 343. Side of model, with shrinkage cracks, toothed trimming, and vertical line made to help with visualization of final sculpture



Fig. 344. Back of head, with finger sweep

the eyes. In finishing the face, he paid particular attention to the upper eyelids, which are crisp and unusually well defined, formed by wiggling a small oval-tip tool in a slight up-and-down motion. The treatment is seen on only one of his other models for the Ponte Sant'Angelo (cat. 37). The curls of the hair are also finely rendered. Bernini first shaped each one by rolling a small ball of clay between his fingers. He then attached the balls to the head, pressing them down with a blunted oval-tip tool to ensure adhesion. The same tool was used to give each curl its shape. The feet and the clouds are also of interest (fig. 346). For the feet, Bernini defined only the big toes, an approach he employed with some frequency, as in the two angels at the Kimbell (cats. 39 and 40). The clouds here were modeled by pushing the clay in a circular motion with fingers, recalling not only the two angels at the Kimbell but also (once again) the Angel with the Scourge (fig. 89).

The present model bears all the signs of having been made in a single session. There are no fabric impressions or worn areas to suggest that it was draped with a moist cloth for later reworking. The surfaces are astonishingly crisp, with many crumbs of excess clay around the untidy tool marks. Bernini chose not to smooth any of the surfaces with a brush or a cloth; all smoothing, which is limited to flesh areas, was done with the fingers. Before setting the model aside, Bernini trimmed the sides of the buttress with a large-tooth tool (see fig. 343). His purpose was to ensure that no parts of it were visible from the front, allowing him to concentrate on the shape of the figure without distractions from behind. He even drew a line down the



Fig. 345. Face: note applied hair, fine-tooth tool marks on nose, eyelids formed of displaced clay, and smoothing finger marks on mouth and chin

right side of the buttress to indicate where, on the finished statue, the figure would end (see fig. 343). The same visualization method is found on his large *Angel with the Crown of Thorns* at Harvard (cat. 43).

A fingerprint found in the clay of the buttress on the right side below the incised line (see fig. 343) was one of a group of matching fingerprints confirming Bernini's authorship of this piece (see fig. 97).



Fig. 346. Base with feet and clouds: note circular modeling

Gian Lorenzo Bernini

37 · Angel with the Scourge

ca. 1667–68. Terracotta, $11\% \times 6\% \times 6\%$ in. (29.3 × 15.6 × 16.1 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.68)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.68 written in black paint on lower back

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Evers 1948, p. 15; Lavin, I. 1955, pp. 175-78, 181-82; Wittkower 1955, p. 233; Hibbard 1966, p. 202; Wittkower 1966, p. 250; Kauffmann 1970, p. 300 n. 55; Weil, M. 1974, pp. 47-48, 78, 108-9 n. 28; Wittkower et al. 1981, p. 250; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, pp. 58, 60; Tratz 1988, p. 445 n. 353; Bacchi and Zanuso 1996, pl. 175; Wittkower et al. 1997, pp. 289-91; Sigel 1999, pp. 54-55, 57-62, 64-65; Sigel and Farrell 1999, pp. 100-103; Weil, M. 1999, pp. 147-50; Barberini 2001-2, p. 54; Boucher 2001–2a, p. 66

EXHIBITIONS: Cambridge, Mass. 1980; Cambridge, Mass. 2007

CONDITION: The neck is broken and repaired with a dowel; the associated losses are filled and inpainted. The top and the center outside edge of the right wing, a section of the base under the left foot, and portions of the scourge are missing, along with drapery adjacent to the hands and the left forearm. Some of the drapery is also missing from the lower left leg. Filled and inpainted areas mask shellac joins associated with shrinkage cracking and losses at the midsection of the sculpture. There is a drilled clay-sampling hole on the base.

THIS MODEL WAS ORIGINALLY IDENTIFIED as being preparatory for the *Angel with the Crown of Thorns* on the Ponte Sant'Angelo. In 1955 Irving Lavin corrected the identification, recognizing that the fractured object in the angel's hands was not a crown but the long thongs of a scourge, the attribute of another angel on the bridge (fig. 347).¹ On the model, the front length of the scourge can be seen passing over the angel's right hand, between thumb and index finger, while the longer back length descends between the hands. This is the same basic configuration found on the finished statue. Another point in favor of the identification is that, of all the angels on the Ponte Sant'Angelo, the *Angel with the Scourge* is by far the closest in design to the model—even down to details such as the tilt of the head and the mournful cast of the eyes; the *Angel with the Scourge* is the only one that gazes at its instrument, doing so in obvious sorrow.

The model furnishes key evidence of the tight control Bernini exercised over the ten angels destined for the bridge. It also clarifies when he began to design the eight angels that

he did not intend to carve himself. This model is routinely—and rightly—compared to the Angel with the Crown of Thorns at the Louvre (cat. 36), which belongs to the earliest phase of planning for the angels. The similarities between the models are most evident in their draperies, which have the same linear character. There are also many specific connections, including the placement of the feet, the modeling of the face, the way the windblown fabric gathers against the right leg before passing behind the left one (fig. 342), and the shape of the wing. On the basis of these similarities, we can easily conclude that the present model followed shortly after the one from the Louvre, meaning that at the same moment Bernini was designing his own two angels—the Angel with the Crown of Thorns and the Angel with the Superscription—he was also attending to the eight angels that would go to his assistants. From the beginning, he was focused on making the bridge a visually unified ensemble.

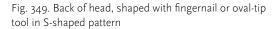
The sculptor chosen to carve the *Angel* with the Scourge was Lazzaro Morelli, who presumably had access to the present model or to one even closer to the final design.² If he was given only the present model, he may have chosen to produce a more finished



Fig. 347. Lazzaro Morelli, *Angel with the Scourge*, 1668–69. Marble, over lifesize. Ponte Sant'Angelo, Rome



Fig. 348. Front-to-back finger stroke, shaping neck and shoulder





version that, contingent on Bernini's approval, he used during carving. The present model bears no signs of measuring, so this was probably the case. Ercole Ferrata produced his own model for another angel on the bridge (cat. 46), although we cannot be certain if he based it on one by Bernini. The traditional view is that the sculptors hired for the bridge worked from drawings, as there are many workshop drawings for the angels that are thought to be copies after original sketches by Bernini,3 Given the existence of the present model, however, and considering that Bernini is known to have produced at least one other model for an angel he did not carve—the second Angel with the Superscription, delegated to Giulio Cartari (cat. 44)—it seems possible, even probable, that he produced some form of model for each of the angels on the bridge. These models could have been the basis for drawings or could have gone directly to the executing sculptors—or both.

The earliest document connecting Morelli to the Angel with the Scourge is a payment dated January 4, 1669.4 By then, he is likely to have already started the statue, as he had received his block of marble at least a couple of months prior, sometime between June and late November 1668.5 His was possibly the last angel on the bridge to be started. Not only was Morelli among the last two sculptors to be given his block, but he was also the last sculptor to receive his initial payment. The first assistants to be paid were Paolo Naldini and Cosimo Fancelli, on July 27, 1668,6 and this can be considered the latest possible date for the present model: it is exceedingly unlikely that Bernini would have let Naldini or Fancelli commence either of their angels before he had designed his own two, as he must have wanted them to serve as templates for the rest. And because we know that the present model belongs to the same phase of planning as his own angels, we can be relatively certain that the present model predates July 27, 1668. In fact, the planning could well have taken place quite a bit earlier, as Bernini may have needed to design each of the ten angels in order to know the dimensions for their blocks. An initial payment for the marble was sent to the supplier on September 22, 1667, with deliveries beginning the following spring.⁷

The model stands out from many of Bernini's others in being a virtual repository of all his most distinctive modeling gestures. One is the powerful finger stroke that sweeps up and over the angel's right shoulder from front to back, forming and defining the neck and the shoulder (fig. 348). The technique is one that Bernini often employed when shaping this part of his models (fig. 120). The fingernail pinch at the rear of the neck is even more distinctive, used simultaneously to outline the back of the neck and to separate it from the adjacent hair (figs. 115–19, 351). A gesture with a more sinuous, calligraphic quality can be seen nearby, on the back of the head, where Bernini ran his fingernail or an oval-tip tool downward in a series of broad S-shaped strokes to suggest several curls of hair (fig. 349).

There is one place on the model that takes top honor for demonstrating the immense pleasure Bernini derived from modeling in clay: the outside edge of the angel's left wing. With six sequential and overlapping downward strokes of his thumb, he impressed a series of evenly spaced fingerprints that are instantly recognizable as feathers (fig. 350). Since this detail cannot be seen unless light strikes it from precisely the right angle, this must have been a private pleasure rather than an outward show of virtuosity. In smoothing the wing, Bernini must have noticed how his finger, when sliding through the clay, left a fingerprint at the end of each stroke that resembled a feather and proceeded to indulge himself by quickly repeating the gesture five times. On the opposite wingtip, he made a more purposeful attempt at suggesting feathers, applying three upward finger strokes—the middle one executed last, as it overlaps the other two (fig. 90).



Fig. 350. Stepped fingerprints forming a feathered texture on the wing edge



Fig. 351. Face, with impressed oval-tip tool marks for features: note fingernail mark on left side of neck

Fingers were not the only tools used to complete the model. Details such as drapery were refined with tools after initial shaping with fingers. For the drapery, Bernini first pushed clay strips up and around the limbs and torso with his fingers. He then used a smaller D-section oval-tip modeling tool to integrate, define, and facet the folds. The tool's flat side was used to smooth; its rounded side to indent; and its sharp edge to incise and to draw. He used the same tool in darting strokes to model the features of the face (fig. 351). Bernini employed a medium-tooth tool with shallow, irregular serrations in the hair, on the drapery over the angel's right leg, and to decorate the curving clouds on the base with parallel lines. Toward the end of modeling, he smoothed areas of the skin with his fingers and a bristle brush. Brush striations are particularly visible on the angel's left leg above the knee (fig. 145)—a level of finish comparable to that seen on the two *Half-Kneeling Angels* (cats. 48 and 49).

For all the ways that the modeling is perfectly consistent with Bernini, some aspects of the construction do fall outside his normal practice. According to X-radiography, he began the model by rolling out a slab of clay, approximately an inch thick, that he used as the base for the model. He next wedged a mass of clay that he turned on its side and placed on top of



Fig. 352. Buttress, with downward carving strokes of a chisel

the slab. The spiral grain of the wedge can be seen in the X-radiograph, extending from the feet to midthigh. On top of the turned wedge, Bernini then added a new slab of clay, with a horizontal grain that ends at waist level. A large shrinkage crack also signals this join. The multilayer approach (especially with the side-turned wedge) finds no direct equivalent in Bernini's oeuvre. The model that comes closest is likely his large Angel with the Crown of Thorns at Harvard, with its seemingly arbitrary massing (cat. 43). The arms and the right leg of the present model followed his more customary procedures—formed of rolled clay and then added, as were the wings, which were made from sheets and strips.

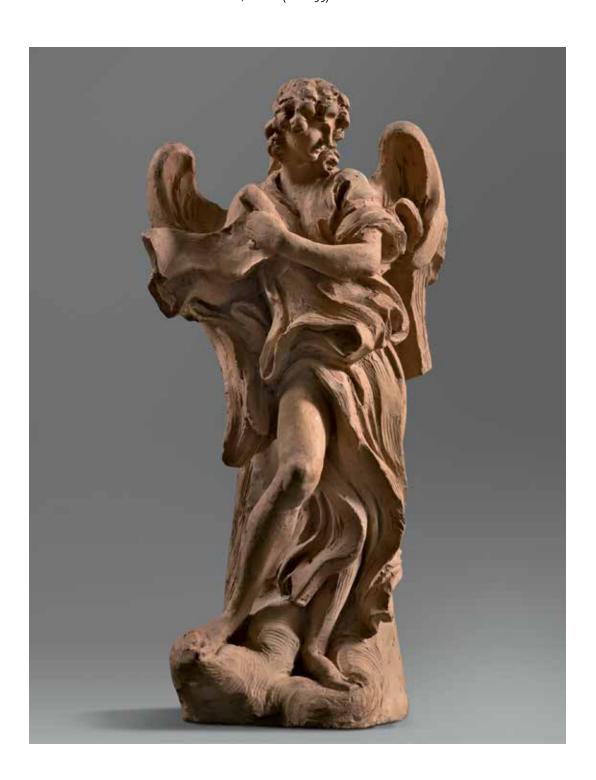
Very late in the drying process, well into the leather-hard stage, the back was trimmed of excess clay using a square-cornered chisel in vigorous downward carving motions (fig. 352). The model was then wire cut from its modeling platform, which is also the case with the angel at the Louvre (cat. 36)—perhaps another reason to assign them to the same phase of planning.

Gian Lorenzo Bernini

38 · Angel with the Superscription

ca. 1667–68. Terracotta, $14\frac{1}{4} \times 7\frac{5}{8} \times 7\frac{1}{8}$ in. (36.3 × 19.5 × 18 cm)

Museo Nazionale del Palazzo di Venezia, Rome (PV 1195)



INSCRIPTIONS, MARKS, AND STAMPS: 1195 written in pencil on the bottom of the base

PROVENANCE: Possibly acquired by Bartolomeo Cavaceppi (d. 1799); possibly bequeathed to Accademia di San Luca, Rome (1799); possibly sold at auction (Accademia di San Luca, Rome, 1800); possibly purchased by syndicate composed of Giovanni Torlonia, Vincenzo Pacetti, and Giovanni Valadier (1800); possibly awarded through court decree to Giovanni Torlonia (1810-d. 1829); possibly by descent to Alessandro Torlonia (d. 1886); possibly unknown intermediaries; Gioacchino Ferroni (d. 1909; sold at auction, Jandolo e Tavazzi, Galleria Sangiorgi, Rome, April 20, 1909, lot 592, to Palazzo Venezia, Rome)

LITERATURE: See page 385.

EXHIBITIONS: Rome 1930, no. 795; Rome 1956–57, no. 337; Rome 1991–92, pp. 47–48; Rome 1994, no. 119; Athens, Ga. 1996, no. 15; Rome 1999b, no. 102; Houston and London 2001–2, no. 45; Madrid and Aranjuez 2003–4, no. 4.10

CONDITION: The fingers of the right hand are missing at the lower edge of the superscription. The right leg from the ankle to the upper thigh is reattached with three dowels and may be a replacement: the clay is a slightly different consistency, and a reddish adhesive fills the gaps at the thigh.

THIS MODEL MARKS A TRANSITION between the linear, flowing garments of the Angel with the Crown of Thorns at the Louvre (cat. 36) and the billowing, more active drapes in Bernini's later models for the Angel with the Superscription and the Angel with the Crown of Thorns (cats. 39-44). While the bottom half of the drapery reflects the angel at the Louvre in its gentle cascading rhythms, there are marked differences in the area around the waist. On the present model, Bernini has introduced a prominent fold across the waistline, which would become standard in future designs. New energy is evident in the treatment of the left arm, which is now wrapped in a swirl of fabric that blows against the left wing. (In later models, Bernini would go back to a bare arm.) One interesting detail is the exceedingly long curl that falls on the angel's left shoulder. It gives the face an aristocratic air, as though Bernini were reflecting on his recent



Fig. 353. X-radiograph of Angel with the Superscription: note the vertical grain of the clay from wedging and the three dowels used to attach the restored leg



Fig. 354. Arm, with clay pushed around the circumference

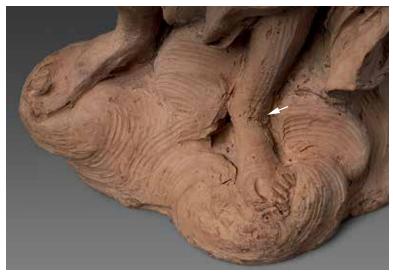


Fig. 355. Feet, with toes formed by an oval-tip tool: note the nexus of measuring marks at the left ankle (arrow) and the flattening of the left shin

bust of Louis XIV, where such curls are prominent (fig. 67).

In construction, the model adheres closely to Bernini's usual practices. X-radiography confirms that the model is solid, with the torso and the buttress formed of a single, tightly wedged column of clay (fig. 353). Examination of the base shows that the model was cut with a wire from its modeling stand and that Bernini added clay at the front for the cloud and the right foot. The torso was shaped out of the central column; the limbs, drapery, and wings were added separately. He constructed the arms from smaller pieces of clay, finishing them with a thin skin of clay that he pushed around their circumferences (fig. 354), a technique seen on virtually all his models for the Ponte Sant'Angelo.

The drapery was modeled quickly, resulting in many crumbs and sharp ridges of displaced clay. A toothed tool was the primary instrument used to finish the drapery, marking a departure from Bernini's normal preference for an oval-tip tool. On the angel at the Louvre (cat. 36), for example, he

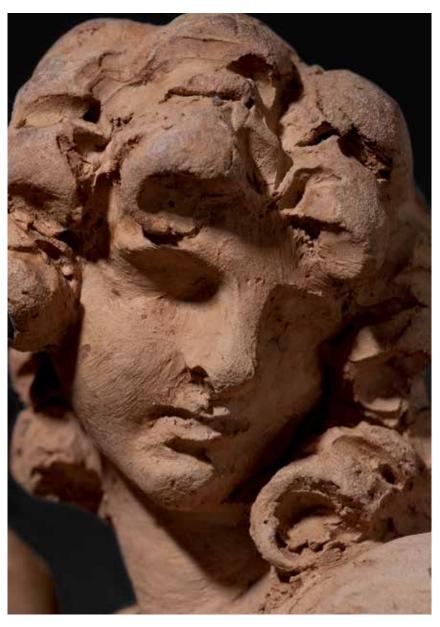


Fig. 356. Face: note brush-smoothed textures made in the wet clay

used the oval-tip tool to give the drapery a generally striated appearance. He likely sought to duplicate that effect in the present model, and the toothed tool offered the most expedient means. A toothed tool was also used to texture the clouds and to shape the front of the left leg, which has been squared off in a manner recalling the same leg on one of the *Angels with the Superscription* at Harvard (cat. 41) and the two angels at the Kimbell (cats. 39 and 40). For the toes, Bernini made delicate stabbing strokes with an oval-tip tool (fig. 355).

The face is one of the more completely rendered among Bernini's models for the Ponte Sant'Angelo (fig. 356). He appears to have taken a few extra moments to form the lips and chin and—in a rare move—to excavate the nostrils. Working quickly, he applied darting strokes

of an oval-tip tool to shape the eyes, mouth, and chin, while adding clay to build up the brow, the bridge of the nose, and the cheeks. For the cascading hair, which is strongly reminiscent of that on the angel at the Louvre, Bernini rolled balls of clay between his fingers, attaching and integrating them with a blunted oval-tip tool. On the back of the head, we find one of his more characteristic modeling gestures: a single stroke of a finger that tracks around the sides and back of the head, used to shape and to smooth simultaneously (fig. 122). Most flesh areas received a light finger smoothing after modeling; the only place to show signs of brush smoothing is the face.

Before declaring the model done, Bernini attended to the buttress, which he textured on both sides with a toothed tool (fig. 357). On the left side, the striations are visible now



Fig. 357. Right side of buttress: note vertical line incised at back to guide trimming

only near the wing root, because Bernini later trimmed large portions of that side and the back with a knife. On the back of the trimmed left wing, he sketched a few broad, curving lines to suggest feathers. On the right side of the buttress, where the toothed texturing remains, he incised a vertical line over it. Because the line nearly coincides with the rear outline of the buttress, it should probably be interpreted as a guideline for trimming.

Despite belonging to an intermediary stage of design, the model displays a surprisingly large number of measuring marks. In terms of the extent to which it was measured, its nearest rivals within the Ponte Sant'Angelo group are the larger Angel with the Superscription at Harvard (cat. 42) and the Angel with the Superscription at the Hermitage (cat. 44), both of which came at the end of the design process, making them natural candidates for measurement. The marks on the present model are of two types—point and struck. Numbering over a hundred, they are found in all the expected places: the feet, ankles, knees, drapery, head, one of the wrists, and one of the elbows. Interestingly, there is no group of points in the pit of the throat, the usual nexus for Bernini. Here the nexus appears to have been the left ankle,

which features twenty-six points and seven struck lines (see figs. 104 and 355). The most likely explanation for the unusual number of measurements is that Bernini decided to base future models on the present one. The measuring appears to have followed shortly after completion of the model, as there are no fabric impressions indicating that it was stored for a prolonged period.

Gian Lorenzo Bernini

39 · Angel with the Superscription

ca. 1667–68. Terracotta, $11\frac{1}{2} \times 6\frac{3}{8} \times 5\frac{1}{8}$ in. (29.2 × 16.2 × 13 cm) Kimbell Art Museum, Fort Worth (AP 1987.02a)



INSCRIPTIONS, MARKS, AND STAMPS: K.A.M. / AP 87.2a written in red paint on bottom

PROVENANCE: Alexander von Frey, Europe and New York (d. 1951); his widow, Erika von Frey, New York and Bremen, Germany (1951–1954); [Rosenberg and Stiebel, New York]; Mr. and Mrs. Richard S. Davis, Wayzata, Minnesota, and London (1954– 1987); [Wildenstein and Co., New York, 1987; sold to Kimbell Art Foundation, Fort Worth]

LITERATURE: Lavin, I. 1955, p. 183; Wittkower 1966, pp. 250–51; Lavin, I. 1967, p. 104; Weil, M. 1974, pp. 48–49; Wittkower et al. 1981, pp. 250–51; Steven F. Ostrow in Princeton and other cities 1981–82, pp. 288–89; Loud et al. 1987, pp. 206–7; *Cazette des Beaux-Arts* 1988, p. 34; Barberini 1994, p. 119; Avery 1997, pp. 165–69; Wittkower et al. 1997, p. 289; Ferrari and Papaldo 1999, pp. 26–27; Weil, M. 1999, p. 148; Potts, ed. 2003, p. 88

EXHIBITIONS: Fort Worth 1982, no. 9; Houston and London 2001–2, no. 47

CONDITION: The head has been broken at the neck and reattached, as have the outer part of the superscription, the underlying right arm, and the lower right leg between the knee and the ankle. The lower left wingtip is a replacement, and the top of the right wing is missing. Areas with smaller chip losses include the front of the hair (missing a commashaped curl) and the toe of the right foot. There are remnants of gesso and gilding in some interstices. A drill hole on the bottom is likely modern.





Fig. 358. Bottoms of the Angel with the Superscription (top) and the Angel with the Crown of Thorns (cat. 40), both with superimposed clay

THE TWO MODELS MADE BY BERNINI for the Ponte Sant' Angelo that survive at the Kimbell are distinguished from the rest in being the only two in the group that can be considered a true pair (cats. 39 and 40). They share the same provenance and scale; their styles of modeling are identical; and they were constructed in similar fashion. A detail on their bases all but proves that they were made side by side, possibly in the same modeling session, virtually as one (fig. 358). After completing the modeling, Bernini used a wire to cut them from his worktable. He then set them aside on the same surface, likely of wood, which was covered with detritus of clay from this or some other project. The detritus adhered to both bases, partially obscuring the marks from the wire cutting while registering the textures from the wooden surface. There are no other models in Bernini's oeuvre with these details so precisely duplicated, and they form a secure temporal link between the two angels.

The Kimbell angels reflect a moment of major change in Bernini's designs. Initially, he had conceived the Angel with the Superscription and the Angel with the Crown of Thorns as mirror images. Midway through planning, he changed his approach, deciding that the legs and the feet of the two angels should

match. The Angel with the Crown of Thorns was subsequently modified so that its right leg was moved back and exposed, its left now forward and covered. He left the upper body as it was, while bringing one other part of the composition into mirror arrangement: the lower drapery, which now sweeps in the direction of the figure's gaze.

As soon as Bernini had the idea to alter his original scheme, he must have reached for clay, knowing that the most effective way to verify his intuition was with small models that could be set side by side and compared in a single view. A larger question is why he was so fixated on the idea of pendants in the first place. No two angels on the Ponte Sant'Angelo can be appreciated simultaneously from the front because the ten statues are set too far apart and the bridge is too narrow. Moreover, Bernini never seems to have intended the Angel with the Superscription and the Angel with the Crown of Thorns to occupy contiguous slots. He placed the Angel with the Robe and Dice between them, with the Angel with the Superscription on the right, the Angel with the Crown of Thorns on the left. This raises another question: did Bernini always consider the Angel with the Crown of Thorns to be left of the Angel with the Superscription? Today, we are conditioned to seeing the former as the right angel, as in its current position at Sant'Andrea delle Fratte, although admittedly it was installed there

a long time after Bernini's death and cannot be assumed to follow his original thinking. Besides, it made good sense to place the angels as they are in the church, looking toward the nave (figs. 336 and 337). Perhaps Bernini was not interested in the question of left or right at all, knowing full well that the two angels could not function as a pair on the bridge. If so, his reasons for approaching them as such are likely to have been fairly abstract—perhaps he relished the theoretical challenge of relating two figures to one another through visual means. The angels certainly lent themselves to this kind of exercise.

If the purpose of the pair at the Kimbell was to test how the revised *Angel with the Crown of Thorns* looked alongside the *Angel with the Superscription*, it is not surprising that

the two models are alike in most technical regards. Conflicting elements—like differences in scale—would have distracted from Bernini's ability to judge how the compositions related to one another. To ensure overall visual consistency, he started from scratch with two entirely new models and may even have gone back and forth between them as he made them. His first step with both was to form a single wedged column of clay. This is revealed in X-radiographs, which show an uninterrupted vertical grain of trapped air running through the central mass. Clay was added for the buttresses as well as to the front of the bases for the clouds and feet. The arms and the right legs were modeled and attached separately, with shrinkage cracks signaling the joins. Both left legs were developed out of the underlying clay and have an abbreviated, squared-off shape. Bernini added both left wings as separate elements. On the present model, he adjusted his approach with the right wing, attaching only the upper portion; the join is clearly visible where the wing has broken. Because the lower part adheres closely to the body, it could be modeled out of the main mass. On the other model, he attached the right wing as one full piece, as he did the left wings on both models. The arms show his characteristic around-thecircumference finger shaping. Another familiar technique is found on the inside



Fig. 359. Oblique view: note parallel alignment of face, superscription, wing edge, sash at waist, and lower leg



Fig. 360. Fingernail impression from Bernini's characteristic pinch, on left side at the back of the neck

of the left wing near the wing root, where Bernini has pushed two fingerfuls of clay from top to bottom to suggest feathers (fig. 133).

Drapery is another area where the two models share close technical affinities. Bernini applied the drapery in sheets and strips, a technique he employed on virtually all his draped models. He integrated and shaped the folds with his fingers, changing to a blunted oval-tip tool for the tighter pleats that dart and twist along the length of the body or bunch at the waist. That Bernini developed the pattern with a clear plan is illustrated

by the angle at which he has set the sash on the present model. When the Angel with the Superscription is viewed obliquely from the right, the sash comes into perfect parallel alignment with the superscription, the lower right leg, and the top left wing (fig. 359). Overall, the drapery was left rough on both models, with many crumbs of clay and visible tool marks.

Several features tie the present model unambiguously to Bernini. Similar hands recur on many of his other models for the Angel with the Superscription (cats. 38, 41, and 42), with the right one squeezed into a flat, mittlike shape, the left one with the little finger extended. The head offers other parallels. Bernini attached it separately, reinforcing it with a mass of cascading hair that serves as a small stabilizing buttress—a device he employed on nearly all his models for the Ponte Sant'Angelo. He often finished as he did here, with a firm pinch at the nape of the neck, leaving the impression of a fingernail to separate the hair from the neckline—a virtual signature for Bernini (fig. 360). The modeling of the face is also consistent



Fig. 361. Detail of face



Fig. 362. Back, showing trimming with a serrated chisel (often used for stone carving), the socket of the attached right wing, and the buttress with knife-carved surfaces trimmed with a saw and filed with a rasp

with his practice: a pinch for the nose, an impressed stroke for the mouth, and horizontal scoops for the eyes (fig. 361). For the hair framing the face, he attached small pieces of clay, rolled between his fingers, which he then dressed with S-shaped strokes of a blunted oval-tip tool.

The back of the present model was first trimmed with a large-tooth tool (fig. 362).

The upper parts, the left wing, and the left side show the use of a chisel with a serrated tip of the kind used to carve stone; the shape of the tip is clearly visible at the end of the plunging strokes. Bernini went on to trim most of the buttress with a knife. On the right side, he partially cut away a stepped series of strong front-to-back finger strokes made during an earlier phase of smoothing and compacting. Sometime after firing, the lower half of the buttress was trimmed with a saw and then filed with a rasp.

The model bears a handful of measuring marks (all struck lines): three on the left shoulder; two above the left elbow; and one on the inside end of the superscription. (A larger comma-shaped mark at the pit of the throat is unlikely to have anything to do with measuring.) The companion *Angel with the Crown of Thorns* (cat. 40) bears no measuring marks. A possible scenario is that Bernini, having finished the present model, took a few confirming measurements as he modeled its companion, which, as the more heavily revised of the two designs, was likely the second of the two to be completed.

Gian Lorenzo Bernini

40 · Angel with the Crown of Thorns

ca. 1667–68. Terracotta, 11% \times 6 \times 6 in. (30.2 \times 15.2 \times 15.2 cm)

Kimbell Art Museum, Fort Worth (AP 1987.02b)



INSCRIPTIONS, MARKS, AND STAMPS: K.A.M. / AP 87.2b written in red paint on the bottom; white-and-blue paper stamp on lower back

PROVENANCE: Alexander von Frey, Europe and New York (d. 1951); his widow, Erika von Frey, New York and Bremen, Germany (1951–1954); [Rosenberg and Stiebel, New York]; Mr. and Mrs. Richard S. Davis, Wayzata, Minnesota, and London (1954– 1987); [Wildenstein and Co., New York, 1987; sold to Kimbell Art Foundation, Fort Worth]

LITERATURE: Lavin, I. 1955, p. 183; Wittkower 1966, pp. 250–51; Lavin, I. 1967, p. 104; Weil, M. 1974, pp. 48, 51; Wittkower et al. 1981, p. 250; Steven F. Ostrow in Princeton and other cities 1981–82, pp. 288–89; Loud et al. 1987, pp. 206–7; *Cazette des Beaux-Arts* 1988, p. 34; Avery 1997, pp. 165–69; Wittkower et al. 1997, p. 289; Ferrari and Papaldo 1999, pp. 26–27; Weil, M. 1999, p. 148; Boucher 2001–2a, pp. 63–64; Potts, ed. 2003, p. 88

EXHIBITIONS: Fort Worth 1982, no. 8; Houston and London 2001–2, no. 47

CONDITION: The head has been broken at the neck and reattached. The upper left wingtip is a replacement. A section of the base, including the right foot from the ankle down, is broken and reattached. There are losses to the hair curls on the left side of the head. Remnants of gesso and gilding are visible in some interstices. There is a drilled hole, likely modern, on the bottom.

ONE OF THE MANY LINKS between this model and its pendant (cat. 39), also at the Kimbell, is their provenance, which goes back to 1951, when they were both in the possession of the art dealer and collector Alexander von Frey. Frey also owned the *Model for the Cathedra Petri* in Detroit (cat. 27), which he appears to have acquired in Italy from the Mattei della Pergola family.¹ The Kimbell angels probably took a different path to Frey. They may once have been part of the Torlonia collection in Rome, which is known to have held many models by Bernini, including the group now at Harvard.² The terracottas in the Torlonia collection were sold off piecemeal during the late nineteenth century, with many—including those at Harvard—still changing hands decades later, at a time when Frey was collecting and dealing.³

That the Kimbell angels have survived the centuries without being separated is a testament to how unmistakably paired they are. One of their more pronounced similarities is their elongated proportions: long, slender legs that terminate in stretched, narrow feet. The



Fig. 363. X-radiograph of Angel with the Crown of Thorns: note the vertical clay grain indicating initial massing from a single wedged column of clay

similarity is particularly strong with the left legs, which are trimmed flat at the front, as though Bernini were thinking in terms of pure shapes. In a certain sense he must have been, as one of his main reasons for making the pair was to judge how the poses related. It should also be noted that such elongations were increasingly normal for Bernini as his career progressed. In his later years, he is reported to have told aspiring sculptors, "Make legs that are long not short." Audolf Wittkower has explained the tendency with reference to Bernini's spirituality.5 According to Wittkower, Bernini came to approach sculpture in an intensely personal way, seeking new, less classical ways to invest his figures with a metaphysical quality—as though they were different from normal human beings and not part of this world. His propensity to elongate is seen most clearly in his models, where he was free to invent as he wished. Generally, in the final execution he reined himself in, as demonstrated by the proportions of the finished angels, which are not nearly as exaggerated as in the models. This is especially true when the finished sculptures are seen from below (di sotto in su), as Bernini intended; he would have wanted the legs to be a little long in order to counteract the effects of foreshortening.

The schematic flattening of both left legs is duplicated on the headless *Angel with the Superscription* at Harvard (cat. 41)—one of the many technical details that confirm Bernini's authorship of the two models at the Kimbell. To highlight another in the present model:



Fig. 364. Detail of face

Bernini pinched the back of the neck between his thumb and forefinger, leaving a characteristic fingernail impression on the right side between the hairline and the neck (fig. 118). As discussed in the previous entry, the same idiosyncratic gesture was applied to the companion *Angel with the Superscription*, although with the fingernail impression made on the left side of the neck (fig. 360).

The steps Bernini took to make the present model are enumerated in the previous entry, where it is pointed out that the Kimbell angels are virtually duplicates in construction and technique. Comparison of the X-radiographs emphasizes the point, with both showing a continuous vertical pattern of trapped air, or grain, which is evidence that each model was massed from a single wedged column of clay (fig. 363). Unusually, the grain is also visible on the back of the present model, exposed during the trimming of the buttress (see fig. 366). The faces present another useful comparison (compare figs. 364 and 361). Bernini formed them almost identically, with the same tools and techniques. Both mouths, for instance, were impressed with a single stroke of an oval-tip tool.

Differences do exist between the two models, and one of the most interesting pertains to a passage between the lower left leg and the adjacent drapery, where Bernini



Fig. 365. Recess formed by stamping, between the lower left leg and the drapery



used a blunted oval-tip tool to form a narrow recess, not by drawing or scooping but by stamping (fig. 365). The resulting line of holes recalls similar rows of impressed marks in the hair of the Moor (fig. 226), in the hair of the Model for the Equestrian Statue of Louis XIV (fig. 276), and in the drapery of one of the Angels with the Superscription (fig. 369). Among the other differences between the models is the more extensive use of a medium-tooth tool for the initial shaping of the limbs and the drapery of the present model. Most tool marks were smoothed away, but some remain visible on the back of the upper right arm and the inside of the upper right thigh, a feature also seen on many other models for the Ponte Sant'Angelo (see cats. 39 and 42-44). The present model also bears an interesting alteration that does not appear on its companion. After initial completion of modeling, the sides and back of the buttress and wings were trimmed

and textured with a large-tooth tool (fig. 366). Bernini returned to the back of the right wing, which he further trimmed with a sharp tool, removing the toothed texturing. After preparing the surface, he enlarged the wing by adding strips and pieces of clay along its outside edge from top to bottom. The additions were carefully integrated on the front but not on the back, which explains why they are still visible.

Fabric impressions in the clay indicate that the present model, like its companion, was stored under damp conditions for some period, likely to control drying. Once the model was fired, a saw was used to trim the lower buttress; the rough edges were then smoothed with a rasp (see fig. 366). The bottom was also worked after firing. It shows a curious chiseling away of terracotta under the buttress, perhaps an attempt to keep the model from wobbling when set upright. The base of the companion angel was treated similarly (fig. 358).

Fig. 366. Back, with overall toothed-tool marks: note enlargement of right wing and exposed vertical grain (arrows) where the buttress was trimmed after firing

Gian Lorenzo Bernini

41 · Angel with the Superscription

ca. 1667–68. Terracotta, $10^{1}\% \times 6\% \times 5\%$ in. (27.8 × 16.5 × 14.2 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.69)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.69 written in black paint on the back; 2° written in pencil under the base

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, p. 184; Wittkower 1955, p. 233; Wittkower 1966, p. 250; Kauffmann 1970, p. 302, pl. 183; Weil, M. 1974, pp. 48, 50; Lavin, I. 1978, pp. 401, 403; Wittkower et al. 1981, p. 250; Fort Worth 1982, fig. 43; Di Gioia 1986b, p. 167; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, p. 72; Tratz 1988, p. 449; Barberini 1994, p. 119; Wittkower et al. 1997, p. 289; Ferrari and Papaldo 1999, pp. 26–27; Sigel 1999, pp. 50-52, 54, 70-71; Sigel and Farrell 1999, pp. 103-7; Weil, M. 1999, pp. 147-50; Boucher 2001-2a, p. 63

EXHIBITIONS: Cambridge, Mass. 1980; Cambridge, Mass. 2007

CONDITION: The head, hair, wingtips above the shoulder, the left wing's trailing edge, the right hand and leg, the end of the scroll, and both feet with associated base and cloud structures on the front and sides of the model are missing. Drapery is also lost from the left hip area and from between the legs. There is a drilled claysampling hole on the base.

THIS MODEL IS CLOSE IN DESIGN and technique to the Angel with the Superscription at the Kimbell (cat. 39). Among the features they share are the bare left arm, the ribbon crossing the waist, the flat left leg, and the flow of drapery across the left knee. The models can be assigned to the final stages of design, when Bernini was exploring the gather around the waist and the treatment of the lower drapery. He would end up eliminating the ribbon in favor of bunched fabric and placing a dramatic swirl of cloth at the side of the left leg. Both models can be safely placed after the model for the Angel with the Superscription in Rome (cat. 38), which differs more substantially from the finished statue in Sant'Andrea delle Fratte (fig. 336). Another indication of the order is that the models at Harvard and the Kimbell have more attenuated proportions than the one in Rome; during his later career Bernini tended to elongate his figures as he developed them.

The incomplete state of the present model complicates stylistic analysis, but it affords a unique opportunity for reconstructing Bernini's modeling techniques. X-radiography shows that he began the assembly with a wedged column of clay with a pronounced vertical grain (fig. 367). He vigorously seated the column onto a modeling stand, causing the clay to flare out into a flat, stable base. The column extends up to the rib cage, where he added more clay to form the chest and upper extremities. This is proven by the pattern of shrinkage cracks on the sur-



Fig. 367. X-radiograph of *Angel with the Superscription*: note the flared base, followed by vertical grain up to chest; the horizontal shift in direction indicates clay additions (arrow)

face, as well as by the X-radiograph, which shows directional grain shifts (vertical to horizontal) in the clay. Fracture losses to the sides and front of the base expose fingerprints in the underlying clay column where the added, but poorly integrated, clouds and feet are now missing (fig. 93).

The missing right leg accounts for one of the most informative losses on the model (fig. 368). The character, shape, and location of the fracture indicate that the leg was made by rolling out a cylinder of clay and attaching it to the torso, rather than by excavating the form from the surrounding clay. The break area provides confirmation, revealing the shrinkage of the leg clay from its original attachment surface, visible through a gap at the bottom of the loss, near the waist. Clay strips and sheets forming the drapery around the leg were added after the leg was attached.

The earliest tool marks found on the model are those of a large-tooth tool. They indicate that, after the initial massing, Bernini was engaged in a rough, subtractive shaping of the back, drapery, and base. The attachment of the wings accompanied or shortly followed this activity; powerful thumb marks from the attachment are impressed over the toothed-tool marks. The drapery was initially detailed with fingers, then Bernini drew the individual folds with medium and small oval-tip modeling tools. Some folds were only marginally integrated and detailed; others



Fig. 368. Shrinkage gap where the now-missing leg was attached to the underlying clay (arrow)



Fig. 369. Stamped impressions of toothed-tool tip in fold

show him turning the oval-tip tool on its edge and sketching in a repetitive, graphic manner, like a draftsman exploring a first thought rather than recording a previously resolved one. A close parallel is found in some of his pen-and-ink studies, such as the several in Leipzig for the Saint Jerome (fig. 44; cat. D.32, and fig. 45), which are noteworthy for their scribbled overlapping lines. Bernini modeled the vertical folds with short, indecisive strokes, leaving rough edges and clay crumbs unsmoothed. In style and technique, the drapery recalls that of the Angel with the Scourge (cat. 37), although the folds tend to be less resolved and less finished on the present model.

The small-tooth tool, used to form the squared left shin, was also responsible for one of the more interesting passages on the model. Behind the left knee, Bernini impressed the tip of the tool in a linear sequence to deepen and reinforce the folds in this section of drapery (fig. 369). The effect has a visual analogy in Bernini's carving style: he often created grooves between curls of hair or folds of drapery with repeated, touching drill holes.

The present model offers one of the more extraordinary opportunities for the viewer to stand in Bernini's place and relive a specific moment in its creation. After adding the wings and trimming them with a large-tooth tool, he further shaped the wing root, shoulders, and back with a matched pair of forceful, over-theshoulder finger strokes, one on each side of the neck (fig. 370). He pulled the clay from front to back and left a fingertipful of displaced





Fig. 370. Pair of over-the-shoulder strokes: arrows indicate direction of movement, as well as fingertip and nail impressions

Fig. 371. Measuring nexus at throat

clay with a perfect nail mark at the end of the stroke on the right side. The left stroke is shallower and leaves a smaller fingertip and nail impression. This pattern of indentations could have been made only if Bernini was standing behind the model at the time, which suggests

he used a modeling stand that enabled him to work on the model from all sides.

In the hollow of the throat—undoubtedly the nexus used during a measuring campaign—are nine sharp, tightly grouped round marks from a divider (fig. 371). The missing head and limbs are likely to have held the corresponding struck marks. There are only a few remaining marks elsewhere on the model: two horizontal marks are swung at the left shoulder, and there is a sharp point on the left hand. The scroll, the left forearm, and the left ankle have impressed linear marks that could also relate to measuring. The measurements were presumably used for the next model in the sequence or to create a pendant *Angel with the Crown of Thorns*, now lost.

Once they were leather hard, the sides and back of the buttress were trimmed with a sharp knife (fig. 372). The impression left in the clay by the slightly curved tip is similar to those in the knife-trimmed areas on several of his other models (cats. 3, 28, 39, and 49). The model was then wire cut from its modeling platform. Fabric impressions attest to its subsequent storage and careful drying.



Fig. 372. Back, carved by a knife; the shape of the blade is visible in the clay at upper right

Gian Lorenzo Bernini

42 · Angel with the Superscription

ca. 1667–68. Terracotta, $11\% \times 6\% \times 5\%$ in. (28.9 × 17.1 × 13.8 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.67)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.67 written in black paint on the back

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Evers 1948, p. 15; Lavin, I. 1955, p. 185; Wittkower 1955, p. 233; Wittkower 1966, pp. 250-51; Kauffmann 1970, p. 302, pl. 185b; Weil, M. 1974, pp. 48, 50; Chamberlain 1977, pp. 80-81; Lavin, I. 1978, pp. 401, 404; Wittkower et al. 1981, pp. 250-51; Washington, D.C., New York, and Cambridge, Mass. 1981-82, p. 21; Fort Worth 1982, fig. 44; Soussloff 1987, p. 116; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, p. 72; Tratz 1988, pp. 449-50; Rome 1991–92, p. 48; Rome and Venice 1991-92, p. 66; Barberini 1994, p. 119; Avery 1997, pp. 165-69; Wittkower et al. 1997, pp. 289-90; Ferrari and Papaldo 1999, pp. 26-27; Sigel 1999, pp. 50-54, 56-58, 60-62, 64, 69-72; Sigel and Farrell 1999, pp. 95-100; Weil, M. 1999, pp. 146-50; Barberini 2001-2, p. 54; Boucher 2001-2a, p. 64; Houston and London 2001-2, p. 200; Cuno et al. 2004, p. 56

EXHIBITIONS: Cambridge, Mass. 1980; Princeton and other cities 1981-82 (Boston only); Cambridge, Mass. 2007

CONDITION: There are firing cracks and associated losses in the buttress area. The front section of the base, comprising the feet and clouds, is broken into two sections, each bisecting an ankle and reattached. Analysis of the fill material suggests that the repair is contemporary with the production and firing. The head, broken at the neck, has been joined, filled, and inpainted. There is a drilled clay-sampling hole on the base.

OF ALL BERNINI'S SURVIVING MODELS for the Angel with the Superscription in Sant'Andrea delle Fratte, this is almost certainly the latest, as it comes closest to the finished statue (fig. 336). In developing the model, Bernini paid particular attention to the waist area, discarding the beltlike ribbon on the earlier models at the Kimbell and at Harvard (cats. 39 and 41). His new solution, which appears on the finished statue, was to activate the waist with a billowing, undulating pleat that flares from the right hip. He also made adjustments to the lower

drapery, amplifying its volume and making the swirl at the side of the left knee more pronounced. Bernini continued to work on the lower drapery, then reverted to earlier models, allowing the cloth to fall more vertically in the finished statue. One detail that comes very close to the present model, however, is the fold of cloth that falls between the legs, brushing the left one near the knee and curling over the cloud form between the feet.

Analysis of how the model was made the high level of finish, the careful dressing of the back, the measuring marks, and the instances of later reworking and repair—reinforces the notion that Bernini attached special



Fig. 373. Base, showing the circular wedging pattern in the clay and the pine resin fill at upper left

importance to it. He seems to have recognized that the model stood at the end of the design process and deserved extra detailing and attention to preservation. The model was created on a sanded platform, with sand grains still caught in the circular marks on the bottom (fig. 373). These marks, along with X-radiography that shows a predominantly vertical clay grain, confirm that Bernini began the modeling process with a column of wedged clay. He then stacked pieces of clay onto the back, building a large stabilizing buttress that was later trimmed. The manner of assembly is revealed in X-radiographs, where the additions show diverging grain patterns.

The arms and scroll, wings, drapery, and right leg are made of added clay elements that were integrated, refined, and smoothed with tools and fingers. For the right arm, after basic assembly, Bernini pushed pads of clay around the circumference to shape and smooth it—a technique repeated on many of his other models (figs. 111–14). Having attached and modeled the cloud forms, he rolled the right leg and put it into place; the left one appears to have been modeled out of the column. Once the body parts were in place, Bernini could turn his attention to the drapery, which was applied as strips or small pieces, integrated and smoothed with fingers and an oval-tip tool. Some parts of the drapery were detailed with a blunted oval-tip tool, its tip rounded rather than sharp. Both kinds of oval-tip tools were used on the model to impress details too fine to be made with fingers. In modeling the face, Bernini used short, jabbing strokes to form the chin and lips and horizontal scooping strokes to create the eye sockets and brow (fig. 374). A light, blotting touch of a finger served



Fig. 374. Detail of face



Fig. 375. Back of the neck, with two impressed fingernail marks outlining and separating the hair

to soften the sharp ridges of clay raised by the strokes. Bernini initially formed the hair framing the face by displacing clay from the head with an oval-tip tool. He added small pads of clay to create individual locks, using the same tool to integrate and to add more detail.

A medium-tooth tool was used to create the texture of curving parallel lines in the cloud forms on both sides of the composition—the treatment anticipating the grooved texture that Bernini gave to the clouds on the finished statue. He also used the tool to thin and refine the back of the figure at the wings, buttress, and drapery (fig. 142). The carefully shaped and dressed buttress, which contrasts with the rough state of most of the buttresses on Bernini's models, is another indication that he devoted more care than usual to this model. As in most of Bernini's models, this one bears instances where he shaped the clay in a particularly idiosyncratic way. This is true of the back of the neck on the right side, where he used the nail of his right index finger to outline and separate the lower edge of the hair (fig. 375). To shape the hair mass, he made two distinct pinches of clay between his right thumb and index finger, leaving nail impressions and corresponding fingerprints. Immediately above is another signature gesture. Beginning at the back of the head, he pushed a finger (probably his left thumb) in a single sweep to just above the right ear, leaving a finger and nail print at the end of the stroke (fig. 376). The gesture, used to shape the back and the sides of the head, is encountered frequently on his models (figs. 121-24).

These two details also provide information about the sequence of modeling: the overlap of the thumbprint from the pinch that defines the hair masses obscures the tool marks under the hair, so it must have followed the thinning and shaping of the back of the figure. Other evidence is provided by the path of the fingernail above the ear, which cuts a fresher track into a surface that had been modeled at an earlier stage. The surrounding surface of the hair has become worn through abrasion, the sharpness of detail muted by repeated handling. The shallow mark in what was nearly leather-hard clay is, by contrast, crisp (see fig. 376). These and other observations indicate that the model was created over an extended period or perhaps reworked after an interlude of well-tended dormancy. Impressions from the draping cloth that must have been used to maintain the moisture content were likely effaced in the final cleaning and smoothing. Additional evidence that Bernini wanted to keep the model in good condition for some time can be seen in a repair made to it before drying. At the center of the unfurled scroll, a shrinkage crack opened in the leather-hard clay. Bernini filled it with several finger smears of quite wet clay applied in an X-shaped pattern (fig. 377). The original clay can be distinguished from the softer, wetter clay added later, since the repair clay and fin-



Fig. 376. Finger sweep around the head from back to front, ending in a fingerprint and a nail impression

ger marks sit on top of, but do not disturb or combine with, the harder underlying clay.

Measuring marks are found on the model, although there is no concentrated grouping at the pit of the throat, as is often the case with Bernini's terracottas. Struck marks, rather than sharp pricks from a pointed instrument, appear on the chin (two), the scroll



Fig. 377. Scroll, showing where it was repaired with an X-shaped smear of clay

(five), above the left hand (one), on the elbow (two), the right knee (two), and the right ankle (two). The front and top of the wings have marks that may also be related to measurement. Other locations where measuring marks are typically found have worn away or been smoothed. Some marks, along with fabric impressions, might have been removed during a final refinement of the surfaces.

During firing, the front part of the base, including both feet, broke off, and there are reasons to think it was immediately reattached in the studio.¹ When the section was reattached and the shrinkage gap at the left ankle closed, it lifted up the base; the join and the space underneath the base were then filled with the same resin mixture. Afterward, the bottom of the base was ground smooth and leveled, with the grinding marks extending seamlessly over both the terracotta and the resin fill areas (see fig. 373). Truncated tool marks on the bottom edges suggest that several millimeters of clay were removed during the grinding.

Gian Lorenzo Bernini

43 · Angel with the Crown of Thorns

ca. 1668. Terracotta, 17½ × 9 × 8½ in. (45 × 22.8 × 21.4 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.57)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.57 written in black paint on lower back

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, p. 183; Wittkower 1955, p. 233; Kruft and Larsson 1966, pp. 153, 155; Wittkower 1966, pp. 250-51; Kauffmann 1970, pl. 178; Weil, M. 1974, p. 49; Lavin, I. 1978, pp. 402, 404; Wittkower et al. 1981, pp. 250-51; Steven F. Ostrow in Princeton and other cities 1981-82, p. 289; Fort Worth 1982, fig. 46; Raggio 1983, p. 376; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, p. 62; Tratz 1988, p. 447; Rome 1991–92, p. 48; Barberini 1994, pp. 124-25; Bacchi and Zanuso 1996, pl. 174; Avery 1997, pp. 165-69; Wittkower et al. 1997, pp. 289-90; Chicago, Philadelphia, and Washington, D.C. 1998-99, p. 80; Ferrari and Papaldo 1999, pp. 26-27; Sigel 1999, pp. 50-52, 53, 59-62, 63, 68; Sigel and Farrell 1999, pp. 75-81; Weil, M. 1999, pp. 144-46; Boucher 2001-2a, p. 63; Sigel 2002-3, p. 63

EXHIBITIONS: Cambridge, Mass. 1980; Cambridge, Mass. 2007

CONDITION: There is substantial shrinkage cracking with associated breakage and small losses through the piece. Gaps in several joins have been filled and inpainted. Losses include the right index and little fingers and the left wing and associated outer layers of the buttress surface. The reattachment of the left foot and the cloud form below it may be a studio repair. There is a drilled clay-sampling hole on the base.

THIS MODEL IS LIKELY TO BE the last one Bernini executed before turning to the final carving. It differs only minimally from the finished statue in Sant'Andrea delle Fratte (fig. 337) and must come after the *Angel with the Crown of Thorns* at the Kimbell (cat. 40), which can be assigned to the previous phase of design. In progressing from that model to the present one, Bernini extended and amplified the sweep of drapery that cuts across the figure's midsection. In the finished statue, he retained that passage, although reworking the fold that descends the figure's right side, which he invested with new energy. He also raised the angel's gaze slightly, lowered the crown, and modified the drapery between the feet, allowing a small portion to sweep up the inside right leg.

Two additional factors indicate this model's position at the end of the design process. First, it is roughly 35 percent larger than Bernini's standard sketch model, or *bozzetto*. In fact, it measures almost precisely two Roman *palmi* (17½ inches) in height, which corresponds to the recommended size for *modelli* in sixteenth- and seventeenth-century treatises on sculpture, such as Orfeo Boselli's.¹ Even though the present model displays all the sketchiness of a typical *bozzetto*, it was certainly detailed enough to serve one of the primary purposes

of *modelli*: the transfer of measurements for enlargement.² This introduces the second reason the model is likely to have preceded the final carving by only a step or two: it was submitted to an extensive campaign of measurement, to be described below.

The modeling process began in typical fashion for Bernini, with a large central column of wedged clay. X-radiography shows the vertical grain of the column, which flares at the bottom from having been seated vigorously on the modeling stand. Separate pieces of clay were added to form the cloud base and the left foot, as well as the upper back, shoulders, neck, hair, and head. A large sheet of clay added to the back of the buttress from top to bottom (to which the left wing was later attached) is now missing, probably broken off during firing. This loss reveals the additive technique used to build up the buttress area. The finger and tool marks seen in the underlying clay were made when the model was lifted and carried around the studio (fig. 378). These details were subsequently covered with added clay, only to be revealed again when the poorly adhered clay sheet broke away. Other finger marks were impressed into the buttress through the coarse fabric draped over the model to control drying. All these marks suggest that the model was moved around the studio in between several modeling sessions.

Large strips, rolled cylinders, and sheets of clay were added to form limbs and drapery and to build out the buttress. The clay was integrated, articulated, and finished with the fingers, a medium oval-tip tool, and toothed tools. A large-tooth tool was used to remove clay from the base and sides of the buttress. Bernini first



Fig. 378. Buttress, where the clay sheet has detached; arrow indicates finger marks

modeled the head with his fingers, then used the medium oval-tip tool to scoop out the eye hollows, to shape and trim the nose and forehead, and to form the mouth and the chin with rapid, impressed strokes (fig. 379). Again with his fingers, he added and integrated small pads of clay to fill out the cheeks, the chin, and the brow. The hair was added in small pads and strips, pressed into place, and integrated with a small oval-tip tool. Part of the left arm was incorporated into the surrounding drapery, which helped avoid the need for a supporting prop. For the crown of thorns, Bernini rolled a piece of clay into a circle and set it into the angel's hands.

In style and technique, the overall modeling closely resembles that of the complete Angel with the



Fig. 379. Face: note measuring nexus at pit of throat with drawn X

Superscription at Harvard (cat. 42). This is interesting in light of the increased scale of the present model. Bernini approached it like any bozzetto, even if it was to be as large as a modello, and even if it was destined from the beginning to serve as the guide in the final execution, used to provide measurements for enlargement—thus like many modelli. The surface of the model bears ample testimony to the extensive measuring campaign to which it was submitted. In fact, no other surviving model in Bernini's oeuvre was referred to for so many measurements. A freestanding pointing device was used to measure the overall height of the model and has left a series of horizontal linear impressions on top of the head. The chin is impressed with a pyramidal pointing mark, square in section. The hollow between the neck and the sternum (a typical nexus of measurements for Bernini) is bisected by an X drawn from several overlapping struck lines and penetrated by numerous sharp point marks (see fig. 379). Other locations with multiple marks (pointed, square-sectioned, and struck) are the right shoulder, biceps, elbow, hand (fig. 106), the drapery over the left knee, on and under the toes of the left foot, the top of the crown, the wing edge, and the wing surface, where the marks pierce two vertical lines. Along the cloud form under the left foot is drawn a rudimentary scale consisting of a horizontal line (ending in a loss area) with two vertical units, a sharp point mark, and a struck line.

Many of the struck lines and sharp points show individual angles of entry, allowing a partial reconstruction of the point-to-point distances taken by Bernini (or one of his



Fig. 380. Diagram reconstructing point-topoint measurements

Fig. 381. Sketch lines drawn on back of head and across to the wing; photograph taken from the viewpoint of the artist, with the sketch lines in alignment



assistants) (fig. 380). The large concentration of points and struck lines at the sternum suggests that it was the nexus, or primary reference point, from which distances were measured (see fig. 379). Secondary locations from which groups of measurements were taken include the top of the crown, the shoulder, the elbow, and the left foot. Over thirty individual point-to-line measurements can be verified by point location and angle. This must represent only a small portion of the original number, as many marks were certainly lost through cloth draping, abrasion, and handling before firing.

Other linear marks were incised into the clay, after the completion of modeling. A series of very lightly drawn lines following the outside of the arms from shoulder to elbow and from elbow to wrist are faintly visible in raking light. A similar, more prominent line is drawn down the shin of the left leg. An incised vertical line bisects the circle of clay forming the crown of thorns and defines its axis and angle. Finally, Bernini sketched an incised line that runs from the top of the back of the head, across to the wingtip, then down along the back of the wing, following its curvature (fig. 381). This was undoubtedly his method of indicating where he intended to truncate the back of the finished angel. Another example of this device is found on the *Angel with the Crown of Thorns* at the Louvre (cat. 36).

Gian Lorenzo Bernini

44 · Angel with the Superscription

ca. 1670. Terracotta, 12% x 5% x 5% in. (32 x 13.5 x 14 cm)

The State Hermitage Museum, Saint Petersburg (630)



INSCRIPTIONS, MARKS, AND STAMPS: H.ck. 630 written in white paint on back of base; M.A. X. / T. Yk 714 written in pencil on back of base

PROVENANCE: See cat. 12.

LITERATURE: Venice 1788, p. 21; Petrov 1864, p. 601; Treu 1871, p. 51; Wittkower 1966, pp. 250-51; Lavin, I. 1967, p. 103; Weil, M. 1974, p. 81; Wittkower et al. 1981, pp. 250-51; Barberini 1994, p. 119; Bacchi and Zanuso 1996, p. 783; Avery 1997, pp. 169, 172; Wittkower et al. 1997, pp. 289-90; Ferrari and Papaldo 1999, p. 459; Weil, M. 1999, pp. 148-49

EXHIBITIONS: Leningrad 1989, no. 21; Rome and Venice 1991-92, no. 22; Chicago, Philadelphia, and Washington, D.C. 1998-99, no. 18; Rome 1999b, no. 101; Houston and London 2001-2, no. 46

CONDITION: The head, the right forearm and hand, the end of the superscription, the right upper wingtip, and the left lower wingtip are missing. There are repairs to the left arm at the wrist and shoulder and to the right leg at the knee. A join at the waist also indicates a repair. The left elbow and the drapery edge below it are restored.

BERNINI'S ORIGINAL TWO ANGELS—the Angel with the Superscription and the Angel with the Crown of Thorns—for the Ponte Sant'Angelo were finished sometime during the spring or early summer of 1669 (figs. 336 and 337). On inspecting them in Bernini's studio, probably that June, Pope Clement IX determined that they were too good for placement outdoors and decided to send them to his hometown of Pistoia. Bernini had no choice but to comply and began preparations for carving two copies. Marble for the first was already on order by July.² The pope would end up changing his mind about Pistoia. Shortly before dying on December 2, he decreed that the angels were now to go to his cardinal nephew, Giacomo Rospigliosi; nonetheless, the nephew appears never to have taken any interest in them, and the angels would remain with Bernini for the rest of his life.3 Initially, he must have been tempted to go ahead and place them on the bridge. The new pope, Clement X, would likely have appreciated the cost savings that would have resulted.4 Still, for whatever reason, the idea of the copies was not dropped. Two marble blocks for the copies were delivered to Bernini's studio during the summer of 1670.5 Payments indicate that he delegated the Angel with the Crown of Thorns to Paolo Naldini (fig. 386) and the Angel with the Superscription to Giulio Cartari (fig. 382).6 The new angels were completed over the course of the next year and installed on the bridge during the fall of 1671.7

The present model, by Bernini, was preparatory for Cartari's contribution, which (unlike Naldini's) was not a straightforward copy. In planning for the second *Angel with the Superscription*, Bernini introduced one fundamental change. Rather than the drapery at the legs blowing to the angel's left, it now blows to the angel's right, the same side as the

superscription. Otherwise, all major parts of the composition remain the same, as do many smaller details, including the curl of drapery that unfurls against the left wing. Why Bernini felt it important that the replacement angel be a variation on the first likely has something to do with seventeenthcentury concepts of originality.8 According to his earliest biographers, Bernini wanted the second Angel with the Superscription to be recognized as his.9 He did not like the idea of the finished bridge not having a single work from his own hands. Yet, as he well understood, if the new angel was to be no more than a copy, he would have a hard time passing it off as something he had carved himself. He would also open himself up to the charge of being lazy. Thus, for the ploy to succeed, he knew he needed to supply Cartari with a modified design, which came in the form of the present model.

In size, style, and technique, the model is extraordinarily close to the later of Bernini's two



Fig. 382. Giulio Cartari, after Gian Lorenzo Bernini, Angel with the Superscription, 1670–71. Marble, over lifesize, Ponte Sant'Angelo, Rome

models for the Angel with the Superscription at Harvard (cat. 42). In design, they are both virtual equivalents to the statues for which they were preparatory. Also, they were both extensively measured. Accordingly, we can draw the same conclusion for the present model that we did for the other: that it came at the very end of the design process and served as the principal reference during carving, the basis for enlargement. One difference may be that, in preparing for the second Angel with the Superscription, Bernini bypassed the step of multiple small sketch models. He very likely moved straight to the present model and may even have produced it with the angel at Harvard in front of him. The change to the drapery is not so complex as to have required prior study.

The technique of the model also speaks to a direct approach. There is no tentativeness to its execution. Nor are there any reworked passages or evidence that modeling extended over a prolonged period. The model was created solid, with no later hollowing. X-radiographs show the characteristic vertical grain of clay that has been wedged into a column to form the main mass (fig. 383). The limbs, the superscription, the wings, the drapery, and the clouds were all attached separately. The drapery across the figure's midsection was added in strips that were reinforced with finger smears of clay and then shaped with tools (fig. 75). The right leg appears to have been rolled before attachment, as X-radiographs show a clear linear grain running down it. A shrinkage crack signaling a join in the base makes clear that the section at the front was added for the clouds and feet. Most of the initial shaping was carried out with toothed tools and then smoothed with fingers. Once Bernini had established the basic forms, he added detail with a small oval-tip tool, reinforcing the folds of drapery and delineating the toes. The clouds were drawn with a medium-tooth tool in counterclockwise strokes.



Fig. 383. X-radiograph of Angel with the Superscription: note continuous vertical orientation of clay grain, indicating initial massing from a single column of wedged clay

The model shows evidence of several modeling gestures that are characteristic of Bernini. On the left shoulder, he pushed the clay from front to back in a single sweep with one of his fingers, leaving a fingerprint in the displaced clay at the end of the stroke. A similar technique is found on the right shoulder of the Angel with the Scourge at Harvard (fig. 348). The left arm of the present model was also shaped and smoothed in his usual way, with the clay pushed around its circumference from front to back (see fig. 112). One gesture unique to Bernini can be seen on the right side of the neck, where he impressed a fingernail to create the rear neckline (fig. 115).

The back of the model is one of the most neatly prepared of all Bernini's models (fig. 384). The wings were thinned with a toothed tool in top-to-bottom strokes; on the right wing, Bernini later finger smoothed some of the toothed texturing. The buttress was

trimmed with a knife, then also smoothed with fingers. The resulting edges are notable for their precision, coming to sharp corners (with a ninety-degree angle at the top). Fabric impressions on the tops of the wings indicate that the model was draped with a damp cloth to regulate drying.

Bernini's main motivation for preparing the sides of the buttress so neatly is likely that he wanted to provide a good, clean space for incised scales. One is found on each side of the buttress, and both are elaborate, consisting of an incised vertical line marked with shorter lines for the units. That the unit lines were stepped off with dividers is clear from the sharp point at the center of each line. The scale on the left has only six unit lines (a chip loss at the bottom may have obliterated a seventh). The lines are evenly spaced in twenty-four-millimeter increments. This is longer than the Roman once (18.6 millimeters) but close to being one-tenth of a Roman palmo (22.3 millimeters). The scale may not have been pegged to any standard unit. It does not appear to have been used.

The scale on the right, which was used, differs from the other in its divisions (fig. 385). It is six units in length, with the top unit divided in half, then divided in half again to create a quarter unit. The quarter unit was then divided into thirds, thus forming units equaling one-twelfth of the main unit. That the scale was then put to use is proven by the dozen or so faint strike marks that cross the vertical line in various places. These marks were clearly made in harder clay, thus after completion of modeling. The scale may have been made by Cartari, the one who would be using it. The only other model by Bernini featuring a scale is the large *Kneeling Angel* (fig. 418). That scale is much more basic than the present two.

The measuring marks on the model confirm that Cartari used it as he carved the final *Angel*—or possibly a full-scale model for it (although none is documented). The marks are mostly struck lines—like those on the scale—and are found in many of the expected locations: the top (five) and back (nine) of the left shoulder; the right shoulder (five); the left ankle (three); the right ankle (two); the left hand (one); and under the right foot between the big and second toes (one). The nexus for the measuring system was undoubtedly the throat, although no marks can now be seen. Tool marks over previously smoothed clay at the throat indicate that the marks were partially effaced with short, vertical strokes of an oval-tip tool (fig. 109). Such tidying up is sometimes seen on Bernini's models, as with the early *Angel with the Crown of Thorns* at Harvard (cat. 35).



Fig. 384. Carefully finished buttress with incised scale

Fig. 385. Scale on right side of buttress: note unit lines and fainter struck lines from the transfer of measurements



Attributed to Paolo Naldini (Italian, 1614–1691)

45 · Angel with the Crown of Thorns

ca. 1669–70. Terracotta, 16% × $4\frac{1}{2}$ × $4\frac{3}{8}$ in. (43 × 11.5 × 11 cm)

The State Hermitage Museum, Saint Petersburg (628)



INSCRIPTIONS, MARKS, AND STAMPS: H.ck. 628 written in white paint on edge of base; illegible Cyrillic inscription written in pencil on back of base

PROVENANCE: See cat. 12.

LITERATURE: Venice 1788, p. 21;
Petrov 1864, p. 602; Treu 1871,
p. 51; Wittkower 1966, p. 251;
Weil, M. 1974, p. 79; Androsov,
Kosareva, and Saverkina 1978,
no. 36; Wittkower et al. 1981,
p. 251; Leningrad 1984, p. 323;
Montagu 1985b, p. 33; Montagu
1989, p. 144; Bacchi and Zanuso
1996, p. 783; Avery 1997, p. 169;
Wittkower et al. 1997, p. 290;
Weil, M. 1999, p. 148; Boucher
2001–2a, pp. 64, 66

EXHIBITIONS: Leningrad 1989, no. 22; Rome and Venice 1991–92, no. 23; Chicago, Philadelphia, and Washington, D.C. 1998–99, no. 19; Rome 1999b, no. 104; Bonn and Berlin 2005–6, no. 206

CONDITION: Most of the thorns are broken off the crown. Other missing elements include the three small fingers on the left hand, the little finger on the right hand, the left wing, and a portion of drapery on the left arm. Parts of the clouds at the base at the front and on the left side are missing, along with the right foot from the ankle down and the left forefoot. There is a chip on the right temple.

PAOLO NALDINI'S MOMENT IN THE SPOTLIGHT came on the Ponte Sant'Angelo, where he earned the distinction of being the only sculptor other than Bernini to carve two of the angels: the *Angel with the Robe and Dice* and the second version of the *Angel with the Crown of Thorns* (fig. 386). Bernini's high regard for Naldini is confirmed by a letter of 1664, in which he writes that Naldini is the second-best sculptor in Rome, after Antonio Raggi. What Bernini probably prized in Naldini was his dependability. A competent technician, he could be trusted to implement others' designs, a role he filled admirably on the bridge.

The present model is likely to be by Naldini, made in preparation for the second *Angel with the Crown of Thorns*. It is certainly not by Bernini. The modeling is overly mechanical, as exemplified by the face (fig. 387). The features display a hesitancy in execution, with the emphasis on precision rather than beautiful, fluid modeling. The eyes are rough and unfocused, as is the mouth, excavated with repeated jabs of a blunted oval-tip tool. Accumulations of excess clay at the back of the mouth confuse what are the teeth and what is the tongue. The wing feathers display comparable fussiness, drawn with a toothed tool in a repetitive, lifeless manner (fig. 388). The hair is also overworked. Each curl was formed individually from a rolled strip of clay, then many of the curls were poked at the center with a sharp instrument (fig. 389). The technique is not one that Bernini is known to have ever employed. Nor is he known to have smoothed his models in quite the same way as the present one, with a moist brush

applied so forcefully that it obliterated the differentiation between most of the materials represented.

If the model is not by Bernini, it must be either a copy after the finished angel or the final modello by Naldini. A slightly stronger argument can be made for Naldini. First, the model differs from the finished angel in two pivotal ways. In the model, the angel holds the crown of thorns in a more closed position relative to the viewer; in the finished statue, the crown is displayed at a more open angle. The second difference concerns the shape of the wings. In the finished statue, the upper wing lobe is closer to the body, turning more upward; on the model, it extends more horizontally, falling out of alignment with the upper arm. According to the conventional rule, such variations in composition are evidence that the model preceded the marble, where modifications were made during carving. This is probably correct here, although there is no way to be certain.

Confirming the attribution to Naldini faces another challenge: there are only two terracottas that can be reliably ascribed to him, and neither offers a perfect comparison with the present model. One is a full-scale model for a portrait bust (State Hermitage Museum, Saint Petersburg);



Fig. 386. Paolo Naldini, after a design by Gian Lorenzo Bernini, Angel with the Crown of Thorns, 1670–71. Marble, over lifesize. Ponte Sant'Angelo, Rome

the other is a *bozzetto* for an angel lifting the bottom of a pulpit (Museo Nazionale del Palazzo di Venezia, Rome).² Both are well made and prove that Naldini possessed the skills to realize a model as attractive as the present one. With the *bozzetto*, there are definite similarities in the texturing given to the wings and the overall smoothness of the drapery and skin, but none rises to the level of indisputable proof of common authorship. The *bozzetto* is much sketchier than the present model, its features abbreviated.

X-radiography suggests that the present model began with multiple pieces of compacted clay; there is no clear vertical grain running through the center of the body that might indicate a single wedged mass. Some linear grain, however, can be seen in the legs, a probable sign that they were rolled separately and attached. The wings were also attached separately, as indicated by the break edge along the left wing. The drapery was applied over the body, not modeled out of it. This is seen clearly on the left arm, where the broken drapery exposes the completed limb underneath (fig. 390). Various comparisons can be drawn with Bernini-such as this method of forming the drapery—but none clarifies the attribution. All the observable techniques could presumably have been practiced by any competent modeler active in seventeenth-century Rome.

To assume the model is by Naldini leads to the question of how it might have served him. Naldini began work on the *Angel with the Crown of Thorns* during the summer of 1670.³ He had likely known for some time—perhaps even as far back as the autumn of the previous year—that the task



Fig. 387. Face: note the labored execution, wound hair curls, and overly careful finishing



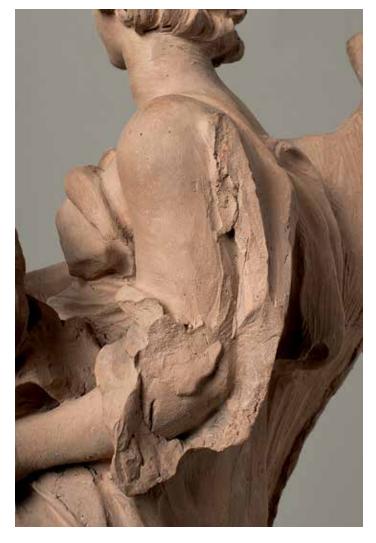
Fig. 388. Wing feathers rendered cursorily with a toothed tool



Fig. 389. Curls at the back of the neck, formed and attached separately, then poked at the center

Fig. 390. Left arm, with the nowmissing wing and drapery revealing the completed arm underneath

of making the copy was to fall to him, and he must have shuddered at the prospect of having to match Bernini, whose exuberant style of sculpture did not fully agree with his own more classicizing one.4 Naldini likely realized that, in order to pull off a successful copy, he should try to work within his own comfort zone, toning down some of the more excessive passages of agitated drapery found on Bernini's original-which is precisely what he did. The second Angel with the Crown of Thorns is a more restrained rendition of the first (fig. 337). The decision to go in that direction must have come with Bernini's approval, and the present model may have been the means by which Naldini gained that approval a sort of presentation model for the master.



Ercole Ferrata (Italian, 1610-1686)

46 · Angel with the Cross

1668. Terracotta, H. 23¼ in. (59 cm)

The State Hermitage Museum, Saint Petersburg (623)



INSCRIPTIONS, MARKS, AND STAMPS: H.ck. 623 written in white paint on back of base; illegible Cyrillic inscription written in pencil on back of base

PROVENANCE: Possibly in the collection of Ercole Ferrata, Rome (by d. 1686); unknown intermediaries; Filippo Farsetti, Venice (d. 1774); his cousin, Daniele Farsetti, Venice (d. 1787); his son, Anton Francesco Farsetti, Venice (1787–1799); gift to Czar Paul I of Russia, Saint Petersburg (1799); placed on deposit at the Academy of Fine Arts, Saint Petersburg (until 1919; transferred to the State Hermitage Museum, Saint Petersburg)

LITERATURE: Venice 1788, p. 23;
Petrov 1864, p. 600; Treu 1871,
p. 50; Golzio 1935, p. 72; Weil, M.
1974, pp. 81–84; Montagu 1989,
pp. 142–43; Androsov 1992,
p. 277; Androsov 1993, p. 107;
Bacchi and Zanuso 1996, p. 803;
Boehman 2009, pp. 85–87

EXHIBITIONS: Rome and Venice 1991–92, no. 37; Chicago, Philadelphia, and Washington, D.C. 1998–99, no. 22; Houston and London 2001–2, no. 49; Massa 2005, no. 17

CONDITION: The right hand is missing, with a repair at the right wrist. Much of the left wing is missing; so is all but the bottom of the cross.

EVERYTHING KNOWN ABOUT ERCOLE FERRATA'S LIFE supports the idea that he was a gifted modeler. Not long after his arrival in Rome in 1646, he is reported to have won a place in Bernini's workshop on the basis of his models.¹ A short time later, he attracted the attention of Alessandro Algardi, one of the most supremely talented modelers of all time.² Ferrata would join Algardi's workshop, becoming one of his closest disciples. After Algardi's death, Ferrata took over for Algardi as the foremost modeling instructor in Rome, running a sculpture academy out of his studio.³ Meanwhile, he formed one of the largest collections of terracottas in Europe.⁴ Many of these were his own, including, it seems, the present model, made in preparation for his contribution to the Ponte Sant'Angelo: the *Angel with the Cross* (fig. 391).⁵ No other model in Ferrata's surviving oeuvre so effectively corroborates his lofty reputation as a modeler.

The model must date to the first half of 1668. According to payments, Ferrata began to carve the *Angel with the Cross* that summer.⁶ During the preceding months, he had likely spent many hours finalizing the design with Bernini, who is almost certain to have provid-

ed a drawing for initial guidance. Ferrata may also have been given a bozzetto for reference; this is how Bernini seems to have handled the parallel case of the Angel with the Scourge (see cat. 37). Once Ferrata had Bernini's rough ideas in hand, he could return to his studio and begin translating them into a modello, which no doubt went back to Bernini for approval. What is beyond question is that the present model was preparatory for the Angel with the Cross—part of the way Ferrata worked with Bernini to develop a design not only appropriate for the bridge but also suited to his more classical style. That the model preceded the finished statue is evident from the many differences between them, which include the marble's bare left shoulder and the treatment of the pleat over the right thigh.

In creating the model, Ferrata appears to have recognized that it was not merely for his own use



Fig. 391. Ercole Ferrata, Angel with the Cross, 1668–69. Marble, over lifesize. Ponte Sant'Angelo, Rome



Fig. 392. X-radiograph of Angel with the Cross Fig. 393. Lower wingtip



but also should represent to Bernini his best efforts as a modeler. With its sumptuous detailing and lively textures, it is a modeler's model—although not a model that would ever be mistaken as Bernini's. Its techniques are too different, including the fact that it was assembled on an armature. X-radiographs show that the torso of the angel was formed around a vertical metal rod (fig. 392). The rod was likely driven into the modeling stand at the beginning of work, to keep the clay upright; once the model had dried sufficiently to be self-supporting, it was lifted off the rod. The exit hole remains on the bottom, and there is also a hole between the shoulders on the back of the model where the rod, longer than needed, poked out (see fig. 396). As far as is known, Bernini never employed a metal armature in his models; instead, his preferred means of providing support was a clay buttress at the back.

X-radiography suggests that Ferrata began with a wedged column of clay. Faint traces of a vertical grain run through the model from the base to just below the shoulders. On top of the column, the clay grain runs more horizontally, indicating that more clay was applied for the shoulders and the neck. X-radiographs also indicate that the head and the right arm were added separately, although not in Bernini's typical way. Instead of being rolled and attached, they were built up with small pieces of clay. How Ferrata shaped the limbs also differs from Bernini. There is no trace of clay having been pushed around the circumferences of the arms or the legs. All the visible tool, finger, and brush marks travel along the lengths of the limbs. The drapery, the cross, and the wings were also added separately. The drapery was applied first, as strips and pieces. The cross must have come after, as it was affixed to the drapery covering the upper right arm; when the cross later separated, it took a piece of the drapery with it. For the wings, Ferrata used sheets of clay, reinforcing the joins by pressing bits of clay into them.

The wings are one of several places where Ferrata's skills as a modeler shine with particular brilliance. On the upper wing, he sketched the shafts of the individual





Fig. 394. Hair, modeled with a blunted oval-tip tool

Fig. 395. Face, with eyes reinforced after smoothing

feathers with an oval-tip tool, shifting to a small-tooth tool for their vanes. On the lower wing, he worked with equal quickness, using the oval-tip tool almost exclusively (fig. 393). The strokes are fluid and display a pleasing rhythm in the way Ferrata accented every third one or so by increasing the pressure on his tool. Among other tour de force passages is the marvelously fresh hair, which appears loose and windswept (fig. 394). Ferrata's tool of choice was the blunted oval-tip tool, which he manipulated in a variety of ways. He drew with it, moving his hand in tiny circles, while also impressing its rounded tip into the clay. He did not worry much over the back of the head or the unseen right side, and so they provide a glimpse of how the hair looked at an earlier stage, after bits of clay had been added for the curls but were still only loosely integrated.

The surface of the model invites careful inspection not only for its beautifully applied textures but also for its silken smooth flesh and drapery. Ferrata smoothed these areas with a wet brush, a technique rarely encountered on models by Bernini. That the brush was wet

is proven by the extremely smooth and soft surfaces. Additionally, in the smoothed areas, the clay bears tiny circles from the bubbles of water that formed and popped on it during brushing (fig. 141). Like Bernini (see cat. 13, for example), Ferrata reinforced certain passages after smoothing. Here he returned to the face, restating the eyes, as is particularly evident with the left one, where he used a blunted oval-tip tool to suggest a trickling tear (fig. 395). As a last step, Ferrata trimmed and dressed the back of the model, using a toothed tool (fig. 396). Afterward, a series of diagonal strokes was hurriedly applied across the back, seemingly at random. Loosely corresponding to the pattern of folds on the back of the finished statue, these likely represent Ferrata's initial thoughts regarding how to deal with the back.

Fewer than ten models can be securely attributed to Ferrata, and none is quite like the present one in style and technique.⁷ The closest comparison is with a model that has



Fig. 396. Back, with exit hole for armature rod and sketched

only recently been attributed to Ferrata, Warrior Stabbing Himself at the Louvre.8 The similarities in the modeling of the hair (especially the use of the blunted oval-tip tool) and in the formulation of the feet and the hands leave no doubt that the Warrior is by the same sculptor as the present model—thus Ferrata. Why more of his models do not conform to these two, in style and technique, is difficult to answer. According to his earliest biographer, Filippo Baldinucci, Ferrata tried to make up for his shortcomings as a designer by soliciting ideas from his assistants in the form of models.9 Perhaps he took some of these models, touched them up, and used them for his own projects, which could explain the variations. In the case of the present model, however, he was following Bernini's design and could concentrate on the modeling, giving it his own flair.10

47 · Angel with the Superscription

ca. 1667–68–before the 1760s. Terracotta, 13 \times 5% \times 5½ in. (33 \times 13.5 \times 14 cm)

The State Hermitage Museum, Saint Petersburg (629)



INSCRIPTIONS, MARKS, AND STAMPS: H.ck. 629 in white paint on back of base; $C\Pi B. A\kappa. Xy\partial. /$ [illegible] 713 written in pencil on back of base

PROVENANCE: See cat. 12.

LITERATURE: Venice 1788, p. 21;
Petrov 1864, p. 601; Treu 1871,
p. 51; Wittkower 1966, p. 250;
Wittkower et al. 1981, p. 250;
Barberini 1994, p. 119; Athens,
Ga. 1996, p. 68; Bacchi and
Zanuso 1996, p. 783; Avery 1997,
p. 169; Wittkower et al. 1997,
p. 289; Ferrari and Papaldo 1999,
pp. 26–27; Barberini 2001–2,
pp. 52–53

EXHIBITIONS: Leningrad 1989, no. 20; Rome and Venice 1991–92, no. 21; Chicago, Philadelphia, and Washington, D.C. 1998–99, no. 17; Rome 1999b, no. 100; Houston and London 2001–2, no. 48

CONDITION: The right arm is missing at the shoulder, the left arm from above the elbow. The head has been reattached. The right wing is missing; the outer portion of the left wing is a restoration (over a metal armature). The hollowed interior and base are partially filled with plaster and overpainted. The plaster on the bottom increases the overall height of the model by about half an inch. Remnants of a dark brown adhesive are visible under the right foot, at a join in the right knee, and behind the right shoulder.

ONLY RECENTLY HAS THE AUTHENTICITY of this model been questioned. In the catalogue of the exhibition "Earth and Fire: Italian Terracotta Sculpture from Donatello to Canova" (2001-2), Bruce Boucher correctly recognizes that the model is incompatible with Bernini's style and technique in crucial ways.¹ Citing the research of Anthony Sigel, he points out that the back is hollowed, a feature that does not appear on any other comparable bozzetto by Bernini (fig. 397). This is just one of many technical anomalies. X-radiography confirms that the model was assembled from small pieces of clay, not from a single wedged column counter to Bernini's usual practice (fig. 398). Furthermore, the model was built without a buttress; the hollowed back, though heavily restored, shows no signs of having ever been trimmed of buttress clay. Another inconsistency is the way the limbs were formed and finished. The finger and brush smoothing was done along their lengths, whereas Bernini typically pushed the clay around the circumference of the forms, leaving marks from the process. Moreover, the arms and the legs are much more highly finished than those on any of his bozzetti.



Fig. 397. Hollowed back, with lower half filled with later restoration materials



Fig. 398. X-radiograph of Angel with the Superscription: note assembly from small pieces of clay



Fig. 399. Face: note proportions of cheeks and chin, inconsistent with Bernini

Stylistically, the model is also far from Bernini. The head is overly wide and not completed at the back. The treatment of the hair, parted down the middle and flaring at the sides, is not found on any of the other models for the Ponte Sant'Angelo. The features of the face are also unusual, defined with greater precision and of broader proportions than was customary for Bernini (fig. 399). The nose and the chin are particularly oversize, while the cheeks look swollen and the eyes are very widely spaced. In execution, the features lack Bernini's usual simplicity and directness, tending toward overworking, which also describes the labored wings. Finally, there is an uncharacteristic awkwardness in the relationship of the torso to the legs. The weight of the torso shifts too far over the flexed right leg rather than over the weight-bearing left leg. As a consequence, the figure looks as though it is about to tumble backward to its right.

The present model was undoubtedly copied from one by Bernini. Among the surviving models for the *Angel with the Superscription*, it comes closest to the later of the two at Harvard (cat. 42), although the actual source may be lost. As Boucher notes, the present model is clearly old, and the provenance supports an early date. Boucher suggests that the model originated within Bernini's workshop and was preparatory for one of the two angels decorating the arms of the Cathedra Petri. The clouds on the model's base would seem to invalidate this hypothesis, however, as they do not appear on the finished Cathedra nor on any of the known models or drawings for it. The only certainty is that the model represents the work of someone with access to one or more of Bernini's models for the Ponte Sant'Angelo. That could even have been a young assistant who undertook the model as an exercise to improve his own modeling skills.



VII · Altar of the Blessed Sacrament

The final commission Bernini would undertake for Saint Peter's was, in fact, a commission he had been contemplating for a long time: the Altar of the Blessed Sacrament (fig. 400). The project originated with Pope Urban VIII, who commissioned Bernini in 1629 to erect a large tabernacle—to serve as the receptacle for the Host—above the altar of the Gregorian Chapel, then designated as the basilica's sacristy. Bernini produced a full-scale wooden model of the tabernacle, which was set in place. In 1638 the model was moved to the third chapel on the right aisle, which had become the basilica's sacristy. At that point, it was apparently recognized that Bernini's design was too large for the space: it covered the altar painting recently completed by Pietro da Cortona. Bernini did not address the problem immediately. Years passed with the temporary wooden model for the tabernacle still in place over the altar. Popes Innocent X and Alexander VII both tried to revive the project, but little new planning seems to have been accomplished—perhaps because Bernini was too busy. Finally, in 1672, he was not. Sometime that year (or possibly earlier) Pope Clement X succeeded in convincing the seventy-four-year-old artist to take up the problem for a final time. In addition to designing a new tabernacle, he conceived two kneeling angels to flank it. All parts were to be cast in bronze and gilded. The casting was underway by the following spring; the altar was completed in 1674.

The Sacrament Altar joins the Ponte Sant'Angelo as the most richly documented of all Bernini's projects in terms of preparatory materials. Five models (cats. 48–52) as well as numerous drawings survive for the altar. No detail, however small, appears to have been left to chance. Bernini was prepared to give each change—each thought—separate study in drawings and models, and the technical bravura he brought to these drawings and models is on par with the best of his career. Was it only during his later years—from the Ponte Sant'Angelo on—that Bernini developed his serial approach to drawing and modeling? Unquestionably not. His models for the bridge and the altar just happened to survive in unusually great numbers. This could reflect a growing appreciation by the aging sculptor that the relics of his creative process were works of art in their own right and deserved preservation.

Fig. 400. Gian Lorenzo Bernini, Altar of the Blessed Sacrament, 1672–74. Gilded bronze. Saint Peter's Basilica, Vatican City

Gian Lorenzo Bernini

48 · Half-Kneeling Angel

1672. Terracotta, $11\frac{1}{4} \times 6\frac{1}{16} \times 8\frac{1}{6}$ in. (28.6 × 17 × 20.5 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.66)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.66 written in black paint on lower back

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, pp. 216-17; Wittkower 1955, p. 240; Grassi 1962, p. 140; Wittkower 1966, p. 263; Lavin, I. 1978, pp. 403-4; Borsi 1980, p. 346; Wittkower et al. 1981, p. 263; Linda Klinger in Princeton and other cities 1981-82, p. 323 n. 2; Rome 1994, p. 126; Bacchi and Zanuso 1996, pl. 190; Falaschi 1996, pp. 75, 81, 103, 118; Wittkower et al. 1997, p. 298; Bacchi and Tumidei 1998, pp. 57, 168; Ferrari and Papaldo 1999, pp. 561, 563; Hemingway 1999a, pp. 151-52, 157-61; Sigel 1999, pp. 49, 53, 56-57, 59-62, 69-70; Sigel and Farrell 1999, pp. 93-95; Evonne Levy in Pinelli, ed. 2000, Notes vol., p. 697

EXHIBITIONS: Cambridge, Mass. 1980; Princeton and other cities 1981-82 (Boston only); Cambridge, Mass. 2007

CONDITION: Right hand and forearm missing. Bottom of right wing missing. Left arm broken in front of elbow, doweled, and reattached, with losses filled and inpainted. Finger area of left hand missing. Grayish discoloration on some surfaces. There is a drilled clay-sampling hole on the base.

THIS MODEL AND THE ONE DISCUSSED in the next entry present interesting problems of date and sequence. Bernini received a payment connected to the Sacrament Altar in 1658, indicating that Pope Alexander VII was briefly interested in renovating the altar and giving it a proper ciborium.¹ If Bernini was encouraged to prepare designs at this moment, one could be a drawing from the Hermitage (fig. 32; cat. D.35); its basic arrangement—figures lifting a large architectural form—follows Bernini's thinking for the Cathedra Petri, which was then underway and obviously on his mind. Equally possible is that Bernini took the

Cathedra Petri as his starting point many years later, in 1672, when Pope Clement X hired him to complete the altar at last.²

Whatever the date of the Hermitage drawing, the four angels depicted in it are highly similar in pose to the two Half-Kneeling Angels at Harvard, suggesting that the models and the drawing date to about the same time. In the drawing, the angels extend one arm outward to support the tempietto while each bears a candle in the opposite hand—the same configuration as in the two models. Interestingly, the models do not correspond to the front two angels in the drawing but to the one in the back left, the only one carrying a candle in his right hand. Nonetheless, there is reason to think that Bernini planned the two Half-Kneeling Angels to be at the front of the composition and part of a flanking pair in the manner of the final altar (fig. 400). As discussed in a later entry (cat. 50), Bernini appears to have constructed an architectural model of the altar, likely made of wood, on which he placed the second Half-Kneeling Angel (cat. 49), fitting it into a recess cut to match its base. At a later stage of planning, he replaced it with one of the Kneeling Angels at Harvard (cat. 50), trimming the



Fig. 401. Face, summarily executed

base of that model to accommodate the recess originally cut for the Half-Kneeling Angel.

Since the only position where both models make compositional sense is at the front of the altar to the left of the tempietto, we might conclude that at the time Bernini modeled the *Half-Kneeling Angels*, he had already progressed from the Hermitage drawing to the final arrangement: a tempietto flanked by two angels—not surrounded by four—and with the tempietto resting on the altar table. Admittedly, this theory depends on many assumptions, but there is at least one observation that helps to ground it: neither *Half-Kneeling Angel* looks to be lifting a large tempietto. They are more gesturing toward it, left arms relaxed and angled slightly downward. The final design would proceed naturally from there, with the angels no longer signaling the tempietto but actively worshipping it. Given the apparent logic of this progression, the *Half-Kneeling Angels* must belong to Bernini's planning under Clement X. They were the direct stepping-stones to the final design, not part of some earlier scheme.

If 1672 seems the most reasonable date for the *Half-Kneeling Angels*, far less certain is which one came first. The present model is the less finished of the two. The face is more

summary, with the eyes barely articulated and no suggestion of a mouth (fig. 401). Second, the back buttress was not trimmed at all, unlike the other angel's (compare figs. 402 and 410). Bernini has used only his fingers to attach and shape the wings, leaving behind an array of fingertip marks, swipes, and fingernail impressions. Third, clay additions—which include the wings made from flat sheets and the arms from rolled cylinders—are not as

thoroughly integrated. Finally, the use of tools is minimal. Marks from a medium oval-tip modeling tool are restricted to two sections of the drapery—one near the waist; one down the right leg—and to the area between the right wing and the torso (two long strokes). Marks from a large-tooth modeling tool appear only on the main sweep of projecting drapery (three short strokes) and inside and below the right wing, where it joins with the figure. In this area, the texturing had a clear purpose: to define the negative space. Regarding the different levels of completion, one surprise is that, on the present model, the left arm projects unsupported; on the other model, Bernini left the arm attached to the torso by means of a neatly trimmed clay brace.

In assessing the sequence of the models, differences in design must also be taken into account. First, the head of the present model angles downward, eyes apparently focused on the tempietto, whereas Bernini lifted the head of the other model, turning it toward the worshipper. The shoulders are oriented differently, made more open to the viewer in the present model. He has reversed which shoulder was bare; on the present model, it is the right one, nearest the viewer. Finally, the designs of the drapery differ. On the



Fig. 402. Back, left untrimmed and unfinished: note attachment of wings and drapery

present model, Bernini has been particularly attentive to the broad sweep of cloth that cuts diagonally across the figure's midsection and fans out over the legs. On the other model, the drapery hugs the body more tightly, as though the wind were blowing from a different direction. At some point while working on the present model, Bernini rethought the section of drapery covering the angel's stomach, applying an S-shaped series of loosely defined drapery folds over an earlier design of incised, linear folds, just visible behind the edges of the poorly integrated clay (fig. 403).

Did Bernini make the present model first, in haste, to visualize a preliminary idea hence its less finished character? Or did he make the other one first, decided that he did not like the drapery and the lifted head, and tried out a workable alternative in the present model? One reason to favor the latter sequence is that the present model is somewhat closer in drapery style to that of the later *Kneeling Angels* (cats. 50-52)—particularly in the use of a single, prominent ribbon of cloth to define the front edge of the upper legs. This assumes that Bernini worked in a linear fashion, never reversing direction, but of course he could well have come back to the present model after having made the other. And what are we to make of the possibility that the other model was the one selected to be tested on an architectural model? Does this mean it was considered the more successful, an improvement over the present model, which came first?

What may decide the debate is a key difference in how the two models were made. Both began on a sanded platform, their bottoms ground smooth after drying but before firing. An analysis of both bottoms shows trapped sand in a spiral wedging formation, indicating the use of a single wedged column of clay as the initial mass (fig. 78). This is confirmed by the X-radiographs of the two models. From this point on, the techniques diverge. According to X-radiography, Bernini established the S-shaped posture of the other model by taking the wedged column of clay and bending it backward (fig. 405). He did not do the same with the present model, and the X-radiograph shows the clay grain as being substantially vertical (fig. 404). It makes sense that Bernini would choose the more conventional method of shaping for the first model. Once he had determined the pose he wanted, he could go with the more convenient technique of bending the wedged column backward.

Another factor supporting the proposed sequence is that the present model bears evidence of having been measured. A double-struck set of triangular point marks is on the upper right arm. There are more sharp point marks on the base below the right knee. This likely indicates that as Bernini made the other *Half-Kneeling Angel*, he took a few confirmatory measurements from the present one to ensure that the basic composition was transferred.

Several features of this model bear special mention. The separation of neck and hair on the right rear side is defined by a line resulting from Bernini's pinching the back of the neck and impressing one of his fingernails into the clay (likely the nail of his right index finger; see fig. 117). The same gesture appears in the same location on several of the *Angels with the Superscription* (figs. 115 and 375). Bernini applied a variant of the gesture on the other *Half-Kneeling Angel*, substituting an oval-tip modeling tool for his fingernail (fig. 409). A second signature gesture that recurs on Bernini's models is the sweep of a finger around the back of the head (figs. 121–24). Finally, there is a hole in the drapery behind the right foot, where Bernini stuck one end of the wooden prop used to support the right arm; evidence of a similar prop can be found on the other *Half-Kneeling Angel*.



Fig. 403. Stomach area, where drapery was revised; the tool marks from the earlier drapery scheme are visible at top and bottom (arrows)

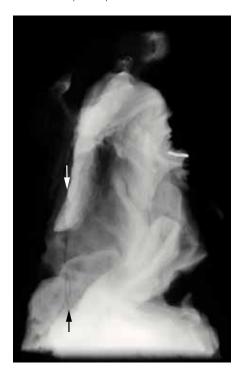


Fig. 404. X-radiograph of *Half-Kneeling Angel*: note that the grain is substantially vertical and that clay was added at the back to enlarge the buttress (arrows)

Gian Lorenzo Bernini

49 · Half-Kneeling Angel

1672. Terracotta, $11\frac{3}{4} \times 7\frac{3}{6} \times 7\frac{5}{8}$ in. (29.8 × 18.3 × 19.4 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.65)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.65 written in black paint on lower back

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, pp. 216-17; Wittkower 1955, p. 240; Grassi 1962, p. 140; Wittkower 1966, p. 263; Lavin, I. 1978, pp. 403-4; Borsi 1980, p. 346; Wittkower et al. 1981, p. 263; Linda Klinger in Princeton and other cities 1981-82, p. 323 n. 2; Rome 1994, p. 126; Bacchi and Zanuso 1996, pl. 190; Falaschi 1996, pp. 81, 103, 118; Wittkower et al. 1997, p. 298; Bacchi and Tumidei 1998, pp. 56, 168; Ferrari and Papaldo 1999, pp. 561, 563; Hemingway 1999a, pp. 151-56; Sigel 1999, pp. 53, 56-58; Sigel and Farrell 1999, pp. 91–93; Evonne Levy in Pinelli, ed. 2000, Notes vol., p. 697

EXHIBITIONS: Cambridge, Mass. 1980; Princeton and other cities 1981-82 (Boston only); Cambridge, Mass. 2007

CONDITION: Right hand broken at wrist and missing. Left thumb also missing. There is a drilled clay-sampling hole on the base.

THIS MODEL, WHOSE DATE AND RELATIONSHIP to its companion *Half-Kneeling Angel* are discussed in the previous entry, was modeled on a sanded platform, and the base was ground smooth on an abrasive surface after drying but before firing (fig. 81). X-radiography, combined with an analysis of shrinkage cracks, suggests that smaller pieces of clay were compacted together to form a base, on top of which was placed a large wedged column of clay. The X-radiograph shows that the grain of the column is not perfectly vertical but follows the backward lean of the figure (fig. 405). This indicates that Bernini established the S-shaped posture at the outset of modeling, bending back the vertical bulk of the clay much as he might pose an articulated doll, rather than adding to and subtracting from a larger original clay mass. (A similar approach was taken on one of the later *Kneeling Angels* [cat. 51], in which the clay

was pushed forward.) Identifiable clay additions include the wings, the arms (added as rolled cylinders; see fig. 406), and various drapery elements applied in thinly folded and curved strips plus larger, thicker sheets that were integrated into the clay mass with fingers and a large oval-tip modeling tool.

As with the other models for the Sacrament Altar, the side intended to face the viewer is the more resolved. The modeling has been carried out predominantly with fingers. Tool use was limited to integrating clay additions, defining drapery folds too small for finger access, and forming small features of the face, hand, and hair. The feathers of the right wing under the sleeve drapery were carefully drawn with a medium-tooth modeling tool. The consistency of tool and finger marks in the wet clay suggests execution in a single session, or in closely spaced multiple sessions.





Fig. 405. X-radiograph of *Half-Kneeling Angel*: note horizontal grain structure below the knees, with vertical grain of a wedged column on top, pushed backward to form the pose

Fig. 406. Left arm, rolled and attached, then draped with strips of clay



Fig. 407. Face, with fingerprints left from the modeling and final



Fig. 408. Flesh area smoothed with a finger wrapped in a cloth; the short lines in the clay resulted from small grains caught in the fabric of the cloth

The face also shows a careful modeling of features and definition of shapes (fig. 407). The approach is comparable to that of the large Kneeling Angel at Harvard (cat. 52), although on a finer scale. The open mouth, the recess under the lower lip, the chin, and even the nostrils have been defined with a few carefully placed strokes and impressed marks from a small blunted oval-tip modeling tool. The final surface was carefully smoothed with fingers, with Bernini's fingerprint leaving a faint, striated texture in several places such as the right cheek. Ultimately, all the flesh areas would be smoothed with fingers, sometimes a finger wrapped in a cloth (fig. 408).

On the other Half-Kneeling Angel (cat. 48), as well as on one of the Angels with the Superscription (cat. 42), an impressed fingernail was used to define the neck and the hair on the right side. Here, the same gesture is repeated in the same place but with a large ovaltip tool substituted for the fingernail (fig. 409). A similar tool was used for the same purpose on the Model of an Angel and Cherub for the "Celestial Glory" at the Museo Horne in Florence (fig. 119). Another feature shared by the present model and the other Half-Kneeling Angel was the use of a prop to support the outstretched right arm. (The wood could have been removed or left to burn

out during firing.) A rectangular impression indicates where the prop was inserted into the clay (fig. 127); linear imprints remain on the underside of the right sleeve from contact with the prop. Fabric drape marks, as well as worn high-relief areas on the head and the wing, indicate a prolonged period of damp storage before drying and firing.

The back and left side of the model were trimmed of excess clay in two stages, which can be clearly read in the overlapping of tool and finger marks (fig. 410). A series of vigorous downward strokes with a dull or blunted chisel, a little over an inch wide, was used in

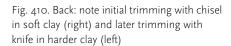


Fig. 409. Right side of neck, with fingernail-like impression from an oval-tip tool

the very wet clay to create a shallow V-shaped hollow between the wings, from the shoulders down. The texture of the resulting surface, rather like that of melted ice cream, suggests that this was carried out during or shortly after the modeling process and clearly differentiates this step from the later trimming. Days or weeks after the V-shaped hollow was formed, excess clay from the left side (the one facing away from the viewer) was removed. This time the clay was much harder and could be carved away in sheets,

using a knife with a curved blade to slice away one wedge of clay at a time in a series of closely spaced strokes. The smoothness of the resulting surface attests to the leather-hard consistency of the clay. The relative hardness and dryness is also indicated by the way the

clay fractured at the root of the cut rather than being elongated or torn. Because the interior of a clay mass retains moisture and will be correspondingly more plastic than the surface during drying, an examination of the clay in the deepest excavations of the two trimmed areas reveals the degree to which the drying process had advanced. Sand is embedded in the trimmed surfaces near the base, suggesting that the model was created on a sanded platform or placed on one to dry, a typical measure to prevent sticking. At some point after firing, the front edge of the base was trimmed with a small chisel, possibly to fit into an architectural model (see cats. 48 and 50).





Gian Lorenzo Bernini

50 · Kneeling Angel

1672. Terracotta, $11\% \times 7\% \times 6\%$ in. (29.1 × 18.3 × 17.4 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.62)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.62 written in black paint on lower back

PROVENANCE: See cat. 2.

LITERATURE: Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, pp. 216-17; Wittkower 1955, p. 240; Faison 1958, p. 116; Grassi 1962, p. 140; Wittkower 1966, p. 263; Lavin, I. 1978, pp. 403-4; Borsi 1980, p. 346; Wittkower et al. 1981, p. 263; Linda Klinger in Princeton and other cities 1981-82, p. 323 n. 2; Rome 1994, p. 126; Bacchi and Zanuso 1996, pl. 189; Cuno et al. 1996, pp. 174-75; Falaschi 1996, pp. 75, 81, 103, 118; Avery 1997, pl. 362; Wittkower et al. 1997, p. 298; Bacchi and Tumidei 1998, pp. 56, 168; Ferrari and Papaldo 1999, pp. 561, 563; Hemingway 1999a, pp. 151, 157; Sigel 1999, pp. 56, 59-60; Sigel and Farrell 1999, pp. 83-85; Evonne Levy in Pinelli, ed. 2000, Notes vol., p. 697

EXHIBITIONS: Cambridge, Mass. 1958; Cambridge, Mass. 1980; Princeton and other cities 1981– 82 (Boston only); Cambridge, Mass. 2007

CONDITION: Breakage loss at top and bottom of the right wing. Post-firing saw cut and fracture removal of the proper right front corner underneath the base. There is a drilled clay-sampling hole on the base.

BY THE FALL OF 1672, work on the Sacrament Altar was sufficiently advanced that full-scale models were needed for the two colossal gilded-bronze angels that were to flank the central ciborium (fig. 400). Bernini delegated the models to Giovanni Rinaldi, who worked on them through the following April, at which time they were dispatched for casting. Bernini must have designed the angels just prior to hiring Rinaldi, during the summer or late fall of 1672.

As discussed in an earlier entry (cat. 48), the decision to decorate the altar with a tempietto flanked by a pair of monumental kneeling angels followed a previous scheme (doubtless also from 1672), in which the angels knelt halfway and carried candles. Bernini would rid the angels of their candles and transform them into exemplars of devotion. The angel on the left, for which the present model was preparatory, kneels deeply, clutches his hands to his chest, and gazes adoringly at the nearby tempietto, conveying his faith in the sacrament of the Eucharist. The companion angel, posed similarly, looks toward the worshippers, inviting them to share in his devotion. In progressing toward the final design, Bernini took enormous pains to determine how the two angels should be posed. He experimented in drawings with giving them extremely deep bows and turning their bodies toward the tempietto (figs. 35 and 36; cats. D.37 and D.38). The present model reflects a slightly later stage, in which Bernini made the angels more available to the spectator by opening their shoulders to the viewer and adjusting their stances to be more upright.

The present model is highly similar in design to the model described in the next entry. Among the slight differences, Bernini has been more attentive to the drapery on the present model, defining the two main folds (the one on top of the legs, and the one beneath the legs) with greater precision. He has also straightened the angel's back, giving it a pose closer to that of the finished statue. Also more like the finished statue is the way this angel kneels—lower, with the hips coming more directly over the feet, the knees bending at a sharper angle. This causes the fabric behind the knees to come to a much sharper crease, a feature given particular prominence on the finished statue. The other model is closer to the finished statue only in the treatment of the right sleeve, where Bernini already appears to be thinking about juxtaposing horizontal creases on the mantle with vertical creases on the undergarment.

Because the present model is closer to the finished statue in pose—and because it looks to be the more definitively finished, with smoother, rounder forms—we might argue that it is the later of the two. Bernini has worked it primarily with his fingers; tool marks remaining after later smoothing are found only on the right side of the base, behind the angel's backside, and in the deeply cut passages of the larger drapery forms. Toothed texturing is minimal, in contrast to the other model, where evidence of toothed tools (both medium and large) is widespread. An oval-tip tool was used on both models to render details, although an important difference can be observed: the strokes impressed on the other model are more frequent and tend to be crisper. Its surface is correspondingly more animated, which is another reason that model gives a stronger impression of rapid execution. If less finished equates to earlier, then the present model came after the other. One problem is that the



Fig. 411. Base, showing where it was trimmed with a saw and a chisel, probably for insertion into an architectural model: note sand and linear wedging pattern

Fig. 412. Face, showing scooped eye sockets; impressed strokes for chin, mouth, and upper lip; clay additions for hair, forehead, cheeks, and chin; finger smoothing on forehead and cheeks; and a small pad of clay added over left eye



other model makes perfectly good sense as a quick rethinking of the present model, which underscores the difficulty of trying to place the models in order. The more important point is that, for those projects dearest to him, Bernini spared no effort in finding the perfect solution, even if it meant producing multiple models that vary only slightly.

A detail on the base of the present model indicates that, no matter the order in which the models were made, Bernini assigned priority to this one. After firing, the front and right sides of the base were cut with a saw to form a curve on the lower half of the base, corresponding to a line incised into the wet clay. The underlying clay was removed with a chisel to form an overhang (fig. 411). As a result of this trimming, the model has nearly the same footprint as one of the earlier Half-Kneeling Angels (cat. 49). This meant that it could be inserted into a base or architectural model constructed for that angel, and indeed, this is the most likely explanation for the trimming. That Bernini chose the present *Kneeling Angel* for placement on the architectural model suggests that he held it to be the more important.

Among the model's more alluring aspects is the delicate, almost ghostlike face (fig. 412). Its features were incised with a small oval-tip tool and augmented with little clay additions to build out the forehead, cheeks, and chin in a manner structurally similar to the heads of three other angels associated with the Sacrament Altar (cats. 48, 49, and 52). The level of completion and finish of features among Bernini's sketch models varies considerably, and this one falls within the midrange. The face and clasped hands are only faintly indicated, with minimal finger smoothing and none by brush, but the drapery is fully delineated, with



Fig. 413. Hands and sleeves modeled with the fingers and an oval-tip tool

Fig. 414. X-radiograph of *Kneeling*Angel: note how the clay was wedged by folding or stacking in a way that trapped air, resulting in a vertical grain

deeply modeled folds (on the lower drapery) and smaller, more abrupt folds (on the sleeves) made with a medium oval-tip modeling tool (fig. 413). A recurring gesture particular to Bernini is the sweep around the right side of the head, in this case from front to back with the finger or fingernail (fig. 124).

The model was created on a sanded platform and leveled on an abrasive surface before firing. X-radiography reveals that the model began as a single central mass or column of

wedged clay; the linear wedging pattern found in the base runs from front to back, not in a spiral (fig. 414). The head was modeled from the same column: the vertical linear grain continues unbroken from the body through the head. Larger added elements include the proper lower left corner of the base, the wings, and probably the arms. The model was executed rapidly and directly, with no apparent linear sketching with tools to define forms and no evidence of later corrections. The modeling is very sure. The clay was uniformly wet throughout the process, as evidenced by the consistency of the finger and tool marks and by the fabric textures left in the surface. This suggests that the work was carried out in one or perhaps two closely spaced modeling sessions. There are fine cloth impressions under the wing on the right side from the damp cloth used to regulate drying. Excess clay was carved or shaved from the interior side and back of the base with a sharp knife.



Gian Lorenzo Bernini

51 · Kneeling Angel

1672. Terracotta, 11 \times 7 \times 7% in. (28 \times 17.8 \times 20.1 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.64)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.64 written in black paint on lower back

Provenance: See cat. 2.

LITERATURE: Fraschetti 1900, p. 394; Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, pp. 192, 194-96; Wittkower 1955, p. 240; Grassi 1962, p. 140; Wittkower 1966, p. 263; Lavin, I. 1978, pp. 404-5; Borsi 1980, p. 346; Wittkower et al. 1981, p. 263; Linda Klinger in Princeton and other cities 1981-82, p. 323 n. 2; Scribner 1991, p. 46; Rome 1994, p. 126; Cuno et al. 1996, pp. 174-75; Falaschi 1996, pp. 75, 81, 103, 118; Wittkower et al. 1997, p. 297; Bacchi and Tumidei 1998, pp. 58, 168; Ferrari and Papaldo 1999, pp. 561, 563; Hemingway 1999a, pp. 151-61; Sigel 1999, pp. 53, 70; Sigel and Farrell 1999, pp. 53, 89-93; Evonne Levy in Pinelli, ed. 2000, Notes vol., p. 697; Cuno et al. 2004, p. 56

EXHIBITIONS: Boston 1955-56; Cambridge, Mass. 1958; Cambridge, Mass. 1980; Princeton and other cities 1981-82 (Boston only); Cambridge, Mass. 2007

CONDITION: Head and top of right wing missing. There is a drilled clay-sampling hole on the base.

LIKE THE OTHER KNEELING ANGEL for the left side of the Blessed Sacrament altar (cat. 50), this one is modeled from a single wedged and rolled column of clay. The side-view X-radiograph shows how the characteristic grain of vertical, linear striations of trapped air was curved by the forceful bending forward of the clay mass to establish the figure's posture (fig. 415). This would have been done early in the modeling process, before the addition of limbs and drapery that would have been distorted or destroyed by the pressure. Clay was then added to the curved mass to form the wings, which are much closer to the body than on any other angel in the group; in fact, the lower wingtips are attached to the angel (fig. 126). The space between the right buttock and the wingtip was defined by a single, plunging stroke of the index finger, probably made at the same time Bernini trimmed the adjacent side and corner of the base with a thumb swipe (fig. 416). A similar plunging stroke is found on one of the Angels with the Superscription (cat. 41), pushing up behind the right wing and beneath the superscription.

Vigorous bottom-to-top finger strokes are seen in the wings and the left side of the present model. Yet, to a substantially greater extent than on any other angel in the group, Bernini modeled and refined the features, drapery, and surfaces with tools rather than his

fingers (fig. 417). Specifically, he used small and medium oval-tip tools and medium- and large-tooth tools. Working in a brisk, sure manner, he combined the contrasting textures of the two kinds of tools to produce lively surfaces that catch the light. He also defined deep drapery folds around the sleeves with short, impressed marks and long strokes of an oval-tip tool, as on the other Kneeling Angel for the left of the altar (cat. 50). But on no other angel in the group was the toothed tool employed for finishing as it was here—part of what gives the model its visual energy.

Uniform, crisp edges and sharp tool impressions through the modeled surfaces indicate the homogeneous consistency of the wet clay at the time it was worked. Unusually, the model bears no evidence of brush smoothing and little of finger smoothing; every rough edge



Fig. 415. X-radiograph of *Kneeling Angel*: note curve in the vertical clay grain produced when the initial column was bent forward





Fig. 416. Proper left rear corner of base, with deep thumb stroke and print

Fig. 417. Drapery detailed with toothed and oval-tip tools: note the profile of the oval tip in the sleeves

and clay crumb resulting from the modeling process remains. Indeed, even though a fabric impression exists at the bottom back edge of the base, indicating a period of damp storage or retarded drying (fig. 146), this model gives the impression of being a one-session sketch—a single concept quickly executed as a complete idea, without later reworking. Models that have been stored and reworked over a prolonged period of time generally acquire softened edges and worn high-relief areas; alterations to these previously modeled surfaces often produce visible textural differences (fig. 376). No such wear appears on this model, whose surfaces are exceedingly fresh.

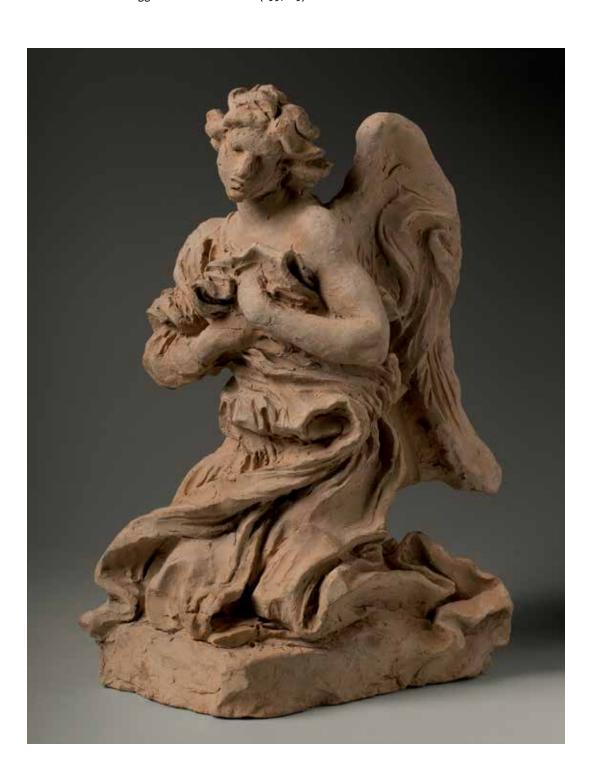
The figure was modeled on a sanded board, and much sand remains trapped in the interstices of the bottom, which was ground smooth after drying but before firing. This model sits much lower to the ground than the other Kneeling Angel for the left of the altar (cat. 50). The base of that model was trimmed, probably for insertion into an architectural model. The present angel was likely never intended for use in the architectural model; Bernini may have made it only to test a different configuration for the upper drapery or an angle for the now-missing head.

Gian Lorenzo Bernini

52 · Kneeling Angel

1672. Terracotta, $13\% \times 7\% \times 8\%$ in. (34 × 18.4 × 21.5 cm)

Harvard Art Museums/Fogg Museum, Cambridge, Massachusetts, Alpheus Hyatt Purchasing and Friends of the Fogg Art Museum Funds (1937.63)



INSCRIPTIONS, MARKS, AND STAMPS: 1937.63 written in black paint on lower back

PROVENANCE: See cat. 2.

LITERATURE: Fraschetti 1900, p. 394; Norton 1914, p. 48; Art News 1938; Opdycke 1938, p. 29; Lavin, I. 1955, pp. 192, 194-96; Wittkower 1955, p. 240; Grassi 1962, p. 140; Wittkower 1966, pp. 260, 263; Lavin, I. 1978, pp. 404-5; Borsi 1980, p. 346; Wittkower et al. 1981, pp. 260, 263; Princeton and other cities 1981-82, p. 323 n. 2; Scribner 1991, p. 46; Rome 1994, p. 126; Cuno et al. 1996, pp. 174-75; Falaschi 1996, pp. 75, 81, 103, 118; Montagu 1996, p. 64; Avery 1997, pl. 146; Wittkower et al. 1997, pp. 297–98; Bacchi and Tumidei 1998, pp. 56, 168; Ferrari and Papaldo 1999, pp. 561, 563; Hemingway 1999a, pp. 151-59; Sigel 1999, pp. 53-54, 56, 62, 67-68; Sigel and Farrell 1999, pp. 86-88; Evonne Levy in Pinelli, ed. 2000, Notes vol., p. 697; Lavin, I. 2001, pp. 144, 146; Houston and London 2001-2, p. 200; Cuno et al. 2004, p. 56

EXHIBITIONS: Boston 1955–56; Cambridge, Mass. 1958; Cambridge, Mass. 1980; Princeton and other cities 1981– 82 (Boston only); Cambridge, Mass. 2007

CONDITION: Loss at bottom tip of right wing and at proper left front and rear corners of base. There is a drilled clay-sampling hole on the base.



Fig. 418. Scale, with incised marks over a toothed-tool stroke and twenty-nine sharp measuring points

OF THE FIVE MODELS for the Sacrament Altar (cats. 48-52), this is the largest and almost surely the latest. It is virtually identical in composition to the corresponding angel on the right side of the altar, whose head is more upright. Bernini is likely to have prepared the present model for Giovanni Rinaldi, who was given the task of elaborating the full-scale model to be used in casting the Kneeling Angel. That this model facilitated some type of enlargement is certain: it bears numerous measuring marks, as well as a linear scale.

The scale is found on the base of the model, on the side not visible to the viewer (fig. 418). Bernini prepared the surface with a horizontal stroke of a large-tooth tool from front to back. He then cut at least seven vertical marks equally spaced at approximately two-centimeter intervals; additional vertical divisions would certainly have been located on the now-missing corners. The scale was used heavily, as evidenced by the many point marks on it. The largest concentration is found on the third division mark from the right, which holds twelve of the twenty-nine points that can be located on the scale. The missing corners are likely to have held many more, as they represent the most logical places for Bernini or an assistant to have fixed one arm of the divider when transferring measurements. The measuring marks on the figure total more than thirty and take three forms: struck lines, sharp points, and square marks. Their locations include the top of the head and face (fig. 421), the wings (fig. 105), the shoulders (fig. 107), the left foot, and various places on the drapery and the base. A nexus of a dozen sharp points and square marks sits in front of the left knee (fig. 419). Interestingly, the nexus was not at the pit of the throat, which is the more typical location on Bernini's models.

The model may have come at the end in the design process, but it has the vigor of a first thought. In construction and technique, it conforms closely to Bernini's sketch model



Fig. 419. Nexus of a dozen point marks on the base

practices. X-radiography revealing the clay grain indicates that the figure was modeled from a single vertical column of wedged and rolled clay (fig. 154). The wings, the arms, and the rear of the base were added (fig. 74). The forms of the figure are generally larger, thicker, and more rounded than those of other angels in the Sacrament Altar group. Bernini modeled the figure forcefully and directly with his fingers and an oval-tip modeling tool, drawing wing and drapery details with linear gestures and impressing deep, short strokes into the clay.

The graphic intensity of the modeling is matched only by that of the now-headless model for the opposing *Kneeling Angel* (cat. 51), where several toothed tools were used to effect an energized, almost vibrating appearance. As in the other angels in the group, the modeling of the drapery and the wing detailing on the side hidden from the viewer are relatively cursory.

The side and back of the head were modeled with a sweep of an ovaltip tool (fig. 420). The gesture recalls the characteristic finger sweep that Bernini used on some of his other models to define the same part of the head. Another of his distinctive gestures, the front-to-back finger stroke shaping the shoulder, can be



Fig. 420. Back of head, with the sweep of an oval-tip tool; note the mark midstroke that records the profile of the tool tip

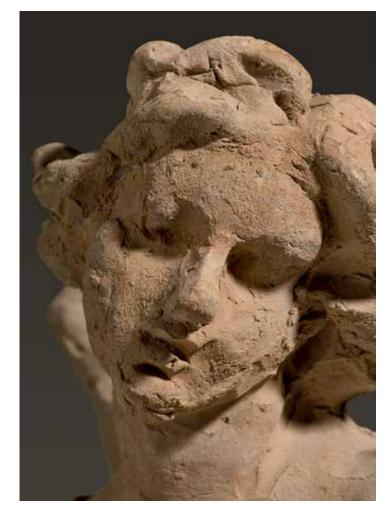


Fig. 421. The head, showing diagonal struck marks in the hair and square mark in the lower lip; two impressed strokes of an oval-tip tool to shape the upper lip; a single stroke from the same tool shaping the lower lip and the upper chin; and clay added to the temples, cheeks, and chin, then smoothed with fingers

Fig. 422. Luc-François Breton, Kneeling Angel, ca. 1760. Terracotta, H. 71/8 in. (20 cm). Musée des Beaux-Arts et d'Archéologie, Besançon (849.35.8)



found on the right side, with fingerprints in displaced clay at the end of the stroke (fig. 120). Bernini has rendered the face with a degree of detail comparable to that of the finer Half-Kneeling Angel (cat. 49), with multiple strokes of an oval-tip tool defining the lips and the chin (fig. 421). Fabric impressions on various parts of the model indicate the use of a damp cloth to regulate drying.

A slightly smaller model of nearly identical design survives in the Musée des Beaux-Arts et d'Archéologie, Besançon (fig. 422). Irving Lavin attributed that model to Bernini in 2001. We have studied it closely and have concluded instead that it is a copy of Bernini's finished angel by the eighteenth-century sculptor Luc-François Breton, with whose work it shares closer stylistic and technical affinities.

Checklist of

Drawings

Notes

Bibliography

Index

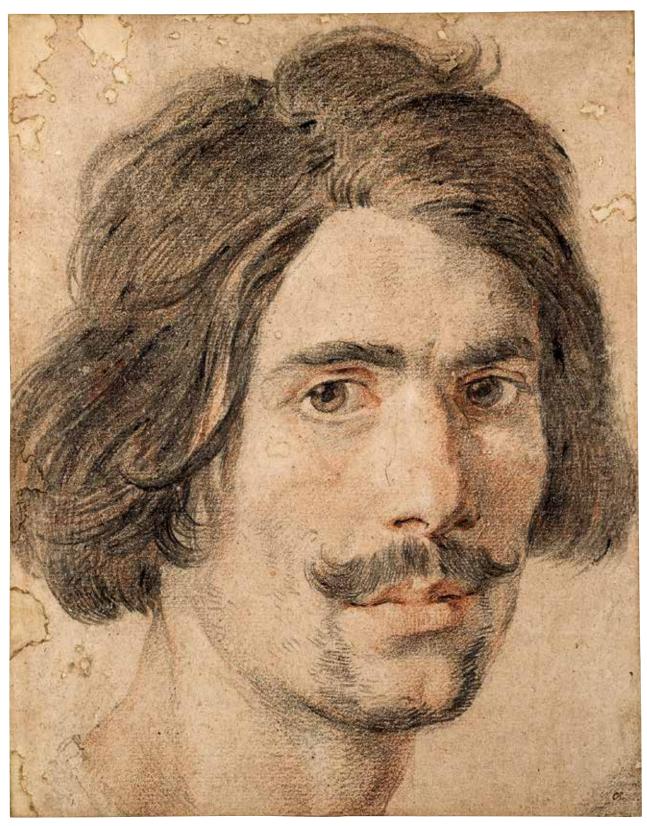


Fig. 423. Self-Portrait. Cat. D.2

Checklist of Drawings

D.1. Gian Lorenzo Bernini

Study for Pluto and Proserpina, ca. 1621 Red chalk, 5% x 3% in. (13 x 9.4 cm) Museum der Bildenden Künste, Leipzig (NI.7860)

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712– 14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: Brauer and Wittkower 1931, vol. 1, pp. 18–19, vol. 2, pl. 5a; Grassi 1944, p. 6, pl. 1; Welcker 1957, pp. 234–36; Kuhn 1966, p. 69; Wittkower 1966, p. 178, no. 10; Kauffmann 1970, p. 43, fig. 21; Harris 1977, p. xiii, no. and pl. 3; Mehnert 1981, p. 11, no. 2; Mehnert 1981, p. 11, no. 2; Mehnert 1982, p. 43, no. and pl. 3; Avery 1997, p. 49, fig. 51; Winner 1999, p. 191, fig. 1

EXHIBITIONS: Stockholm 1966, no. 1133; Princeton and other cities 1981–82, no. 2

Fort Worth only

Fig. 37

D.2. Gian Lorenzo Bernini

Self-Portrait, ca. 1625–30 Black and red chalks, heightened with white chalk, 10% x 8½ in. (27.5 x 21.5 cm) Ashmolean Museum of Art and Archaeology, Oxford (WA 1944.132/P.II 792)

PROVENANCE: Francesco Maria Niccolò Gaburri (d. 1742); Charles Rogers (Lugt 624); William Young Ottley (Lugt 2642, 2662–65); purchased by the Ashmolean Museum in 1944 (Hope Fund)

LITERATURE: Wittkower 1951, p. 51; Parker 1956, vol. 2, p. 417, no. 792, pl. 176; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 250; Harris 1977, p. xxv, no. and pl. 23; Martinelli 1981, p. 12, and n.p., no. and pl. 14; Harris 1982, p. 391; White, Whistler, and Harrison 1992, pp. 86–87, no. 31; Harris 2007–8, pp. 175–76; Harris 2011, pp. 172–73, fig. 15

EXHIBITIONS: London 1950–51, no. 388; Rome and Oxford 1991–92, no. 3; Edinburgh 1998,

no. 2; Rome 2007–8, no. 25; Los Angeles and Ottawa 2008–9, no. 3.1

Fig. 423

D.3. **Gian Lorenzo Bernini**Architectural Studies and Three
Leg Studies for Saint Longinus,
ca. 1629–30

Red chalk on buff paper, 10 % x 14 % in. (27.6 x 37 cm) Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 13764

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Harris 1968, pp. 384, 390, no. 12, pl. 26; Harris 1977, p. xv, no. and pl. 20; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778

Fort Worth only

Fig. 424

D.4. Gian Lorenzo Bernini

Eight Studies for the
Torso of a Partially Draped
Figure, Probably for Saint
Longinus, ca. 1629–30
Pen and sepia ink over traces
of black chalk on buff paper,
7 1/6 x 9 1/8 in. (18.3 x 25.2 cm)
Stiftung Museum Kunstpalast,
Düsseldorf KA (FP) 13613

Annotated in ink at upper left with part of a mathematical sum

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Harris 1968, p. 388, no. 1, pl. 18; Kauffmann 1970, p. 100, fig. 56a; Kruft 1970, p. 87, fig. 20; Harris 1987, p. 49 n. 21; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778; Di Gioia 2002, p. 58, fig. 13

EXHIBITIONS: Düsseldorf 1969–70, no. 43, pl. 41; London and Edinburgh 1973, no. 1

New York only

Fig. 425

D.5. Gian Lorenzo Bernini

Studies for Saint Longinus, ca. 1629–30 Red chalk on buff paper, 10½ x 15¾ in. (26 x 39.8 cm) Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 13255

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Harris 1968, p. 389, no. 5, pl. 20a; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778; Preimesberger 2001a, p. 107

Fort Worth only

Fig. 426

D.6. Gian Lorenzo Bernini

Study for the Torso of Saint Longinus, ca. 1629–30 Red chalk on buff paper, 9½6 x 10½ in. (25 x 27.7 cm) Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 7719

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Harris 1968, p. 388, no. 2, pl. 199; Kruft 1970, p. 87; Küffner 1971, p. 171; Harris 1977, p. xiv, no. and pl. 13; Martinelli 1981, n.p., no. 5; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778; Preimesberger 2001a, pp. 101, 107, fig. 6

EXHIBITIONS: Düsseldorf 1969–70, no. 44, pl. 37; London and Edinburgh 1973, no. 4

New York only

Fig. 48

D.7. Gian Lorenzo Bernini

Study for the Torso of Saint Longinus, ca. 1629–30 Red chalk heightened with white on buff paper, 10 x 11½ in. (25.5 x 29.2 cm) Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 7716

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Harris 1968, p. 388, no. 3, pl. 19b; Eckhard Schaar in Düsseldorf 1969–70, p. 34, no. 44; Harris 1977, p. xiv, no. and pl. 14; Martinelli 1981, n.p., no. and pl. 5; Wittkower

et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778; Preimesberger 2001a. p. 107

EXHIBITIONS: London and Edinburgh 1973, no. 3

Fort Worth only

Fig. 49

D.8. Gian Lorenzo Bernini

Study of a Window Frame and the Left Arm of Saint Longinus, ca. 1629–30 Red chalk on buff paper, 9 % x 15% in. (25.2 x 38.6 cm) Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 12440

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Harris 1977, p. xv, no. and pl. 19; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778; Preimesberger 2001a, p. 107

New York only

Fig. 427

D.g. Gian Lorenzo Bernini

Three Studies of Drapery Details, Probably for Saint Longinus, ca. 1629–30 Red chalk on buff paper, 10 × 14½ in. (25.4 × 37.8 cm) Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 13225

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Harris 1968, p. 389, no. 7, pl. 22; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778

New York only

Fig. 428

D.10. Gian Lorenzo Bernini

Three Studies of Drapery Details, Probably for Saint Longinus, ca. 1629–30
Red chalk on buff paper, 10½ x 14½ in. (26 x 37.9 cm)
Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 13954

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Harris 1968, p. 389, no. 6, pls. 21a, b; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778; Preimesberger 2001a, p. 107

Fort Worth only

Fig. 429

D.11. Gian Lorenzo Bernini

Two Studies for the Drapery of Saint Longinus (recto); Two Studies for the Knot of Drapery beside Saint Longinus's Left Arm (verso), ca. 1629-30 Red chalk on buff paper (recto and verso), 93/6 x 14/8 in. (25 x 37.8 cm) Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 12441

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Kruft 1970, p. 87; Küffner 1971, p. 171; Harris 1977, p. xv, nos. and pls. 17-18; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778; Preimesberger 2001a, pp. 103, 107, fig. 8

EXHIBITIONS: Düsseldorf 1969-70, no. 45, pl. 42; London and Edinburgh 1973, no. 2

New York only

Fig. 430

D.12. Gian Lorenzo Bernini

Two Studies of a Draped Figure, Probably Saint Longinus (recto); Study of a Draped Figure and Study of a Drapery Detail (verso), ca. 1629-30 Red chalk on buff paper (recto and verso), 101/6 x 151/2 in. (25.6 x 39.3 cm) Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 13260

Inscribed on recto, at lower right (canceled in ink by a later hand): 78

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

LITERATURE: Harris 1968, p. 388, no. 4, pl. 20a; Harris 1977, p. xiv, no. and pl. 15; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778; Preimesberger 2001a, pp. 102, 107, fig. 7

New York only

Fig. 50

D.13. Gian Lorenzo Bernini Two Studies of Details of Drapery, One with the Left Arm of Saint Longinus (recto); Two Additional Drapery Studies, Probably for Saint Longinus (verso), ca. 1629-30 Red chalk on buff paper, 10% x 14% in. (26.2 x 37 cm)

PROVENANCE: Wilhelm Lambert Krahe (Lugt 2309); Düsseldorf Academy (by ca. 1779)

Stiftung Museum Kunstpalast, Düsseldorf KA (FP) 12975

LITERATURE: Harris 1968, p. 389, no. 8, pl. 23a; Wittkower et al. 1997, p. 251; Maddalena Spagnolo in Pinelli, ed. 2000, Notes vol., p. 778; Preimesberger 2001a, p. 107

Fort Worth only

Fig. 51

D.14. Gian Lorenzo Bernini

Design for an Elephant with an Obelisk, ca. 1632 or ca. 1658 Pen and ink with wash over black chalk, 10¾ x 4% in. (27.3 x 11.6 cm) The Royal Collection, Windsor Castle (RL 5628)

PROVENANCE: Cardinal Francesco Albani, Rome (1721-1762; purchased in Rome by John Adam for King George III in 1762)

LITERATURE: Brauer and Wittkower 1931, vol. 1, pp. 10, 143-47, 150, vol. 2, pl. 14a; Blunt and Cooke 1960, p. 24, no. 37; D'Onofrio 1967a, p. 231, fig. 125; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 170; Avery 1997, pp. 190-92; Wittkower et al. 1997, p. 287; Curzietti 2007, pp. 336, 341

EXHIBITIONS: Edinburgh 1998, no. 107

Fig. 25

D.15. Gian Lorenzo Bernini

Study for a Triton (recto); Anatomical Studies? (verso), ca. 1642-43 Red chalk, background tinted with pale brown wash, framing lines in pen and brown ink (recto); black chalk (verso), $14\% \times 9\%$ in. (36.4 × 24.5 cm) The Metropolitan Museum of Art, New York; Harry G. Sperling Fund, 1973 (1973.265)

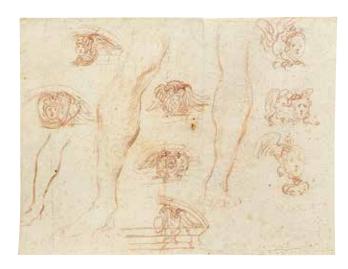


Fig. 424. Architectural Studies and Three Leg Studies for Saint Longinus. Cat. D.3

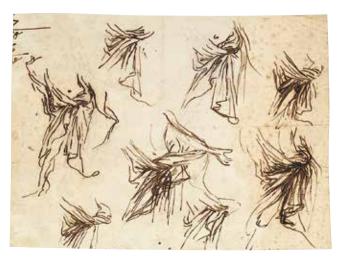


Fig. 425. Eight Studies for the Torso of a Partially Draped Figure, Probably for Saint Longinus. Cat. D.4



Fig. 426. Studies for Saint Longinus. Cat. D.5

Inscribed in pen and brown ink on recto, at lower right: *G. L. Bernini*; on verso, at upper center: *Lorenzo Bernini*

PROVENANCE: Georges Haumont collection; [Hôtel Drouot, Paris, March 22, 1928, lot 43]; [Apolloni, Rome]; purchased by MMA in 1973

LITERATURE: Jacob Bean in MMA Notable Acquisitions 1975, p. 64; Harris 1977, p. xvii, no. and pl. 37; Bean and Turçic 1979, pp. 42–43, no. and pl. 64; Montagu 1986, p. 11; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, p. 28; Montagu 1989, p. 30, fig. 35; Alan Darr in Rome 1999b, p. 381; Curzietti 2010, p. 111, fig. 6

EXHIBITIONS: New York 1975–76, no. 6; New York 1976–77, n.p., unnumbered; New York 2001–2

Fig. 38

D.16. Gian Lorenzo Bernini

Study for the Head of Saint
Teresa (recto); Drapery Study for
Saint Teresa (verso), ca. 1647
Red chalk on gray paper (recto);
black chalk (verso), 11 x 81/8 in.
(28 x 20.7 cm)
Museum der Bildenden Künste,
Leipzig (NI.7882r-v)

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712–14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: Weisbach 1921, p. 136; Brauer and Wittkower 1931, vol. 1, pp. 9 n. 2, 36, 37, vol. 2, pls. 24a, b; Kuhn 1967, pp. 70–71; Kauffmann 1970, pp. 145–48, figs. 77a–c, 78; Harris 1977, p. xviii, no. and pl. 46; Lavin, l. 1980, vol. 1, pp. 118 n. 4, 119, 120, 123, figs. 231–32; Martinelli 1981, n.p., no. and pl. 24; Mehnert 1981, p. 18, no. 17; Mehnert 1982, pp. 45–46, no. and pl. 11; Wittkower et al. 1997, p. 266

EXHIBITIONS: Princeton and other cities 1981–82, nos. 10–11; Rome 1999b, nos. 62a, b; Bonn and Berlin 2005–6, no. 254B [Bonn only]

New York only

Fig. 52

D.17. Gian Lorenzo Bernini

Study for the Head of Saint Teresa (recto); Study for the Angel (verso), ca. 1647 Red chalk on gray paper (recto); black chalk (verso), 7% x 7% in. (20.2 x 19.5 cm) Museum der Bildenden Künste, Leipzig (NI.7881r-v)

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712–14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: Weisbach 1921, p. 136; Brauer and Wittkower 1931, vol. 1, pp. 9 n. 2, 36–37, vol. 2, pl. 23b; Kuhn 1967, pp. 70–71; Kauffmann 1970, pp. 145–48, figs. 77a–c, 78; Harris 1977, p. xviii, no. and pl. 45; Lavin, l. 1980, vol. 1, p. 108, fig. 230; Martinelli 1981, n.p., no. and pl. 23; Mehnert 1981, p. 19, no. 18; Wittkower et al. 1997, p. 266

EXHIBITIONS: Princeton and other cities 1981–82, nos. 10–11; Rome 1999b, nos. 63a, b; Bonn and Berlin 2005–6, no. 254A [Bonn only]

Fort Worth only

Fig. 53

D.18. Gian Lorenzo Bernini

Academy Study of a Male Nude Seen from Below, ca. 1648–49 Red chalk with white heightening on rough gray paper, 20% x 15% in. (52.4 x 38.6 cm) Gabinetto Disegni e Stampe degli Uffizi, Florence (11921 F)

PROVENANCE: Houses of Medici and Lorraine, Florence (by 1793)

LITERATURE: Inventory 1793, vol. 1 (Bernino nos. 1–14); Fraschetti 1900, p. 190; Brauer and Wittkower 1931, vol. 1, p. 50 n. 2, vol. 2, pls. 29b–30; Martinelli 1950, p. 177; Kauffmann 1970, p. 186, fig. 93; Petrioli Tofani 1972, n.p., no. 81; Harris 1977, pp. xiv, xix, no. and pl. 48; Martinelli 1981, n.p., no. 26; Avery 1997, p. 198; Wittkower et al. 1997, p. 269

EXHIBITIONS: Jerusalem 1984, no. 45; Rome 1986, no. 15; Florence 1997, no. 115, fig. 127; Rome 2004, uncatalogued

Fig. 40

D.19. Gian Lorenzo Bernini

Academy Study of a Male Nude, ca. 1648–49
Red chalk with white heightening on white paper, 20¾ x 16 in. (51.7 x 40.6 cm)
Gabinetto Disegni e Stampe degli Uffizi, Florence (11922 F)

PROVENANCE: Houses of Medici and Lorraine, Florence (by 1793)

LITERATURE: Inventory 1793, vol. 1 (Bernino nos. 1–14); Fraschetti 1900, p. 194; Brauer and Wittkower 1931, vol. 1, p. 50 n. 2, vol. 2, pls. 29b–30; Martinelli 1950, p. 177; Kauffmann 1970, p. 186, fig. 92; Petrioli Tofani 1972, n.p., no. 81; Harris 1977, pp. xiv, xix, no. and pl. 7; Martinelli 1981, pp. 5, 8, and n.p., no. and pl. 26; Harris 1990, p. 512; Avery 1997, p. 198; Wittkower et al. 1997, p. 269; Harris 2003, p. 121

EXHIBITIONS: Florence 1976, no. 63, fig. 60; Montreal 1986, no. 61; Florence 1997, no. 114

Fig. 41

D.20. Gian Lorenzo Bernini

Study for the Sea Deity with Dolphin Fountain at the Palazzo Ducale, Sassuolo, ca. 1652–53 Black chalk, 13% × 9% in. (34.8 × 23.8 cm)
The J. Paul Getty Museum,
Los Angeles (87.GB.142)

Stamped on verso, at bottom right, with the mark of the collector A. G. B. Russell

PROVENANCE: Archibald Russell, London; Marquess of Talleyrand Collection, Rome (until 1987; sold at auction, Rome and Paris Sale, Christie's Monaco, June 15, 1986, lot 73, to the J. Paul Getty Museum)

LITERATURE: Sotheby's London 1928, lot 39; Brauer and Wittkower 1931, vol. 1, p. 53, vol. 2, pl. 34; Harris 1977, p. xix, no. and pl. 51; Pirondini, ed. 1982, pp. 64–65; Walsh et al. 1988, pp. 136, 174, no. 61; Avery 1997, p. 208; Wittkower et al. 1997, p. 300; Desmond Shawe-Taylor in Edinburgh 1998, p. 139, fig. 114; Bacchi 2004, pp. 47, 49

EXHIBITIONS: London 1927, no. 24

Fig. 22

D.21. Gian Lorenzo Bernini or assistant

Design for Fountain with Dolphins Bearing a Conch Shell, ca. 1651–52 Pen and brown wash on browntinted paper, with blue wash, 15% x 9% in. (39.6 x 24.5 cm) The Royal Collection, Windsor Castle (RL 5625)

PROVENANCE: Cardinal Francesco Albani, Rome (1721–1762; purchased in Rome by John Adam for King George III in 1762)

LITERATURE: Voss 1910a, p. 105, fig. 3; Brauer and Wittkower 1931, vol. 1, pp. 10 n. 2, 51–52, vol. 2, pl. 32; Pane 1953, pl. 108; Wittkower 1955, p. 215; Blunt and Cooke 1960, p. 24, no. 40, pl. 11; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 142; D'Onofrio 1976, p. 505; Harris 1977, p. xix n. 50; Avery 1997, p. 204, fig. 291; Wittkower 1997 et al., p. 272; Ferrari and Papaldo 1999, p. 451; Avery 2002–3, p. 18

EXHIBITIONS: London 1950–51, no. 379; Edinburgh 1998, no. 99

Fig. 26

D.22. Gian Lorenzo Bernini

Design for Fountain with Tritons and Dolphins, ca. 1652–53
Pen and brown ink over traces of graphite, 9% x 8% in. (24.6 x 20.6 cm)
The Royal Collection, Windsor Castle (RL 5623)

PROVENANCE: Cardinal Francesco Albani, Rome (1721–1762; purchased in Rome by John Adam for King George III in 1762)

LITERATURE: Voss 1910a, p. 107, fig. 4; Brauer and Wittkower 1931, vol. 1, pp. 1, 10 n. 2, 50–53, vol. 2, pl. 33; Grassi 1944, p. 9, pl. 17; Pane 1953, pl. 87; Wittkower 1955, p. 216; Blunt and Cooke 1960, p. 24, no. 41, pl. 10; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 143; D'Onofrio 1977, p. 506; Harris 1977, p. xix, no. and pl. 50; Avery 1997, p. 204, fig. 295; Wittkower et al. 1997, p. 272; Ferrari and Papaldo 1999, p. 451; Avery 2002–3, p. 22

EXHIBITIONS: London 1925, no. 28; London 1938, no. 441; London 1950–51, no. 382; Rome 1961, no. 4; Edinburgh 1998, no. 100; Rome 1999b, no. 119

Fig. 27

D.23. Gian Lorenzo Bernini Study for the Equestrian Statue of Constantine, ca. 1654 Black chalk, 1214 x 101/2 in. $(31 \times 26.7 \text{ cm})$

Real Academia de Bellas Artes de San Fernando, Madrid (D/2247)

Inscribed in ink at bottom right: Del Bernini

PROVENANCE: Carlo Maratta, Rome (d. by 1713); Procaccini (1713?-1734); his widow (sold to the Real Academia in 1775)

LITERATURE: Tormo y Monzó 1929, p. 81; Velasco y Aguierre 1941, p. 164, no. 189; Pérez Sánchez 1965, p. 7, no. 1; Wittkower 1966, p. 253; Kauffmann 1970, p. 283; Vizthum 1971, p. 85, pl. 26; Harris 1977, p. xx, no. and pl. 61; Pérez Sánchez 1978, no. 41; Martinelli 1981, p. 18, and n.p., no. and pl. 29; Nicola M. Courtright in Princeton and other cities 1981-82, p. 138; Marder 1992, pp. 282-83; Marder 1997, pp. 145-49; Wittkower et al. 1997, p. 292, no. 73; Bacchi and Tumidei 1998, pp. 52, 158; Chiara Savettieri in Pinelli, ed. 2000, Notes vol., p. 473, fig. 320; Lavin, I. 2005, p. 162, fig. 185

EXHIBITIONS: Madrid and Aranjuez 2003-4, no. 5.2

New York only

Fig. 29

D.24. Gian Lorenzo Bernini

Study for Daniel (recto); Study of an Arch, Pier, and Entablature (verso), ca. 1655 Red chalk on gray paper, 15% x 8% in. (39 x 21.2 cm) Museum der Bildenden Künste, Leipzig (NI.7891r-v)

Inscribed at lower left, by a later hand: Berno

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712-14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: Brauer and Wittkower 1931, vol. 1, pp. 9 n. 2, 58, vol. 2, pl. 46; Hibbard 1965, p. 191, fig. 99; Kuhn 1966, pp. 74-75; Kauffmann 1970, pp. 225-26, fig. 123b; Harris 1977, p. xx, no. and pl. 65; Mehnert 1981, p. 29, no. 36; Mehnert 1982, p. 46,

no. and pl. 13; Schulze 1989, pp. 173-91; Wittkower et al. 1997, p. 277; Angelini and Montanari 1998, p. 141

EXHIBITIONS: Princeton and other cities 1981-82, no. 34; Rome 1999b, no. 74; Bonn and Berlin 2005-6, no. 192D [Bonn only]

Fort Worth only

Fig. 43

D.25. Gian Lorenzo Bernini

Two Studies for Daniel, ca. 1655 Black chalk on gray paper, 15% x 7% in. (39.5 x 19.3 cm) Museum der Bildenden Künste, Leipzig (NI.7893)

Inscribed in ink at lower left, by a later hand: Berno

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712-14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: Brauer and Wittkower 1931, vol. 1, pp. 9 n. 2, 58, vol. 2, pl. 43; Hibbard 1965, p. 191, fig. 99; Kuhn 1966, pp. 74-75; Kauffmann 1970, pp. 225-26, fig. 123a; Harris 1977, p. xx, no. and pl. 62; Mehnert 1981, p. 28, no. 34; Mehnert 1982, p. 46, no. and pl. 12; Schulze 1989, pp. 173-91; Wittkower et al. 1997, p. 277; Angelini and Montanari 1998, p. 141

EXHIBITIONS: Princeton and other cities 1981-82, no. 32; Rome 1999b, no. 75; Bonn and Berlin 2005-6, no. 192A [Bonn only]

Fort Worth only

Fig. 431

D.26. Gian Lorenzo Bernini Study for Daniel, ca. 1655

Red chalk, 14% x 9% in. (37.8 x 23.8 cm) Museum der Bildenden Künste, Leipzig (NI.7890)

Inscribed in ink at lower right:

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712-14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

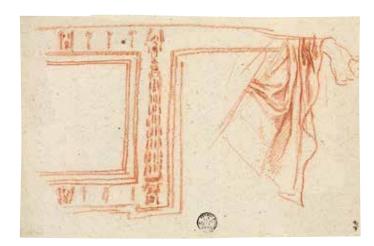


Fig. 427. Study of a Window Frame and the Left Arm of Saint Longinus. Cat. D.8



Fig. 428. Three Studies of Drapery Details, Probably for Saint Longinus. Cat. D.9

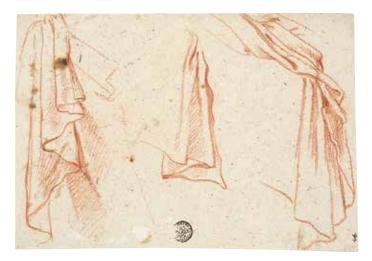


Fig. 429. Three Studies of Drapery Details, Probably for Saint Longinus. Cat. D.10

LITERATURE: Kroker 1913–14;
Fischer 1928, p. 25, figs. 26–27;
Brauer and Wittkower 1931,
vol. 1, pp. 9 n. 2, 58, vol. 2,
pl. 46; Hibbard 1965, p. 191,
fig. 98; Kuhn 1966, pp. 74–75;
Kauffmann 1967b, p. 332;
Kauffmann 1970, pp. 216 n. 113,
225–26, fig. 123a; Harris 1977,
p. xx, no. and pl. 63; Mehnert
1981, p. 29, no. 35; Schulze 1989,
pp. 173–91; Avery 1997, p. 261,
fig. 378; Wittkower et al. 1997,
p. 277; Angelini and Montanari
1998, pp. 141, 143, fig. 141

EXHIBITIONS: Princeton and other cities 1981–82, no. 33; Rome 1999b, no. 76; Bonn and Berlin 2005–6, no. 192B [Bonn only]

New York only

Fig. 42

D.27. Gian Lorenzo Bernini

Study for Daniel (recto); Studies for the Head or Hand of Daniel (verso), ca. 1655
Red chalk on gray paper (recto and verso), 14 % x 7½ in. (38 x 19 cm)
Museum der Bildenden Künste, Leipzig (NI.7892r-v)

Inscribed in ink at lower right, by a later hand: *Berno*

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712–14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: Brauer and Wittkower 1931, vol. 1, pp. 9 n. 2, 33, 58, vol. 2, pl. 44; Hibbard 1965, p. 191, fig. 99; Kuhn 1966, pp. 74–75; Kauffmann 1970, pp. 225–26, fig. 123c; Harris 1977, p. xx, no. and pl. 64; Mehnert 1981, p. 29, no. 36; Schulze 1989, pp. 173–91; Wittkower et al. 1997, p. 277; Angelini and Montanari 1998, p. 141

EXHIBITIONS: Princeton and other cities 1981–82, no. 33; Bonn and Berlin 2005–6, no. 192C [Bonn only]

New York only

Fig. 283

D.28. Gian Lorenzo Bernini or workshop

Design for the Cathedra Petri, ca. 1657 Pen-and-ink wash, brown wash over black chalk, 9½ × 51% in. (24.1 × 14.5 cm) The Royal Collection, Windsor Castle (RL 5614)

Inscribed in ink at bottom center: Del Cavalier Gio: Lorenzo Bernini

PROVENANCE: Cardinal Francesco Albani, Rome (1721–1762; purchased in Rome by John Adam for King George III in 1762)

LITERATURE: Brauer and Wittkower 1931, vol. 1, pp. 10 n. 4, 105-6, 139, 169, 171, vol. 2, pl. 166a; Battaglia 1943, pp. 54, 57, 73, 78, 80, 84, 97, pl. 4; Einem 1955, p. 104, fig. 5; Kauffmann 1955, p. 239; Wittkower 1955, p. 219; Blunt and Cooke 1960, p. 22, no. 26; Kauffmann 1970, p. 257, pl. 139; Steven F. Ostrow in Princeton and other cities 1981-82, p. 176, fig. 69; Avery 1997, p. 108, fig. 131; Rice, L. 1997, p. 267, fig. 167; Wittkower et al. 1997, p. 278; Tomaso Montanari in Pinelli, ed. 2000, Notes vol., p. 620; Harris 2001, p. 118

EXHIBITIONS: London 1950–51, no. 383; Salzburg 1979, no. 12; Madrid and Aranjuez 2003–4, no. 4.6

Fig. 300

D.29. Gian Lorenzo Bernini

Study for a Church Father (recto); Study for a Church Father (verso), ca. 1658 Black chalk on gray paper (recto and verso), 16% x 10 in. (42.9 x 25.4 cm) Museum der Bildenden Künste, Leipzig (NI.7898r-v)

Inscribed in ink at lower left, by a later hand: *Berno*

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712–14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: VOSS 1922, p. 28, fig. 15; Fischer 1928, p. 26; Brauer and Wittkower 1931, vol. 1, pp. 9 n. 4, 107, vol. 2,

pl. 76; Kauffmann 1970, pp. 262–63, 267, fig. 141b; Harris 1977, p. xxi, no. and pl. 74; Martinelli 1981, n.p., no. and pl. 31; Mehnert 1981, p. 31, no. 42; Wittkower et al. 1997, p. 278; Bacchi and Tumidei 1998, p. 142; Tomaso Montanari in Pinelli, ed. 2000, Notes vol., p. 621; Harris 2001, p. 123, fig. 9

EXHIBITIONS: Stockholm 1966, no. 1138; Budapest 1969, no. 10; Princeton and other cities 1981– 82, nos. 38–39

Fort Worth only

Figs. 301 and 302

D.30. Gian Lorenzo Bernini

Study for Saint Augustine,
ca. 1658
Black chalk with white
heightening on formerly gray
paper, 16% x 10% in.
(42.2 x 25.9 cm)
Museum der Bildenden Künste,
Leipzig (NI.7894)

Inscribed in ink at upper right: A.S. Pietro; at lower right:

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712–14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: Voss 1922, p. 28 n. 1, fig. 15; Brauer and Wittkower 1931, vol. 1, pp. 9 n. 4, 107, vol. 2, pl. 77; Grassi 1944, p. 9, pl. 20; Kauffmann 1970, p. 267, fig. 141c; Harris 1977, p. xxi, no. and pl. 73; Martinelli 1981, n.p., no. and pl. 32; Mehnert 1981, p. 31, no. 41; Mehnert 1982, p. 47, no. and pl. 17; Wittkower et al. 1997, p. 278; Bacchi and Tumidei 1998, pp. 44, 142; Tomaso Montanari in Pinelli, ed. 2000, Notes vol., p. 621; Harris 2001, p. 123, fig. 10

EXHIBITIONS: Stockholm 1966, no. 1138; Princeton and other cities 1981–82, no. 40

New York only

Fig. 69

D.31. Workshop of Gian

Tomb of Alexander VII in Saint Peter's Basilica, probably ca. 1656-58 Pen and bister wash over black chalk, $17\% \times 12\%$ in. $(44 \times 30.7 \text{ cm})$ The Royal Collection, Windsor Castle (RL 5603)

PROVENANCE: Cardinal Francesco Albani, Rome (1721–1762; purchased in Rome by John Adam for King George III in 1762)

LITERATURE: Voss 1914–15, pl. 160; Brauer and Wittkower 1931, vol. 1, p. 168, vol. 2, pl. 129b; Blunt and Cooke 1960, p. 22, no. 22; Kauffmann 1970, pp. 314, pl. 192; Fehl 1984, pp. 115-18; Bernstock 1986, pp. 174, 366, fig. 9; Montagu 1989, p. 110; Koortbojian 1991, pp. 269-70; Zollikofer 1994, pp. 12, 29, fig. 19; Avery 1997, pp. 133-34, fig. 178; Rice, L. 1997, p. 132; Wittkower et al. 1997, p. 296; Angelini and Montanari 1998, pp. 193-95, fig. 198; Bacchi and Tumidei 1998, pp. 60, 62, 178; Tomaso Montanari in Pinelli, ed. 2000, Notes vol., p. 596

EXHIBITIONS: London 1938, no. 422; Madrid and Aranjuez 2003–4, no. 2.15

Fig. 323

D.32. Gian Lorenzo Bernini

Study for Saint Jerome (recto); Drapery Studies (verso), ca. 1661 Pen and ink (recto); red chalk (verso), 7% x 5% in. (18.6 x 12.9 cm) Museum der Bildenden Künste, Leipzig (NI.7861r-v)

Inscribed in ink at bottom center by a later hand: *Siena*

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712–14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: Weisbach 1921, p. 140; Brauer and Wittkower 1931, vol. 1, pp. 61–62, 64, vol. 2, pl. 50a; Welcker 1957, pp. 231–32; Kuhn 1966, pp. 11, 26, 32, 78, 79, 128; Kauffmann 1970, pp. 213, 235–37, fig. 128a; Harris 1977, p. xxii, no. and pl. 78; Mehnert 1981, p. 40, no. 63; Mehnert

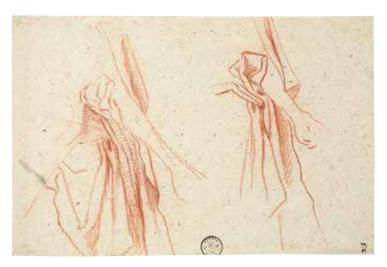


Fig. 430. Two Studies for the Drapery of Saint Longinus. Cat. D.11

1982, pp. 46–47, no. and pl. 15; Angelini and Montanari 1998, p. 167

EXHIBITIONS: Princeton and other cities 1981–82, no. 59

New York only

Fig. 44

D.33. Gian Lorenzo Bernini Study for Angels and Clouds in Glory (recto); Study for a Frame with Acanthus Motif (verso), ca. 1663 Black chalk, 11% x 8% in. (30.2 x 22.7 cm) Museum der Bildenden Künste, Leipzig (NI.7900r-v)

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712–14; transferred to Museum der Bildenden Künste, Leipzig, in 1953)

LITERATURE: Fischer 1928, p. 26; Brauer and Wittkower 1931, vol. 1, pp. 95 n. 1, 109, vol. 2, pl. 80; Grassi 1944, p. 9, pl. 22; Wittkower 1966, p. 235; Harris 1977, p. xxi, no. and pl. 75; Mehnert 1981, p. 33, no. 44; Mehnert 1982, pp. 47–48, no. and pl. 19; Bacchi and Tumidei 1998, p. 142; Tomaso Montanari in Pinelli, ed. 2000, Notes vol., p. 621

EXHIBITIONS: Princeton and other cities 1981–82, no. 41

Fort Worth only

Fig. 321

D.34. **Gian Lorenzo Bernini** Study for the Head of Constantine, ca. 1662

Constantine, ca. 1662
Black chalk, 9% x 7% in.
(25.1 x 18.6 cm)
Istituto Nazionale per la Grafica,
Rome (FC 127503)

PROVENANCE: Biblioteca Corsiniana, Rome

LITERATURE: Brauer and Wittkower 1931, vol. 1, p. 104, vol. 2, pl. 71a; Grassi 1944, p. 8; Rossacher 1967, p. 10, fig. 4; Kauffmann 1970, p. 284; Martinelli 1981, n.p., no. and pl. 30; Marder 1997, p. 171, fig. 160; Bacchi and Tumidei 1998, p. 158; Chiara Savettieri in Pinelli, ed. 2000, Notes vol., p. 473

New York only

Fig. 273

D.35. Gian Lorenzo Bernini and assistants

Design for the Altar of the Blessed Sacrament, ca. 1658 or ca. 1672 Pen and brown ink with wash, 14% x 10¼ in. (38 x 26 cm)
The State Hermitage Museum, Saint Petersburg (126)

PROVENANCE: P. J. Mariette (Lugt 1852); Charles-Philippe Campion de Tersan (Lugt 1038); M. G. T. de Villenave (Lugt 2598); Alliance des Artistes, Paris; A. A. Polovzova and the Stieglitz College Library in Saint Petersburg (Petrograd); transferred to the State Hermitage Museum (1923)



Fig. 431. Two Studies for Daniel. Cat. D.25

LITERATURE: Basan 1775, no. 203; Wittkower 1955, p. 239, no. 78, fig. 93; Dobroklonskii 1961, no. 126, pl. 11; Grassi 1962. pp. 244-45; Fagiolo dell'Arco and Fagiolo 1967, pp. 81, 229, and n.p., no. 169; Harris 1977, pp. vi, xxiii-xxiv, no. and pl. 92; Martinelli 1981, p. 18, and n.p., no. and pl. 46; Linda Klinger in Princeton and other cities 1981-82, pp. 317-18, figs. 113, 319, 321; Grigorieva and Kantor-Gukovskja 1983, n.p., no. and pl. 46; Scribner 1991, pp. 46, 122, fig. 68; Falaschi 1996, pp. 75, 101-2, fig. 93; Bacchi and Tumidei 1998, pp. 155-56, 168; Evonne Levy in Pinelli, ed. 2000. Notes vol., p. 698; Lavin, I. 2005, p. 211, fig. 256; Ackermann 2007, p. 209

EXHIBITIONS: Leningrad 1959, p. 15

New York only

Fig. 32

D.36. Gian Lorenzo Bernini

Study for a Kneeling Angel, ca. 1658 or ca. 1672 Black chalk and brown wash, oval cut and made up at left, 5½ x 6 in. (14.1 x 15.2 cm) The Royal Collection, Windsor Castle (RL 5561)

PROVENANCE: Cardinal Francesco Albani, Rome (1721–1762; purchased in Rome by John Adam for King George III in 1762)

LITERATURE: Brauer and Wittkower 1931, vol. 1, pp. 1, 10, 173, vol. 2, pl. 132b; Blunt and Cooke 1960, p. 22, no. 29; Linda Klinger in Princeton and other cities 1981–82, pp. 318–19, fig. 114; Falaschi 1996, pp. 71, 78, 101, 114, fig. 11; Montagu 1996, p. 63; Avery 1997, p. 117, fig. 145; Wittkower et al. 1997, p. 297; Bacchi and Tumidei 1998, p. 168; Evonne Levy in Pinelli, ed. 2000, Notes vol., p. 698

EXHIBITIONS: London 1950–51, no. 393; Edinburgh 1998, no. 75

Fig. 34

D.37. Gian Lorenzo Bernini

Study for a Kneeling Angel, ca. 1672 Pen and brown wash on black chalk, on discolored white paper, $6 \times 5\%$ in. (15.3 \times 13.6 cm) The Royal Collection, Windsor Castle (RL 5562) PROVENANCE: Cardinal Francesco Albani, Rome (1721–1762; purchased in Rome by John Adam for King George III in 1762)

LITERATURE: Brauer and Wittkower 1931, vol. 1, pp. 1, 10, 175, vol. 2, pl. 136a; Blunt and Cooke 1960, p. 22, no. 30, fig. 15; Linda Klinger in Princeton and other cities 1981–82, pp. 320, 323 n. 2, 324 n. 19, fig. 117; Falaschi 1996, pp. 71, 79, 101, 115, fig. 15; Montagu 1996, p. 64; Wittkower et al. 1997, p. 297; Bacchi and Tumidei 1998, p. 168; Evonne Levy in Pinelli, ed. 2000, Notes vol., p. 698

EXHIBITIONS: Rome 1961, no. 2; Edinburgh 1998, no. 76

Fig. 35

D.38. Gian Lorenzo Bernini

Study for a Kneeling Angel, ca. 1672 Black chalk and brown wash, 51% × 63% in. (14.4 × 16.8 cm) The Royal Collection, Windsor Castle (RL 5560)

PROVENANCE: Cardinal Francesco Albani, Rome (1721–1762; purchased in Rome by John Adam for King George III in 1762)

LITERATURE: Brauer and Wittkower 1931, vol. 1, pp. 1, 10, 174–75, vol. 2, pl. 136b; Blunt 1960, p. 22, no. 28; Harris 1977, p. xxiv, no. and pl. 93; Linda Klinger in Princeton and other cities 1981–82, p. 319, fig. 115; Falaschi 1996, pp. 71, 101, 115, fig. 12; Wittkower et al. 1997, p. 297; Bacchi and Tumidei 1998, p. 168; Evonne Levy in Pinelli, ed. 2000, Notes vol., p. 698; Lavin, l. 2005, p. 215, fig. 259

EXHIBITIONS: London 1925, no. 32; London 1950–51, no. 390; Edinburgh 1998, no. 74

Fig. 36

D.39. Gian Lorenzo Bernini

Two Studies for the Angel with the Superscription, ca. 1667–68 Pencil, 6% x 8% in. (17.4 x 21.2 cm) Istituto Nazionale per la Grafica, Rome (FC 127500)

PROVENANCE: Biblioteca Corsiniana, Rome

LITERATURE: Fraschetti 1900, pp. 369, 374; Reymond 1912, p. 101; Brauer and Wittkower 1931, vol. 1, p. 161, vol. 2, pl. 120b; Grassi 1944, p. 8, pl. 25; Kruft and Larsson 1966, p. 147; Wittkower 1966, p. 250; Kauffmann 1970, p. 302, fig. 184; Weil, M. 1974, p. 48, fig. 36; Wittkower 1975a, p. 112, fig. 171; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, pp. 58, 60; Tratz 1988, pp. 450–51; Scribner 1991, p. 112; Avery 1997, p. 165, fig. 217; Weil, M. 1999, p. 148, fig. 160; Bruce Boucher in Houston and London 2001–2, p. 194, no. 43

EXHIBITIONS: Rome 1999b, no. 97

New York only

Fig. 338

D.40. Gian Lorenzo Bernini

Study for the Head of an Angel, ca. 1668
Red chalk, $7\% \times 5\%$ in.
(19.6 \times 14.9 cm)
Istituto Nazionale per la Grafica,
Rome (FC 127499)

PROVENANCE: Biblioteca Corsiniana, Rome

LITERATURE: Fraschetti 1900, pp. 365, 374; Reymond 1912, pp. 102–3; Brauer and Wittkower 1931, vol. 1, p. 161 n. 5; Grassi 1944, p. 8, pl. 26; Kauffmann 1970, p. 303 n. 65; Weil, M. 1974, p. 48, fig. 42; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, pp. 69–70; Tratz 1988, pp. 450–51; Wittkower et al. 1997, p. 289

EXHIBITIONS: Rome 1999b, no. 95

New York only

Fig. 47

D.41. Gian Lorenzo Bernini and assistant

Study for the Equestrian Statue of Constantine, ca. 1669–70 Black chalk with some red chalk accents and white heightening on gray paper, 14 × 8¾ in. (35.5 × 22.3 cm) Museum der Bildenden Künste, Leipzig (NI.7916)

Inscribed in ink at bottom left, by a later hand: Ber.no

PROVENANCE: Possibly Queen Christina of Sweden, Rome; Prior Francesco Antonio Rensi, Rome; Stadtbibliothek, Leipzig (by 1712–14; transferred to Museum der Bildenden Künste, Leipzig, in 1953) LITERATURE: Brauer and Wittkower 1931, vol. 1, p. 104, vol. 2, pl. 72; Rossacher 1967, p. 8, fig. 12; Kauffmann 1970, pp. 286–87, fig. 151; Harris 1977, p. xxiii, no. and pl. 90; Martinelli 1981, n. p., no. 29; Mehnert 1981, p. 47, no. 77; Mehnert 1982, p. 49, no. and pl. 26; Marder 1997, pp. 175–76, fig. 161; Bacchi and Tumidei 1998, p. 158; Chiara Savettieri in Pinelli, ed. 2000, Notes vol., p. 473

EXHIBITIONS: Stockholm 1966, no. 1141; Princeton and other cities 1981–82, no. 27

Fort Worth only

Fig. 30

Notes to the Essays

C. D. Dickerson III, "Bernini at the Beginning"

- 1 For Baldinucci's description of the sculpture's original reception, see Baldinucci 1966 ed., pp. 13–14. For an example of the early praise, see Leporeo 1628, n.p.; and Bruni 1633, p. 34. For the second reference, I thank Jonathan Unglaub, who is preparing an article on the poet Antonio Bruni and his literary commemoration of Bernini's sculptures
- 2 The Pluto and Proserpina spent only a short time at the Villa Borghese before being dispatched to the Villa Ludovisi as a gift from Scipione Borghese to Ludovico Ludovisi. The statue returned to the Villa Borghese only in 1908. See Winner 1998, p. 187.
- **3** Vasari/Milanesi 1906 ed., vol. 1, p. 152.
- 4 Ibid., pp. 152–55. See also Vasari/Milanesi 1906 ed., vol. 7, p. 128 (regarding Pierino da Vinci's practices as a modeler). Benvenuto Cellini makes a similar point; see Cellini 1967 ed., pp. 135–36.
- 5 The bibliography on models in the Renaissance is vast.
 Useful studies include Lavin,
 I. 1967; Wittkower 1977, pp. 127–65; Weil, P. 1978; Myssok 1999;
 O'Grody 1999b, pp. 1–61; and
 Boucher 2001–2b.
- **6** Hibbard 1965, p. 23; Wittkower et al. 1997, p. 13; and Avery 1997, p. 17.
- 7 Baglione 1642, p. 305. Unless otherwise noted, this and all other translations in this essay are my own.
- **8** As prescribed by Cellini (1967 ed., p. 136).
- 9 For Pietro's beginnings, see Vannucchi 1976, pp. 26–31, 43–47; Giuliani 1989; and Kessler 2005, p. 17.
- 10 Baglione 1642, p. 304: "alcuni principi del disegno." On Sirigatti, see Borghini, R. 2007 ed., pp. 54–55; Baldinucci 1845–47 ed., vol. 2, p. 560; Pope-Hennessy 1965; Frosini

- 1979; Pegazzano 1998, pp. 145, 148, 155, 157, 162–63; and Kessler 2005, pp. 17–19.
- 11 For a recent and excellent discussion of *Il Riposo*, see the introduction to Borghini, R. 2007 ed. by Lloyd H. Ellis Jr., pp. 1–39.
- 12 Borghini, R. 2007 ed., pp. 108–11.
- 13 Baglione 1642, p. 304.
- 14 According to Baglione (ibid.), Pietro went to Caprarola with Antonio Tempesta, who is known to have directed the fresco decorations at the villa between approximately 1579 and 1583. On the subject of Pietro at Caprarola, see Partridge 1999 and Montanari 2007–8, p. 22.
- 15 Even as late as 1627 the stereotype still held, as evident from comments made by Vincenzo Giustiniani in his treatise on sculpture, "Discorso sopra la scultura." See Giustiniani 1981 ed., pp. 70–71. For a discussion of the broader issue, see Lukehart 2008, p. 201; and Preimesberger 2001b.
- **16** Baglione 1642, p. 305: "rivolgendo tutto l'animo alla scoltura."
- 17 Ibid.: "buona prattica in maneggiare il marmo."
- **18** The best sources for the early history of the Accademia di San Luca are Grossi and Trani 2009 and Lukehart 2009.
- 19 On the influence of the guilds in Rome, see Lukehart 2008, pp. 205–7; Lukehart 2009, pp. 161–65; and Anderson 2009. On sculptors in Rome, see Lukehart 2008, pp. 200–207.
- 20 This started to change only during the late 1610s, with Scipione Borghese. The Ludovisi family was also progressive in this regard. See Lukehart 2008, pp. 202, 215
- 21 For the period coinciding with Gian Lorenzo Bernini's youth, knowledge of the restoration industry is sketchy. One gauge is the size of some of the more prominent antiquity collections assembled during the decades soon after his birth. In 1610 the Borghese collection totaled over 200 pieces (Kalveram 1995, pp. 143–54); in 1614 the Mattei collection totaled over 300 pieces
- (Lanciani 1989-2002, vol. 3, pp. 92-106); and in 1623 the Ludovisi collection totaled approximately 170 pieces, with another 300 or so added by 1633 (Palma 1983, pp. 40, 42). Another measure is the number of collectors with restoration facilities on their own properties. The documented examples known to me are Ferdinando de' Medici at the Villa Medici (Boyer 1929, p. 269); Odoardo Farnese at the Palazzo Farnese (Uginet 1980, p. 46 n. 129); Flavio Chigi at the Palazzo Chigi at Santi Apostoli (Sparti 1998, p. 67); and Francesco Maria Del Monte at his casino on the via Ripetta (Waźbiński 1994, vol. 2, pp. 465-67). How restoration studios were organized in terms of personnel has not been systematically studied, but it is clear that the use of assistants was widespread. See Montagu 1989, p. 151, and note 22 below. 22 On the creative side of restoration, the fundamental study remains Montagu 1989, pp. 151-72. See also Sénéchal 1988; Sparti 1998, pp. 60-68; and Lukehart 2008, p. 202. For Gian Lorenzo Bernini as restorer, see Montagu 1989, pp. 158-61. A telling indication of the kind of restoration projects deemed suitable for young restorers is found in a letter of 1651 from Monanno Monanni, a Medici agent in Rome, to Leopoldo de' Medici. It discusses a particular ancient head that, according to the dealer Leonardo Agostini, should be restored by a "giovane" since the work was so straightforward. See Sparti 1998, p. 62.
- 23 However, there is abundant evidence, stretching back to the early sixteenth century, that models were regularly employed for complex restorations; see Vasari/Milanesi 1906 ed., vol. 7, p. 489. Still, that practice seems to have been limited to the more accomplished sculptors, and there are even documented cases of restorations that were deemed too complex for the chosen restorer, necessitating the hiring of a painter or sculptor to advise on the design. See Sparti 1998, p. 62. The one type of model that young restorers might have learned

- to make is full-scale terracruda models of the parts they were trying to replace. On that technique, which is described by Orfeo Boselli, see Weil, P. 1967, pp. 93–94.
- 24 The first sculptor to be elected principe was Flaminio Vacca in 1599. See Missirini 1823, p. 73. It is sometimes reported that Pietro Bernini served as principe after his move back to Rome from Naples; see Fraschetti 1900, p. 7. It is more likely that he served a stint as a professor; see Kessler 2005, p. 411. On the original teaching goals of the Accademia, see Roccasecca 2009. If the Academy had been effective in teaching artists, we might expect to find more drawings after plaster casts or live models, yet very few are known, especially compared to those from Florence; see Marciari 2009 and Brooks 2009.
- 25 Of the seventeen sculptors to whom Baglione dedicates biographies in his Lives of the Artists, only Nicolas Cordier is mentioned as having attended classes at the Accademia. See Baglione 1642, p. 114; and Lukehart 2008, p. 193. It should be borne in mind, however, that Baglione uses the plural "Accademie," which could indicate that Cordier was involved not so much with the Accademia di San Luca as with the sort of informal studio, or academy, sometimes run by artists or patrons. See Passeri 1772 ed., p. 352, for an equivalent use of the term.
- 26 Baglione 1642, p. 69: "in questa Città tutti i Signori cominiciarono a restaurare molte cose antiche."
- **27** For an overview of Pietro's movements, see Kessler 2005, pp. 17–23.
- 28 Ibid., pp. 301–6, no. A17.
- 29 Ibid., p. 446, doc. 139.
- 30 Ibid., p. 449, doc. 159.
- 31 Ibid., pp. 314-17, no. A21.
- **32** Ostrow 2004, pp. 355–63.
- 33 Baldinucci 1966 ed.,
- pp. 9–10.
- 34 Only one drawing has been associated with Pietro, and it is almost certainly by someone else. See Ostrow 2004, pp. 356–57; and Kessler 2005, pp. 409–10, no. E13.

- 35 Among the handful of models that could be added to the list, one is actually a bronze, the Charity of ca. 1600 by Nicolas Cordier in the Victoria and Albert Museum, London, which is thought to be a unique cast of a lost preparatory model for the corresponding figure in the Aldobrandini Chapel in Santa Maria sopra Minerva, Rome. See Pressouvre 1984, vol. 2. p. 399. For arguments that it may not relate to a preparatory model, see Dickerson 2006, pp. 65-66. Four additional candidates are known to me: Saint Matthew and an Angel (Giometti 2011, pp. 37-38) and a bust of Seneca (Giometti 2011, pp. 38-39), both in the Museo Nazionale del Palazzo di Venezia, Rome; and two standing Saints in the collection of Valentino Martinelli in Perugia (Mancini, F., ed. 2002, pp. 69-70).
- 36 The key bibliography for Maderno's terracottas comprises Schlegel 1978, pp. 1–2; Androsov 1991; Rome and Venice 1991-92, pp. 100-105; Bacchi and Zanuso 1996, p. 817; Chicago, Philadelphia, and Washington, D.C. 1998-99, pp. 44-49, nos. 1-3; Dickerson 2006, pp. 409-15 (with complete bibliography and list of bronze copies).

37 Dickerson 2006, pp. 283-96.

- 38 Camillo Mariani is likely to have been the next best, if not as good as or better than Maderno, but he died in 1611. 39 For Pietro's activities in Santa Maria Maggiore, see Kessler 2005, pp. 314-19, 322-25, nos. A21, A22, and A24. Over basically the same years, Maderno can be connected with five sculptures for the Pauline Chapel there: the relief Liberius Tracing the Perimeter of Santa Maria Maggiore in the Snow; the relief Rudolf II of Hungary Attacking the Turks; four pairs of angels decorating the ceiling spandrels; and Saint Ephrem and Saint Matthias on the facade. See Ferrari and Papaldo 1999, pp. 245, 251, 255-56.
- **40** Kessler 2005, pp. 442–43, doc. 119.
- 41 Pollak 1928-31, vol. 2, p. 333.
- 42 Lorizzo 2003, p. 360.

- 43 For a discussion of the Saint Cecilia in relation to Maderno's talents as a modeler, see Dickerson 2008, ill. as fig. 1.
- 44 Lavin, I. 1968b, pp. 228-29; Kessler 2005, pp. 351-53, no. C1.
- 45 For a discussion of the inherent distortions, see Holbrook 1911, pp. 44-45. The conversion of death masks (or life masks) into convincing portraits for display is described by Vasari, who suggests the practice had become widespread in Italy by the late fifteenth century. See Vasari/Milanesi 1906

ed., vol. 3, pp. 372-73.

- 46 Lavin, I. 1968b, pp. 223-29. Among those accepting Bernini's authorship are: Brandi 1969, pp. 11-15; Białostocki 1981, p. 6; Androsov 1989, p. 68; Scribner 1991, p. 10; Preimesberger and Mezzatesta 1996, p. 829; Avery 1997, p. 35; Dombrowski 1997, p. 19; Marder 1998, p. 14; Aidan Weston-Lewis in Edinburgh 1998, p. 67; Bacchi 1999, pp. 66, 69-70; and Montanari 2005, pp. 273-74, 277. Among those judging the bust to be by Pietro or a collaboration between father and son are: D'Onofrio 1967b, p. 6; D'Agostino 1997-98, p. 168; Kessler 2005, pp. 319-22, no. A23; and Kessler 2011.
- 47 Lavin, I. 1968b, p. 244. 48 Ibid., p. 247: "due teste di creta fatte di mano del
- 49 The other bust was of Antonio Ceparelli. See ibid., pp. 241-42.
- 50 That Louis XIV granted Bernini seventeen sittings should be considered exceptional. The four granted him by Alexander VII are probably more typical. See Chantelou 1985 ed., p. 38 n. 116.
- 51 Ibid., pp. 40-41, 43-44, 48, 59-60. See also Wittkower 1951a.
- 52 Consider the story of Bernini as a child going before Pope Paul V and producing an impressive drawing of a saint's head. See Baldinucci 1966 ed., p. 9; Chantelou 1985 ed., p. 102; and Bernini 2011 ed., p. 98. For some of his earliest surviving portrait drawings, and on the question of their dates, see Harris 2007-8, pp. 174-75.
- 53 For an excerpt from Lelio Guidiccioni's letter to Bernini,

- June 4, 1633, see Tomaso Montanari's essay in this volume. The full text of this letter has been published in: D'Onofrio 1966; D'Onofrio 1967b, pp. 381-88; and Zitzlsperger 2002, pp. 179-83. 54 Benocci and Petrucci 2006,
- pp. 56-79.
- 55 Ibid., p. 77, doc. 2.
- 56 Ibid., doc. 4: "con ogni
- esquisita diligenza." 57 Dickerson 2006, pp. 342-
- 53. Having reexamined the four models in preparation for "Bernini: Sculpting in Clay," I stand by my original conclusions. The models in question are, from the Hermitage, the David (fig. 71), the Pluto, and the Neptune, and, from the Cleveland Museum of Art, the Head of Proserpina (fig. 70). Anthony Sigel has also now examined all four and agrees that they are inconsistent with Bernini's modeling techniques. For concurring opinions, see Sebastian Schütze in Rome 1998, p. 179 nn. 50, 53; and Coliva 2002, pp. 13-17. One terracotta that remains to be analyzed is a head related to the Proserpina. See Herrmann Fiore, ed. 1997, pp. 91-93. To judge by the one published photograph, it looks as though it came from a mold.
- 58 Coliva, ed. 2002, pp. 153-58, 161-62 (for the Pluto and Proserpina); 171-78, 182-83 (for the David); and 196-202, 206-7 (for the Apollo and Daphne).
- 59 See note 36 above.
- 60 For the idea that Bernini knew Giambologna's models and was inspired by them, see Lavin, I. 1967, p. 102. 61 The most likely place in
- Rome for Bernini to have encountered a model by Giambologna is the Villa Medici, but only one is recorded in any of the known inventories of the collection there. It was in wax and seems to have been a reduction of the ancient statue known as The Wrestlers-thus not a bozzetto. See Chastel and Morel 1989-2009, vol. 4 (2009), p. 112.
- 62 Lavin, I. 1978, p. 404. 63 On the Saint Lawrence, which is widely dated to 1617, see Schütze in Rome 1998,

pp. 62-77.

- 64 Avery 1997, p. 48; and Winner 1998, p. 191. For the view that the bronze was cast from a model by Giambologna, see Fock 1983.
- 65 For a summary of the critical fortunes of the Pitti Hercules and Antaeus, see Haskell and Penny 1981, pp. 232-34.
- 66 This bronze is usually attributed to Pietro da Barga. See De Nicola 1916; Lavin, I. 1967, p. 102 n. 40; Kauffmann 1970, p. 44; Preimesberger 1989b, p. 121; and Schütze in Rome 1998, p. 193. For the plausible suggestion that it is instead by someone in the orbit of Vincenzo de' Rossi. see Boström 1990.
- 67 Remini could well have known Giambologna's composition from a bronze reduction or the print by Andrea Andreani.
- 68 Winner 1998, pp. 191-203.
- 69 Bernini 2011 ed., pp. 102-3. See also Damm 2006,
- pp. 230-32.
- 70 For the Damned Soul, see Schütze in Rome 1998, p. 164; and Damm 2006, pp. 231-32. For the David, see Baldinucci 1966 ed., p. 13.
- 71 A drawing from ca. 1625 in the Ashmolean Museum of Art and Archaeology, Oxford (cat. D.2), is often considered Bernini's earliest surviving self-portrait drawing. See Julian Brooks in Los Angeles and Ottawa 2008-9, p. 159. For an earlier candidate, in the Museo Horne, Florence, see Harris 2007-8, p. 177; and Harris 2011, pp. 163-66.
- 72 The Blessed Soul is usually dated to 1619. See Schütze in Rome 1998, pp. 148-69.
- 73 On the reception of the Niobe, see Haskell and Penny 1981, pp. 274-79.
- 74 The model, which came from the collection of Evan Gorga, was originally attributed to Bernini by A. E. Brinckmann (1923-24, vol. 2, pp. 48-53) and Rudolf Wittkower (1955, p. 219). In my dissertation of 2006 I also argued that the model is by Bernini. With thanks to Jennifer Montagu, I now realize that Antonio Giorgetti must be considered the more likely author. Giorgetti undoubtedly used the model in carving the kneeling angel on the right of the

balustrade in front of the Spada Chapel in San Girolamo della Carità, Rome. What complicates the attibution to Giorgetti is that he is known to have used head studies by other sculptors. See Montagu 1977, pp. 94-96. 75 That Bernini understood the novelty of his treating carving as modeling is suggested by a famous passage attributed to him by his earliest two biographers, in which Bernini boasts of being able to carve marble as though it were a pliable substance like wax or dough; Bernini 2011 ed., p. 211; and Baldinucci 1966 ed., pp. 74-75. See Tomaso Montanari's essay in this volume.

Ian Wardropper, "Sketching on Paper and in Clay"

- 1 The fundamental study of Bernini's drawings remains Heinrich Brauer and Rudolf Wittkower, Die Zeichnungen des Gianlorenzo Bernini (Brauer and Wittkower 1931). Ann Sutherland Harris, Selected Drawings of Gian Lorenzo Bernini (Harris 1977), is a useful summary. Also essential to the literature is the catalogue from an exhibition that began at the Princeton University Art Museum, Drawings by Gianlorenzo Bernini from the Museum der Bildenden Künste Leipzig, German Democratic Republic, by Irving Lavin et al. (Princeton and other cities 1981-82).
- 2 Avery 1997, p. 76.
- 3 This is pointed out by Nicola M. Courtright, in Princeton and other cities 1981–82, pp. 72–74, no. 6.
- 4 See, for example, French early seventeenth-century designs for chimneypieces in the Album Derand, Musée du Louvre, illustrated in Babelon 1965, p. 210, showing different designs axially for either side.
- 5 Princeton and other cities 1981–82, pp. 282–87, no. 81.
 6 For Hercules Bearing an Obelisk and Allegorical Figures Bearing an Obelisk hoth pen and wash over chalk and both in the Biblioteca Vaticana, Rome, see Brauer and Wittkower 1931, vol. 1, pp. 144–45, vol. 2, pls.
- **7** See ibid., vol. 1, pp. 143–45, vol. 2, pl. 109.
- 8 See Blunt and Cooke 1960, Bernini nos. 40 and 41.
- **9** Charles Avery (1997, p. 204) notes that the shell
- p. 204) notes that the shell fountain was given by Innocent X to his sister-in-law, who installed it in the gardens of the Villa Doria Pamphilj (now in the Palazzo Doria Pamphilj).
- 10 Donati 1941

176-77a.

- 11 Brauer and Wittkower 1931, vol. 2, pl. 159a.
- **12** Marder 1997, pp. 167–69,
- 13 Harris (1977, p. xxiii, no. and pl. 90) believes that Bernini did only the drapery.
- **14** Mehnert 1981, p. 64, no. 109; Princeton and other cities 1981–82, pp. 317–18, no. 89.

- 15 Linda Klinger accepts the Hermitage drawing as Bernini's (Princeton and other cities 1981–82, pp. 317–18, fig. 113). Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 169, dates it to 1658–61, citing its close stylistic relationship to the projects for the Cathedra Petri.
- **16** See Noehles 1975 for the relationship of the tabernacle to Cortona's painting. Also see Princeton and other cities 1981–82, p. 321.
- 17 Grassi 1944, p. 6, saw a "Neo-Venetian" aspect to Bernini's drawings. Linda Klinger (Princeton and other cities 1981–82, p. 58, no. 1) also discerns influence from sixteenth-century Venetian drawings.
- **18** Bernini himself cited Carracci's thoughts on drawings, as recorded in his discussions in France; see Chantelou 1985 ed., pp. 155–56. See Linda Klinger et al. in Princeton and other cities 1981–82, p. 19.
- 19 Bean and Turçic 1979,
- pp. 42–43, no. 64, fig. 64. 20 See Martinelli 1950,
- pp. 174–77. 21 Harris 1977, p. xix, no. and pl. 48.
- 22 First proposed in Brauer and Wittkower 1931, vol. 1, p. 9, vol. 2, pls. 43–46. See Harris
- 23 Wittkower 1963.
- **24** Princeton and other cities 1981–82, pp. 229, 231–32, no. 61, ill. p. 239.

1977, nos. and pls. 62-64.

- 25 Ibid., pp. 288-92, no. 82.
- 26 Weil, M. 1974, p. 41, fig. 24.
- 27 Ibid., pp. 41–45, figs. 25–32.
- **28** For a comprehensive study of these drawings, see Harris 1968.
- 29 See ibid., p. 385, nos. 4–9.
 30 A second sheet in Leipzig describes an identical view of the head but pays more attention to the cloth beneath her chin and the closing of her gown. See Princeton and other cities 1981–82, pp. 87–89, no. 10.
- 31 Steven F. Ostrow believes that the top drawing on the sheet was the first of the two; see ibid., pp. 302–3, no. 86.

Andrea Bacchi, "The Role of Terracotta Models in Bernini's Workshop"

- 1 The principal evidence for Finelli's participation is the notice in Passeri 1772 ed., p. 256. For a discussion of Finelli's early years with Bernini, see Dombrowski 1997, pp. 13–55. It also bears mentioning that Bernini's father, Pietro, was also doubtless helping him at this time, and there could have been one or two others, such as Santi Ghetti. On Ghetti, see Basili 1999.
- 2 For what follows, I am indebted to the fundamental studies of Bernini's workshop by Jennifer Montagu (1985b, 1989, and 1996) and Helga Tratz (1988).
- 3 Golzio 1935, p. 67: "Una Carità di creta cotta bozzetto del. S.r. Melchiorre." Note that the inventory also employs the terms *sbozzetto* and *sbozzo* in reference to terracotta models.
- 4 For Bernini's death inventory, see Martinelli, ed. 1996, pp. 253–67. The inventory records a "quantity of clay *modelli*" in the attic space (ibid., p. 259).
- 5 Montagu 1985a, vol. 2, p. 436, no. 161.B.1, and p. 426, nos. 147.B.1 and 148.B.1.
- 6 Giometti 2011, p. 42. Another example, also in the Museo Nazionale del Palazzo di Venezia, Rome, is a terracotta bust of Innocent X. For the opinion that the bust was more than preparatory, see Montagu 1985a, vol. 2, p. 431, no. 156. It is worth noting that Bernini also seems to have made lifesize terracotta models for some of his busts, although none survive. The 1681 inventory of his house lists at least four terracotta busts: two of Urban VIII, one of Scipione Borghese, and one of Cardinal Richelieu (see Martinelli, ed. 1996, pp. 254, 256). The first two likely functioned as models for the numerous bronze portraits Bernini made of that pope; because the portraits of Scipione and Richelieu were executed directly in marble. those terracottas must be either autograph preparatory models or replicas. None of the entries are followed by the phrase "di

- mano della bona memoria del Cavaliere" (from the hand of the late Bernini), which we find for other works that were in the house (see Bacchi and Hess 2008-9, p. 30).
- 7 Regarding Bolgi's authorship, see Ferrari and Papaldo 1999, p. 217. See also Fagiolo dell'Arco 1999, p. 25.
- 8 See note 41 below.
- 9 See p. 8 in C. D. Dickerson III's essay in this volume. The only model known today that can be attributed to Pietro Bernini is truly exceptional; it is not in clay but in marble (Pinacoteca dell'Accademia di Carrara, Bergamo). See Kessler 2005, pp. 339-40.
- 10 Montagu 1985b, p. 27.
- 11 For Ferrata's contribution, see Baldinucci 1845-47 ed., vol. 5, p. 380.
- 12 On the likelihood that politics lay behind Mochi's selection, see Boudon-Machuel 2005, p. 103.
- 13 See the dicussion by Montagu 1989, pp. 142-45.
- 14 For the gallery at the Quirinale, see Briganti 1982, pp. 107-8.
- 15 The large workshop that executed the stucco reliefs in the nave at Saint John Lateran under Algardi's direction offers a similar case study. See Montagu 1985a, vol. 2, pp. 343-44. Alluding to the fact that Algardi was supervising the work at the Lateran in the same way that Bernini was supervising the work at Santa Maria del Popolo, Virgilio Spada wrote in 1656, "Il Cav.re Algardi non vi lavorò, ma sebene i migliori giovani che fossero in Roma. come si e fatto al presente nella chiesa del Popolo." ("Although the Cavaliere Algardi was not working there, all the best voung men in Rome were, just as they were in the church of the Popolo.") See ibid., p. 344.
- 16 Ibid., pp. 434-36.
- 17 Ouinterio 1981.
- 18 Tratz 1988, p. 407.
- 19 Montagu 1985b, p. 39 n. 38.
- 20 For this, see Tomaso Montanari's essay in this volume.
- 21 Sandrart 1925 ed., p. 286: "biß in 22. alle 3. Spannen hoch von Wachs mir gezeigt." Sandrart 1683, p. 188: "viginti

- dua plasmaverat è cerâ ideas." 22 For Sandrart's questionable
- reliability, see Bacchi 2009-10,
- 23 See note 7 above.
- 24 For the payments, see Napoleone 1998. Domenico Bernini (1713, p. 83) attributes only the Saint Teresa group to his father, while Baldinucci (1948 ed., p. 178) says Bernini worked on the side reliefs and attributes to him "l'ultimo cardinale Cornaro" (the last Cornaro cardinal).
- 25 See note 11 above.
- 26 This letter, addressed to Apollonio Bassetti and dated October 13, 1674, was first noted by Edward Goldberg (1983, p. 334): "Non so chi si sia fatto scultore, che non sia stato buon modellatore et il Lalgardi, che quando venne a Roma disse il Bernini per screditarlo, quando fu costretto a dire che modellava meglio di lui, che non avrebbe più saputo fare una statua, si è pur veduto quello che ha voluto dire saper maneggiare la greta avendo fatto di quelle opere alle quali il Bernino non arriverà mai a pareggiarlo nella gloria."
- 27 For examples of these gifts, see Montagu 1985a, vol. 1, p. 129 n. 8, vol. 2, p. 311, no. 8.L.B.1, p. 366, no. 65.L.B.1, and pp. 410-11, nos. 129.L.B.1 and 130.L.B.1; Walker 1998-99, p. 19; and Wardropper 1998-99, pp. 36, 115.
- 28 Ferrari and Papaldo 1999, p. 446.
- 29 See note 8 in cat. 6.
- **30** Golzio 1935, pp. 69, 72: "un modello dell'Elefante della Minerva di creta" and "un elefante rotto di cera." The inventory of Ferrata's workshop includes various models related to the execution of marble sculpture for Bernini. See also Tratz 1988, p. 414.
- 31 Montagu 1985b, pp. 30-31, 39-40. Note the difference in the present translation.
- 32 For example, Titi 1987 ed., vol. 1, p. 77.
- 33 On the chapel, see D'Onofrio 1969, p. 149; Wittkower et al. 1997, pp. 263-65; and Bacchi and Zanuso 1996, pp. 776-77, 843-44. Martinelli's text was published in D'Onofrio 1969, p. 149:

- "Li depositi sono scoltura del medemo (Baratta) con disegno e modello di detto Bernino." ("The tombs were executed by the same [Baratta] from a drawing and modello by the aforementioned Bernini.") Martinelli likely means here a model for the tomb as a whole rather than for the single relief.
- 34 For general information about these sculptors, see their biographies in Bacchi and Zanuso 1996.
- 35 Butzek 1988.
- 36 Bernini 1713, p. 106: "fatto il Modello della Statua intera del medesimo Papa, che poi scolpì in marmo Antonio raggi detto il Lombardo."
- 37 For De Vecchi's letter, see Butzek 1980, p. 60, doc. 30.
- **38** D'Onofrio 1957, p. 212: "scolpire di marmo detta statua conforme il pensiero del Sig. Cav. Bernino."
- 39 Fraschetti 1900, p. 203: "il modello fatto da me."
- 40 Titi 1987 ed., vol. 1, p. 77.
- 41 Ibid.; Mola 1966 ed., p. 130. 42 Wittkower 1961, vol. 1,
- p. 521, doc. 24: "lo farò prima di mia mano il modello di creta di detta opera, poi assisterò continuamente a detti giovani acciò imitino detto modello, insegnandoli tutti li modi che debano tenere. . . . Poi farò la testa di S.M. tutta di mia mano, e poi anco se il S.Dio mi darà vita e forza, per il grand'amore et obligo che porto al Re di Francia, mi sforzerò di fare quello che non voglio promettere con parole ma' credere di farlo con fatti."
- 43 See Kristina Herrmann
- Fiore in Rome 1998, p. 310. 44 Getty Provenance Index, Archival Inventory I-735, item 0008: "Un modello di creta cotta indorato rappresentante il Ré di Francia á Cavallo con base di legno sotto scorniciato
- del Sig. Cavalier Bernini." 45 Pascoli 1992 ed., p. 75: "poco più su della croce,

indorato, e dicono che sia mano

vedendo Andrea, che la cattedra non era discoperta, e che il Bernini seguitava a camminare, l'arrestò, e gli disse: Questo Signor Bernini è il luogo, dove veder voglio, e dove veder si deve, la vostr'opera, se da me ne bramate il parere; perché

- questo è il punto di sua veduta."
- 46 Battaglia 1943, pp. 161-64.
- 47 As with the authors of Vatican City 1981, pp. 130-31,
- 48 Brauer and Wittkower 1931, vol. 1, p. 174: "fatto di sua mano i modelli piccoli, e grandi." Tuccio Sante Guido, who recently restored the large models, is planning a publication on how they were made.
- 49 Martinelli, ed. 1996, pp. 233-42.
- 50 Jarrard 2002, pp. 415, 417, and doc. XIII: "che fatto chiamare il Signor Cavaliere Bernini quel francese per il Modello del Palleotto, che esso ha ordinatolo di dare prima per poterlo lui vedere, e ritoccare, e poi lo farà in grande."
- 51 Borghini, G. 1984.
- 52 Montagu 1985a, vol. 2, p. 361, no. 61.B.5, and p. 153, no. 45.A.B.3.
- 53 Pollak 1928-31, vol. 2, p. 333. See also Dombrowski 1997, p. 302 n. 4.
- 54 Pollak 1928-31, vol. 2, pp. 358, 360, 362, docs. 1175, 1180, 1195: "ad Andrea Bolgi scultore per 6 giornate fatte in aiuto delli modelli sopra le colonne," "a Giuliano Finelli scultore per servitio e aiuto delle forme e modelli," and "ad Andrea Bolgi scudi 10 per aiuto delli modelli degl'Angeli."
- 55 Ibid., p. 355, doc. 1154. See also Boudon-Machuel 2005, pp. 255-56.
- 56 Bellori 1976 ed., p. 290: "Pareva bene che tutta l'industria di questo scultore riuscisse solamente ne' putti, adoperato ancora a modellarne alcuni per le colonne di bronzo sopra l'altare de gli Apostoli in Vaticano." ("It truly seemed as though all the skill of this sculptor would result only in putti; for he was also engaged to model some of the bronze columns over the altar for the Apostles in the Vatican.") For the translation, see Bellori 2005 ed., p. 228. Passeri 1772 ed., p. 85: "Facendo istanza il Papa, che questo grand'uomo [Duquesnoy] fosse impiegato in qualche occasione, per li suoi stimuli solleciti, ed incessanti gli furono dati da fare alcuni modelli di putti di non molta grandezza, che dovevano

gettarsi di metallo, per servire d'ornamento alle Quattro colonne del Ciborio di bronzo che nella gran Basilica di S. Pietro è sotto alla circonferenza della gran Cupola." ("With the Pope insisting that this great man [Du Quesnoy] be employed in some capacity, and following his frequent requests, he was given the task of making some models of small putti, to be cast in metal, to decorate the four columns of the bronze ciborium under the great dome in Saint Peter's Basilica.")

- 57 Pollak 1928-31, vol. 2., pp. 345-46, doc. 1132: "il disegno, e modello piccolo di dette colonne . . . i modelli grandi di dette colonne grandi." "rinettato e messo insieme . . . modelli di cera, riducendoli à modelli perfetti per poterli gettar di metallo."
- 58 Ibid.: "In fare detti modelli . . . e gettar le dette colonne il Bernino hà lavorato continuamente di sua mano tre anni."
- 59 Montagu 1996, p. 66.
- 60 Tratz 1988, p. 437.
- Raggio 2008.
- Ibid., p. 349.
- 63 Rome 2006, p. 174.
- 64 Pollak 1928-31, vol. 2,
- pp. 479-80, docs. 1894-95.
- 65 Cicognara 1813-18, vol. 3, p. 303.

Tomaso Montanari, "Creating an Eye for Models"

1 Montesquieu 1949-51 ed., vol. 1, pp. 710-12: "Le Bernin. m'a dit monsieur Adam, est admirable pour la machine: c'est ce qu'on appelle en peinture ordonnance. Comme il n'a pas la correction du dessin, et que cette correction n'est pas si nécessaire dans une grande machine que dans une seule statue, on ne voit que des grands idées, et son défaut devient petit. Au contraire l'Algarde et le Flamand sont corrects dans le dessin. Le grand art du Bernin c'est de savoir tailler le marbre: il semble qu'il en ait fait ce qu'il a voulu. Nous avons été voir à Sainte-Bibiane, monsieur Adam et moi, une statue de la sainte vierge où, avec un effort admirable, le Bernin a fait paraître et a distingué une étoffe de laine avec de grand plis pour le manteau, une espèce de camisole de soie, qui va jusques aux hanches dessous et la chemise, encore dessous. Le manteau a de grand plis et paraît de laine. La chemisette a des petits plis, et est lisse et paraît de soie, aussi bien que la doublure du manteau. La chemise est encore marquée par des plis, qui ne sont ni si grands que les premiers, ni si petits que les seconds et, d'ailleurs, étant de linge elle n'a point de poli. Il a mis un très grand nombre de plis à tous ces draperies et n'a pas laissé. par son art, de faire paraître le nu; en sorte qu'avec beaucoup il fait beaucoup, au lieu que le Flamand et l'Algarde, avec peu de plis, font de même paraître le nu. L'art du Bernin vient de sa science à tailler le marbre qui fait que, malgré la quantité de plis et de matière, il se sauve; d'autant que le marbre étant transparent, il met des yeux et des trous qui font un bon effet. Cela fait que ses modèles ne sont point recherchés dans les pays étrangers: car, comme la terre n'est pas transparente comme le marbre, il paraît du noir dans ses trous et ses veux: ce qui les rend rudes: et la confusion que cela sent la petite manière: outre que, n'étant pas corrects, le défaut saute aux

yeux. Au lieu que les dessins de l'Algarde sont recherchés. Le Bernin n'est donc bien connu qu'à Rome." This passage has been included in the recent critical literature on Bernini (Garms 2002, pp. 133, 139, 144; Boudon 2002, pp. 334-45; and Bacchi and Hess 2008-9, p. 3), but it has never been discussed in relation to the question of how models were perceived.

- 2 On the collecting of models in seventeenth-century Rome. see Raggio 1983, Di Gioia 1986a, Montagu 1986, Walker 1998-99, Barberini 2001-2, and Montagu 2008.
- 3 One example is Du Quesnoy's model for the figure of Saint Andrew, mentioned in Bellori 2005 ed., p. 229. Walker's statement (1998-99, p. 18) that Bellori's Nota delli musei (1664) mentions two collections of models is the result of a mistaken interpretation of n. 51 in Raggio 1983. In fact, the guidebook contains no reference to clay models; the note about Algardi's small sculpture in the Franzoni collection refers to works in metal.
- 4 Bellori 2005 ed., p. 296.
- 5 For some of the more important inventories listing models, see Raggio 1983, Walker 1998-99, Montagu 2008, and Villani 2008
- 6 For Adam's collection of models, see Souchal 1973, pp. 188-90.
- 7 For Clement XI's Museum of Models, see Pampalone 2003 and Raggio 2008 (which ignores Pampalone's essay).
- 8 See especially Walker 1998-
- 99, pp. 19, 25-29, 114-15. 9 According to Chantelou, June 10 (2001 ed., p. 55): "Quelqu'un de chez lui avant apporté un morceau de terre à modeler, il m'a demandé s'il v avait un moyen d'en fair avoir une charretée, afin d'occuper ses gens et qu'ils ne fussent pas sans rien faire. J'ai donné ordre qu'on lui en fît venir ce qu'il ne demandait." ("One of his attendants brought him some modeling clay, and he asked me if it might not be possible to obtain

a cartload so as to keep his

people occupied, as they had

nothing to do at present. I gave

the order immediately." English

translation from Chantelou 1985 ed., p. 27.)

- 10 Cited in Kommer 1974, p. 159: "Bissogna dissegnar all'occhio, cioè imprimersi ogni cosa nella mente, fare sempre dell'inventioni, schizze, disegni de differenti pensieri, richiederne il consiglio delli valenthuomini, metterne il pensiero dell'uno appresso dell'altro in carta, giudicare, considerare gli suoi errori secondo le fabbriche degli antichi come anche delle moderne, fare modelli in terra, conservare sempre l'ingegno nelle cose al più arricchite, contemplar anche molte stampe per imprimerse nell'idea vari pensieri."
- 11 As I have also discussed in Montanari 2005, pp. 272-73.
- 12 On the question of Bernini and small bronzes, see Montanari 2004c.
- 13 See Tomaso Montanari in Bellori 2005 ed., pp. 20-22.
- 14 Bellori 2005 ed., p. 49.
- 15 For Agucchi, see Mahon 1947. For Mancini, see Mancini, G. 1956 ed. A comparison of Giustiniani's letters on painting and on sculpture (1981 ed.) illuminates the difference in the intellectual and hermeneutic method that characterized the approach to each of these arts. For the other critics cited here, one need only look at the titles of the following works: Carlo Ridolfi, Le maraviglie dell'arte, ovvero, le vite degli illustri pittori veneti e dello Stato (1648): Francesco Scannelli, II microcosmo della pittura (1657); Marco Boschini, La carta del navegar pitoresco: Dialogo . . . (1660); Carlo Cesare Malvasia, Felsina pittrice (1678); André Félibien, Entretiens sur les vies et sur les ouvrages des plus excellens peintres anciens et modernes (1666-88); and Roger de Piles, Abregé de la vie des
- 16 From Préface pour servir à l'histoire de la vie et des ouvrages du Cavalier Bernin, cited in Montanari 1999, pp. 119-20: "Ce qui m'a encore porté à entreprendre cét ouvrage c'est la pensée qu'il pourra servir à persuader nos grands seigneurs qui font tant d'honneur à la peinture, et qui n'épargnent rien pour en orner leurs cabinets

peintres (1699).

- et leurs galleries, de n'en pas moins faire à la sculpture, et qu'à l'imitation de Louis le Grand—qui n'a point voulu separer ces deux soeurs, et qui a son Lisippe comme son Apelles—ils eussent la mesme curiosité pour les bustes, les bronzes, les bas-reliefs et les statuës."
- 17 Letter from Filippo Baldinucci to Vincenzo Capponi, April 28. 1681, in Baldinucci 1974-75 ed., vol. 6, pp. 469-70: "piacendomi per ora intendere col nome di 'opere' non solo le pitture, ma anche i disegni che i pittori fanno nelle carte, e fino a' primi pensieri o schizzi che vogliamo dire."
- 18 Cited in Barocchi 1979, p. 30: "Mi è sempre parso e pare, che questo poeta [il Tasso] sia nelle sue invenzioni oltre tutti i termini gretto, povero e miserabile; e all'opposito, l'Ariosto magnifico, ricco e mirabile: e quando mi volgo a considerare i cavalieri con le loro azzioni e avvenimenti, come anche tutte l'altre favolette di questo poema, parmi giusto d'entrare in uno studietto di qualche ometto curioso, che si sia dilettato di adornarlo di cose che abbiano, o per antichità o per rarità o per altro, del pellegrino, ma che però sieno in effetto coselline, avendovi, come saria a dire, un granchio petrificato, un camaleonte secco, una mosca e un ragno in gelatina in un pezo d'ambra, alcuni di quei fantoccini di terra che dicono trovarsi ne i sepolcri antichi di Egitto, e così, in materia di pittura, qualche schizetto di Baccio Bandinelli o del Parmigiano, e simili altre cosette: ma all'incontro, quando entro nel Furioso, veggo aprirsi una guardaroba, una tribuna, una galleria regia, ornata di cento statue antiche de' più celebri scultori, con infinite storie intere, e le migliori, di pittori illustri. con un numero grande di vasi, di cristalli, d'agate, di lapislazari e d'altre gioie, e finalmente ripiena di cose rare, preziose, maravigliose, e di tutta eccellenza." Much of this passage, although not all of it, is translated in Panofsky 1954, pp. 18-19.
- 19 For inventories related to Scipione Borghese, see Minozzi 1998. For those related to Urban

- VIII's Barberini nephews, see Lavin, M. 1975. After Urban's death, one of his nephews, Cardinal Francesco Barberini, would come to own at least one model by Bernini (see cat. 6). Relative to the display of drawings, see Montanari 2007-8, pp. 75-77.
- 20 On the collecting of models by artists, see Montagu 2008. It is not at all certain that the anecdote (cited in Walker 1998-99, pp. 20, 114; and Montagu 2008, p. 282) of the servant who secretly sold "drawings and models" by Bernini refers to clay modelli. The context of the sentence (Bernini 1713, p. 161) suggests that it refers only to two-dimensional work, making a distinction between sketches and more finished drawings.
- 21 Bernini did produce (or oversee) the occasional bronze statuette. See cat. 5 and Montanari 2004c.
- 22 The manuscript version of this catalogue was published in D'Onofrio 1967b, p. 438: "Nota che non si pongono le scene, quarant'hore, fochi d'alegrezza, catafalchi, mascherate, e cose simili quali sono innumerabili. Disegni in gran quantità, la maggior parte in casa Chigi, Medici, in Francia. Quadri sopra 150, cioè teste o due figure o tre per quadri, molti de' quali sono in casa Chigi, Barberina, Bernina." For the dating and meaning of this list, see Montanari 1998a, pp. 402-4. "Forty Hours" were installations made for the observance of the vigil between Christ's death on Good Friday and the Resurrection on Easter Sunday.
- 23 See Baldinucci 1682, p. 63. See also note 39 below. 24 Cited in Martinelli, ed.
- 1996, p. 259: "[N]elli soffitti di sopra in uno vi è una quantità di modelli di creta della bona memoria del signor cavaliere."
- 25 Martinelli, ed. 1996, p. 254. 26 For the inventory of 1706, see Borsi, Acidini Luchinat, and Quinterio, eds. 1981, p. 120: "quali robbe, cioè modelli di creta col trasportali in altre stanze e per il tempo di anni 25 si sono rotti" ("thus, they were cited as 'broken' because they were 'moved to other rooms and

for twenty-five years'"). The con-

- text allows us to understand that the "other rooms" to which the models were moved were in the attic. For the inventory of 1731, see Martinelli, ed. 1996, p. 267. 27 Borsi, Acidini Luchinat, and Quinterio, eds. 1981, p. 107: "modelli di creta mezzi rotti, quali tutti per esser stati trasportati in guardaroba si sono rotti e spezzati, non vi sono più, e qualche porzione ne fu donata al signor Giulio Cartaré, allievo del signor cavaliere, per esser cose di poco rilievo."
- 28 Marchionne Gunter (2002) located and published an inventory, drawn up in 1714, of Cartari's estate (he died in 1699). This list includes many terracottas, some of them evidently by Bernini. For example (ibid., p. 221): "Due angeli di terracotta color di marmo, alti palmi due l'uno incirca, uno tiene in mano la corona di spine, l'altro il titolo della Croce." ("Two terracotta angels the color of marble, about two palmi high, one of which holds the crown of thorns and the other the inscription from the cross.") The absence of artists' names and the summary nature of most of the descriptions make it difficult to match these items to those in Cavaceppi's inventory (for which see Barberini 1994).
- 29 Pope Alexander VII's diary is eloquent on the role of Bernini's models in receiving his patrons' approval. See, for example. Krautheimer and Jones 1975, p. 207, no. 188. For further discussion, see Raggio 1983, pp. 371-72.
- 30 Bernini 1713, p. 178: "concorso non solo di tutto il fiore della nobiltà di Roma, ma di tutta l'Europa."

31 Baldinucci 1682, p. 8.

32 Cited in D'Onofrio 1967b. p. 384; and Zitzlsperger 2002, p. 181: "Io non sono mai per dimenticarmi il diletto che m'è toccato dall'intervenire sempre all'opra, vedendo ciascuna mattina Vostra Signoria con leggiadria singulare far sempre mille moti contrari: discorrer, sempre aggiornato sul conto delle cose occorrenti e con le mani andar lontanissimo

dal discorso: rannicchiarsi,

distendersi, maneggiar le dita

- sul modello con la prestezza e varietà di chi tocca un'arpa; segnar col carbone il marmo in cento luoghi, batter col marmo in cent'altri; batter, dico, in una parte e guardar nell'opposta; nell'opposta; spinger la faccia battendo innanzi, e volger la faccia guardando indietro; vincer le contrarietà, e con animo grande sopirle subito; spezzarglisi il marmo per un pelo in due pezzi quando era già il lavoro condotto"
- 33 Saviotti 1903, p. 73, citing a letter of February 24, 1635, from the abbot Giuseppe Zongo Ondedei: "due Accademie, l'una di Pittura, l'altra di Scultura, nelle quali si lavora continuamente e si vien formando la Commedia da' medesimi Accademici, e con l'occasione delle dette Arti." Ibid., pp. 72-73, citing a letter of February 14, 1635, from Zongo Ondedei: "tutta si aggira intorno alla scultura e pittura, e mentre si fanno statue e quadri vanno nascendo i discorsi e intrecciandovisi gli amori con tanta facilità e naturalezza che par che il caso li porti, e con tanta diversità d'invenzioni che l'uomo non si stanca mai." For the implications of this comedy for the figurative arts, see Montanari 2004b and Montanari 2007-8, pp. 36-51. 34 Montanari 2004b, p. 305: "In scena equitis Bernini hinc taberna pictoria, hinc statuaria
- 35 Montanari 2007-8, pp. 36-51.

fenesta humili patebant, atque

utrobique aliquid agebatur, non.

ut vulgo fit, omnia otiosa erant."

- **36** Montanari 2004b, p. 311: "Idem [Berninus] apposite expressit ruinam domus quæ aliquot oppressit. Idem appositissime cadaver unius ex iis qui ruina oppressi fuerant ut terrorem incuteret. Nec mirum: ad vivum enim expresserat cadaver unius eorum qui in officina gladiaria prope doganam paucis ante mensibus ab incumbente domo concussa oppressi fuerunt. Construxit vero cadaver ex charta pesta et inter manus ferebatur."
- 37 Sandrart 1925 ed., p. 286. 38 Laurain-Portemer 1981, p. 205 n. 2: "Altro non voglio dirle se non che, non sono molti giorni, che a fortuna andai dal

- signor cavalier Bernini, e viddi un bellissimo ritratto, a segno che io hebbi a impazzirmene. Intorno, quello di Borghese, quello del re d'Inghilterra, quello che el medesimo cavaliere fece d'una sua dama quando n'era ciecamente innamorato non sono da paragonare di gran lunga."
- 39 Borsi, Acidini Luchinat, and Quinterio, eds. 1981, pp. 108, 111.
- 40 Stone, quoted in Spiers 1918-19, pp. 170-71. On the Portrait of Thomas Baker, see Los Angeles and Ottawa 2008-9, pp. 241-42.
- 41 Wittkower 1977, pp. 232-36. 42 Baldinucci 1682, pp. 70-71:
- "Per fare il ritratto della Maestà del re di Francia, egli ne fece prima alquanti modelli, nel mettere poi mano all'opera, alla presenza del re tutti se gli tolse d'attorno, e a quel monarca che, ammirando quel fatto, gli domandò la cagione del non volersi valere delle sue fatiche, rispose che i modelli gli erano serviti per introdurre nella sua fantasia le fattezze di chi egli dovea ritrarre, ma quando le avea concepite, e dovea dar fuori il parto, non gli erano più necessari, anzi dannosi, al suo fine, che era di darlo fuori non simile ai modelli, ma al vero." ("In order to make his portrait of His Majesty the King of France, he first made several modelli, but when he began the work, in the presence of the King, he removed all of them. Admiring this fact, the King asked him why he did not wish to benefit from all his work, Bernini answered that the modelli allowed him to study the features of his sitters, but once he had understood them and had to do the work, they were no longer necessary and indeed dangerous because the result should resemble the person and not the modelli.") A close variant of this passage appears in Bernini 1713, p. 134. 43 Chantelou 2001 ed., July 29,
- p. 96; July 30, p. 98; and August 12, pp. 115-16: "Il ne s'était pas servi depuis de ses dessins, afin de ne pas faire une copie de son propre ouvrage au lieu d'un original." For the English translation, see Chantelou 1985 ed., August 12, p. 115.

- 44 For a clear example from the seventeenth century of the word modello being used to mean "drawing," see Baldinucci 1682, p. 31.
- 45 Chantelou 2001 ed., p. 56: "[Bernini] avait demandé de la terre afin de faire des ébauches de l'action qu'il pourrait donner au buste.'
- 46 Chantelou 1985 ed., June 24, p. 40; June 27, p. 43; June 30, pp. 44-45; July 1, pp. 46-49; and July 13, p. 60.
- 47 Chantelou, 1985 ed., July 1, p. 48: "M. Colbert then saw the model for the royal bust."
- 48 Mirot 1904, p. 227: "A San Germano . . . il signor cavaliere disegnò varie parti del retratto di Sua Maestà, per poterlo poi fare nel modello a Parigi."
- 49 Ibid., p. 219: "il mercoledi [June 24, Bernini] principiò il modello di creta, et ora lo sta facendo . . . il giovedì mattina venne monsù Colbert . . . e veduto il modello abbozzato disse: 'o bella cosa, o quanto è simile al re' . . . il venerdì mattina venne monsù di Lione per medesimamente visitare il signor cavaliere, e vidde il suo modello, nel quale ne ebbe gran gusto e ne restò molto soddisfatto."
- 50 For the relevant inventory, see Villani 2008, pp. 475-76.
- 51 In the case of the Charity with Four Children (cat. 1), the comparisons made by Raggio (1983) still seem decisive to me in identifying it as an autograph work by Bernini.
- 52 Ibid.
- 53 In January 2008, I assigned Rossella Robibaro a thesis paper (at the University of Rome Tor Vergata) on Cardinal Nini and the figurative arts and pointed her toward the cardinal's will. The results of this research can be found in Robibaro 2010. pp. 353-54. The inventory made after the cardinal's death records, among many other works of art: "Due modelli dorati di creta cotta. . . . Un modello di creta cotta dorata sopra d'un buffetto . . . Un San Gerolamo di creta cotta dorata. ... Un Frcole di creta cotta inargentata. Un Bacchetto di creta cotta compagno al suddetto. Una Madonna di creta cotta. Un modello di creta
- cotta rappresentante la Carità mezzo dorato. Un modello di creta cotta rappresentante Sant'Agnese. . . . Un modello di creta rappresentante la lotta de' medesimi [sic, il contesto non dà senso e si tratta forse di un errore di trascrizione]. Due medaglie di creta cotta con ritratto d'Alessandro Settimo e Clemente Decimo. Un modello di creta cotta rappresentante un ermafrodito. . . . Un modello di creta cotta rappresentante un Cupido. . . . Due modelli di creta cotta dorati, uno rappresentante il Battesimo di San Giovanni Battista, e l'altro una Vergine, con suo piedestalletto d'ebano. . . . Un modello di creta cotta dorato rappresentante due Gratie." ("Two gilded, fired clay modelli. . . . One gilded, fired clay modello on a buffet. . . One Saint Jerome in gilded, fired clay. . . . One Hercules in silvered fired clay. One infant Bacchus in fired clay and the companion to the preceding figure. One Madonna in fired clay. One fired clay and partially gilded modello of Charity. One fired clay modello representing Saint Agnes. . . . One clay modello representing the battle between the same figures [sic, this makes no sense in this context and may be due to an error in transcription]. Two fired clay medals representing Alexander VII and Clement X. One fired clay modello representing a hermaphrodite. . . . One fired clay modello representing a Cupid. . . . Two gilded, fired clay modelli, one representing the baptism of Saint John the Baptist and the other the Virgin with an ebony base. . . . One gilded, fired clay modello representing two of the Graces.") For Cardinal Nini, see also Simone 2010.
- 54 For the three drawings by Bernini, see Robibaro 2010. pp. 359, 368: "Un disegno in carta, chiaroscuro mano del cavalier Bernini con un cavallo marino e con figure acanto in piedi, mano del detto. . . . Un disegno d'accademia, mano del cavalier Bernini, con vetro. cornice negra. . . . Un disegno d'acquarella con il Tempo che scuopre la Verità, mano del cavalier Bernini con vetro, e

- cornice negra lisci." ("A chiaroscuro drawing on paper by the Cavaliere Bernini with a hippocamp and standing figures beside it, also by the same. . . . An academic drawing by the Cavaliere Bernini, in a black frame under glass. . . . A watercolor drawing with Time unveiling Truth, by Cavaliere Bernini. in a polished black frame and under glass.") For the drawing for the Trevi Fountain, see ibid., p. 357: "Un quadro dipinto con disegno della Fontana di Trevi con molte figurette cornice bianca." ("A painting with a design of the Trevi Fountain with many small figures and a white frame.") Robibaro did not understand that this was Bernini's famous and nowlost project for the fountain, for which see Tessin's report, "La invenzione che il cavalier Bernini aveva fatto sopra la Fontana di Trevi è stata donata al cardinale Nini," cited in Kommer 1974, p. 160. Robibaro does document that this drawing was purchased by Bernini's eldest son, Pier Filippo, after Nini's death (Robibaro 2010, p. 357).
- 55 Giamarria, ed. 2009, p. 297, citing the inventory of Cardinal Girolamo Farnese: "Dui modelli di creta delle statue fatte della Catedra di San Pietro fatte dal Bernini di dui Dottori uno bianco, e l'altro tinto di metallo."
- 56 For Francesco Barberini, see Lavin, M. 1975, p. 7, doc. 49. For the Marchese del Carpio, see Cacciotti 1994, p. 190: "due mascaroni di creta cotta fatti dal cavalier Bernino." See also Montanari 2003.
- 57 I have discussed the topic in other settings: Montanari 1997, Montanari 1998a, and Montanari 1998b.
- 58 On the phenomenon, see also Montanari 1998b.
- 59 Baldinucci 1682, p. 78: "che il cavalier Bernino non solo era il migliore scultore e architetto del suo secolo, ma anche (semplicissimamente parlando) il maggior uomo; perché (diceva egli) quantunque più apprezzabile cosa fusse stata l'esser un gran teologo, un gran capitano, un grande oratore, come nel secolo presente tali professioni

- siano stimate o più nobili o più necessarie, tuttavia non v'era nessun teologo che al suo tempo si fusse tanto nella sua professione avanzato quanto il Bernino nelle proprie." For the English translation, see Baldinucci 1966 ed., p. 85. 60 See Montanari 2006 (with bibliography).
- 61 Baldinucci 1682, p. 71: "nelle opere sue, grandi o piccole ch'elle si fossero cercava, per quanto era in sé, che rilucesse quella bellezza di concetto di che l'opera stessa si rendeva capace e diceva che non minore studo o applicazione egli era solito porre nel disegno d'una lampana di quello ch'e' si ponesse in una statua o in una nobilissima fabbrica." For the English translation, see Baldinucci 1966 ed., p. 78.
- 62 See Rome 1999b, pp. 302-3, no. 13.
- 63 Baldinucci 1682, p. 78: "[Rinaldo d'Este] stimò tanto un colpo della sua mano che avendolo condotto a Tivoli, acciò vedesse se era bene eseguito il disegno d'una fontana d'un suo famoso giardino, per un breve ritocco della sua mano sopra certi stucchi fecegli dono d'un anello con cinque diamanti, di valore di 400 scudi." For the English translation, see Baldinucci 1966 ed., p. 85.
- 64 Pallavicino 1644, p. 526: "Né perché la statua sia di creta e non d'oro meno in lei si scorge e s'apprezza l'arte dello scultore."
- 65 Chantelou 2001 ed., July 6, p. 71: "qu'il avait un plaisir extrême de voir ces premières productions d'esprit des grand hommes . . . et dit même que ces dessins des grand maîtres étaient, en quelque sorte, plus satisfaisants que les ouvrages qu'ils avaient depuis éxecutés dessus avec etude." For the English translation, see Chantelou 1985 ed., p. 54.
- 66 Bernini 1713, p. 149: "la difficultà di render il marmo pieghevole come la cera" and "rendere i sassi così ubbidienti alla mano come se stati fossero di pasta."
- 67 Baldinucci 1682, pp. 142-43: "quanto fusse nel Bernino l'amore ch'ei portò all'arte non è facile il raccontare: diceva che il portarsi a operare era a lui uno

- andare a deliziarsi al giardino. Fece anche sempre della medesima grande stima, di che diede aperti segni. In prova di che mi basterà dire che la prima volta che la Maestà della regina di Svezia volle farli l'onore di andare a vederlo operare nella propria casa, egli la ricevette con quell'abito medesimo grosso e rozzo col quale soleva lavorare il marmo, che per esser l'abito dell'arte stimavalo egli il più degno con che potesse ricevere quella gran signora. La quale bella finezza, essendo di subito penetrata dal sublime ingegno di quella Maestà, non solo gli accrebbe concetto dello spirito di lui, ma fece sì che ella medesima, in segno pure di stima dell'arte, volesse toccare l'abito stesso con le sue proprie mani." For the English translation, see Baldinucci 1966 ed., p. 76. For the historical significance and meaning of the passage, see Montanari 1998a, pp. 353-55.
- 68 Chantelou 2001 ed., August 13, p. 97: "La reine de Suède, touchant les finesses de cet art, en sait autant que ceux du métier." For the English translation, see Chantelou 1985 ed., pp. 118-19.
- 69 Shearman 1992, p. 227. 70 Letter from Filippo Baldinucci to Vincenzo Capponi, April 28, 1681, in Baldinucci 1974-75 ed., vol. 6, p. 460: "'Multa vident pictores in umbris et in eminentia quae nos non videmus,' confessò Cicerone medesimo, e mi sovviene in tal proposito che Nicomaco il pittore, osservando la tanto celebrata Venere di Zeusi ch'egli dipinse ai Crotoniati, sentì che un certo uomiciattolo da nulla si faceva gran meraviglia del suo stupore, ond'egli fu necessitato a rispondergli: 'Non diresti così. se tu avessi i miei occhi.' Questo antico concetto con bella grazia accomodò ad altro simil proposito il buon artefice Salvador Rosa, allora che essendogli mostrata una singular pittura da un dilettante che insiememente in estremo la lodava, egli con uno di quei soliti gesti spiritosi pien di maraviglia esclamò: 'Oh, pensa quel che tu diresti, se tu la vedessi con gli occhi di Salvador Rosa.'"

Steven F. Ostrow, "The Fire of Art"?

- 1 From the vita of Luca della Robbia, in Vasari/Milanesi 1878-85, vol. 2, p. 171: "nelle bozze molte volte, nascendo in un momento subito dal furore dell'arte, si esprima il suo concetto in pochi colpi." Unless otherwise noted, this and all other translations in this essay are my own.
- 2 Chantelou 2001 ed., July 6, p. 71: "ces premières productions d'esprit des grands hommes, que c'était là qu'on voyait la splendeur d'une idée nette, claire, et noble" and "ces dessins des grands maîtres étaient, en quelque sorte, plus satisfaisants que les ouvrages qu'ils avaient depuis exécutés dessus avec étude." I quote the passage in English from Chantelou 1985 ed., p. 54.
- 3 Winckelmann/Fuseli 1765, p. 269; Winckelmann 1776, vol. 1, p. 22, as quoted in Honour 2001-2, p. 69.

4 I omit from this discus-

- sion the brief comments on Bernini's bozzetti in early biographies of the sculptor by Filippo Baldinucci (1682) and Domenico Bernini (1713); in the diary that Paul Fréart de Chantelou kept of Bernini's trip to France in 1665 (Chantelou 1985 ed., 2001 ed.); in Joachim von Sandrart's Teutsche Academie (1675); and in the often-quoted letter to the sculptor (dated June 4, 1633) from the Tuscan-born poet and courtier Lelio Guidiccioni about his making of the bust of Scipione Borghese, On these early sources, see the essay by Tomaso Montanari in this volume. My goal in this survey of the literature is to be as comprehensive as possible, but omissions are inevitable and are solely the responsibility of this writer. Full citations for the publications are provided in the bibliography.
- 5 Bacci 1906, p. 147. The model, now in the Museo Nazionale del Bargello, Florence, was later dismissed by Wittkower (1966, p. 267) as "rather dry . . . Berninesque in conception but probably not by Bernini's hand."

- 6 Steinmann (1907, esp. pp. 45-48) argued that the first was preparatory to Truth Unveiled. Wittkower (1966, p. 219) rightly called it a later derivation. Monica Butzek (1988, p. 93) has convincingly attributed the Venus and Adonis to Giuseppe Mazzuoli.
- 7 With respect to Bernini's preparatory work, Voss (1910a) focuses on drawings, but he also devotes considerable attention to the Tritons with Dolphins in Berlin (cat. 11) and to the Rio de la Plata and Nile models in Venice (cats. 8 and 9).
- 8 Norton 1914, p. 19.
- 9 Ibid., pp. 45, 46.
- 10 Brinckmann 1923-24, vol. 1, p. 95. In a 1926 review of Brinckmann's Barock-Bozzetti, Margaret H. Longhurst praised the catalogue, especially the reproductions, but rightly criticized the English translation as being, in many cases, unintelligible. In a short article of 1926-27, Brinckmann added another bozzetto to his corpus of Bernini works: a Charity with Four Children in the Musée Granet, Aix-en-Provence, an attribution that has not been favorably received.
- 11 Mariani 1929, pp. 60, 62.
- 12 I borrow "creative intelligence" from the brief but insightful assessment of Brauer and Wittkower's study by George Bauer in his introduction to Bauer, ed. 1976, p. 22.
- 13 Lili Froelich-Bume (1937) and Wolfgang Born (1937), in their reviews of the exhibition (Vienna 1936-37), singled out Bernini's bozzetti as among the most spectacular works. Both also refer to bozzetti as "spontaneous" renderings of the artistic idea.
- 14 Opdycke 1938, p. 28. Mention should also be made of Roberto Battaglia's monographic study of 1943, La cattedra berniniana di San Pietro, in which he painstakingly reconstructed the development of Bernini's Cathedra Petri on the basis of preparatory works and archival documents. Bozzetti and modelli-several discovered by Battaglia—figure prominently in his study, along with drawings, as documenting key moments in Bernini's working process.

- 15 Lee 1951, p. 71 n. 2. The Casa Giocondi model is the wellknown bozzetto for the Four Rivers Fountain, first published in Fraschetti 1900, p. 180, which is now in a private collection in Rome
- 16 Grigaut 1953, p. 124; Grigaut 1952-53, p. 67.
- 17 Lavin, I. 1955, p. 1.
- 18 Among the approximately fifty bozzetti attributed to Bernini at the time, Lavin considered only twenty-nine to be original, authentic works by the artist. Although Lavin's corpus is still of great value, a number of works he rejected have come to be considered autograph, and a number of his attributions have been contested.
- 19 Lavin, I. 1955, p. 7.
- 20 Ibid., p. 30.
- 21 As Lee had done earlier, Lavin (ibid., p. 53 n. 64) noted the presence of fingerprints on several of the bozzetti, "suggesting the possibility of a criminological method of investigation."
- **22** Lavin (ibid., p. 36) made the rather surprising assertion that "formally at least, Bernini never contradicted himself and any study [i.e., bozzetto] which seems related to a work by Bernini, cannot be of his own creation if its basic effect is not consistent with that of the final work in question."
- 23 As will be discussed below, the authenticity of the models for the Saint Teresa in Ecstasy (cat. 17) and the Saint Bibiana now in the Hermitage is much contested.
- 24 There is now general consensus that this work is not by Bernini and is most likely a cast made from the finished marble. 25 Lavin, I. 1967, pp. 103, 104. Lavin repeated many of these
- same ideas in his article of 1978, which was clearly intended for a less-specialized audience. As in his dissertation, in this article Lavin again observed that calibrated scales, intended to facilitate enlargement, appear on the bases of several of Bernini's bozzetti, and Lavin suggests that Bernini was the first sculptor to employ such a system. The 1967 essay was republished, with a new introduction and revised notes, in 2009.
- 26 Wittkower 1977, p. 199.

- 27 Cipriani 1980. Cipriani published this work three additional times, the most extensive discussion appearing in 1987.
- 28 These four bozzetti were also exhibited in "Vatican Splendour: Masterpieces of Baroque Art" at the National Gallery of Canada, Ottawa, in 1986, and are discussed in entries by Marc Worsdale in the accompanying catalogue (Ottawa and other cities 1986-87, pp. 82-85, 90-93, nos. 17, 18, 21, 22).
- 29 As quoted from the introduction, Fort Worth 1982, n.p. The catalogue includes entries on the five terracottas in that exhibition: the Cleveland Museum of Art's Proserning (no. 1); the Detroit Institute of Arts' Cathedra Petri (no. 7); the Angel with the Crown of Thorns and Angel with the Superscription, then in the Davis collection, now in the Kimbell (nos. 8 and 9); and the Victoria and Albert Museum's Blessed Ludovica Albertoni (no. 10). 30 From her reading of inven-
- tories, Raggio determined that the Chigi collection included eight bozzetti attributed to Bernini. She also argued that the black pigment that had covered the four in the Vatican until being removed in 1981 was seventeenth century in origin.

31 In the first article, of 1984,

Di Gioia provided only a brief

- discussion of the discovery, focusing on an analysis of the bozzetto for the Saint Longinus. A longer and more probing discussion of Fontana as collector appeared in her essay (1986c) in the catalogue for the exhibition of the discovered works entitled "Archeologia nel centro storico," held at Castel Sant'Angelo in 1986 (Rome 1986). In another essay in the catalogue (1986b), Di Gioia addressed the function and technique of models in the sixteenth and seventeenth centuries, with particular attention to Bernini (largely derived from Lavin's 1967 and 1978 publications). She also wrote the entries in the catalogue on all of the discovered terracottas. "Bozzetti barocchi dallo studio di F. A. Fontana [1986a]," those by Bernini being nos. 12, 14, and 17. Two other studies should
- also be noted here: a pithy essay of 1987 by Paola Santa Maria Mannino that discusses the bozzetti and drawings related to the statues on the Colonnade of Saint Peter's and includes a number of documents that speak of Bernini's making clay models for the project; and a similar study from 1996, by Laura Falaschi, which analyzes the drawings, bozzetti, and full-scale models for the angels on the Altar of the Blessed Sacrament in Saint Peter's. The full-scale models for the Sacrament Altar as well as those for the Cathedra Petri were the subjects of a brief article by Fabrizio Mancinelli (1992). 32 Rome 1991-92: Rome and Venice 1991-92. Another exhibition, held at the Palazzo Chigi Saracini in Siena in 1989, featured a model (cat. 31), attributed to Bernini, for the Saint Jerome in the Chapel of the Madonna del Voto in the Siena Cathedral, which is comparable to the better-known bozzetto for the same figure in Termini Imerese (Siena 1989, vol. 1, pp. 229-37, no. 61).
- 33 Androsov also published a short article in Burlington Magazine in 1991 on works by Bernini, Stefano Maderno, and Camillo Rusconi from the Farsetti collection. The collection received additional attention from Katrin Kalveram in an article of 1997, in which she provided the most detailed study of Farsetti as a collector and situated him within the larger history of collecting terracottas in the eighteenth century.
- 34 The one exception is the Angel with the Crown of Thorns (cat. 45), which the curators of this exhibition attribute to Paolo Naldini. The most significant of these controversial. highly finished models are the Neptune, Pluto, David, Saint Teresa in Ecstasy (cat. 17), Blessed Ludovica Albertoni (cat. 21), and Saint Bibiana, the last of which was first published by Matzulevitsch in 1963 as an autograph work but identified by Wittkower (1966, p. 189) as an eighteenth-century copy.
- 35 Avery 1997, p. 258.
- 36 Sigel 1999, p. 71.
- 37 Other essays in the volume

- include two by Colette Czapski Hemingway, in which she considers, respectively, clay as a medium for sculptors' models and how the discussions of modeling in clay in treatises by Raffaello Borghini (1584) and André Félibien (1676) illuminate the bozzetti for the Altar of the Blessed Sacrament in Saint Peter's; an essay by Jeannine O'Grody on the bozzetto for the Cathedra Petri's figure of Saint Ambrose (cat. 28), acquired by the Fogg in 1995, which she places within the project's development; and another by Mark S. Weil, in which he revisits the Ponte Sant'Angelo angels, offering a new order for the sequence of drawings and bozzetti. The volume also presents a catalogue by Sigel and Farrell of the fifteen bozzetti studied, with sections on their condition, technical observations, and petrography. 38 See David Ekserdjian's review of the volume (1999).
- 39 Barberini 2001-2, p. 50.
- 40 In another publication of 2001, Lavin published a bozzetto in the Musée des Beaux-Arts. Besançon, which he attributed to Bernini and identified as being related to the angels for the Altar of the Blessed Sacrament in Saint Peter's, but which the curators of this exhibition attribute to Luc-François Breton (fig. 422). Essays by Rudolf Preimesberger and by Ann Sutherland Harris, both also of 2001, analyze the development of the Saint Longinus and the Cathedra Petri, respectively, through all the known drawings and models.
- 41 Weil, M. 2002-3, p. 33. 42 In this context, Coliva also rejects the attribution to Bernini of the Hermitage terracottas related to the Borghese sculptures as well as those for the head of Proserpina (Cleveland Museum of Art) and for the Blessed Ludovica Albertoni (Hermitage).
- 43 I wish to thank Professor Mark Pharis, a ceramic artist and colleague at the University of Minnesota, for discussing this issue with me and confirming my understanding that the bozzettii would have required considerable time and effort to make.

Notes to the Catalogue

Cat. 1

- 1 Marc Worsdale in Ottawa and other cities 1986–87, p. 84.
- 2 Olga Raggio in New York, Chicago, and San Francisco 1983–84, p. 85.
- **3** Pollak 1928–31, vol. 2, pp. 601–2, doc. 2410.
- 4 The first payments related to the tomb date to early 1628, suggesting the commission was awarded the previous year. See ibid., p. 590, doc. 2378.
- 5 A preparatory drawing for the tomb in the Royal Collection, Windsor Castle, is frequently cited as evidence that the present model must date to about 1627, the date assigned to the drawing by Heinrich Brauer and Rudolf Wittkower (1931, vol. 1, pp. 23-24, vol. 2, pl. 151). The drawing shows a Charity with two children, suggesting that Bernini had already moved past the four-children stage. The document of 1630 (see note 3 above) indicates that this may not be the case—that Bernini may still have been questioning the number of children. For a recent and convincing suggestion that the drawing must date to after 1630, see Maria Celeste Cola in Lugano 1999, pp. 409-10. One definite connection between the drawing and the present model is the crying child with the extinguished torch, possible evidence that the model shortly preceded the drawing. The marble for the Charity with Four Children began to be roughed out only in 1634, the probable terminus ante quem for the model. See Pollak 1928-31, vol. 2, p. 608, doc. 2453. 6 Fraschetti 1900, p. 138.
- **7** Borsi, Acidini Luchinat, and Quinterio, eds. 1981, p. 109.
- **8** Villani 2008, pp. 475–76. On the question of dates for the inventories, see ibid., pp. 433–34.
- **9** Ibid., pp. 473–74.
- 10 Ibid., pp. 471-73.
- 11 The full-scale model for the tomb was completed during 1672. For the payments, see Golzio 1939, pp. 117–21.
- **12** Although there is no indication that Bernini ever contemplated four children

- for Alexander's Charity, he did submit the design to frequent and extensive reworking, as evidenced by drawings. For a selection of the drawings, see Koortbojian 1991.
- 13 The first payment to Mazzuoli (for the full-scale model of Alexander's *Charity*) dates to November 11, 1672. See Golzio 1939, p. 121, doc. 294.
- **14** On Mazzuoli's *Charity* in the Chapel of the Monte di Pietà, see Carta 2002.

Cat. 2

- 1 On the possibility that all fourteen of the original Bernini terracottas at Harvard once belonged to Bartolomeo Cavaceppi, see Gasparri 1993, pp. 28–30; and Gasparri 1994, p. 62.
- 2 On Carlo Barberini, see Lavin, I. 1983; Brunelli 2003, pp. 195–96, 203–5; and Bilancia 2004, p. 95.
- 3 Fraschetti 1900, p. 94 n. 1.
- 4 Ferrari and Papaldo 1999, p. 217.
- 5 Relative to the inscription, Ferrari and Papaldo (ibid.) report the year as 1631, while Fagiolo dell'Arco 1999, p. 25, reports it as 1633. To our eyes, it reads either 1632 or 1633—certainly not 1631.
- 6 On the iconography, see Lavin, I. 1983, p. 8.

Cat.

- 1 Pollak 1928–31, vol. 2, p. 426,
- 2 Ibid., pp. 426-27, doc. 1622.
- 3 Lavin, I. 1968a, p. 20.
- 4 For the choice of Du Quesnoy, see Boudon-Machuel 2005, pp. 203–4. For the stucco, see Pollak 1928–31, vol. 2, p. 430, docs. 1639–45.
- 5 Pollak 1928–31, vol. 2, p. 93, doc. 117.
- 6 Ibid., p. 431, doc. 1646. Bernini had received a down payment for the full-scale model on December 19, 1629 (ibid., p. 454, doc. 1770), but there is no certainty he proceeded to execute it then. The decree of May 5, 1631, suggests not, as does the gap in payments until September 6, 1631.
 7 Ibid., p. 454, docs. 1771–74.
- Documents indicate that the model was carried out by Stefano Speranza. On May 15, 1632, Guido Ubaldo Abbatini received a payment to paint the model, a certain indication that it was finished. The last payment to

- Bernini was April 5, 1632 (ibid., p. 455, doc. 1780).
- **8** On the fresco, see Lavin, I. 1968a, pp. 24 n. 118, 29; and Boudon-Machuel 2005, p. 107. A print of 1629, executed by Domenico Castelli, is thought to reflect an early design for the *Saint Longinus*. It portrays a statue very similar in design to the one in Abbatini's fresco. Like Abbatini, Castelli probably based his image on a lost drawing or a model; it does not necessarily record a full-scale model. On the print, see Boudon-Machuel 2005, pp. 105–7.
- 9 Lavin, I. 1968a, pp. 23, 35–37. 10 For the most complete account of the model by Du Quesnoy, see Boudon-Machuel 2005, pp. 230–31, no. 13b.
- 11 Ibid., p. 231, no. 13b dér. 1.
- 12 Hibbard 1966, p. 82.
- 13 Note the difference in our conclusions from the original analysis by Kendra Roth (1999), who reported that the gilding was applied directly to the terracotta surface in the flesh areas, with no gesso layer.
- **14** For one example of an earlier gilded sculpture given two different burnishes, see Serck-Dewaide 1991, pp. 67, 389, pl. 5.

Cat. 4

- 1 Sandrart 1925 ed., p. 286.
- 2 On the discovery, see Rome 1986, pp. 185–88.
- 3 For the final decree, dated July 5, 1638, see Lavin, I. 1968a, p. 26 n. 124. A slightly earlier decree, of April 26, 1638, reversed the locations of the *Longinus* and *Andrew*. See ibid., p. 27 n. 123. The *Longinus* was installed by June 16, 1638, indicating that the final decree was already known by then. See ibid., p. 26 n. 125.
- 4 Marble for the statue began arriving during the fall of 1634; the last piece was delivered in the summer of 1635. See Pollak 1928–31, vol. 2, p. 456, docs. 1781–87; and Di Gioia 2002, p. 57.
- **5** Di Gioia 2002, p. 51.
- 6 See note 4 above.
- 7 Di Gioia 2002, p. 58.

Cat. 5

- 1 For the most complete census of the known versions, see Bewer 1999, p. 166 n. 12.
- **2** For an overview of the tomb's history, see Wittkower et al. 1997,

- pp. 254–55. For the relevant payments, see Pollak 1928–31, vol. 2, pp. 204–15.
- 3 The first payment is dated December 16, 1633. See Pollak 1928–31, vol. 2, pp. 204–5, doc. 609. Although the monument was officially unveiled on March 27, 1637, work on it continued for nearly five more years. See ibid., pp. 206–7, docs. 614–17.
- **4** Lavin, M. 1975, p. 197, no. 207.
- 5 The plaque above the sarcophagus is inscribed 1635, which suggests the year the body was entombed.
- 6 See C. D. Dickerson III's essay in this volume, pp. 2–23.
- 7 Montagu 1996, pp. 3-4.
- 8 For one of these exceptions, see Montanari 2003. Montanari attributes the model to Bernini, but we think it more likely that it was delegated to assistants.

Cat 6

- 1 D'Onofrio 1967a, pp. 295–96.
- 2 As indicated in a print of the Palazzo Barberini from 1638. See Waddy 1990, p. 207, fig. 126.
- 3 Ibid., pp. 261-63.
- 4 Golzio 1971, p. 40: "L'Em. Sig. Card. sta intorno per fare alzare il suo obelisco dinanzi al palazzo delle 4 fontane, che sarà un buone altezza, atteso che pensa ponerlo nel dorso di un grande elefante da farsi di pietra detta granite ovvero metallo, ch'a questo proposito gli ho fatto vedere un mio piccolo di marmo, et il Sig. Cavalier Bernino ne ha fatto già un disegno, qui si pensa sempre cose nuovo." ("The Eminent Signor Cardinal is in the midst of having erected in front of his palace at the four fountains an obelisk of good height. He is thinking of putting it on the back of a big elephant that will be made from granite or metal, for which I have had him see my little one of marble; the Signor Cavaliere Bernini has already made a design, which is considered very unique.")
- 5 On the possibility the idea originated around 1632, see D'Onofrio 1967a, p. 231 n. 5*.
- 6 Ibid., p. 297.
- **7** For a basic history of the monument, see Wittkower et al. 1997, p. 287; and Ferrari and Papaldo 1999, p. 446.

- 8 Brauer and Wittkower 1931, vol. 2, pls. 109, 110a, and 110b.
- 9 The document was first published by Lavin, M. 1975, p. 7, doc. 49. The present collocation is Biblioteca Apostolica Vaticana, Archivio Barberini, Computisteria 160, fol. 27: "A di 8 Mag.go 1666 Al Sig. Cavalier Bernini Il Modello dell'Elefante con la Guglia di legno." ("To the Signor Cavaliere Bernini, the Model of the Elephant with the Obelisk of wood.") The volume in which it appears has no title but is indexed as Registro del guardaroba del Cardinale Francesco Barberini, 1664-78.
- 10 For the start of work, in April 1666, see Gnoli 1888, p. 403; and Fraschetti 1900, p. 106. For the date of unveiling, either June or July 1667, see Ferrari and Papaldo 1999, p. 446.
- 11 González-Palacios 2010, p. 54.
- 12 As reported by Gigli 1958 ed., p. 112.
- 13 Two paintings of elephants are listed in the collection of Cassiano Dal Pozzo, one by Pietro Testa, one by Nicolas Poussin. See Haskell and Rinehart 1960. p. 325. The one by Poussin is likely to be Hannibal Crossing the Alps, which is thought to date to about 1625. See Jerusalem 1999, pp. 44-47. Testa's is lost, but a print illustrating an elephant does survive by him, inscribed 1631. See Bartsch 1990, p. 171. For a later painting by Poussin featuring an elephant, from about 1640, see Rosenberg 1998, pp. 36-45.

- 1 The Model for the Fountain of the Moor (cat. 13) was partially coated with a substance of similar appearance. Chemical analysis has proven that it is N-methoxymethyl nylon, or soluble nylon, a conservation material used between the 1950s and the early 1980s, then discontinued when its long-term insolubility was recognized.
- 2 Cipriani 1980, p. 75.
- 3 Ibid.: "un leone studio del cav. Bernini per la Fontana di Piazza Navona."
- 4 Ibid.: "leone del cav. Bernini."
- 5 D'Onofrio 1977, p. 579.
- 6 For a recent and exemplary discussion, see D'Amelio and Marder 2011.

- 7 As first noticed in Montagu 1986, p. 11.
- 8 D'Onofrio 1977, pp. 578-79.

- 1 Regarding these lines, which also appear on other models in the Galleria Giorgio Franchetti alla Ca' d'Oro and seem to relate to piece molds for casting, see Dickerson 2006, pp. 244-48.
- 2 D'Onofrio 1957, p. 212.

Cat. 9

- 1 See cat. 8, note 1.
- 2 Titi 1987 ed., vol. 1, p. 77. The mention of the models does not appear in earlier editions of the guidebook.

Cat. 10

- 1 For the use of wooden models in the Renaissance, see Millon 1994. For the seventeenth century, see Kieven 1999–2001, DD. 204-5.
- 2 For example, Battaglia 1943, p. 160, doc. 20.
- 3 Silla Zamboni in Rome 1984-85, p. 426.
- 4 Relative to the mention of the model in the inventory of 1803, see ibid. On Marsili and the founding of the Academy, see Renassi 1000
- 5 For the donation, see Brizzolara 1986, p. 18. On October 22, 1709, Marsili had already announced his intention of donating the collection.
- 6 Zanotti 1739, p. 54.
- 7 Fagiolo dell'Arco, ed. 2002, pp. 109-12.
- 8 In the collection of Bernini's heirs in Rome (now the Forti Bernini family), there is a large terracotta that is routinely attributed to Bernini and identified as preparatory for the Four Rivers Fountain. We have had the opportunity to inspect the model and do not consider it to be autograph. We follow Cesare D'Onofrio's thinking (1977, p. 469 n. 31) that it was created during the eighteenth century.

- 1 Cited in D'Onofrio 1977, p. 504.
- 2 On the earlier fountain, see ibid., pp. 156-62.
- 3 On the failed statue, see ibid., pp. 504-6; and Heimbürger Ravalli 1979.
- 4 The earliest mention of the statue's removal is in a payment concerned with the lead piping

- of the fountain dated June 17, 1652. Cited in D'Onofrio 1977, p. 504 n. 4.
- 5 Cited ibid., p. 506: "il gruppo de doi tritoni, et li Quattro pesci."
- 6 The rejection is not specifically documented. The Fountain of the Moor was commissioned on May 2, 1653. See ibid., p. 504 n. 5.

Cat. 12

1 On the early history of the Farsetti collection, see Kalveram 1997: Nepi Scirè 1998: and Androsov 1998-99, pp. 3-7, 114.

- 1 On the Fountain of the Snail, see D'Onofrio 1977, pp. 504-6.
- 2 The model is reported as in silver by Francesco Mantovani, agent of the Duke of Modena (Fraschetti 1900, p. 180 n. 2), and an anonymous informant (D'Onofrio 1986, p. 411). For other reports of the model, see Bernini 2011 ed., pp. 161-62;
- and Baldinucci 1966 ed., p. 36. 3 There does exist an old photograph in the Kimbell archives of a model (present whereabouts unknown) that is unmistakably based on the present onealmost certainly cast from it. That model is painted black, but the present model bears no traces of any kind of paint, which rules out its being identified as the one in the photograph. In all likelihood, the duplicate was cast sometime during the second half of the twentieth century using a pliable mold that left no marks on the surface of the present model. Conceivably, the soluble nylon (N-methoxymethyl nylon) that once covered the present model was applied as a release material for the mold.
- 4 D'Onofrio 1977, p. 506. See also Avery 2002-3, p. 24.
- 5 Avery 2002-3, p. 24.
- 6 Fraschetti 1900, p. 203: "il modello fatto da me." The document is also reproduced in New York 2002-3, p. 73, doc. 12.

1 Wittkower et al. 1997, p. 273, provides the most complete census of these copies. Absent from his list are the version documented in the Accademia di San Luca, for which see p. 144, and the version appearing in an old photograph of the Palazzo

Chigi, for which see Villani 2008, fig. 1. The model discussed by Muñoz (1917, p. 78) is the one that recently sold in Munich and may also be the model in the old photograph of the Palazzo Chigi. See also Avery 2002-3, p. 26, fig. 11. Another version to be added to the list is the one in an old photograph preserved in the archives of the Kimbell Art Museum. See cat. 13, note 3. for the likelihood that it is a twentieth-century cast of the Kimbell Moor.

2 Schlegel 1978, pp. 34-35.

- 1 For a transcription of the letter, see Pirondini, ed. 1982, p. 165, doc. 21. See also Bacchi 2004, pp. 47-50.
- 2 Desmond Shaw Taylor in Edinburgh 1998, pp. 139-40.
- 3 For a transcription, see Bacchi
- 4 For a transcription, see Pirondini, ed. 1982, p. 165, doc. 22. See also Montagu 1985b, pp. 39-40 n. 42.
- 5 This passage has been interpreted in different ways, underscoring its complexity. According to Andrea Bacchi (see his essay in this volume). Bernini promises that Raggi will undertake the models. According to Jennifer Montagu (1985b, p. 30), Bernini promises he will undertake the models himself. The truth probably lies inbetween. Bernini was likely being cagey, knowing that he would ultimately dodge the responsibility but wanting the agent to think that the models will be his. I thank Paola D'Agostino and Davide Gasparotto for their help in understanding the passage.
- 6 For one terracotta that has been plausibly assigned to Raggi, see Giometti 2011, pp. 47-48, no. 26.
- 7 On the model in Modena, see Corradini, ed. 1996, p. 71, no. 52/1914 (with earlier bibliography); and Bacchi 2004, p. 53. 8 According to at least one letter from Poggi dated January 4, 1652, Raggi was reluctant to leave Rome. See Bacchi 2004, p. 52. He may have been holding out hope that he could somehow manage to execute the fountain
- 9 Bacchi 2004, p. 52.

from Rome.

10 On the provenance, see Corradini, ed. 1996, p. 71, no. 52/1914.

Cat. 16

- 1 For the fullest discussion of the sources, see Lavin, I. 1980, vol. 1, pp. 92-103.
- 2 Bernini may even have contributed to the relief, entrusted with the portrait of the pope. See Lavin, I. 2004, pp. 138-39.
- 3 Barcham 2001, pp. 365-69.
- 4 Ibid., p. 367.
- 5 Napoleone 1998, p. 184, doc. 6.
- 6 Ibid., p. 183, doc. 1.

1 Tod Marder in Turin and other cities 1999-2001, p. 445.

Cat. 18

- 1 Pietro Cannata in Rome 1999b, pp. 350-51.
- 2 In addition to the firing temperature, some of the many variables influencing shrinkage include particle size and orientation, additives, and mineral composition. See Rice, P. 1987, pp. 63-93.

Cat. 19

- 1 Maria Pedroli Bertoni in Martinelli, ed. 1987, p. 60.
- 2 Di Gioia 2002, pp. 111-14.
- 3 Santa Maria Mannino 1987,
- 4 Falaschi 1987, p. 272.
- 5 On the niches, whose plan had already been drawn up and approved by 1647, see Roca De Amicis 1995, pp. 46-48.

Cat. 20

- 1 For the history of the commission, see Perlove 1990, pp. 9-14.
- 2 According to Perlove (ibid., p. 13), the earliest evidence of work dates to early 1672, suggesting the commission could have been awarded late the previous fall.
- 3 Ibid., pp. 13-14.
- 4 For the most comprehensive list of these copies, see Malgouyres 2002. Among other versions: two terracottas in the collection of Pierre Crozat (Mariette 1750, nos. 174-75); a bronze sold at Bonham's, London, September 1, 1987, lot 92; a bronze sold at Sotheby's, London, July 7, 2006, lot 80 (now on loan to the National Gallery of Scotland, Edinburgh); and a gilded

terracotta sold at Sotheby's, London, July 8, 2011, lot 76.

Cat. 21

1 Malgouyres 2000, pp. 26-27.

- 1 For a discussion of how the Constantine was created, see Marder 1997, pp. 174-75.
- 2 Ibid., pp. 171-73.
- 3 The latest date for the decision to move the location to the Scale Regia is July 1664. See ibid., p. 174.

Cat. 23

- 1 Marder 1997, p. 171.
- 2 Ibid.

Cat. 24

LITERATURE: Mirot 1904, pp. 279-80; Paris 1913, p. 193; Reymond 1913; Brinckmann 1923-24, vol. 2, pp. 62-71; Bertini Calosso 1924, pp. 559-66, pl. fc. p. 558; Strinati 1924, pp. 607-8, 611; Benkard 1926, p. 42; Baldinucci 1948 ed., p. 253 n. 118; De Rinaldis 1948a, p. 66; De Rinaldis 1948b, p. 92; Della Pergola 1951, p. 42; Martinelli 1953, p. 152; Pane 1953, pp. 102-3, fig. 174; Faldi 1954, pp. 41-42; Lavin, I. 1955, pp. 169-71; Wittkower 1955, p. 235; Wittkower 1961, vol. 1, p. 502, vol. 2, p. 168, fig. 2; Grassi 1962, pp. 122-23; Della Pergola 1963, p. 2; Matzulevitsch 1963, p. 73; Hibbard 1965, pp. 210, 212; Wittkower 1966, pp. 254-55; Fagiolo dell'Arco and Fagiolo 1967, n.p., no. 224; Keller 1971, p. 68; Mariani 1974, p. 89; Wittkower 1975b, pp. 87-88; Paoletti 1980, p. 120; Berger 1981, pp. 239-40, 243; Białostocki 1981, n.p., no. 27; Fagiolo dell'Arco 1981, p. 30; Staccioli 1981, p. 70, no. 88; Wittkower et al. 1981, pp. 254-55; Gould 1982, p. 126; Martin 1986, pp. 46-47; Laurain-Portemer 1987, p. 137; Hoog 1989, p. 33; Scribner 1991, p. 116; Rome 1991-92, p. 49; Burke 1992, p. 32; Avery 1997, p. 245; Wittkower et al. 1997, p. 293; Wardropper 1998-99, pp. 39, 115; Ferrari and Papaldo 1999, p. 471; Montanari 2003, pp. 406, 409; Montanari 2004a, p. 190

1 Death inventory of Mattia de' Rossi (Getty Provenance Index, inventory 735, fol. 56v): "Un modello di creta cotta indorato

rappresentante il Ré di Francia á cavallo con base di legno sotto scorniciato indorato, e dicono che sia mano del Sig. Cavalier Bernini." ("A gilded terracotta model representing the king of France on horseback with a gilded base of wood, said to be by the Signor Cavalier Bernini.") If this is the present model, it is surprising there are no traces of gilding. That said, were the present model to have been gilded, the gilding would most likely have been applied over gesso, and there are certainly traces in many interstices of what could be that gesso. The dark red coating makes confirmation impossible. The possibility that the model might have been gilded over gesso raises new questions about the toothed texturing given to the model. Was the texturing intended as scoring for the gesso?

- 2 Chantelou 1985 ed., p. 117 (August 13, 1665).
- 3 Wittkower 1961, vol. 1, p. 519, doc. 13.
- 4 Ibid., p. 520, doc. 15.
- 5 Ibid., p. 521, doc. 20.
- 6 Ibid., doc. 24.
- 7 Ibid., doc. 23. 8 Ibid., doc. 24.
- 9 On the question of preparatory drawings for the statue, see Wittkower et al. 1997, p. 293; and Kristina Herrmann Fiore in Rome 1998, p. 314.
- 10 The X-radiography was complicated by the size and density of the model, and interpreting the resulting X-rays was further complicated by the likelihood that many of the areas that now appear solid may be filled with plaster from later restorations
- 11 The base is now possibly filled with plaster, which would appear as solid clay in X-radiographs; examining the underside of the base was not possible.
- 12 Wittkower 1961, vol. 1, p. 513.
- 13 Ibid., p. 521, doc. 24.
- 14 Ibid., doc. 23.
- 15 See, for example, ibid., p. 518, doc. 5. See also ibid.,
- pp. 500-501. 16 For the earliest mention of the carving, see ibid., p. 523, doc. 33.
- 17 The carving was doubtless concluded by the middle of 1678. See ibid., p. 528, docs. 62, 63.
- 18 Ibid., p. 529, doc. 72.
- 19 For the date of arrival, see ibid., p. 530, doc. 78. On the reception of the statue, see ibid.,

- pp. 511-16; and Berger 1981.
- 20 Montanari 2003.

Cat. 25

- 1 Villani 2008, p. 472: "Un modello del Danielle di terra cotta del Popolo, fatto dal Bernino."
- 2 Ibid., pp. 475–78.
- 3 The first time the model is described as painted is in an inventory of 1770. See ibid., p. 452. It is not listed as painted in the inventory of 1692-94, although other models in the inventory are. See ibid., pp. 471-74. The second layer of paint likely represents a repainting done during the nineteenth or twentieth century.
- 4 For a discussion of when the Daniel was commissioned, see Francesco Petrucci in Rome 1999b, p. 358; and Marc Worsdale in Ottawa and other cities 1987-88, p. 90.
- 5 Golzio 1933–34, p. 140.

Cat. 26

- 1 Raggio 1983, pp. 376-77; Olga Raggio in New York, Chicago, and San Francisco 1983-84, no. 32; and Marc Worsdale in Ottawa and other cities 1986-87, no. 22. 2 Villani 2008, p. 475: "Una figura di terra cotta alta pal: doi e mezzo in circa che rappresenta un Vecchio con un'Angelo che lo tiene per gli capelli." ("A terracotta figure, two and a half palmi in height, representing an old man with an angel who pulls his hair.") On the dating of
- pp. 433-35. 3 The Habakkuk was installed by the end of November 1661. See Golzio 1933-34, p. 140. The Habakkuk must have been commissioned at the same time as its pendant, the Daniel, thus about 1654-55. Work on the statue could not have begun before the fall of 1656, when the marble was delivered. See Wittkower et al. 1997, pp. 276-77.

the inventory, see Raggio 1983, p. 279 n. 20; and Villani 2008,

- 4 On Ferrata's work for Bernini in Santa Maria del Popolo, see Wittkower et al. 1997, p. 276. 5 Baldinucci 1845-47 ed., vol. 5,
- p. 390.

LITERATURE: Battaglia 1943, pp. 244-49; Grigaut 1952-53; Grigaut 1953; Lavin, I. 1955,

pp. 123-25; Wittkower 1966, p. 236; Cummings and Elam, eds. 1971, p. 107; Wittkower 1977, pp. 178-79; Rossacher 1980, pp. 258-59; Wittkower et al. 1981, p. 236; Steven F. Ostrow in Princeton and other cities 1981-82, p. 183 nn. 13, 15, 25; Alan Darr in Detroit 1985, pp. 142-43; Darr 1986, p. 481; Rossacher 1986, pp. 64-66; Alan Darr in Henshaw, ed. 1995, p. 186; Wittkower et al. 1997, p. 278; Angelini and Montanari 1998, pp. 108-12; Bacchi and Tumidei 1998, p. 47; Farrell, Lie, and Young 1999, pp. 44-45; O'Grody 1999a, pp. 138, 142, 143 nn. 15, 25; Tomaso Montanari in Pinelli, ed. 2000, Notes vol., p. 621; Harris 2001, pp. 124-25; Alan Darr in Darr, Barnet, and Boström 2002, vol. 2, pp. 31-34; Llewellyn 2009, pp. 236-37

- 1 According to notes in the Detroit Institute of Arts' curatorial file, the dealer Alexander von Frey acquired the model from the "Conte Mattei di Pergola," whom Frey identified as the brother of the preceding owner, Cardinal Conte Mattei. This cardinal is almost certain to be Mario Mattei. He appears to have had two brothers, Nicola Mattei Bandini, who died in 1843, and Conte Gaetano Mattei, whose life dates are unknown. More than likely, von Frey is in error about the relationship and the model passed to a nephew, such as Conte Marco Mattei della Pergola (1839-1907). On Cardinal Mario Mattei and his family connections, see Weber 1978, vol. 2, p. 483.
- 2 Krautheimer and Jones 1975, p. 207, no. 188.
- 3 After the present model, Bernini proceeded with a full-scale model of the entire Cathedra, likely completed about 1660. For these payments, see Battaglia 1943, pp. 161-64, docs. 33-48. The design appears to have met with criticism, resulting in certain changes. For the criticism, see Pascoli 1730, pp. 19-20. Casting of the chair began in 1663, although the design must have been set by late 1661, when the first Church Father was cast. See Battaglia 1943, p. 169, doc. 108.
- 4 For records of who was working on the Cathedra, see

- Battaglia 1943, pp. 159-64. See also Tratz 1988, pp. 428-30.
- 5 One difficulty with the attribution to Cafà is that he may not have arrived in Rome until about 1658. If so, he would have needed to come to Bernini's attention immediately in order to be invited to help on the model. More plausible is that he came to be involved through Ercole Ferrata, whose workshop Cafà joined on his arrival in Rome. If Bernini delegated the model to Ferrata, which is highly possible, Ferrata may have turned to Cafà for assistance on the reliefs. On Cafà's early years in Rome, see Sciberras, ed. 2006, pp. 3-5. On the Faith at Cambridge, see Montagu 2006, pp. 68-69.
- 6 Stone 1981, p. 95.

Cat. 28

- 1 Krautheimer and Jones 1975, p. 207, no. 185: "il secondo modello di San Ambrogio per il Cathedra."
- 2 Ibid., p. 204, no. 67. The order to begin work on the project was given on January 21, 1657.
- 3 For the first architectural model, which dates to February 1657, see Tratz 1988, p. 427. For payments, see Battaglia 1943, pp. 159-60, docs. 17-21.
- 4 A print by Conrad Martin Merz, presumably after an original drawing by Bernini, is likely to date to early 1657. See Tratz 1988, pp. 427-28. It appears to reflect a more mature design than the drawing at Windsor (fig. 300) and can be considered transitional between the first architectural model of early 1657 and the resumption of planning in early
- 5 For the alternative view that the drawings date to 1660—and thus directly preceded the final design-see Steven F. Ostrow in Princeton and other cities 1981-82, pp. 180-81.
- 6 For these payments, see Battaglia 1943, pp. 161-64, docs. 33-48. See also Tratz 1988, pp. 429-30.
- **7** The criticism is reported by Pascoli 1730, pp. 19-20. A papal medal issued in 1662 is likely to reflect the full-scale model of 1658-60. See Tratz 1988, pp. 431-34.
- 8 On the ensuing changes, see Steven F. Ostrow in Princeton and other cities 1981-82, pp. 178-81.

- 9 The Ambrose appears to have been one of the last of the Church Fathers to be cast. The final models for some of the others were underway by May 1661. See Battaglia 1943, p. 163, doc. 50. By the end of 1662, all four had been cast and were being cleaned. See ibid., p. 169, doc. 111.
- 10 Roth 1999, pp. 126-27.
- 11 Battaglia 1943, pp. 159-60.
- 12 Ibid., pp. 161-64.

Cat. 29

- 1 Giammaria, ed. 2009, p. 297. citing the inventory of Cardinal Girolamo Farnese: "Dui modelli di creta delle statue fatte della Catedra di San Pietro fatte dal Bernini di dui Dottori uno bianco, e l'altro tinto di metallo." ("Two clay modelli of statues for the Cathedra Petri made by Bernini of two Doctors, one white and the other the color of metal.") Note that the Model for the Cathedra Petri in Detroit (cat. 27) shows evidence of a two-tone approach.
- 2 Another example at the Hermitage is a Saint Augustine. See Rome and Venice 1991-92, p. 63.

Cat. 30

- 1 For overviews of the commission, see Wittkower et al. 1997, p. 282; Angelini and Montanari 1998, pp. 155-73; and Butzek 1996, pp. 13-58. For documentation, see Golzio 1939, pp. 89-106.
- 2 Payments were issued in August 1662 for the delivery of the marble blocks for the Saint Jerome and Mary Magdalen. See Golzio 1939, pp. 91-92, doc. 4419. These are likely to have been back payments, with actual carving having begun the previous year, the probable date of the present model.
- 3 No list of such models exists. Two noteworthy examples are: Antonio Giorgetti's Head of an Angel at the Hermitage (Chicago, Philadelphia, and Washington, D.C. 1998-99, pp. 96-97, no. 27); and another Head of an Angel, possibly also by Giorgetti, in a private collection, Saint Louis (see note 74 in C. D. Dickerson III's essay in this volume). For examples by Alessandro Algardi, see note 5 below.
- 4 The inventory was originally published in Italian by Golzio 1935. For an English translation, see Boehman 2009, pp. 324-31.

- 5 Those by Algardi that survive are: Head of the Executioner (private collection); Head of an Angel (Museum für Kunst und Gewerbe, Hamburg); Head of a Moor (Museo Nazionale del Bargello, Florence); Model for Bust of Saint Matthew (National Gallery of Art, Washington, D.C.). See Montagu 1985a, vol. 2, p. 372, no. 68.B.2; pp. 381-82, no. 75.B.1; p. 448, no. 184; and p. 386, no. 79.B.1.
- 6 For the one other, see Brauer and Wittkower 1931, vol. 2, pl. 142. 7 Chantelou 1985 ed., p. 16. See also Bacchi and Hess 2008-9.

Cat. 31

- 1 For the most complete discussion of these, in addition to illustrations, see Siena 1989. vol. 1, pp. 230-34, 236-37.
- 2 The other candidate, which we know only through photographs, is in the Museo Civico. Termini Imerese. See Brugnoli 1961: Pamela Gordon in Princeton and other cities 1981-82, pp. 231-32; and Wittkower et al. 1997, p. 282.
- 3 On Fabio di Carlo Corradino Chigi, see Salmi 1967, p. 14.

Cat. 32

- 1 On the possibility that the model passed through the Torlonia collection, see Morozzi 1988, p. ix. See also Museo Horne 1926, p. 24.
- 2 Anthony Sigel would like to thank Mr. George Fogg III for alerting him to the model.
- 3 Payments for the Celestial Glory were made between November 1663 and January 1666. See Battaglia 1943, pp. 176-78. The idea for the Glory was likely conceived about 1660, with the design gradually refined over the following years. See Steven F. Ostrow in Princeton and other cities 1981-82, pp. 174-93.
- 4 For Bernini's use of a template approach elsewhere, see Montagu 1989, p. 130.
- 5 Brauer and Wittkower 1931, vol. 2, pl. 79.
- 6 Steven F. Ostrow in Princeton and other cities 1981-82, pp. 174-93.
- 7 Battaglia 1943, p. 176.

1 Zollikofer 1994, p. 118, doc. B4.

- 2 Baldinucci 1966 ed., p. 65; and Bernini 2011 ed., p. 215.
- 3 Güthlein 1981, p. 221, no. 96.
- 4 There is some indication that he was uncertain about which allegories to include on the tomb. See Krautheimer and Jones 1975, p. 212, no. 383, discussed by Koortbojian 1991, pp. 270-72.
- 5 Payments for the tomb begin in December 1671. See Golzio 1939, p. 117, no. 1770.
- 6 On the drawings, see Koortboijan 1991.
- 7 Fehl 1985, pp. 114-15; and Rice, L. 1997, p. 132.
- 8 On the move to Santa Maria Maggiore, see Zollikofer 1994, pp. 15-20.
- 9 Mercati 1944.
- 10 See note 5 above.

- 1 The first payment for the fullscale model actually dates to just after his birthday, to December 16, 1671. See Golzio 1939, p. 117, doc. 1770.
- 2 The first payment to Mazzuoli is dated November 11, 1672. See ibid., p. 117, doc. 294.
- 3 The payments to Mazzuoli for the carving run between April 7, 1663, and November 29, 1675. See ibid., p. 122, doc. 122 (for the first); p. 131, doc. 2511 (for the last).
- 4 Schlegel 1967, p. 391.
- 5 See, for example, Charity with Two Children in the Istituto Statale d'Arte "Duccio di Buoninsegna," Siena (Petroio 2007, no. 8); and Saint John the Baptist in Palazzo Chigi Saracini, Siena (Siena 1989, vol. 2, no. 75). The Ys were also a device employed by Mazzuoli's relatives. See, for example, Giuseppe Maria's Putto in the Istituto Statale d'Arte "Duccio di Buoninsegna," Siena (Petroio 2007, no. 13).
- 6 Butzek 1988, p. 88.
- 7 Ibid., pp. 75-77.

Cat. 35

1 The one drawing that could take precedence is an ink study in Leipzig for the Angel with the Crown of Thorns (fig. 46). For the view that it precedes the chalk studies in Rome, see Steven F. Ostrow in Princeton and other cities 1981-82, p. 288; and Weil, M. 1999, pp. 145-46. For the view that the drawings in Rome

- came first, see Houston and London 2001-2, p. 194.
- 2 For proof of Bernini's deep admiration for the Antinous, see Chantelou 1985 ed., p. 167. Boucher (2001-2a, p. 60) proposed the Apoxyomenos as the
- 3 Wittkower 1975a, pp. 110-14.

Cat. 37

- 1 Since Lavin's dissertation of 1955, not every scholar who has published on this model has followed the correct identification, resulting in confusion over how the finished Angel with the Crown of Thorns developed from its preparatory models. See, for example, Weil, M. 1974, pp. 47-48.
- 2 Weil, M. 1974, pp. 127-28, docs. 153-60.
- 3 Ibid., p. 41.
- 4 Ibid., p. 127, doc. 153.
- 5 Ibid., p. 32.
- 6 Ibid., p. 123, docs. 88, 99.
- 7 Ibid., pp. 121-22, docs. 67,

LITERATURE: Bollettino d'arte 1909; Mariani 1930; Riccoboni 1942, p. 164; Grassi 1946; Hermanin 1948, p. 278; Santangelo, ed. 1954, p. 78; Wittkower 1955, p. 250; Grassi 1962, p. 133; Wittkower 1966, p. 250; Fagiolo dell'Arco and Fagiolo 1967, p. 220; Weil, M. 1971; Weil, M. 1974, p. 48; Wittkower et al. 1981, p. 250; Fort Worth 1982, nos. 8-9; Pope-Hennessy 1986, p. 489; Cardilli Alloisi and Tolomeo Speranza, eds. 1988, p. 70; Tratz 1988, p. 448; Barberini 1994, p. 119: Bacchi and Zanuso 1996. p. 783; Avery 1997, p. 168, fig. 225; Wittkower et al. 1997, p. 289; Ferrari and Papaldo 1999, pp. 26-27, 503; Weil, M. 1999, pp. 144-50; Barberini 2001–2, p. 53; Boucher 2001-2a, p. 62; Gianni Pittiglio in Barberini and Selene Sconci 2009, p. 86; Giometti 2011, pp. 53-54

 According to curatorial records, the information that Frey acquired the Model for the Cathedra Petri in Detroit from the Mattei della Pergola family comes from Dr. Paul Drey, the dealer who handled the sale to the museum. Note that the Model for the Cathedra Petri in

Detroit bears the same paper stamp as the Kimbell angels; all three were likely in Frey's possession at the same time.

- 2 On the possibility that the Bernini models at Harvard passed through the Torlonia collection, see Gasparri 1994, p. 62.
- 3 On the dispersion of the Torlonia collection, see ibid.. pp. 62-63. Little is known about Frey, but he is normally thought to have started his activities as an art dealer during the early 1920s. See Sotheby's, London, December 8-9, 1988, p. 48; and Yeide, Akinsha, and Walsh 2001, p. 283.
- 4 Chantelou 1985 ed., pp. 285-86.
- 5 Wittkower 1975a, pp. 112-14.

Cat. 42

1 According to Fourier transform infrared spectrometry (FTIR), the adhesive used to make the repair is a mixture of pine resin and ground limestone-materials in use at the time the model was made.

Cat. 43

- 1 Boselli 1978 ed., fol. 56v. See also Cellini 1967 ed., p. 135.
- 2 Boselli 1978 ed., fol. 56v. See also Weil, P. 1978, p. 133.

- 1 Weil, M. 1974, p. 133, doc. 222.
- 2 Ibid., p. 122, doc. 81.
- 3 Ibid., p. 34 (December 9, 1669).
- 4 Ibid.
- 5 Ibid., p. 122, doc. 152.
- 6 Ibid., pp. 128-29, docs. 163-72 (for Naldini); p. 129, docs. 173-82 (for Cartari).
- 7 Ibid., p. 129, doc. 186.
- 8 On attitudes toward copying in seventeenth-century Rome, see Cropper 2005.
- 9 Bernini 2011 ed., p. 219; Baldinucci 1966 ed., p. 64.

- 1 Incisa della Rocchetta 1929, p. 369.
- 2 For the terracotta in Saint Petersburg, see Chicago. Philadelphia, and Washington, D.C. 1998-99, pp. 90-91, no. 24. For the terracotta in Rome, see Giometti 2011, pp. 68-69,
- 3 Weil, M. 1974, p. 128, doc. 163.
- 4 Bernini may have assigned the copy to Naldini at the

moment the marble was ordered, in the summer or fall of 1669. The block had arrived in Rome by December 15, 1669. See ibid., p. 122, doc. 83. On Naldini, see ibid., pp. 78-79.

Cat. 46

- 1 Baldinucci 1845-47 ed., vol. 5, p. 380.
- 2 Boehman 2009, pp. 52-69.
- 3 Ibid., pp. 105-29.
- 4 For the inventory of the collection, see Golzio 1935, pp. 64-74.
- 5 Ibid., p. 72.
- 6 Weil, M. 1974, p. 126, doc. 136.
- **7** For one list of Ferrata's works, including models, see Boehman 2009, pp. 373-76. See also the two that have recently been catalogued in the Museo Nazionale del Palazzo di Venezia, Rome (Giometti 2011, pp. 63-65). For a recent addition to Ferrata's oeuvre of models, see Bacchi 2012.
- 8 Bresc-Bautier et al. 2006. p. 280.
- 9 Baldinucci 1845-47 ed., vol. 5, p. 390. For a discussion of the problem as it relates to Ferrata's young and gifted pupil Melchiorre Cafà, see Montagu 2006.
- 10 The Warrior presents a somewhat similar situation, in that its design derives from a famous antiquity that Ferrata would have known in the Ludovisi collection Rome See Bresc-Bautier et al. 2006, p. 280.

 Bruce Boucher in Houston and London 2001-2, p. 204.

Cat. 48

- 1 Brauer and Wittkower 1931, vol. 1, p. 174 n. 2. See also Falaschi 1996, pp. 76-77, for a discussion of the history of the Sacrament Altar under Alexan-
- 2 Payments for the altar begin in November 1672. See Martinelli, ed. 1996, p. 235. The commission may have been awarded the previous year or even during Clement X's first year as pope, 1670.

Cat. 50

- 1 Martinelli, ed. 1996, p. 235,
- 2 Ibid., pp. 236-37, docs. 14, 16.

Bibliography

Ackermann 2007

Felix Ackermann. Die Altäre des Gian Lorenzo Bernini: Das barocke Altarensemble im Spannungsfeld zwischen Tradition und Innovation. Petersberg: Michael Imhof Verlag, 2007.

Anderson 2009

Paul Anderson. "The Archiconfraternita di San Giuseppe and the Università dei Falegnami: The Development of Professional Institutions in Early Baroque Rome." In Lukehart, ed. 2009, pp. 288– 323.

Androsov 1989

Sergei O. Androsov. "Neizvestnoye proizvedeniye Dzhan Lorentso Bernini" (The unknown works of Gian Lorenzo Bernini). *Iskusstvo* 12 (December 1989), pp. 68–79.

Androsov 1990

Sergei O. Androsov. "Neizvestnoye proizvedeniye Dzhan Lorentso Bernini" (The unknown works of Gian Lorenzo Bernini). Soobshcheniya Gosudarstvennogo Ermitazha (Newsletter of the State Hermitage) 54 (1990), pp. 9–10.

Androsov 1991

Sergey O. Androssov [sic]. "Works by Stefano Maderno, Bernini and Rusconi from the Farsetti Collection in the Ca' d'Oro and the Hermitage." *The Burlington Magazine* 133, no. 1058 (May 1991), pp. 292–97.

Androsov 1992

Sergei O. Androsov. "Proizvedeniya Ercole Ferraty i Domenico Gvidi v Ermitazhe" (Works of Ercole Ferrata and Domenico Guidi in the Hermitage). In *Pamyatniki kul'tury: Novye otkrytiya, Ezhegodnik* 1990 (Monuments of culture: New discoveries, yearbook 1990). Moscow, 1992.

Androsov 1993

Sergei O. Androsov. "Novye atributsii ital'ianskikh terrakot XVII–XVIII vv. V" (New attributions for Italian terracottas of the seventeenth and eighteenth centuries). In Stranitsy istorii zapadnoevropeyskoy skul'ptury: Sbornik nauchnykh statey. Pamyati Zh. A. Matzulevich (1890–1973) (Pages of the history of western European sculpture: Essays to the memory of Zh. A. Matzulevich [1890–1973]), pp. 106–21. Saint Petersburg, 1993.

Androsov 1998–99

Sergei [O.] Androsov. "The Farsetti Collection in Italy and Russia." In Chicago, Philadelphia, and Washington, D.C. 1998– 99, pp. 2–13, 114.

Androsov, Kosareva, and Saverkina 1978

Sergei O. Androsov, Nina K. Kosareva, and Irina Saverkina. *The Hermitage*. Vol. 3, *Sculpture*. Leningrad: Aurora Art Publishers; Tokyo: Kodansha, 1978.

Angelini and Montanari 1998

Alessandro Angelini and Tomaso Montanari. Gian Lorenzo Bernini e i Chigi tra Roma e Siena. Milan: Amilcare Pizzi, 1998.

Ann Arbor 2003

The Collections of the Romanovs: European Art from the State Hermitage Museum, St. Petersburg. Exhibition, The University of Michigan Museum of Art, Ann Arbor, 2003. Catalogue by James Christen Steward and Sergei O. Androsov. London and New York: Merrell, 2003.

Art News 1938

"Bernini Bozzetti for America: Sketches by the Baroque Genius for the Fogg Art Museum." Art News 36 (June 4, 1938), pp. 11–12.

Athens, Ga. 1996

Masterpieces of Renaissance and Baroque Sculpture from the Palazzo Venezia, Rome. Exhibition, Georgia Museum of Art, The University of Georgia, Athens, Ga., 1996. Catalogue by Shelley E. Zuraw and others. Athens, Ga., 1996.

Averett 2006

Matthew Knox Averett. "Bernini's Fountains at the Piazza Barberini." Ph.D. diss., University of Missouri, Columbia, Mo., 2006.

Avery 1997

Charles Avery. Bernini: Genius of the Baroque. London: Thames and Hudson,

Avery 2002-3

Charles Avery. "The History of Bernini's Fountain of the Moor." In New York 2002–3, pp. 10–28.

Babelon 1965

Jean Pierre Babelon. *Demeures parisiennes* sous Henri IV et Louis XIII. Paris: Le Temps, 1965.

Bacchi 1999

Andrea Bacchi. "Del conciliare l'inconciliabile. Da Pietro a Gian Lorenzo Bernini: Commissioni, maturazioni stilistiche e pratiche di bottega." In Rome 1999b, pp. 65–76.

Bacchi 2004

Andrea Bacchi. "Sculture e apparati decorativi." In *Il Palazzo di Sassuolo: Delizia dei duchi d'Este*, edited by Filippo Trevisani, pp. 40–55. Parma: Grafiche STEP Editrice, 2004.

Bacchi 2009-10

Andrea Bacchi. "Bernini contro Bernini." In Federico Zeri, dietro l'immagine:
Opere d'arte e fotografia, pp. 96–105.
Exhibition, Museo Civico Archeologico,
Bologna, 2009–10. Catalogue by Anna
Ottani Cavina and others. Turin: Umberto
Allemandi & C., 2009.

Bacchi 2012

Andrea Bacchi. Ferrata, Cafà, i Falconieri e un nuovo modello per la Fede in San Giovanni dei Fiorentini. Munich. 2012.

Bacchi and Hess 2008-9

Andrea Bacchi and Catherine Hess. "Creating a New Likeness: Bernini's Transformation of the Portrait Bust." In Los Angeles and Ottawa 2008–9, pp. 1–43.

Bacchi and Tumidei 1998

Andrea Bacchi and Stefano Tumidei. *Bernini: La scultura in San Pietro*. Milan: Federico Motta Editore, 1998.

Bacchi and Zanuso 1996

Andrea Bacchi and Susanna Zanuso. *Scultura del '600 a Roma*. Repertori fotografici, 10. Milan: Longanesi, 1996.

Bacci 1906

Pèleo Bacci. "Un bozzetto sconosciuto di Gian Lorenzo Bernini." *Rivista d'arte* 4, no. 8–9 (1906), pp. 142–47.

Bacci 1931

Pèleo Bacci. "Giov. Lorenzo Bernini e la statua di Alessandro VII per il duomo di Siena." *Diana* 6, no. 1 (1931), pp. 37–56, pls. 1–5.

Baglione 1642

Gio[vanni] Baglione. Le vite de' pittori, scultori et architetti: Dal pontificato di Gregorio XIII. del 1572; In fino a tempi di Papa Urbano Ottavo nel 1642. Rome: Andrea Fei, 1642.

Baldinucci 1682

Filippo Baldinucci. Vita del cavaliere Gio. Lorenzo Bernino, scultore, architetto, e pittore. Florence: Vincenzio Vangelisti, 1682.

Baldinucci 1845-47 ed.

Filippo Baldinucci. *Notizie de' professori del disegno da Cimabue in qua* 5 vols. Florence, 1845–47.

Baldinucci 1948 ed.

Filippo Baldinucci. *Vita di Gian Lorenzo Bernini*. Edited and annotated by Sergio Samek Ludovici. 1682. Milan: Edizioni del Milione, 1948.

Baldinucci 1966 ed.

Filippo Baldinucci. *The Life of Bernini*. Translated by Catherine Enggass.

Foreword by Robert Enggass. University Park, Pa.: The Pennsylvania State University Press, 1966.

Baldinucci 1974-75 ed.

Filippo Baldinucci. Notizie dei professori del disegno da Cimabue in qua. Edited and annotated by Paola Barocchi. 7 vols. 1845-47. Florence: S.P.E.S., 1974-75.

Baldinucci 2006 ed.

Filippo Baldinucci. The Life of Bernini. Translated by Catherine Enggass. Introduction by Maarten Delbeke, Evonne Levy, and Steven F. Ostrow. 2nd ed. 1966. University Park, Pa.: The Pennsylvania State University Press, 2006.

Baltimore 1940

The Journal and Catalog of . . . Sculpture and Carl Milles, Exhibition, Baltimore Museum of Art, 1940. Baltimore, 1940.

Bange 1933

[E. F. Bange.] Italienische Skulpturen im Kaiser Friedrich Museum. Berlin: H. Heenemann, 1933.

Barberini 1994

Maria Giulia Barberini. "I bozzetti ed i modelli dei secoli XVI-XVIII della collezione di Bartolomeo Cavaceppi." In Rome 1994, pp. 115-37.

Barberini 2001–2

Maria Giulia Barberini. "Base or Noble Material?: Clay Sculpture in Seventeenthand Eighteenth-Century Italy." In Houston and London 2001-2, pp. 43-59, 286-87.

Barberini 2002

Maria Giulia Barberini, "Gian Lorenzo Bernini: Processi creativi." In Coliva, ed. 2002, pp. 277-84.

Barberini and Selene Sconci 2009

Maria Giulia Barberini and Maria Selene Sconci. Guida al Museo nazionale del Palazzo di Venezia. Rome: Soprintendenza Speciale per il Patrimonio Storico Artistico ed Etnoantropologico, 2009.

Barcham 2001

William L. Barcham. Grand in Design: The Life and Career of Federico Cornaro, Prince of the Church, Patriarch of Venice and Patron of the Arts. Memorie (Istituto Veneto di Scienze, Lettere ed Arti. Classe di scienze morali, lettere ed arti), 93. Venice: Istituto Veneto di Scienze, Lettere ed Arti, 2001.

Barocchi 1979

Paola Barocchi. "Storiografia e collezionismo da Vasari al Lanzi." In Storia dell'arte italiana, part 1, Materiali e problemi, vol. 2, L'artista e il pubblico, pp. 3-82. Turin: Giulio Einaudi Editore, 1979.

Barry 2004

Fabio Barry. "New Documents on the Decoration of Bernini's Fonseca Chapel." The Burlington Magazine 146, no. 1215 (June 2004), pp. 396-99.

Bartsch 1990

Paolo Bellini and Richard W. Wallace, eds. Italian Masters of the Seventeenth Century. The Illustrated Bartsch, 45, Commentary (Le peintre-graveur, vol. 20 [pt. 2]). New York: Abaris Books, 1990.

Barzman 2000

Karen-edis Barzman. The Florentine Academy and the Early Modern State: The Discipline of Disegno. Cambridge and New York: Cambridge University Press, 2000.

F[rançois] Basan. Catalogue raisonné de différens objets de curiosités qui composoient le Cabinet de feu Mr. Mariette. Paris, 1775.

Basili 1999

M[aria] C[ristina] Basili. "Ghetti, Santi." In Dizionario biografico degli Italiani, vol. 53 (1999), pp. 668-70. Rome: Istituto della Enciclopedia Italiana, 1960-.

Battaglia 1942

Roberto Battaglia. Crocifissi del Bernini in S. Pietro in Vaticano. [Rome]: Reale Istituto di Studi Romani, 1942.

Battaglia 1943

Roberto Battaglia. La cattedra berniniana di San Pietro. Collectanea Urbana. 2. Rome: Reale Istituto di Studi Romani, 1943.

Bauer, ed. 1976

George C. Bauer, ed. Bernini in Perspective. Englewood Cliffs, N.J.: Prentice-Hall, 1976.

Beal and Mancoff 2007

Graham W. J. Beal and Debra N. Mancoff. Treasures of the DIA, Detroit Institute of Arts. Seattle: Marquand Books, 2007.

Bean and Turcic 1979

Jacob Bean and Lawrence Turçic. 17th Century Italian Drawings in the Metropolitan Museum of Art. New York: The Metropolitan Museum of Art, 1979.

Beck and Schulze, eds. 1989

Herbert Beck and Sabine Schulze, eds. Antikenrezeption im Hochbarock. Schriften des Liebieghauses. Berlin: Gebr. Mann Verlag, 1989.

Bellori 1664

Giovan Pietro Bellori. Nota delli musei, librerie, galerie et ornamenti di statue e pitture ne'palazzi, nelle case, e ne'giardini di Roma. Rome: Apresso Biagio Deuersin, e Felice Cesaretti nella stamperia del Falco, 1664.

Bellori 1976 ed.

Giovan Pietro Bellori. Le vite de' pittori, scultori e architetti moderni. Edited and annotated by Evelina Borea; introduction by Giovanni Previtali. 1672. Turin: Giulio Einaudi Editore, 1976.

Bellori 2005 ed.

Giovan Pietro Bellori. The Lives of the Modern Painters, Sculptors and Architects: A New Translation and Critical Edition. Translated by Alice Sedgwick Wohl; notes by Hellmut Wohl; introduction by Tomaso Montanari. 1672. Cambridge and New York: Cambridge University Press, 2005.

Benassi 1990

Stefano Benassi. "Les origines de l'Accademia Clementina: Le projet d'une historiographie artistique de L. F. Marsili." In Les fins de la peinture: Actes du colloque organisé par le Centre de Recherches Littérature et Arts Visuels (9-11 mars 1989), edited by René Démoris, pp. 52-62. Paris: Éditions Desjonquères, 1990.

Benkard 1926

Ernst Benkard. Giovanni Lorenzo Bernini. Frankfurt: Iris-Verlag, 1926.

Benocci and Petrucci 2006

Carla Benocci and Francesco Petrucci Paolo Giordano II Orsini nei ritratti di Bernini, Boselli, Leoni e Kornmann, Rome: De Luca Editori d'Arte, 2006.

Berger 1981

Robert W. Berger. "Bernini's Louis XIV Equestrian: A Closer Examination of Its Fortunes at Versailles." The Art Bulletin 63, no. 2 (June 1981), pp. 232-48.

Bernardini ed 2001

Maria Grazia Bernardini, ed. Bernini a Montecitorio: Ciclo di conferenze nel auarto centenario della nascita di Gian Lorenzo Bernini . . . (ottobre-dicembre 1999). Rome: Camera dei Deputati, 2001.

Bernini 1713

Domenico Bernino [sic]. Vita del cavalier Gio. Lorenzo Bernino. Rome: Rocco Bernabò, 1713.

Bernini 2011 ed.

Domenico Bernini. The Life of Gian Lorenzo Bernini: A Translation and Critical Edition, with Introduction and Commentary. Edited and annotated by Franco Mormando. University Park, Pa.: The Pennsylvania State University Press, 2011.

Bernstock 1981

Judith E. Bernstock. "Bernini's Memorials to Ippolito Merenda and Alessandro Valtrini." The Art Bulletin 63, no. 2 (June 1981), pp. 210-32.

Bernstock 1988

Judith [E.] Bernstock. "Bernini's Tomb of Alexander VII." Saggi e memorie di storia dell'arte 16 (1988), pp. 167-90, 363-73.

Bershad 1985

David L. Bershad. "The Newly Discovered Testament and Inventories of Carlo Maratti and His Wife Francesca (Gommi)." Antologia di belle arti, n.s., no. 25-26 (1985), pp. 65-84.

Bertini Calosso 1924

Achille Bertini Calosso. "Il monumento équestre del Bernini a Luigi XIV." Bollettino d'arte del Ministero della Pubblica Istruzione, ser. 2, [17], no. 12 (June 1924), pp. 557-66.

Bertolotti 1881

A[ntonio] Bertolotti. Artisti lombardi a Roma nei secoli XV, XVI e XVII: Studi e ricerche negli archivi romani. 2 vols. Milan: U. Hoepli, 1881.

Bewer 1999

Francesca G. Bewer. "Bronze Casts after Bozzetti and Modelli by Bernini." In Gaskell and Lie, eds. 1999, pp. 162-67.

Białostocki 1981

Jan Białostocki. Gian Lorenzo Bernini. Berlin: Henschelverlag, 1981.

Bilancia 2004

Fernando Bilancia. "Le eseguie di Carlo Barberini nella chiesa di Santa Maria in Aracoeli." In Studi sul Barocco romano: Scritti in onore di Maurizio Fagiolo dell'Arco, by Mario Serio et al., pp. 95-117. Milan: Skira, 2004.

Bindman 1970

David Bindman. European Sculpture from Bernini to Rodin. London: Studio Vista, 1970.

Black 2000

Bernard Black. "Canova's Lost Model for Hercules and Lichas Preserved in Bronze." Apollo 152, n.s., no. 463 (September 2000), pp. 13-21.

Blandino 2001

Betty Blandino. The Figure in Fired Clay. London: A. & C. Black, 2001.

Blunt 1966

Anthony Blunt. The Paintings of Nicolas Poussin: Critical Catalogue. London: Phaidon Press, 1966.

Blunt and Cooke 1960

Anthony Blunt and Hereward Lester Cooke. The Roman Drawings of the XVII and XVIII Centuries in the Collection of Her Majesty the Queen at Windsor Castle. London: Phaidon Press, 1960.

Bodart 2006

Diane H. Bodart. "L'excellence du portrait par Gian Lorenzo Bernini, ou la resemblance à l'épreuve de l'idea." Studiolo 4 (2006), pp. 39-60.

Bode 1922

Wilhelm Bode. Die italienische Plastik. 6th ed. Handbücher der Stattlichen Museen zu Berlin. 1891. Berlin and Leipzig: Walter de Gruyter & Co., 1922.

Boehman 2009

Jessica Marie Boehman. "Maestro Ercole Ferrata." Ph.D. diss., University of Pennsylvania, Philadelphia, 2009.

Andrea Bolland, "Desiderio and Diletto: Vision, Touch, and the Poetics of Bernini's Apollo and Daphne." The Art Bulletin 82, no. 2 (June 2000), pp. 309-30.

Bollettino d'arte 1909

"Notizie. Musei e gallerie." Bollettino d'arte [3], no. 7 (July 1909), p. 279.

Bologna 1968

Mostra di sculture e disegni scenografici del Seicento e del Settecento della Accademia di Belle Arti di Bologna. Exhibition, Accademia di Belle Arti, Bologna, 1968. Catalogue by Alessandro Parronchi and Silla Zamboni. Bologna: Accademia Clementina, 1968.

Bologna 1979

L'arte del Settecento Emiliano: La pittura, l'Accademia Clementina, Exhibition, Palazzi del Podestà and di Re Enzo, Bologna, 1979. Catalogue by Andrea Emiliani and others. Bologna: Alfa Edizioni, 1979.

Bondil 1996

Nathalie Bondil. La sculpture art du modelage: Terre, cire, pâtes, plâtre, résines. Paris: Ed. Fleurus, 1996.

Bonn 2002-3

Venezia!—Kunst aus venezianischen Palästen: Sammlungsgeschichte Venedigs vom 13. bis 19. Jahrhundert. Exhibition, Kunst- und Ausstellungshalle der Bundesrepublik Deutschland Bonn, 2002-3. Ostfildern: Hatje Cantz, 2002.

Bonn and Berlin 2005-6

Barock im Vatikan: Kunst und Kultur im Rom der Päpste II, 1572-1676. Exhibition, Kunstund Ausstellungshalle der Bundesrepublik Deutschland, Bonn; Martin-Gropius-Bau, Berlin, 2005-6. Catalogue by Georg Satzinger, Sebastian Schütze, and others. Leipzig: E. A. Seemann Verlag, 2005.

Bonnefoy 1970

Yves Bonnefoy. Rome 1630: L'horizon du premier baroque. Paris: Flammarion, 1970.

Bonnefoy 1994

Yves Bonnefoy. Rome 1630: L'horizon du premier baroque. 2nd ed. 1970. Paris: Flammarion, 1994.

Borghini, G. 1984

Gabriele Borghini. "Nota sul modello in grande per la 'Santa Caterina' di Ercole Ferrata nel Duomo di Siena." Antologia di belle arti, n.s., no. 21-22 (1984), pp. 76-79.

Borghini, R. 2007 ed.

Raffaello Borghini. Il Riposo. Edited and translated by Lloyd H. Ellis. 1584. Toronto: University of Toronto Press, 2007.

Born 1937

Wolfgang Born. "Bozzetti and Modelletti." The Connoisseur 99, no. 428 (April 1937), pp. 191-96.

Borsi 1980

Franco Borsi. Bernini architetto. Milan: Electa Editrice, 1980.

Borsi, Acidini Luchinat, and Quinterio, eds. 1981

Franco Borsi, Cristina Acidini Luchinat, and Francesco Quinterio, eds. Gian Lorenzo Bernini: Il testamento, La casa, La raccolta dei beni. Biblioteca di architettura. Saggi e documenti, 27. Florence: Alinea Editrice, 1981.

Boschini 1660

Marco Boschini. La carta del navegar pitoresco: Dialogo Venice: Per il Baba, 1660.

Boselli 1978 ed.

Orfeo Boselli. Osservazioni della scoltura antica dai manoscritti Corsini e Doria e altri scritti. Edited by Phoebe Dent Weil. Florence: Edizioni S.P.E.S., 1978.

Boston 1955-56

"Christmas Seen by Baroque Artists." Exhibition, Museum of Fine Arts, Boston, 1955-56. No catalogue.

Boström 1990

Antonia Boström. "A Bronze Group of the Rape of Proserpina at Cliveden House in Buckinghamshire." The Burlington Magazine 132, no. 1053 (December 1990), pp. 828-40.

Boucher 1998

Bruce Boucher. Italian Baroque Sculpture. London: Thames and Hudson, 1998.

Boucher 2001–2a

Bruce Boucher. "Bernini's Models for the Angels of the Ponte Sant'Angelo in Rome." In Houston and London 2001-2, pp. 60-66.

Boucher 2001-2b

Bruce Boucher. "Italian Renaissance Terracotta: Artistic Revival or Technological

Innovation?" In Houston and London 2001-2, pp. 1-31, 283-84.

Boudon 2002

Marion Boudon. "L'antithèse Bernin-Du Quesnoy dans la littérature artistique française des XVIIe et XVIIIe siècles." In Grell and Stanič, eds. 2002, pp. 325-49.

Boudon-Machuel 2005

Marion Boudon-Machuel. François du Quesnoy, 1597-1643. Paris: Arthena, 2005.

Bover 1929

Ferdinand Boyer. "Un inventaire inédit des antiques de la villa Médicis (1598)." Revue archéologique, ser. 5, 30 (October-December 1929), pp. 256-70.

Brandi 1969

Cesare Brandi. L'attività giovanile di Gianlorenzo Bernini: Appunti tratti dalle lezioni del professor Cesare Brandi, anno accademico 1968–1969. Rome: Mario Bulzoni Editore, 1969.

Brandi 1970

Cesare Brandi. La prima architettura barocca: Pietro da Cortona, Borromini, Bernini. Bari: Laterza, 1970.

Brauer and Wittkower 1931

Heinrich Brauer and Rudolf Wittkower. Die Zeichnungen des Gianlorenzo Bernini. 2 vols. Römische Forschungen der Bibliotheca Hertziana, 9-10. Berlin: Verlag Heinrich Keller, 1931.

Bresc-Bautier et al. 1989

Geneviève Bresc-Bautier et al. Louvre: Guide des collections. Paris: Éditions de la Réunion des Musées Nationaux, 1989.

Bresc-Bautier et al. 1991

Geneviève Bresc-Bautier et al. Le Louvre: Trésors du plus grand musée du monde. Paris: Sélection du Reader's Digest, 1991.

Bresc-Bautier et al. 2006

Geneviève Bresc-Bautier et al. Les sculptures européennes du musée du Louvre: Byzance, Espagne, îles britanniques, Italie, anciens Pays-Bas et Belgique, pays germaniques et de l'Europe de l'est, pays scandinaves, antiques restaurées et copies d'antiques. Paris: Somogy; Musée du Louvre, 2006.

Briganti 1982

Giuliano Briganti. Pietro da Cortona, o, Della pittura barocca. 2nd ed. 1962. Florence: G. C. Sansoni Editore, 1982.

Briggs 1915a

Martin S. Briggs. "The Genius of Bernini." The Burlington Magazine for Connoisseurs 26, no. 143 (February 1915), pp. 197-98, 200-202.

Briggs 1915b

Martin S. Briggs. "The Genius of Bernini (Conclusion)." The Burlington Magazine for Connoisseurs 26, no. 144 (March 1915), pp. 223-25, 227-28.

Brinckmann 1923-24

A[lbert] E[rich] Brinckmann. Barock-Bozzetti. Vols. 1-2, Italienische Bildhauer/ Italian Sculptors. Frankfurt: Frankfurter Verlags-Anstalt, 1923-24.

Brinckmann 1924

A[lbert] E[rich] Brinckmann. "Due bozzetti per Fontana di G. L. Bernini." Bollettino d'arte del Ministero della Pubblica Istruzione, ser. 2, [17], no. 11 (May 1924), pp. 491-95.

Brinckmann 1926-27

A[lbert] E[rich] Brinckmann. "Ein Bozzetto Berninis." Zeitschrift für bildende Kunst, n.s., 60 (1926-27), pp. 264-70.

Brizzolara 1986

Anna Maria Brizzolara. Le sculture del Museo civico archeologico di Bologna: La collezione Marsili. Bologna: Grafis, 1986.

Brooks 2009

Julian Brooks. "Florentine Artists and Disegno in Late Cinquecento Rome." In Lukehart, ed. 2009, pp. 224-45.

Brugnoli 1961

Maria Vittoria Brugnoli. "Un bozzetto del Bernini per il 'San Girolamo.'" Arte antica e moderna 13-16 (1961), pp. 291-93, fig. 131b.

Brummer 1967

Hans Henrik Brummer. "Two Works by Giulio Cartari." Konsthistorisk tidskrift 36, no. 3-4 (November 1967), pp. 106-33.

Brunelli 2003

Giampiero Brunelli. Soldati del papa: Politica militare e nobiltà nello Stato della Chiesa, 1560-1644. Studi e ricerche, Università degli studi Roma Tre, Dipartimento di studi storici, geografici, antropologici, 8. Rome: Carocci, 2003.

Bruni 1633

Antonio Bruni. Le Veneri: Poesie del Bruni. Rome: G. Mascardi, 1633.

Budapest 1969

Mesterraizok a Lipcsei Képzöművészeti Múzeumból. Exhibition, Szépmüvészeti Múzeum, Budapest, 1969. Catalogue by Iván Fenyó. Budapest: Népmüvelési Propaganda Iroda, 1969.

Burke 1992

Peter Burke. The Fabrication of Louis XIV. New Haven and London: Yale University Press, 1992.

Burlington Magazine 1981

"Some Recent Acquisitions of Sculpture by European Public Collections." Supplement to The Burlington Magazine 123, no. 934 (January 1981), pp. 63-[66].

Butzek 1980

Monika Butzek. "Die Papstmonumente im Dom von Siena." Mitteilungen des Kunsthistorischen Institutes in Florenz 24, no. 1 (1980), pp. 15-78.

Butzek 1988

Monika Butzek. "Die Modellsammlung der Mazzuoli in Siena." Pantheon 46 (1988), pp. 75-102.

Cacciotti 1994

Beatrice Cacciotti. "La collezione del VII marchese del Carpio tra Roma e Madrid." Bollettino d'arte, ser. 6, 79, no. 86-87 (July-October 1994), pp. 133-96.

Cambridge, Mass. 1958

"The Italian and English Renaissance." Exhibition, Charles Hayden Memorial Library [M.I.T.], Cambridge, Mass., 1958. No catalogue.

Cambridge, Mass. 1980

"In Memoriam: Gian Lorenzo Bernini." Exhibition, Fogg Art Museum, Cambridge, Mass., 1980. No catalogue.

Cambridge, Mass. 2007

"Gian Lorenzo Bernini: Sketches in Clay." Exhibition, Harvard University Art Museums, Cambridge, Mass., 2007. No catalogue.

Cardilli Alloisi and Tolomeo Speranza, eds. 1988

Luisa Cardilli Alloisi and Maria Grazia Tolomeo Speranza, eds. La Via degli angeli: Il restauro della decorazione scultorea di Ponte Sant'Angelo. Rome: De Luca Edizioni d'Arte, 1988.

Carta 2002

Marina Carta. "La statua della Carità di Giuseppe Mazzuoli per la Cappella del Monte di Pietà di Roma: Alcune precisazioni sulla progettazione e realizzazione." In Sculture romane del Settecento, vol. 2, La professione della scultore, edited by Elisa Debenedetti, pp. 41-53. Rome: Bonsignori Editore, 2002.

Cellini 1967 ed.

Benvenuto Cellini. The Treatises of Benvenuto Cellini on Goldsmithing and Sculpture. Translated by C. R. Ashbee. New York: Dover Publications, 1967.

Cennini 1933 ed.

Cennino Cennini. The Craftsman's Handbook: The Italian "Il libro dell'arte." Translated by Daniel V. Thompson, Jr. New Haven: Yale University Press, 1933.

Chamberlain 1977

Harriet Feigenbaum Chamberlain. "The Influence of Galileo on Bernini's Saint Mary Magdalen and Saint Jerome." The Art Bulletin 59, no. 1 (March 1977), pp. 71–84.

Chaney, ed. 2003

Edward Chaney, ed. The Evolution of English Collecting: The Reception of Italian Art in the Tudor and Stuart Periods. New Haven and London: Yale University Press, 2003.

Chantelou 1885 ed.

[Paul Fréart] de Chantelou. *Journal du voyage du Cavalier Bernin en France*. Edited by Ludovic Lelanne. Paris: Gazette des Beaux-Arts, 1885.

Chantelou 1985 ed.

Paul Fréart de Chantelou. *Diary of the Cavaliere Bernini's Visit to France*. Edited by Anthony Blunt; annotated by George C. Bauer; translated by Margery Corbett. Princeton, N.J.: Princeton University Press, 1985.

Chantelou 2001 ed.

Paul Fréart de Chantelou. *Journal de voyage du Cavalier Bernin en France*. Edited by Milovan Stanič. 1885. Paris: Macula/L'Insulaire, 2001.

Chastel and Morel 1989-2009

André Chastel and Philippe Morel. *La Villa Médicis*. 5 vols. Rome: Académie de France à Rome, École Française de Rome, 1989–2009.

Chicago, Philadelphia, and Washington, D.C. 1998–99

From the Sculptor's Hand [second issue, Bernini's Rome]: Italian Baroque Terracottas from the State Hermitage Museum.
Exhibition, The Art Institute of Chicago; Philadelphia Museum of Art; National Gallery of Art, Washington, D.C., 1998–99.
Catalogue by Ian Wardropper and others.
Chicago: Art Institute of Chicago, 1998.

Christian 1986

Mary Christian. "Bernini's 'Danube' and Pamphili Politics." *The Burlington Magazine* 128, no. 998 (May 1986), pp. 352, 354–55.

Cicognara 1813-18

Leopoldo Cicognara. Storia della scultura dal suo Risorgimento in Italia sino al secolo di Napoleone per servire di continuazione alle opere di Winckelmann e di D'Agincourt. 3 vols. Venice: Picotti, 1813–18.

Cionci 2004

Andrea Cionci. Il tenore collezionista: Vita, carriera lirica e collezioni di Evan Gorga. Florence: Nardini, 2004.

Cipriani 1980

Angela Cipriani. "Un leone 'studio del Cav. Bernini.'" *Ricerche di storia dell'arte* 11 (1980), pp. 75–78.

Cipriani 1987

Angela Cipriani. "Un bozzetto per il leone della Fontana dei Fiumi." In Fagiolo, ed. 1987, pp. 139–47.

Colasanti 1924

Arduino Colasanti. "Un inedito frammento del bozzetto della Dafne del Bernini." Bollettino d'arte del Ministero della Pubblica Istruzione, ser. 2, [17], no. 9 (March 1924), pp. 416–18.

Coliva 2002

Anna Coliva. "I gruppi monumentali borghesiani." In Coliva, ed. 2002, pp. 10-35.

Coliva, ed. 2002

Anna Coliva, ed. Bernini scultore: La tecnica esecutiva. Rome: De Luca Editori d'Arte, 2002.

Connors 1982

Joseph Connors. "Bernini's S. Andrea al Quirinale: Payments and Planning." *Journal* of the Society of Architectural Historians 41, no. 1 (March 1982), pp. 15–37.

Contardi 1991-92

Bruno Contardi. "I modelli nel sistema della progettazione architettonica a Roma tra 1680 e 1750." In In urbe architectus: Modelli, disegni, misure; La professione dell'architetto, Rome, 1680–1750, pp. 9–22. Exhibition, Museo Nazionale di Castel Sant'Angelo, Rome, 1991–92. Catalogue by Bruno Contardi, Giovanna Curcio, and others. Rome: Argos Edizioni, 1991.

Corradini, ed. 1996

Elena Corradini, ed. *Museo e medagliere* estense tra Otto e Novecento. Modena: F. C. Panini, [1996].

Cropper 2005

Elizabeth Cropper. The Domenichino Affair: Novelty, Imitation, and Theft in Seventeenth-Century Rome. New Haven and London: Yale University Press, 2005.

Cummings 1979

Frederick J. Cummings. Selected Works from The Detroit Institute of Arts. Detroit: Detroit Institute of Arts, 1979.

Cummings and Elam, eds. 1971

Frederick J. Cummings and Charles H. Elam, eds. *The Detroit Institute of Arts Illustrated Handbook*. Detroit: Detroit Institute of Arts, 1971.

Cuno et al. 1996

James Cuno et al. *Harvard's Art Museums*: 100 *Years of Collecting*. Cambridge, Mass.: Harvard University Museums; New York: Harry N. Abrams, 1996.

Cuno et al. 2004

James Cuno et al. Whose Muse?: Art Museums and the Public Trust. Princeton, N.J.: Princeton University Press, 2004.

Cureau de La Chambre 1685

Pierre Cureau de La Chambre. *Préface pour servir à l'histoire de la vie et des ouvrages du Cavalier Bernin*. N.p.: N.p., [1685].

Curzietti 2007

Jacopo Curzietti. "Gian Lorenzo Bernini e l'*Elefante* della Minerva: Una documentazione inedita." *Studi di storia dell'arte*, no. 18 (2007), pp. 333–42.

Curzietti 2010

Jacopo Curzietti. "Gian Lorenzo e Luigi Bernini: Nuovi documenti per la Fontana del Tritone in piazza Barberini." *Storia dell'arte* 125–26, n.s., 25–26 (January– August 2010), pp. 110–23.

D'Agostino 1996

Paola D'Agostino. "Un contributo al catalogo di Pietro Bernini." *Dialoghi di storia dell'arte*, no. 2 (May 1996), pp. 108–11.

D'Agostino 1997-98

Paola D'Agostino. "Pietro Bernini tra manierismo e barocco: Considerazioni su uno scultore 'di transizione.'" *Rendiconti della Accademia di Archeologia, Lettere e Belle Arti* [Naples], n.s., 67 (1997–98), pp. 147–71.

Daltrop 1989

Georg Daltrop. "Antikensammlungen und Mäzenatentum um 1600 in Rom." In Beck and Schulze, eds. 1989, pp. 37–58.

D'Amelio and Marder 2011

Maria Grazia D'Amelio and Tod A. Marder. "The Four Rivers Fountain: Art and Building Technology in Pamphilj Rome." In The Pamphilj and the Arts: Patronage and Consumption in Baroque Rome, edited by Stephanie C. Leone, pp. 23–36. Chestnut Hill, Mass.: McMullen Museum of Art, Boston College, 2011.

Damm 2006

Heiko Damm. "Gianlorenzo on the Grill: The Birth of the Artist in His 'Primo Parto di Divozione.'" In Delbeke, Levy, and Ostrow, eds. 2006, pp. 223–49.

Darr 1986

Alan Phipps Darr. "A Valentiner Legacy: Italian Sculpture." *Apollo* 124, n.s., no. 298 (December 1986), pp. 476–85.

Darr, Barnet, and Boström 2002

Alan P. Darr, Peter Barnet, and Antonio Boström. *Catalogue of Italian Sculpture in The Detroit Institute of Arts*. 2 vols. London: Harvey Miller Publishers; Detroit: Detroit Institute of Arts, 2002. Delbeke, Levy, and Ostrow, eds. 2006 Maarten Delbeke, Evonne Levy, and Steven

F. Ostrow, eds. Bernini's Biographies: Critical Essays. University Park, Pa.: The Pennsylvania State University Press, 2006.

Delfini Filippi 1989

Gabriella Delfini Filippi. San Pietro: La Basilica, la Piazza, Guide del Vaticano, 1. Rome: Flli. Palombo, 1989.

Della Pergola 1951

Paola Della Pergola. Galleria Borghese in Roma. Itinerari dei musei e monumenti d'Italia, 43. Rome: La Libreria dello Stato, 1951.

Della Pergola 1963

Paola Della Pergola. Villa Borghese. Itinerari dei musei, gallerie e monumenti d'Italia, 106. Rome: Istituto Poligrafico dello Stato, La Libreria dello Stato, [1963].

Delogu 1932

Giuseppe Delogu. La scultura italiana del Seicento e del Settecento, parte 1. Florence: Cherubini, 1932.

De Nicola 1916

Giacomo De Nicola. "Notes on the Museo Nazionale of Florence—II: A Series of Small Bronzes by Pietro da Barga." The Burlington Magazine for Connoisseurs 29, no. 165 (December 1916), pp. 362-65, 368-70, 373.

De Rinaldis 1948a

Aldo De Rinaldis. Catalogo della Galleria Borghese in Roma. Rome, 1948.

De Rinaldis 1948b

Aldo De Rinaldis. L'arte in Roma dal Seicento al Novecento. Storia di Roma, 30. Bologna: L. Cappelli, 1948.

Detroit 1965

Art in Italy, 1600-1700. Exhibition, The Detroit Institute of Arts, 1965. Catalogue by Frederick [J.] Cummings and others. Detroit, 1965.

Detroit 1985

100 Masterworks from The Detroit Institute of Arts. Exhibition, The Detroit Institute of Arts, 1985. Catalogue edited by Julia P. Henshaw. New York: Hudson Hills Press, 1985.

Dickerson 2006

C. D. Dickerson III. "Bernini and Before: Modeled Sculpture in Rome, c. 1600-25." Ph.D. diss., Institute of Fine Arts, New York University, New York, 2006.

Dickerson 2008

C. D. Dickerson III. "The 'Gran Scuola' of Guglielmo della Porta, the Rise of the 'Aurifex Inventor,' and the Education of Stefano Maderno." Storia dell'arte 121,

n.s., no. 21 (September-December 2008), pp. 25-72.

Di Gioia 1984

Elena Bianca Di Gioia. "Un bozzetto del 'San Longino' di Gian Lorenzo Bernini ritrovato nella bottega di Francesco Antonio Fontana." Antologia di belle arti, n.s., no. 21-22 (1984), pp. 65-69.

Di Gioia 1986a

Elena Bianca Di Gioia, "Bozzetti barocchi dallo studio di F. A. Fontana." In Rome 1986, pp. 171-217.

Di Gioia 1986b

Elena Bianca Di Gioia. "Bozzetti e modelli: Breve nota sulla loro funzione e sulle tecniche in uso tra XVI e XVII secolo.' In Rome 1986, pp. 161-70.

Di Gioia 1986c

Elena Bianca Di Gioia. "'Casa e bottega del Cav. Francesco Antonio Fontana': Materiali dallo studio di uno scultore romano della seconda metà del '600." In Rome 1986, pp. 151-60.

Di Gioia 1990

Elena Bianca Di Gioia. Museo di Roma: La collezioni di scultura del Seicento e Settecento Itinerari didattici d'arte e di cultura, 28. Rome: Fratelli Palombi Editori, 1990.

Di Gioia 1997

E[lena] B[ianca] Di Gioia. " Fontana, Francesco Antonio." In Dizionario biografico degli Italiani, vol. 48 (1997), pp. 657-61. Rome: Istituto della Enciclopedia Italiana, 1960-.

Di Gioia 2002

Elena Bianca Di Gioia. Le collezioni di scultura del Museo di Roma: Il Seicento. Rome: Campisano Editore, 2002.

Di Gioia 2010

Elena Bianca Di Gioia. "Ercole Ferrata: Gli ultimi pensieri sul suo Studio de' disegni, modelli, cere e giessi." In Omaggio ai maestri intelvesi: Ercole Ferrata, Carlo Innocenzo Carloni, sculture e dipinti dal Museo Diocesano di Scaria Intelvi, pp. 23-58. Exhibition, Musei Civici, Como, 2010. Catalogue by Maria Letizia Casati and others. Quaderni della Pinacoteca Civica di Como, 5. Como, 2010.

Dobroklonskii 1961

M. V. Dobroklonskii. Risunki ital'ianskoi shkoly XVII–XVIII vekov: Katalog (Drawings of the Italian school, seventeenth to eighteenth centuries). Leningrad: Izdatel'stvo Gosudarstvennogo Ermitazha, 1961.

Dombrowski 1997

Damian Dombrowski. Giuliano Finelli: Bildhauer zwischen Neapel und Rom.

Schriften zur bildenden Kunst, 7. Frankfurt: Peter Lang, 1997.

Donati 1941

Ugo Donati. "Tre fontane berniniane." L'urbe: Revista romana di storia, arte, lettere, costumanze 6, no. 2 (February 1941), pp. 11-13.

D'Onofrio 1957

Cesare D'Onofrio. Le fontane di Roma con documenti e disegni inediti. Rome: Staderini Editore, 1957.

D'Onofrio 1966

Cesare D'Onofrio. "Un dialogo-recita di Gian Lorenzo Bernini e Lelio Guidiccioni." Palatino 10, no. 2 (April-June 1966), pp. 127-34.

D'Onofrio 1967a

Cesare D'Onofrio. Gli obelischi di Roma. Rome: Bulzoni Editore, 1967.

D'Onofrio 1967b

Cesare D'Onofrio. Roma vista da Roma. Rome: Liber, 1967.

D'Onofrio 1969

Cesare D'Onofrio. Roma nel Seicento. I Volti di Roma. [Florence]: Vallecchi, 1969.

D'Onofrio 1977

Cesare D'Onofrio. Acque e fontane di Roma. Rome: Staderini Editore, 1977.

D'Onofrio 1986

Cesare D'Onofrio. Le fontane di Roma. 3rd ed. 1957. Rome: Romana Società, 1986.

Düsseldorf 1969–70

Meisterzeichnungen der Sammlung Lambert Krahe. Exhibition, Kunstmuseum Düsseldorf, 1969-70. Catalogue by Eckhard Schaar and Dieter Graf. Düsseldorf, 1969.

Düsseldorf 1990

Facetten des Barock: Meisterzeichnungen von Gianlorenzo Bernini bis Anton Raphael Mengs aus dem Kunstmuseum Düsseldorf, Akademiesammlung. Exhibition, Kunstmuseum Düsseldorf, 1990. Catalogue by Hein-Th. Schulze Altcappenberg and Susannah Cremer. Düsseldorf, 1990.

Edinburgh 1998

Effigies and Ecstasies: Roman Baroque Sculpture and Design in the Age of Bernini. Exhibition, National Gallery of Scotland, Edinburgh, 1998. Catalogue by Aidan Weston-Lewis and others. Edinburgh, 1998.

Einem 1955

Herbert von Einem. "Bemerkungen zur Cathedra Petri des Lorenzi Bernini." Nachrichten der Akademie der Wissenschaften in Göttingen: Philologisch-Historische Klasse, 1955, pp. 93-114.

Ekserdjian 1999

David Ekserdjian. Review of Sketches in Clay for Projects by Gian Lorenzo Bernini: Theoretical, Technical, and Case Studies, edited by Ivan Gaskell and Henry Lie. Apollo 150, n.s., no. 450 (August 1999), p. 61.

Evers 1948

Hans Gerhard Evers. Die Engelsbrücke in Rom. Berlin: Verlag Gebr. Mann, 1948.

Fagiolo 2002

Marcello Fagiolo. "Introduzione all 'toscanità' di Bernini (e alla 'romanita' di Michelangelo e di Buontalenti)." In Bernini e la Toscana: Da Michelangelo al barocco mediceo e al neocinquecentismo, edited by Oronzo Brunetti, Silvia Chiara Cusmano, and Valerio Tesi, pp. ix-lix. Roma, storia, cultura, immagine, 9. Rome: Gangemi Editore, 2002.

Fagiolo, ed. 1987

Marcello Fagiolo, ed. Gian Lorenzo Bernini e la arti visive. Biblioteca internazionale di cultura, 19. Rome: Istituto della Enciclopedia Italiana, 1987.

Fagiolo dell'Arco 1969

Maurizio Fagiolo dell'Arco. "Gian Lorenzo Bernini." Storia dell'arte, no. 1–2 (1969), pp. 195-200.

Fagiolo dell'Arco 1981

Maurizio Fagiolo dell'Arco. Bernini. Rome: De Luca Editore, 1981.

Fagiolo dell'Arco 1999

Maurizio Fagiolo dell'Arco. "Bernini 'regista' del Barocco: Ragioni e percorso di una mostra." In Rome 1999b, pp. 17–36.

Fagiolo dell'Arco 2001

Maurizio Fagiolo dell'Arco. L'immagine al potere: Vita di Giovan Lorenzo Bernini. Rome: GLF Editori Laterza, 2001.

Fagiolo dell'Arco and Fagiolo 1967

Maurizio Fagiolo dell'Arco and Marcello Fagiolo dell'Arco. Bernini: Una introduzione al gran teatro del barocco. Rome: Mario Bulzoni Editore, 1967.

Fagiolo dell'Arco, ed. 2002

Maurizio Fagiolo dell'Arco, [ed.]. Berniniana: Novità sul regista del Barocco. Milan: Skira, 2002.

Faison 1958

S. Lane Faison, Jr. A Guide to the Art Museums of New England. New York: Harcourt Brace, 1958.

Falaschi 1987

Laura Falaschi. "Organizzazione del cantiere: Ruolo del Morelli, tecnica di esecuzione." In Martinelli, ed. 1987, pp. 28-30.

Falaschi 1996

Laura Falaschi. "Il ciborio del Santissimo Sacramento in San Pietro in Vaticano, secondo i disegni e i progetti di Gian Lorenzo Bernini da Urbano VIII Barberini a Clement X Altieri." In Martinelli, ed. 1996, pp. 69-136.

Faldi 1954

Italo Faldi. Galleria Borghese: Le sculture dal secolo XVI al XIX. Cataloghi dei musei e gallerie d'Italia. Rome: Istituto Poligrafico dello Stato, 1954.

Farrell, Lie, and Young 1999

Eugene F. Farrell, Henry Lie, and Suzanne M. M. Young. "Clay Analysis." In Gaskell and Lie, eds. 1999, pp. 39-47.

Philipp Fehl. "Improvisation and the Artist's Responsibility in St. Peter's, Rome: Papal Tombs by Bernini and Canova." In Eröffnungs- und Plenarvorträge [der] Arbeitsgruppe "Neue Forschungsergebnisse und Arbeitsvorhaben," vol. 9, section 9, edited by Elisabeth Liskar, pp. 111-23, 199-204. Akten des XXV. Internationalen Kongresses für Kunstgeschichte, Wien, 4.-10. September 1983. Vienna: Hermann Böhlaus Nachf., 1985.

Félibien 1666-88

André Félibien. Entretiens sur les vies et sur les ouvrages des plus excellens peintres anciens et modernes. 5 vols. Paris: Chez P. Le Petit, 1666-88.

Fenton 1998

James Fenton. Leonardo's Nephews: Essays on Art and Artists. New York: Farrar, Straus and Giroux, 1998.

Ferrari and Papaldo 1999

Oreste Ferrari and Serenita Papaldo. Le sculture del Seicento a Roma. Rome: Ugo Bozzi Editore, 1999.

Fischer 1928

Wolfgang G. Fischer. "Die Handzeichnungen aus dem römischen Barock in der Leipziger Stadtbibliothek." Zeitschrift für bildende Künst, n.s., 62 (1928–29), Kunstchronik ünd Kunstliteratur, no. 3 (June 1928), pp. 25-28.

Florence 1976

Omaggio a Leopoldo de' Medici. Parte I. Disegni. Exhibition, Gabinetto Disegni e Stampe degli Uffizi, Florence. Catalogue by Anna Forlani Tempesti and Anna Maria Petrioli Tofani. Florence: Leo S. Olschki Editore, 1976.

Florence 1997

Disegni del Seicento Romano. Exhibition, Gabinetto Disegni e Stampe degli Uffizi,

Florence, 1997. Catalogue by Ursula Verena Fischer Pace. Florence: Leo S. Olschki Editore, 1997.

Fock 1983

C[ornelia] Willemijn Fock. "The Original Silver Casts of Giambologna's Labours of Hercules." In Studien zum europäischen Kunsthandwerk: Festschrift Yvonne Hackenbroch, edited by Jörg Rasmussen, pp. 141-45. Munich: Klinkhardt & Biermann, 1983.

Fogolari 1913

Gino Fogolari. "L'Accademia veneziana di pittura e scoltura del Settecento." L'Arte 16 (1913), pp. 241-72, 364-94.

Fogolari, Nebbia, and Moschini 1929

Gino Fogolari, Ugo Nebbia, and Vittorio Moschini. La R. Galleria Giorgio Franchetti alla Ca' d'Oro di Venezia: Guida—Catalogo. Venice: Ferrari, 1929.

Forlì 2012

Wildt: L'anima e le forme. Exhibition, Musei San Domenico, Forlì, 2012. Catalogue by Paola Mola and others. Milan: Silvana Editoriale, 2012.

Forti 1980

Augusto Forti. "Ricordi del Bernini in casa Forti." Strenna dei romanisti 41 (1980), pp. 196-204.

Fort Worth 1982

The Art of Gianlorenzo Bernini: Selected Sculpture. Exhibition, Kimbell Art Museum, Fort Worth, 1982. Catalogue by Michael P. Mezzatesta. Fort Worth, 1982.

Fraschetti 1900

Stanislao Fraschetti. Il Bernini: La sua vita, la sua opera, il suo tempo. Milan: U. Hoepli, 1900.

Froelich-Bume 1937

L[ili] Froelich-Bume. "Bozzetti and Modelletti of the Late Renaissance and the Baroque." The Burlington Magazine for Connoisseurs 70, no. 408 (March 1937), pp. 132-35.

Frosini 1979

Dino Frosini. "Il Palazzotto del Buonomo e la 'Torre della Fame' in Pisa: L'intervento celebrativo di Ridolfo Sirigatti." Annali della Scuola Normale Superiore di Pisa: Classe di lettere e filosofia, ser. 3, 9, no. 4 (1979), pp. 1475-96.

Gallavotti Cavallero 2009

Daniela Gallavotti Cavallero. "Le sculture di Gian Lorenzo Bernini e della sua scuola." In Santa Maria del Popolo: Storia e restauri, edited by Ilaria Miarelli Mariani and Maria Richiello, pp. 603-18. Rome: Istituto Poligrafico e Zecca dello Stato, Libreria dello Stato, 2009.

Gamba 1920

Carlo Gamba. "Il Palazzo e la raccolta Horne a Firenze." Dedalo: Rassegna d'arte 1 (1920), pp. 162-85.

Gamba 1961

Carlo Gamba. Il Museo Horne a Firenze: Catalogo. Florence: Soprintendenza alle Gallerie di Firenze, 1961.

Garms 2002

Jörg Garms. "Le Bernin dans la littérature de voyage européenne d'Ancien Régime." In Grell and Stanič, eds. 2002, pp. 129-46.

Gaskell 1999a

Ivan Gaskell. "An Economy of Seventeenth-Century Clay Sculptors' Models." In Gaskell and Lie, eds. 1999, pp. 26-30.

Gaskell 1999b

Ivan Gaskell. "Conclusion." In Gaskell and Lie, eds. 1999, pp. 170-71.

Gaskell and Lie, eds. 1999

Ivan Gaskell and Henry Lie, eds. "Sketches in Clay for Projects by Gian Lorenzo Bernini: Theoretical, Technical, and Case Studies." Harvard University Art Museums Bulletin 6, no. 3 (Spring 1999).

Gasparri 1993

Carlo Gasparri. "L'eredità Cavaceppi e le sculture Torlonia." Rivista dell'Istituto Nazionale d'Archeologia e Storia dell'Arte, ser. 3, 16 (1993), pp. 1-56.

Gasparri 1994

Carlo Gasparri. "La fine dello studio Cavaceppi e le collezioni Torlonia." In Rome 1994, pp. 57-64.

Gazette des Beaux-Arts 1988

"La chronique des arts: Principales acquisitions des musées en 1987." Gazette des Beaux-Arts, ser. 6, 111, no. 1430 [supplement] (March 1988), pp. 1-76.

Giammaria, ed. 2009

Alessandro Giammaria, ed. Archivio del collezionismo romano: Progetto diretto da Luigi Spezzaferro. Strumenti, 9. Pisa: Edizioni della Normale, 2009.

Gigli 1958 ed.

Giacinto Gigli. Diario romano, 1608–1670. Edited by Giuseppe Ricciotti. Rome: Tumminelli, 1958.

Giometti 2011

Cristiano Giometti. Roma: Il Palazzo di Venezia e le sue collezioni di scultura. Vol. 4, Museo Nazionale del Palazzo di Venezia: Sculture in terracotta. Rome: Gangemi Editore, 2011.

Giuliani 1989

Marco Giuliani. "Discorso sulla vita e prima giovinezza di Pietro Bernini, ovvero delle cose occorse tra Sesto e Firenze dall'anno 1562 al 1596, in circa." In Sesto Fiorentino 1989, pp. 25-32.

Giustiniani 1981 ed.

Vincenzo Giustiniani. Discorsi sulle arti e sui mestieri. Edited by Anna Banti. Raccolta di opere inedite e rare. Florence: G. C. Sansoni Editore, 1981.

Gnoli 1888

Domenico Gnoli. "Disegni del Bernini per l'obelisco della Minerva in Roma." Archivio storico dell'arte 1 (1888), pp. 398-403.

Goldberg 1983

Edward L. Goldberg. Patterns in Late Medici Art Patronage. Princeton, N.J.: Princeton University Press, 1983.

Golzio 1933-34

Vincenzo Golzio. "Storia dell'arte e ricerche archivistiche. Documenti berniniani." Archivi d'Italia e rassegna internazionale degli archivi, ser. 2, 1 (1933-34), pp. 138-45.

Golzio 1935

Vincenzo Golzio. "Storia dell'arte e ricerche archivistiche. Lo 'Studio' di Ercole Ferrata." Archivi d'Italia e rassegna internazionale degli archivi, ser. 2, 2 (1935), pp. 64-74.

Golzio 1939

Vincenzo Golzio. Documenti artistici sul Seicento nell'archivio Chigi. Rome: Casa Editrice Fratelli Palombi, 1939.

Golzio 1971

Vincenzo Golzio. Palazzi romani dalla rinascità al neoclassico. Roma cristiana, 14. Bologna: L. Cappelli, 1971.

González-Palacios 1970

Alvar González-Palacios. "Bernini as a Furniture Designer." The Burlington Magazine 112, no. 812 (November 1970), pp. 71[8]-23.

González-Palacios 2010

Alvar González-Palacios. "Concerning Furniture: Roman Documents and Inventories; Part 1, c. 1600-1720.' Furniture History 46 (2010), pp. 1-135.

Gould 1982

Cecil Gould. Bernini in France: An Episode in Seventeenth-Century History. 1981. Princeton, N.I.: Princeton University Press, 1982.

Grassi 1944

Luigi Grassi. Disegni del Bernini. Disegnatori ed incisori italiani, 5. Bergamo: Istituto Italiano d'Arti Grafiche, 1944.

Grassi 1946

Luigi Grassi. "Disegni inediti del Bernini e la decorazione di Ponte S. Angelo."

Arti figurative: Rivista d'arte antica e moderna 2, no. 3–4 (July–December 1946), pp. 186-99, pls. 57-68.

Grassi 1962

Luigi Grassi. Gianlorenzo Bernini. Rome: Edizioni dell'Ateneo, 1962.

Grassi 1982

Luigi Grassi. Review of Bernini disegni, by Valentino Martinelli. Antichità viva 21, no. 4 (July-August 1982), pp. 44-45.

Grell and Stanič, eds. 2002

Chantal Grell and Milovan Stanič, eds. Le Bernin et l'Europe: Du baroque triomphant à l'âge romantique. Mythes, critique et histoire, 9. Paris: Presses de l'Université de Paris-Sorbonne, 2002.

Grigaut 1952-53

Paul L. Grigaut. "A Terracotta Model of St. Peter's Cattedra." Bulletin of The Detroit Institute of Arts 32, no. 3 (1952-53), pp. 65-68.

Grigaut 1953

Paul L. Grigaut. "A Bozzetto for St. Peter's 'Cattedra.'" *The Art Quarterly* 16, no. 2 (Summer 1953), pp. 124-30.

Grigorieva and Kantor-Gukovskja 1983

Irina Grigorieva and Asja Kantor-Gukovskja. I grandi disegni italiani delle collezioni dell'Ermitage di Leningrado. Milan: Silvana Editoriale, [1983].

Grossi and Trani 2009

Monica Grossi and Silvia Trani. "From Universitas to Accademia: Notes and Reflections on the Origins and Early History of the Accademia di San Luca Based on Documents from Its Archives." In Lukehart, ed. 2009, pp. 22-41.

Guidiccioni 1992 ed.

Lelio Guidiccioni. Latin Poems: Rome 1633 and 1639. Edited and translated by John Kevin Newman and Frances Stickney Newman. Hildesheim: Weidmann, 1992.

Güthlein 1981

Klaus Güthlein. "Quellen aus dem Familienarchiv Spada zum römischen Barock, 2. Folge." Römisches Jahrbuch für Kunstgeschichte [Bibliotheca Hertziana] 19 (1981), pp. 173-243.

Güthlein 2001

Klaus Güthlein. "Gian Lorenzo Berninis bronzenes Eingangsgitter der Chigi-Kapelle des sieneser Doms." In Opere e giorni: Studi su mille anni di arte europea dedicati a Max Seidel, edited by Klaus Bergdolt and Giorgio Bonsanti, pp. 655-66. Venice: Marsilio Editori, 2001.

Harris 1968

Ann Sutherland Harris. "New Drawings by Bernini for 'St. Longinus' and Other

Contemporary Works." Master Drawings 6, no. 4 (Winter 1968), pp. 383–91, pls. 18–33.

Harris 1977

Ann Sutherland Harris. Selected Drawings of Gian Lorenzo Bernini. New York: Dover Publications, 1977.

Harris 1982

Ann Sutherland Harris. Review of *Bernini disegni*, by Valentino Martinelli. *Master Drawings* 20, no. 4 (Winter 1982), pp. 389–93.

Harris 1987

Ann Sutherland Harris. "La dittatura di Bernini." In Fagiolo, ed. 1987, pp. 43–58.

Harris 1990

Ann Sutherland Harris. "Bernini's Four Rivers Fountain as Permanent Theater." In "All the world's a stage...": Art and Pageantry in the Renaissance and Baroque, Part 2, Theatrical Spectacle and Spectacular Theatre, edited by Barbara Wisch and Susan Scott Munshower, pp. 488–516. Papers in Art History from The Pennsylvania State University, 6. University Park, Pa.: Department of Art History, The Pennsylvania State University, 1990.

Harris 2001

Ann Sutherland Harris. "La Cattedra di San Pietro in Vaticano: Dall'idea alla realizzazione." In Bernardini, ed. 2001, pp. 113–28.

Harris 2003

Ann Sutherland Harris. "Three Proposals for Gian Lorenzo Bernini." *Master Drawings* 41, no. 2 (Summer 2003), pp. 119–27.

Harris 2007-8

Ann Sutherland Harris. "I disegni di ritratto di Gian Lorenzo Bernini." In Rome 2007–8, pp. 170–81.

Harris 2011

Ann Sutherland Harris. "Bernini's Portrait Drawings: Context and Connoisseurship." *The Sculpture Journal* 20, no. 2 (2011), pp. 163–78.

Haskell and Penny 1981

Francis Haskell and Nicholas Penny. *Taste and the Antique: The Lure of Classical Sculpture*, 1500–1900. New Haven and London: Yale University Press, 1981.

Haskell and Rinehart 1960

Francis Haskell and Sheila Rinehart. "The Dal Pozzo Collection: Some New Evidence, Part I." *The Burlington Magazine* 102, no. 688 (July 1960), pp. 318–27.

Hawley 1971

Henry Hawley. "A Terra-cotta Model of Bernini's Proserpina." *Bulletin of the Cleveland Museum of Art* 58, no. 4 (April 1971), pp. 107–11.

Hecksher 1947

William S. Hecksher. "Bernini's Elephant and Obelisk." *The Art Bulletin* 29, no. 3 (September 1947), pp. 155–82.

Heimbürger Ravalli 1979

Minna Heimbürger Ravalli. "Bernini's Shell Decoration for Della Porta's Fountain at Piazza Navona." *Paragone, Arte* 30, no. 357 (November 1979), pp. 83–88, pls. 60–64.

Hemingway 1999a

Colette Czapski Hemingway. "Borghini, Félibien, and Five Angels for the Altar of the Blessed Sacrament." In Gaskell and Lie, eds. 1999, pp. 151–61.

Hemingway 1999b

Colette Czapski Hemingway. "Of Clay, and the Initial Stages of Sculpture." In Gaskell and Lie, eds. 1999, pp. 31–36.

Hemingway and Sigel 2002

Colette Czapski Hemingway and Anthony Sigel. "Progetto di Ricerca Bernini dei Musei d'Arte dell'Università di Harvard." In Coliva, ed. 2002, pp. 285–89.

Henshaw, ed. 1995

Julia P. Henshaw, ed. *The Detroit Institute of Arts: A Visitor's Guide*. Detroit: Detroit Institute of Arts, 1995.

Herding 1970

Klaus Herding. Pierre Puget: Das bildnerische Werk. Berlin: Verlag Gebr. Mann, 1970.

Hermanin 1948

Federico Hermanin. *Il Palazzo di Venezia*. Rome: La Libreria dello Stato, 1948.

Herrmann Fiore, ed. 1997

Kristina Herrmann Fiore, ed. *Apollo e Dafne del Bernini nella Galleria Borghese*. Rome: Silvana Editoriale, 1997.

Hibbard 1965

Howard Hibbard. *Bernini*. Harmondsworth: Penguin Books, 1965.

Hibbard 1966

Howard Hibbard. *Bernini*. Reprint ed. 1965. Baltimore: Penguin Books, 1966.

Hibbard and Jaffe 1964

Howard Hibbard and Irma Jaffe. "Bernini's Barcaccia." *The Burlington Magazine* 106, no. 733 (April 1964), pp. 159–71, [175].

Holbrook 1911

Richard Thayer Holbrook. Portraits of Dante from Giotto to Raffael: A Critical Study with a Concise Iconography. London: P. L. Warner; Boston and New York: Houghton Mifflin Company, 1911.

Honour 2001-2

Hugh Honour. "Canova's Work in Clay." In Houston and London 2001–2, pp. 67–81, 287–88.

Hoog 1989

Simon Hoog. Le Bernin: Louis XIV, une statue "déplacée." Paris: A. Biro, 1989.

Houston and London 2001-2

Earth and Fire: Italian Terracotta Sculpture from Donatello to Canova. Exhibition, The Museum of Fine Arts, Houston; Victoria and Albert Museum, London, 2001–2. Catalogue by Bruce Boucher and others. New Haven and London: Yale University Press, 2001.

Hubbard and Motture 2001-2

Charlotte Hubbard and Peta Motture. "The Making of Terracotta Sculpture: Techniques and Observations." In Houston and London 2001–2, pp. 82–95, 288–90.

Hunisak 1977

John M. Hunisak. The Sculptor Jules Dalou: Studies in His Style and Imagery. Outstanding Dissertations in the Fine Arts. 1976. New York: Garland Publishing,

Huse 1967

Norbert Huse. "Gianlorenzo Berninis Vierströmebrunnen." Ph.D. diss., Ludwig-Maximilians-Universität, Munich, 1967.

Incisa della Rocchetta 1929

Giovanni Incisa della Rocchetta. "Notizie sulla fabbrica della chiesa collegiata di Ariccia (1662–1664)." *Rivista del Reale Istituto d'Archeologia e Storia dell'Arte* 1, no. 3 (1929), pp. 347–92.

Inventory 1793

"Indice generale dei volumi nei quali è compresa la raccolta dei disegni della Real Galleria, disposto secondo l'ordine dei medesimi." 4 vols. Gabinetto di Disegni e Stampe, Florence, Inv. 1793.

Jarrard 2002

Alice Jarrard. "Inventing in Bernini's Shop in the Late 1660s: Projects for Cardinal Rinaldo d'Este." *The Burlington Magazine* 144, no. 1192 (July 2002), pp. 409–19.

Jerusalem 1984

Rishume mofet mi-galeryat Ufitsi/ Disegni italiani della Galleria degli Uffizi. Exhibition, Israel Museum, Jerusalem, 1984. Catalogue by Annamaria Petrioli Tofani. Jerusalem, 1984.

Jerusalem 1999

Nicolas Poussin: Works from His First Years in Rome. Exhibition, Israel Museum, Jerusalem, 1999. Catalogue by Denis Mahon. Jerusalem, 1999.

Jobst 2008

Christoph Jobst. "Cortona und Bernini in der Cappella del Santissimo Sacramento

von Sankt Peter: Altarbild und Sakramentstabernakel im Konflikt?" In Satzinger and Schütze, eds. 2008, pp. 375-91.

Johns 1984

Christopher M. S. Johns. "Some Observations on Collaboration and Patronage in the Altieri Chapel, San Francesco a Ripa: Bernini and Gaulli." Storia dell'arte, no. 50 (1984), pp. 43-47.

Kalveram 1995

Katrin Kalveram. Die Antikensammlung des Kardinals Scipione Borghese. Römische Studien der Bibliotheca Hertziana, 11. Worms: Wernersche Verlagsgesellschaft, 1995.

Kalveram 1997

Katrin Kalveram. "Die Terrakotta-Sammlung des Filippo Farsetti." Münchner Jahrbuch der bildenden Kunst, ser. 3, 48 (1997), pp. 135-46.

Kauffmann 1955

Hans Kauffmann. "Berninis Tabernakel." Münchner Jahrbuch der bildenden Kunst, ser. 3, 6 (1955), pp. 222-42.

Kauffmann 1961

Hans Kauffmann. "Berninis Hl. Longinus." In Miscellanea Bibliothecae Hertzianae zu Ehren von Leo Bruhns, Franz Graf Wolff Metternich, Ludwig Schudt, pp. 366-74. Römische Forschungen der Bibliotheca Hertziana, 16. Munich: Verlag Anton Schroll & Co., 1961.

Kauffmann 1967a

Hans Kauffmann. "Der Werdegang der Theresagruppe von Giovanni Lorenzo Bernini." In Essays in the History of Art Presented to Rudolf Wittkower, edited by Douglas Fraser, Howard Hibbard, and Milton J. Lewine, pp. 222-29, pls. sec. 31, figs. 1-6. London: Phaidon Press, 1967.

Kauffmann 1967b

Hans Kauffmann. Review of Gifan] Lorenzo Bernini: The Sculptor of the Roman Baroque, by Rudolf Wittkower. Zeitschrift für Kunstgeschichte 30, no. 4 (1967), pp. 326-35.

Kauffmann 1970

Hans Kauffmann. Giovanni Lorenzo Bernini: Die figürlichen Kompositionen. Berlin: Gebr. Mann Verlag, 1970.

Kauffmann 1976

Hans Kauffmann. "Bernini's St. Longinus." In Bauer, ed. 1976, pp. 98-110, figs. 13-14.

Keller 1971

Ulrich Keller. Reitermonumente absolutistischer Fürsten: Staatstheoretische Voraussetzungen und politische Funktionen. Münchner kunsthistorische Abhandlungen, 2. Munich and Zurich: Verlag Schnell & Steiner, 1971.

Kessler 2005

Hans-Ulrich Kessler. Pietro Bernini (1562-1629). Römische Studien der Bibliotheca Hertziana, 16. Munich: Hirmer Verlag,

Kessler 2011

Hans-Ulrich Kessler. "Training a Genius: Portrait Sculpture by Pietro and Gian Lorenzo Bernini." The Sculpture Journal 20, no. 2 (2011), pp. 135-45.

Kieven 1999-2001

Elisabeth Kieven. "'Mostrar l'inventione': The Role of Roman Architects in the Baroque Period: Plans and Models." In Turin and other cities 1999-2001, pp. 172-205.

Kommer 1974

Björn R. Kommer. Nicodemus Tessin der Jüngere und das Stockholmer Schloss: Untersuchungen zum Hauptwerk des schwedischen Architekten. Heidelberger kunstgeschichtliche Abhandlungen, n.s., 11. Heidelberg: C. Winter, 1974.

Koortbojian 1991

Michael Koortbojian. "Disegni for the Tomb of Alexander VII." Journal of the Warburg and Courtauld Institutes 54 (1991), pp. 268-73, pls. 75-77.

Kosareva 1974

Nina Kosareva. "A Terracotta Study by Gianlorenzo Bernini for the Statue of the Blessed Ludovica Albertoni." Apollo 100, n.s., no. 154 (December 1974), pp. 480-85.

Krahn 1998

Volker Krahn. "Bernini und Algardi in Berliner Museen und preussischen Schlössern zum 400. Geburtstag der beiden grossen Bildhauer." Museums Journal 12, no. 2 (April 1998), pp. 46-49.

Krautheimer and Jones 1975

Richard Krautheimer and Roger B. S. Jones. "The Diary of Alexander VIII: Notes on Art, Artists and Buildings." Römisches Jahrbuch für Kunstgeschichte [Bibliotheca Hertziana] 15 (1975), pp. 199-233.

Kroker 1913-14

Ernst Kroker. "Eine Sammlung von Handzeichnungen in der Leipziger Stadtbibliothek." Zeitschrift für bildende Kunst 49, n.s., 25 (1913-14), pp. 110-24.

Kruft 1970

Hanno-Walter Kruft. "Zeichnungen der Sammlung Lambert Krahe zu der Ausstellung im Kunstmuseum Düsseldorf, 14. XI. 1969 bis 8. II. 1970." Kunstchronik 23, no. 4 (April 1970), pp. 85-89, 97-100.

Kruft and Larsson 1966

Hanno-Walter Kruft and Lars Olof Larsson. "Entwürfe Berninis für die Engelsbrücke in

Rom." Münchner Jahrbuch der bildenden Kunst, ser. 3, 17 (1966), pp. 145-60.

Kuhn 1966

Rudolf Kuhn. "Die Entstehung des Bernini'schen Heiligenbildes: Dissertation über die Auffassung, den Stil und die Komposition der Skulpturen von 1621 bis die fünfziger Jahre." Ph.D. diss., Ludwig-Maximilians-Universität, Munich, 1966.

Kuhn 1967

Rudolph Kuhn. "Die Unio mystica der hl. Therese von Avila von Lorenzo Bernini in der Cornarokapelle in Rom." Alte und moderne Kunst 12, no. 94 (September-October 1967), pp. 2-8.

Kurz 1942

Otto Kurz. "A Sculpture by Guido Reni." The Burlington Magazine for Connoisseurs 81, no. 474 (September 1942), pp. 222-23, 225-26.

Lanciani 1989-2002

Rodolfo Lanciani. Storia degli scavi di Roma e notizie intorno le collezioni romane di antichità. 7 vols. 1902–12. Rome: Edizioni Quasar, 1989-2002.

Laurain-Portemer 1981

Madeleine Laurain-Portemer. Études Mazarines. Vol. 1. Paris: de Boccard, 1981.

Laurain-Portemer 1987

Madeleine Laurain-Portemer. "Fortuna e sfortuna di Bernini nella Francia di Mazzarino." In Fagiolo, ed. 1987, pp. 113-38.

Lavin, I. 1955 Irving Lavin. "The Bozzetti of Gianlorenzo Bernini." Ph.D. diss., Harvard University, Cambridge, Mass., 1955.

Lavin, I. 1967

Irving Lavin. "Bozzetti and Modelli: Notes on Sculptural Procedure from the Early Renaissance through Bernini." In Stil und Überlieferung in der Kunst des Abendlandes: Akten des 21. internationalen Kongresses für Kunstgeschichte in Bonn 1964, vol. 3, Theorien und Probleme, pp. 93-104, pls. 12-13. Berlin: Verlag Gebr. Mann, 1967.

Lavin, I. 1968a

Irving Lavin. Bernini and the Crossing of St. Peter's. Monographs on Archaeology and the Fine Arts, 17. New York: New York University Press, 1968.

Lavin, I. 1968b

Irving Lavin. "Five New Youthful Sculptures by Gianlorenzo Bernini and a Revised Chronology of His Early Works." The Art Bulletin 50, no. 3 (September 1968), pp. 223-48.

Lavin, I. 1973

Irving Lavin. "Afterthoughts on 'Bernini's Death.'" The Art Bulletin 55, no. 3 (September 1973), pp. 429-36.

Lavin, I. 1978

Irving Lavin. "Calculated Spontaneity: Bernini and the Terracotta Sketch." Apollo 107, n.s., no. 195 (May 1978), pp. 398-405.

Lavin, I. 1980

Irving Lavin. Bernini and the Unity of the Visual Arts. 2 vols. The Pierpont Morgan Library. New York and London: Oxford University Press, 1980.

Lavin, I. 1983

Irving Lavin. "Bernini Memorial Plaque for Carlo Barberini." Journal of the Society of Architectural Historians 42, no. 1 (March 1983), pp. 6-10.

Lavin, I. 2000

Irving Lavin. "Bernini at St Peters." In Pinelli, ed. 2000, Essays vol., pp. 177-236.

Lavin, I. 2001

Irving Lavin. "Bernini-Bozzetti, One More, One Less: A Berninesque Sculptor in Mid-Eighteenth Century France." In Ars et scriptura: Festschrift für Rudolf Preimesberger zum 65. Geburtstag, edited by Hannah Baader et al., pp. 143-56. Berlin: Gebr. Mann Verlag, 2001.

Lavin, I. 2004

Irving Lavin. "Bernini giovane." In Bernini dai Borghese ai Barberini: La cultura a Roma intorno agli anni venti, edited by Olivier Bonfait and Anna Coliva, pp. 134-48. Atti del convegno, Accademia di Francia a Roma, Villa Medici, 17-19 febbraio 1999. Rome: De Luca Editori d'Arte, 2004.

Lavin, I. 2005

Irving Lavin. "Bernini at St. Peter's: Singularis in Singulis, in Omnibus Unicus." In St. Peter's in the Vatican, edited by William Tronzo, pp. 111-243. Cambridge and New York: Cambridge University Press, 2005.

Lavin, I. 2007-9

Irving Lavin. Visible Spirit: The Art of Gianlorenzo Bernini. 2 vols. London: The Pindar Press, 2007-9.

Lavin, I. 2009

Irving Lavin. "'Bozzetto Style': The Renaissance Sculptor's Handiwork." In Lavin, I. 2007-9, vol. 2, pp. 1174-233.

Lavin, M. 1975

Marilyn Aronberg Lavin. Seventeenth-Century Barberini Documents and Inventories of Art. New York: New York University Press, 1975.

Lee 1951

Sherman E. Lee. "A Bozzetto Attributed to Bernini." The Art Quarterly 14, no. 1 (Spring 1951), pp. 65-71.

Leipzig 1928

Handzeichnungen berühmter Meister des Hochbarocks aus eigenem Besitz. Exhibition, Leipziger Stadtbibliothek, 1928. Leipzig, 1928.

Leningrad 1959

Vystavka ital'ianskikh risunkov XVII–XVIII vekov (Exhibition of Italian drawings from the seventeenth to eighteenth centuries). Exhibition, The Hermitage, Leningrad, 1959. Catalogue by M. V. Dobroklonskii and Larisa N. Salmina. Leningrad, 1959.

Leningrad 1984

Le Musée de l'Ermitage: L'art de l'Europe occidental, peinture, dessin, sculpture. Leningrad: Edition d'Art Aurora, 1984.

Leningrad 1987

Masterpieces of Western Art from the Hermitage, Leningrad. Exhibition. Leningrad, 1987.

Leningrad 1989

Ital'ianskaia terrakotta XVII-XVIII vekov: Eskizy i modeli masterov barokko iz sobraniya Ermitazha (Italian terracottas of the seventeenth and eighteenth centuries: Studies and models of the baroque masters from the collections of the Hermitage). Exhibition, State Hermitage Museum, Leningrad, 1989. Catalogue by Sergei O. Androsov and Nina K. Kosareva. Leningrad, 1989.

Leporeo 1628

Ludovico Leporeo. La Villa Borghese: All'ilustriss. et Reverendiss Signor Cardinale Padrone. Rome, 1628.

Levi 1900

Cesare Augusto Levi. Le collezioni veneziane d'arte e d'antichità del secolo XIV ai nostri giorni. Venice: Ferd. Ongania, 1900.

Lie 1999a

Henry Lie. "Conclusion." In Gaskell and Lie, eds. 1999, pp. 168-69.

Lie 1999b

Henry Lie. "Technical Studies: Rationale and Techniques." In Gaskell and Lie, eds. 1999, pp. 37-38.

Llewellyn 2009

Nigel Llewellyn. "The Cult of Saints." In London 2009, pp. 230-40, 326.

Lloyd 1999

Nancy Lloyd. "Fingerprints." In Gaskell and Lie, eds. 1999, pp. 119-24.

London 1925

Catalogue of an Exhibition of Italian Art of the Seventeenth Century. Exhibition, Burlington Fine Arts Club, London, 1925. Catalogue by Osbert Sitwell and Archibald G. B. Russell. London, 1925.

London 1927

Catalogue of a Loan Exhibition of Drawings of the XVII. and XVIII. Centuries: The Magnasco Society. Exhibition, The Warren Gallery, London, 1927. London, 1927.

London 1938

Seventeenth Century Art in Europe: An Illustrated Souvenir of the Exhibition of Seventeenth Century Art in Europe at the Royal Academy of Arts, London. Exhibition, The Royal Academy of Arts, London, 1938. Catalogue by E. K. Waterhouse and others. London: William Clowes and Sons, 1938.

London 1950-51

Exhibition of Works by Holbein and Other Masters of the 16th and 17th Centuries: Illustrated Souvenir. Exhibition, The Royal Academy of Arts, London, 1950-51. London: The Academy, 1950.

London 2009

Baroque 1620-1800: Style in the Age of Magnificence. Exhibition, Victoria and Albert Museum, London, 2009. Catalogue by Michael Snodin, Nigel Llewellyn, and others. London: V&A Publishing, 2009.

London and Edinburgh 1973

Master Drawings of the Roman Baroque from the Kunstmuseum Düsseldorf: A Selection from the Lambert Krahe Collection. Exhibition, Victoria and Albert Museum, London; Talbot Rice Arts Centre, University of Edinburgh, 1973. Catalogue by Dieter Graf. Margate: Eyre & Spottiswoode; Thanet Press, 1973.

Longhurst 1926

M[argaret] H. L[onghurst]. Review of Barock-Bozzetti, by A[lbert] E[rich] Brinckmann. The Burlington Magazine for Connoisseurs 49, no. 284 (November 1926), pp. 255-56.

Lorizzo 2003

Loredana Lorizzo. "Bernini's 'apparato effimero' for the Canonisation of St Elisabeth of Portugal in 1625." The Burlington Magazine 145, no. 1202 (May 2003), pp. 354-60.

Los Angeles 2010

Eye for the Sensual: Selections from the Resnick Collection. Exhibition, Los Angeles County Museum of Art, 2010. Catalogue by Bernard N. Jazzar, J. Patrice Marandel, and others. Stuttgart: Dr. Cantz'sche Druckerei, 2010.

Los Angeles and Ottawa 2008-9

Bernini and the Birth of Baroque Portrait Sculpture. Exhibition, J. Paul Getty Museum, Los Angeles; National Gallery of Canada, Ottawa, 2008-9. Catalogue by Andrea Bacchi and others. Los Angeles: J. Paul Getty Museum, 2008.

Loud et al. 1987

Patricia Cummings Loud et al. In Pursuit of Quality: The Kimbell Art Museum, An Illustrated History of the Art and Architecture. Fort Worth: [Kimbell Art] Museum, 1987.

Lugano 1999

Il giovane Borromini: Dagli esordi a San Carlo alle Quattro Fontane. Exhibition, Museo Cantonale d'Arte, Lugano, 1999. Catalogue by Manuela Kahn-Rossi, Marco Franciolli, and others. Milan: Skira, 1999.

Lugt 1921, 1956

Frits Lugt. Les marques de collections de dessins et d'estampes. Amsterdam: Vereenigde Drukkerijen, 1921. Supplément. The Hague: Martinus Nijhoff, 1956. Reprint, San Francisco: Alan Wofsy Fine Arts, 1971.

Lukehart 2008

Peter M. Lukehart. "Carving Out Lives: The Role of Sculptors in the Early History of the Accademia di San Luca." In Penny and Schmidt, eds. 2008, pp. 184-217.

Lukehart 2009

Peter M. Lukehart. "Visions and Divisions in the Early History of the Accademia di San Luca." In Lukehart, ed. 2009, pp. 160-95.

Lukehart, ed. 2009

Peter M. Lukehart, ed. The Accademia Seminars: The Accademia di San Luca in Rome, c. 1590-1635. CASVA Seminar Papers, 2. Washington, D.C.: National Gallery of Art, 2009.

Maclagan and Longhurst 1932

Eric Maclagan and Margaret H. Longhurst. Catalogue of Italian Sculpture. 2 vols. in 1. Victoria and Albert Museum Dept. of Architecture and Sculpture. London: Board of Education, 1932.

Madrid and Aranjuez 2003-4

Cortes del Barroco, de Bernini y Velázquez a Luca Giordano. Exhibition, Palacio Real, Madrid, and Palacio Real de Aranjuez, 2003-4. Catalogue by Fernando Checa Cremades and others. Madrid: Sociedad Estatal para la Acción Cultural Exterior, Patrimonio Nacional, 2003.

Magalhães do Vale 2008

Teresa Leonor Magalhães do Vale. "La fontana di Nettuno nei giardini del palazzo di Lisbona dei conti di Ericeira, un'opera

di Gian Lorenzo Bernini e Ercole Ferrata in Portogallo." In Traduzioni, imitazioni, scambi tra Italia e Portogallo nei secoli: Atti del primo colloquio internazionale, Pisa, 15-16 ottobre 2004, edited by Monica Lupetti, pp. 137-62. Florence: Leo S. Olschki Editore, 2008.

Mahon 1947

Denis Mahon. Studies in Seicento Art and Theory. London: Warburg Institute, University of London, 1947.

Malgouyres 2002

Philippe Malgouyres. "'La bienheureuse Ludovica Albertoni' de Gianlorenzo Bernini (1598–1680): Esquisses, modèles et copies." Bulletin des Musées de Dijon, no. 8 (2002), pp. 23-30.

Malvasia 1678

Carlo Cesare Malvasia. Felsina pittrice: Vite pittori bolognesi . . . 4 parts in 2 vols. Bologna: Domenico Barbieri, 1678.

Mancinelli 1992

Fabrizio Mancinelli. "I modelli di Bernini." In Pinacoteca Vaticana: Nella pittura l'espressione del messaggio divino; nella luce la radice della creazione pittorica, by Umberto Baldini et al., pp. 402-17. Milan: Fabbri Editori, 1992.

Mancini, F., ed. 2002

Francesco Federico Mancini, ed. Raccolte della città di Perugia: Collezione Valentino Martinelli. Milan: Electa Editrice; Editori Umbri Associati, 2002.

Mancini, G. 1956 ed.

Giulio Mancini. Considerazioni sulla pittura, pubblicate per la prima volta da Adriana Marucchi, con il commento di Luigi Salerno. Fonti e documenti inediti per la storia dell'arte. Rome: Accademia Nazionale dei Lincei, 1956.

Mancini, M. 2004

Matteo Mancini, "La corte pontificia e l'Antico come modello artistico." In Rome 2004, pp. 284-321.

Marchionne Gunter 2002

Alfredo Marchionne Gunter, "Gian Lorenzo Bernini e Giulio Cartarè." In Fagiolo dell'Arco, ed. 2002, pp. 218-27.

Marciari 2009

John Marciari. "Artistic Practice in Late Cinquecento Rome and Girolamo Muziano's Accademia di San Luca." In Lukehart, ed. 2009, pp. 196-223.

Marder 1992

Tod A. Marder. "Bernini's Commission for the Equestrian Statue of Constantine in St. Peter's: A Preliminary Reading." In An Architectural Progress in the Renaissance and Baroque—Sojourns In and Out of Italy:

Essays in Architectural History Presented to Hellmut Hager on His Sixty-sixth Birthday, edited by Henry A. Millon and Susan Scott Munshower, part 1, pp. 280-307. Papers in Art History from The Pennsylvania State University, 8, pt. 1. University Park, Pa.: The Pennsylvania State University, 1992.

Marder 1997

T[od] A. Marder. Bernini's Scala Regia at the Vatican Palace. Cambridge and New York: Cambridge University Press, 1997.

Marder 1008

T[od] A. Marder. Bernini and the Art of Architecture. New York: Abbeville Press,

Marder 2008

Tod A. Marder. "A Finger Bath in Rosewater: Cracks in Bernini's Reputation." In Satzinger and Schütze, eds. 2008, pp. 427-34.

Mariani 1929

Valerio Mariani. "Bozzetti berniniani." Bollettino d'arte del Ministero della Pubblica Istruzione, ser. 1, 9, no. 2 (August 1929), pp. 59-65.

Mariani 1930

Valerio Mariani. "Note Berniniane." Bollettino d'arte del Ministero della Educazione Nazionale, ser. 1, 10, no. 2 (August 1930), pp. 57-69.

Mariani 1931

Valerio Mariani. "Bernini e la 'Cattedra' di San Pietro." Bollettino d'arte, ser. 3, 25, no. 4 (October 1931), pp. 161-72.

Mariani 1974

Valerio Mariani. Gian Lorenzo Bernini. Naples: Società Editrice Napoletana, 1974.

Mariette 1750

Pierre-Jean Mariette. Description sommaire des statues, figures, bustes, vases, et autres morceaux de sculpture, tant en marbre au'en bronze, & des modéles en terre cuite, porcelaines, & fayences d'Urbin, provenans du cabinet de feu M. Crozat. Paris: Louis-François Delatour, 1750.

Marshall 2001

David Marshall. "A Bernini Self-Portrait?" Art Bulletin of Victoria [Melbourne], no. 41 (2001), pp. 8-18.

Martin 1986

Michel Martin. Les monuments équestres de Louis XIV: Une grande enterprise de propagande monarchique. Paris: Picard, 1986.

Martinelli 1950

Valentino Martinelli. "I disegni del Bernini." Commentari: Rivista di critica e storia dell'arte 1, no. 3 (July-September 1950), pp. 172-86.

Martinelli 1953

Valentino Martinelli. Bernini. Milan: Arnoldo Mondadori Editore, 1953.

Martinelli 1981

Valentino Martinelli. Bernini disegni. Florence: 'La Nuova Italia' Editrice, 1981.

Martinelli 1994

Valentino Martinelli. Gian Lorenzo Bernini e la sua cerchia: Studi e contributi (1950–1990). Collana Pubblicazioni dell'Università degli studi di Perugia. Naples: Edizioni Scientifiche Italiane, 1994.

Martinelli, ed. 1987

Valentino Martinelli, ed. Le statue berniniane del Colonnato di San Pietro. Rome: De Luca Editore, 1987.

Martinelli, ed. 1996

Valentino Martinelli, ed. L'ultimo Bernini, 1665–1680: Nuovi argomenti, documenti e immagini. Rome: Edizioni Quasar, 1996.

Massa 2005

Con gli occhi di Canova: La collezione Farsetti del Museo Ermitage. Exhibition, Palazzo Ducale, Massa, 2005. Catalogue by Sergei O. Androsov and others. Massa, 2005.

Matzulevitsch 1963

Giannetta Matzulevitsch. "Tre bozzetti di G. L. Bernini all'Ermitage di Leningrado." Bollettino d'arte, ser. 4, 48, no. 1-2 (January-June 1963), pp. 67-74.

Mehnert 1981

Karl-Heinz Mehnert. Gianlorenzo Bernini, 1598-1680: Zeichnungen. Kataloge der Graphischen Sammlung, Museum der bildenden Künste, 5. Leipzig: Museum der Bildenden Künste, 1981.

Mehnert 1982

Karl-Heinz Mehnert. Gianlorenzo Bernini: Zeichnungen. Leipzig: Insel-Verlag, 1982.

Mellini 1996-97

Gian Lorenzo Mellini. "Studi berniniani." Labyrinthos, nos. 29-32 (1996-97), pp. 207-37.

Mercati 1944

Angelo Mercati. "Nuove notizie sulla tribuna di Clemente IX a S. Maria Maggiore da lettere del Bernini." Roma: Rivista di studi e di vita romana 22 (1944), pp. 18-22.

Middeldorf 1971

Ulrich Middeldorf. "Bernini's Portrait of Francesco Barberini." The Burlington Magazine 113, no. 822 (September 1971), pp. [542], 544.

Migliorato 2001

Alessandra Migliorato. "Un Laocoonte inedito e altre note per Pietro Bernini." Commentari d'arte 7, no. 18-19 (January-August 2001), pp. 28-41.

Millon 1994

Henry A. Millon. "Models in Renaissance Architecture." In The Renaissance from Brunelleschi to Michelangelo: The Representation of Architecture, pp. 18-73. Exhibition, Palazzo Grassi, Venice, 1994. Catalogue by Henry A. Millon, Vittorio Magnago Lampugnani, and others. Milan: Bompiani, 1994.

Minozzi 1998

Marina Minozzi. "Appendice documentaria: Le opere di Bernini nella collezione di Scipione Borghese." In Rome 1998,

Mirot 1904

Léon Mirot. "Le Bernin en France: Les travaux du Louvre et les statues de Louis XIV." Mémoires de la Societé de l'Histoire de Paris et de l'Ile-de-France 31 (1904), pp. 161-288.

Missirini 1823

Melchior Missirini. Memorie per servire alla storia della Romana Accademia di S. Luca fino alla morte di Antonio Canova. Rome: Stamperia de Romanis, 1823.

MMA Notable Acquisitions 1975

The Metropolitan Museum of Art: Notable Acquisitions 1965-1975. New York: The Metropolitan Museum of Art, 1975.

Mola 1966 ed.

Giov. Battista Mola. Breve racconto delle miglior opere d'architettura, scultura et pittura fatte in Roma et alcune fuor di Roma descritto . . . l'anno 1663, Hrsg. nach den Handschriften der Biblioteca Vaticana und der Biblioteca Comunale in Viterbo. Edited by Karl Noehles. Berlin: Bruno Hessling, 1966.

Molajoli 1984

Bruno Molajoli. "Il cav. Romualdo Gentilucci 'fautore di opera di belle arti' a Roma nell'Ottocento." Strenna dei romanisti 45 (1984), pp. 331-52.

Montagu 1967

Jennifer Montagu. "Two Small Bronzes from the Studio of Bernini." The Burlington Magazine 109, no. 775 (October 1967), pp. 566-71.

Montagu 1971

Jennifer Montagu. Review of Bernini and the Crossing of St. Peter's, by Irving Lavin, and Zur Entstehungsgeschichte der Hochaltar-Architektur von St. Peter in Rom, by Heinrich Thelen. The Art Quarterly 34, no. 4 (Winter 1971), pp. 490-93.

Montagu 1977

Jennifer Montagu. "Alessandro Algardi and the Statue of St. Philip Neri." Jahrbuch der Hamburger Kunstsammlungen 22 (1977), pp. 75-100.

Montagu 1982

Jennifer Montagu. Review of Bernini and the Unity of the Visual Arts, by Irving Lavin. The Burlington Magazine 124, no. 949 (April 1982), pp. 240-43.

Montagu 1985a

Jennifer Montagu. Alessandro Algardi. 2 vols. New Haven and London: Yale University Press, 1985.

Montagu 1985b

Jennifer Montagu. "Bernini Sculptures Not by Bernini." In Gianlorenzo Bernini: New Aspects of His Art and Thought, edited by Irving Lavin, pp. 25-61. University Park, Pa., and London: The Pennsylvania State University Press, 1985.

Montagu 1986

Jennifer Montagu. "Disegni, Bozzetti, Legnetti and Modelli in Roman Seicento Sculpture." In Entwurf und Ausführung in der europäischen Barockplastik: Beiträge zum internationalen Kolloquium des Bayerischen Nationalmuseums und des Zentralinstituts für Kunstgeschichte München, 24. bis 26. Juni 1985, edited by Peter Volk, pp. 9–30. Munich and Zurich: Verlag Schnell & Steiner, 1986.

Montagu 1989

Jennifer Montagu. Roman Baroque Sculpture: The Industry of Art. New Haven and London: Yale University Press, 1989.

Montagu 1996

Jennifer Montagu. Gold, Silver, and Bronze: Metal Sculpture of the Roman Baroque. The A. W. Mellon Lectures in the Fine Arts, 1990. Bollingen Series, 35: 39. Princeton, N.J.: Princeton University Press, 1996.

Montagu 1999

Jennifer Montagu. "Bernini and Others." The Sculpture Journal 3 (1999), pp. 102-8.

Montagu 2006

Jennifer Montagu. "Melchiorre Cafà's Models for Ercole Ferrata." In Sciberras, ed. 2006, pp. 67-78, 245-47.

Montagu 2008

Jennifer Montagu. "Artists as Collectors of Sculpture in Baroque Rome." In Penny and Schmidt, eds. 2008, pp. 278-89.

Montanari 1997

Tomaso Montanari. "Gian Lorenzo Bernini e Sforza Pallavicino." Prospettiva, no. 87-88 (July-October 1997), pp. 42-68.

Montanari 1998a

Tomaso Montanari. "Bernini e Cristina di Svezia: Alle origini della storiografia berniniana." In Angelini and Montanari 1998, pp. 328-477.

Montanari 1998b

Tomaso Montanari. "Sulla fortuna poetica di Bernini: Frammenti del tempo di Alessandro VII e di Sforza Pallavicino." Studi Secenteschi 39 (1998), pp. 127–64.

Montanari 1999

Tomaso Montanari. "Pierre Cureau de La Chambre e la prima biografia di Gian Lorenzo Bernini." *Paragone, Arte* 50, ser. 3, no. 24–25 (March–May 1999), pp. 103–32.

Montanari 2003

Tomaso Montanari. "Da Luigi XIV a Carlo II: Metamorfosi dell'ultimo capolavoro di Gian Lorenzo Bernini." In Arte y diplomacia de la monarquía hispánica en el siglo XVII, edited by José Luis Colomer, pp. 403–14. Madrid: Fernando Villaverde Ediciones, 2003.

Montanari 2004a

Tomaso Montanari. *Gian Lorenzo Bernini*. Grandi scultori, 1. Rome: Gruppo Editoriale L'Espresso, 2004.

Montanari 2004b

Tomaso Montanari. "'Theatralia' di Giovan Battista Doni: Una nuova fonte per il teatro di Bernini." In *Estetica barocca*, edited by Sebastian Schütze, pp. 301–20. Rome: Campisano Editore, 2004.

Montanari 2004c

Tomaso Montanari. "Un 'tritone' d'argento di Gian Lorenzo Bernini." *Prospettiva*, no. 113–14 (January–April 2004), pp. 175–82.

Montanari 2005

Tomaso Montanari. "Percorsi per cinquant'anni di studi berniniani." *Studiolo* 3 (2005), pp. 269–98.

Montanari 2006

Tomaso Montanari. "At the Margins of the Historiography of Art: The *Vite* of Bernini between Autobiography and Apologia." In Delbeke, Levy, and Ostrow, eds. 2006, pp. 73–109.

Montanari 2007–8

Tomaso Montanari. "Storia di Bernini pittore." In Rome 2007–8, pp. 20–85.

Montanari 2009

Tomaso Montanari. "Bernini in Laterano: Una nuova lettura per sette disegni berniniani a Lipsia." In Dessins de sculpteurs, vol. 2, Quatrièmes rencontres internationales du Salon du Dessin, 25 et 26 mars 2009, edited by Guilhem Scherf et al., pp. 31–40. Paris: Société du Salon du Dessin; L'Echelle de Jacob, 2009.

Montesquieu 1949-51 ed.

Charles[-Louis] de Secondat de Montesquieu. *Oeuvres complètes*. Edited by Roger Caillois. 2 vols. Bibliothèque de la Pléiade, 81, 86. Paris: Gallimard, 1949–51.

Montreal 1986

Dessins italiens du XVIIe siècle du Musée des Offices de Florence/Italian XVIIth-Century Drawings from the Uffizi Gallery in Florence. Exhibition, Montreal Museum of Fine Arts, 1986. Catalogue by Gianvittorio Dillon and Annamaria Petrioli Tofani. Montreal: Musée des Beaux-Arts de Montréal, 1986.

Morello 2008

Giovanni Morello. Intorno a Bernini: Studi e documenti. Rome: Gangemi Editore, 2008.

Morozzi 1988

Luisa Morozzi. *Le carte archivistiche della Fondazione Herbert P. Horne: Inventario.* Inventari e cataloghi toscani, 24. [Florence]: Giunta Regionale Toscana; Milan: Editrice Bibliografica, 1988.

Mortimer 1985

Kristin A. Mortimer, with William G. Klingelhofer. Harvard University Art Museums: A Guide to the Collections—Arthur M. Sackler Museum, William Hayes Fogg Art Museum, Busch-Reisinger Museum. Cambridge, Mass.: Harvard University Art Museums; New York: Abbeville Press, 1985.

Muñoz 1917

Antonio Muñoz. "La scultura barocca a Roma. III.—L'esotismo." *Rassegna d'arte* 4, no. 3–4 (1917), pp. 68–80.

Museo Horne 1926

Museo Horne. *Illustrated Catalogue of the Horne Museum*. Florence: [Castrucci], 1926.

Myssok 1999

Johannes Myssok. Bildhauerische Konzeption und plastisches Modell in der Renaissance. Beiträge zur Kunstgeschichte des Mittelalters und der Renaissance, 8. Münster: Rhema, 1999.

Napoleone 1998

Caterina Napoleone. "Bernini e il cantiere della Cappella Cornaro." *Antologia di belle arti*, n.s., no. 55–58 [*Studi sul Settecento*] (1998), pp. 172–86.

Naylor 1999

Martin Naylor. Illustrerad katalog över äldre svensk och utländsk skulptur/Illustrated catalogue: Swedish and European Sculpture. Stockholm: Nationalmuseum, 1999.

Nepi Scirè 1987

Giovanna Nepi Scirè. "Aspetti della politica culturale della Repubblica di Venezia: Accademia di Pittura e Scultura e il restauro delle pubbliche pitture." In Dal Museo alla Città: Cultura e società nelle Venezia del Settecento. Soprintendenza ai Beni Artistici e Storici di Venezia, Sezione

didattica, [198–], Itinerari didattici, 6. [Venice, 1987].

Nepi Scirè 1998

Giovanna Nepi Scirè. "Filippo Farsetti e la sua collezione." In *Studi in onore di Elena Bassi*, pp. 73–94. Techné, 15. Venice: Arsenale Editrice, 1998.

New York 1975-76

European Drawings Recently Acquired, 1972–1975. Exhibition, The Metropolitan Museum of Art, New York, 1975–76. Catalogue by Jacob Bean. New York, 1975.

New York 1976-77

Roman Artists of the 17th Century: Drawings and Prints. Exhibition, The Metropolitan Museum of Art, New York, 1976–77. New York, 1976.

New York 2001-2

"Johnson Rotation, November 5, 2001–January 28, 2002." Exhibition, The Metropolitan Museum of Art, New York, 2001–2. No catalogue.

New York 2002-3

Bernini: The Modello for the Fountain of the Moor. Exhibition, Salander-O'Reilly Galleries, New York, 2002–3. Catalogue by Andrew Butterfield and others. New York, 2002.

New York, Chicago, and San Francisco 1983–84

The Vatican Collections: The Papacy and Art. Exhibition, The Metropolitan Museum of Art, New York; The Art Institute of Chicago; The Fine Arts Museums of San Francisco, 1983–84. Catalogue by Carlo Pietrangeli and others. New York: The Metropolitan Museum of Art, 1982.

New York Times 1905

"Downfall of the Paris 'Sugar King."

New York Times, September 24, 1905, p. SM9.

Nijstad 1997

Jaap Nijstad. "Op basis van: De onderzijde van terracotta bozzetti als vertekpunt voor een kunsthistorische beschouwing." In Album discipulorum: J.R.J. van Asperen de Boer, edited by Peter van den Brink and Liesbeth M. Helmus, pp. 146–53. Zwolle: Waanders Uitgevers, 1997.

Noehles 1975

Karl Noehles. "Zu Cortonas Dreifaltigkeitsgemälde und Berninis Ziborium in der Sakramentskapelle von St. Peter." *Römisches Jahrbuch für Kunstgeschichte* [Bibliotheca Hertziana] 15 (1975), pp. 169–82.

Northampton 1974

"Roman Baroque Sculpture." In Five College Roman Baroque Festival: Easter Weekend, April 11–14, 1974. Exhibition, Smith College Museum of Art, Northampton, Mass., 1974. N.p.: N.p., 1974.

Norton 1914

Richard Norton. *Bernini and Other Studies in the History of Art.* New York: Macmillan; London: Macmillan and Company, 1914.

O'Grody 1999a

Jeannine O'Grody. "Bernini's St. Ambrose for the Cathedra Petri: A Model and the Metamorphosis of a Figure." In Gaskell and Lie, eds. 1999, pp. 133–43.

O'Grody 1999b

Jeannine O'Grody. "'Un semplice modello': Michelangelo and His Three-Dimensional Preparatory Works." Ph.D. diss., Case Western Reserve University, Cleveland, Ohio, 1999.

Opdycke 1938

Leonard Opdycke. "A Group of Models for Berninesque Sculpture." *The Bulletin of the Fogg Museum of Art* 7, no. 2 (March 1938), pp. [25]—30.

Ostrow 2004

Steven F. Ostrow. "Playing with the *Paragone*: The Reliefs of Pietro Bernini." *Zeitschrift für Kunstgeschichte* 67, no. 3 (2004), pp. 329–64.

Ottawa and other cities 1986-87

Vatican Splendour: Masterpieces of Baroque Art. Exhibition, National Gallery of Canada, Ottawa; The Vancouver Art Gallery; The Art Gallery of Ontario, Toronto; The Montreal Museum of Fine Arts, 1986–87. Catalogue by Catherine Johnston, Gyde Vanier Shepherd, and Marc Worsdale. Ottawa, 1986.

Ozzola 1908

Leandro Ozzola. "L'arte alla corte di Alessandro VII." *Archivio della R. Società Romana di Storia Patria* 31 (1908), pp. 5–91.

Pallavicino 1644

Sforza Pallavicino. *Del bene, libri quattro*. Rome: F. Corbelletti, 1644.

Palma 1983

Beatrice Palma. *Museo Nazionale Romano*. Vol. 1, *Le sculture*. Pt. 4, *I marmi Ludovisi: Storia della collezione*. Rome: De Luca Editore, 1983.

Pampalone 2003

Antonella Pampalone. "Lorenzo Ottoni scultore e restauratore clementino (1700–1721): L'origine del Museo dei Modelli di Scultura." In Sculture romane del Settecento, vol. 3, La professione dello scultore, edited by Elisa Debenedetti, pp. 9–49. Rome: Bonsignori Editore, 2003.

Pane 1953

Roberto Pane. *Bernini architetto*. Collezione di storia dell'arte, 1. Venice: Neri Pozza Editore, 1953.

Panofsky 1954

Erwin Panofsky. Galileo as a Critic of the Arts. The Hague: Martinus Nijhoff, 1954.

Paoletti 1980

Laura Paoletti. *Il Bernini in Roma.*Poggibonsi: Antonio Lalli Editore, [1980].

Paris 1905

Catalogue des tableaux anciens et modernes, pastels, acquarelles, dessins, . . . objets d'art et d'ameublement . . . composant la collection de M. E. Cro[s]nier. Auction catalogue, Galerie Georges Petit, Paris, December 4–5, 1905. Paris, 1905.

Paris 1913

Catalogue des tableaux anciens, . . . tableaux modernes, dessins et pastels anciens et modernes, objets d'art de haute curiosité et d'ameublement composant la collection de feu M. Édouard Aynard. Preface by Émile Bertaux. Auction catalogue, Galerie Georges Petit, Paris, November 29–30, 1913. Paris, 1913.

Paris 1934

Sculptures et bibelots antiques; sculptures du Moyen-Age et des temps moderns; tableaux anciens, maquettes. Première partie. Auction catalogue, Galerie Charpentier, Paris, May 31–June 1, 1934. Paris, 1934.

Parker 1956

K[arl] T. Parker. Catalogue of the Collection of Drawings in the Ashmolean Museum. Vol. 2, Italian School. Oxford: Clarendon Press, 1956.

Partridge 1999

Loren Partridge. "Federico Zuccari at Caprarola, 1561–1569: The Documentary and Graphic Evidence." In Der Maler Federico Zuccari, ein römischer Virtuoso von europäischem Ruhm: Akten des internationalen Kongresses der Bibliotheca Hertziana, Rom und Florenz, 23.–26. Februar 1993, edited by Matthias Winner and Detlef Heikamp, pp. 159–84. Römisches Jahrbuch der Bibliotheca Hertziana, supplement to vol. 32, 1997–98. Munich: Hirmer Verlag, 1999.

Pascoli 1730

Lione Pascoli. Vite de pittori, scultori, ed architetti moderni. Vol. 1. Rome: A. de' Rossi, 1730.

Pascoli 1992 ed.

Lione Pascoli. Vite de pittori, scultori, ed architetti moderni. Edited and annotated by Alessandro Marabottini et al. 1730–36. Perugia: Electa Editori Umbri, 1992.

Passeri 1772 ed.

Giovanni Battista Passeri. Vite de' pittori, scultori ed architetti, che anno lavorato in Roma, morti dal 1641 fino al 1673. Rome: G. Settari, 1772.

Pauwels 2005

Yves Pauwels. Review of Bernini dai Borghese ai Barberini: La cultura a Roma intorno agli anni venti . . . , edited by Anna Coliva and Olivier Bonfait. Revue de l'art 149 (2005), pp. 72–73.

Pedrocchi 2005

Anna Maria Pedrocchi. "Giovan Lorenzo Bernini e Santi Ghetti: L'altare maggiore in Sant'Agostino a Roma; nuovi documenti e precisazioni." *Bollettino d'arte*, ser. 6, 90, no. 133–34 (July–December 2005), pp. 115–26.

Pegazzano 1998

Donatella Pegazzano. "Lorenzo Sirigatti: Gli svaghi eruditi di un dilettante del Cinquecento." Mitteilungen des Kunsthistorischen Institutes in Florenz 42, no. 1 (1998), pp. 144–75.

Penny and Schmidt, eds. 2008

Nicholas Penny and Eike D. Schmidt, eds. Collecting Sculpture in Early Modern Europe. Studies in the History of Art, 70. Center for Advanced Study in the Visual Arts, Symposium Papers, 47. Washington, D.C.: National Gallery of Art, 2008.

Pérez Sánchez 1965

Alfonso Emilio Pérez Sánchez. Veintiseis dibujos boloñeses y romanos del siglo XVII. Madrid: Real Academia de Bellas Artes de San Fernando, 1965.

Pérez Sánchez 1978

Alfonso Emilio Pérez Sánchez. *I grandi disegni italiani nelle collezioni di Madrid*. Milan: Silvana Editoriale, 1978.

Perlove 1990

Shelley Karen Perlove. *Bernini and* the Idealization of Death: The Blessed Ludovica Albertoni and the Altieri Chapel. University Park, Pa., and London: The Pennsylvania State University Press, 1990.

Perrault 1909

Charles Perrault. *Mémoires de ma vie*. Edited by Paul Bonnefon. 1669. Paris: H. Laurens, 1909.

Petrioli Tofani 1972

Annamaria Petrioli Tofani. *The Famous Italian Drawings of the Uffizi Collection.* Milan: Silvana Editoriale d'Arte, 1972.

Petroio 2007

Scultura barocca: Studi in terracotta dalla bottega dei Mazzuoli. Exhibition, Museo della Terracotta, Petroio, 2007. Catalogue by Monika Butzek and others. Milan: Silvana Editoriale, 2007.

Petrov 1864

Petr Nikolaevich Petrov. Sbornik materialov dlya istorii imperatorskoy S-Peterburgskoy Akademii khudozhestv...chast' I (Collection of materials for the history of the imperial Saint Petersburg academy of the fine arts, part 1). Saint Petersburg, 1864.

Petrucci 1997

Francesco Petrucci. "Gian Lorenzo Bernini per casa Chigi: Precisazioni e nuove attribuzioni." *Storia dell'arte,* no. 90 (1997), pp. 176–200.

de Piles 1699

Roger de Piles. Abregé de la vie des peintres, avec des reflexions sur leurs ouvrages, et un traité du peintre parfait, de la connoissance des desseins, & de l'utilité des estampes.
Paris: Chez Charles de Sercy, 1699.

Pinelli, ed. 2000

Antonio Pinelli, ed. *La Basilica di San Pietro in Vaticano/The Basilica of St Peter in the Vatican.* 4 vols. Mirabilia Italiae, 10. Modena: Franco Cosimo Panini Editore, 2000.

Pirondini, ed. 1982

Massimo Pirondini, ed. *Ducale Palazzo di Sassuolo*. Genoa: Edizioni Spiga, 1982.

Pittoni 2001

Leros Pittoni. Antonio Raggi: Dalla bottega di Bernini, un grande scultore ticinese. Subiaco: Editore La Voce del Tempo, 2001.

Pollak 1928-31

Oskar Pollak. *Die Kunsttätigkeit unter Urban VIII.* 2 vols. Quellenschriften zur Geschichte der Barockkunst in Rom. Vienna: Dr. Benno Filser Verlag, 1928–31.

Pope-Hennessy 1964

John Pope-Hennessy. Catalogue of Italian Sculpture in the Victoria and Albert Museum. 3 vols. London: Her Majesty's Stationery Office, 1964.

Pope-Hennessy 1965

John Pope-Hennessy. "Portrait Sculptures by Ridolfo Sirigatti." *Victoria and Albert Museum Bulletin* 1, no. 2 (April 1965), pp. 33–36.

Pope-Hennessy 1966

John Pope-Hennessy. *La scultura italiana*. Vol. 3, *Il Cinquecento e il Barocco*. 2 vols. Milan: Feltrinelli, 1966.

Pope-Hennessy 1986

John Pope-Hennessy. An Introduction to Italian Sculpture. Vol. 3, Italian High Renaissance and Baroque Sculpture. Oxford: Phaidon Press, 1986.

Posse 1909

Hans Posse. "Bernini, Giovanni Lorenzo." In Allgemeines Lexikon der bildenden Künstler von der Antike bis zur Gegenwart, edited by Ulrich Thieme and Felix Becker, vol. 3 (1909), pp. 461–68. 37 vols. Leipzig: W. Engelmann, 1907–50.

Potts, ed. 2003

Timothy Potts, ed. *Kimbell Art Museum:* Handbook of the Collection. Fort Worth: Kimbell Art Museum; New Haven and London: Yale University Press, 2003.

Preimesberger 1974

Rudolf Preimesberger. "Obeliscus Pamphilius: Beiträge zu Vorgeschichte und Ikonographie des Vierströmebrunnens auf Piazza Navona." Münchner Jahrbuch der bildenden Kunst, ser. 3, 25 (1974), pp. 77–162.

Preimesberger 1989a

Rudolf Preimesberger. "Berninis Statue des Longinus in St. Peter." In Beck and Schulze, eds. 1989, pp. 143–53.

Preimesberger 1989b

Rudolf Preimesberger. "Zu Berninis Borghese-Skulpturen." In Beck and Schulze, eds. 1989, pp. 109–27.

Preimesberger 2001a

Rudolf Preimesberger. "Il San Longino del Bernini in San Pietro in Vaticano: Dal bozzetto alla statua." In Bernardini, ed. 2001, pp. 95–111.

Preimesberger 2001b

Rudolf Preimesberger. "Motivi del 'paragone' e concetti teorici nel *Discorso sopra la Scultura* di Vincenzo Giustiniani." In Rome and Berlin 2001, pp. 50–56.

Preimesberger and Mezzatesta 1996

Rudolf Preimesberger and Michael P. Mezzatesta. "Bernini: (2) Gianlorenzo." In *The Dictionary of Art*, edited by Jane [S.] Turner, vol. 3, pp. 828–40. 34 vols. London and New York: Grove, 1996.

Pressouyre 1984

Sylvia Pressouyre. Nicolas Cordier: Recherchés sur la sculpture à Rome autour de 1600. 2 vols. Collection de l'École Française de Rome, 73. Rome: École Française de Rome, 1984.

Princeton and other cities 1981-82

Drawings by Gianlorenzo Bernini from the Museum der Bildenden Künste Leipzig, German Democratic Republic. Exhibition, The Art Museum, Princeton University; Cleveland Museum of Art; Los Angeles County Museum of Art; Kimbell Art Museum, Fort Worth; Indianapolis Museum of Art; Museum of Fine Arts, Boston, 1981–82. Catalogue by Irving Lavin and others. Princeton, N.J.: The Art Museum; Princeton University Press, 1981.

Quinterio 1981

Francesco Quinterio. "La casa del Bernini." In Borsi, Acidini Luchinat, and Quinterio, eds. 1981, pp. 13–37.

Raggio 1968

Olga Raggio. Review of Catalogue of Italian Sculpture in the Victoria and Albert Museum, by John Pope-Hennessy. The Art Bulletin 50, no. 1 (March 1968), pp. 98–105.

Raggio 1983

Olga Raggio. "Bernini and the Collection of Cardinal Flavio Chigi." *Apollo* 117, n.s., no. 255 (May 1983), pp. 368–79.

Raggio 2008

Olga Raggio. "Pope Clement XI's Museo di Modelli in the Vatican Palace." In Penny and Schmidt, eds. 2008, pp. 342–55.

Reymond 1912

Marcel Reymond. "Le Pont Saint-Ange par le Bernin." *La Revue de l'art ancienne et moderne* 32, no. 185 (August 1912), pp. 99–112.

Reymond 1913

Marcel Reymond. "La statue équestre de Louis XIV par le Bernin." La Revue de l'art ancien et moderne 34, no. 196 (July 1913), pp. 23–40.

Riccoboni 1942

Alberto Riccoboni. Roma nell'arte: La scultura nell'evo moderno dal Quattrocento ad oggi. Rome: Casa Editrice Mediterranea, 1942.

Rice, L. 1997

Louise Rice. The Altars and Altarpieces of New St. Peter's: Outfitting the Basilica, 1621–1666. Cambridge and New York: Cambridge University Press, 1997.

Rice 1 2008

Louise Rice. "Bernini and the Pantheon Bronze." In Satzinger and Schütze, eds. 2008, pp. 337–52.

Rice, P. 1987

Prudence M. Rice. *Pottery Analysis: A Sourcebook*. Chicago: University of Chicago Press, 1987.

Richardson 1952-53

E[dgar] P[reston] Richardson. "Two Bozzetti by Gian Lorenzo Bernini." *Bulletin of The Detroit Institute of Arts* 32, no. 3 (1952–53), pp. 61–65.

Richardson 1953

E[dgar] P[reston] Richardson. "Two Bozzetti by Gian Lorenzo Bernini." *The Art Quarterly* 16, no. 1 (Spring 1953), pp. 2–10.

Ridolfi 1648

Carlo Ridolfi. Le maraviglie dell'arte, ovvero, le vite degli illustri pittori veneti e dello Stato. Venice, 1648.

Roberto 1989

Sebastiano Roberto. "Bernini, Mattia de'Rossi e i Rospigliosi: L'altare maggiore della Chiesa dello Spirito Santo a Pistoia." Quasar 1 (January 1989), pp. 67-80.

Robibaro 2010

Rossella Robibaro. "L'inventario dei beni del cardinal Nini (1628-1680): Un documento inedito." Annali della pontificia insigne Accademia di Belle Arti e Lettere dei Virtuosi al Pantheon 10 (2010), pp. 331-407.

Roca De Amicis 1995

Augusto Roca De Amicis. L'opera di Borromini in San Giovanni in Laterano: Gli anni della fabbrica (1646-1650). Rome: Edizione Librerie Dedalo, 1995.

Roccasecca 2009

Pietro Roccasecca. "Teaching in the Studio of the 'Accademia del Disegno dei pittori, scultori e architetti di Roma' (1594–1636)." In Lukehart, ed. 2009, pp. 122-59.

Rome 1911

Guida generale delle mostre retrospettive in Castel Sant'Angelo: Esposizione internazionale di Roma. Exhibition, Castel Sant'Angelo, Rome, 1911. Bergamo: Istituto Italiano d'Arti Grafiche, 1911.

Rome 1930

Mostra di Roma secentesca. Exhibition, Istituto di Studi Romani, Rome, 1930. Rome, 1930.

Rome 1956-57

Il Seicento Europeo: Realismo, classicismo, barocco. Exhibition, Palazzo delle Esposizioni, Rome, 1956-57. Catalogue by Luigi Salerno and others. Rome: De Luca, 1956.

Rome 1961

Mostra di disegni delle collezioni reali d'Inghilterra a Windsor. Exhibition, Palazzo di Venezia, Rome, 1961. Catalogue by Anthony Blunt. London: Phaidon Press, 1961.

Rome 1984-85

Roma 1300–1875: L'arte degli anni santi. Exhibition, Palazzo Venezia, Rome, 1984-85. Catalogue by Marcello Fagiolo, Maria Luisa Madonna, and others. Milan: Arnoldo Mondadori Editore, 1984.

Rome 1986

Archeologia nel centro storico: Apporti antichi e moderni di arte e cultura dal Foro della Pace. Exhibition, Castel Sant'Angelo, Rome, 1986. Rome: Fratelli Palombi Editori, 1986.

Rome 1986-87

Il trionfo dell'acqua: Immagini e forme dell'acqua nelle arti figurative. Exhibition, Istituto Nazionale per la Grafica, Rome, 1986-87. Catalogue by Carla Esposito, Maria Antonella Fusco, and others. Rome: Paleani Editrice, 1986.

Rome 1991

Fasto romano: Dipinti, sculture, arredi dai palazzi di Roma. Exhibition, Palazzo Sacchetti, Rome, 1991. Catalogue by Alvar González-Palacios. Rome: Leonardo-De Luca, 1991.

Rome 1991-92

Sculture in terracotta del barocco romano: Bozzetti e modelli del Museo Nazionale del Palazzo di Venezia, Exhibition, Museo Nazionale del Palazzo di Venezia, Rome, 1991–92. Catalogue by Maria Giulia Barberini. Rome: Fratelli Palombi Editori, 1991.

Rome 1992-93

La Collezione Boncompagni Ludovisi: Algardi, Bernini e la fortuna dell'Antico. Exhibition, Fondazione Memmo, Palazzo Ruspoli, Rome, 1992–93. Catalogue by Antonio Giuliano and others. Venice: Marsilio Editori, 1992.

Rome 1994

Bartolomeo Cavaceppi, scultore romano (1717-1799). Exhibition, Museo del Palazzo di Venezia, Rome, 1994. Catalogue by Maria Giulia Barberini and others. Rome: Fratelli Palombi Editori, 1994.

Rome 1998

Bernini scultore: La nascita del Barocco in Casa Borghese. Exhibition, Galleria Borghese, Rome, 1998. Catalogue by Anna Coliva, Sebastian Schütze, and others. Rome: Edizioni De Luca, 1998.

Rome 1999a

Algardi: L'altra faccia del barocco. Exhibition, Palazzo delle Esposizioni, Rome, 1999. Catalogue by Jennifer Montagu and others. Rome: Edizioni De Luca 1000

Rome 1999b

Gian Lorenzo Bernini: Regista del Barocco. Exhibition, Palazzo Venezia, Rome, 1999. Catalogue by Maria Grazia Bernardini, Maurizio Fagiolo dell'Arco, and others. Milan: Skira, 1999.

Rome 2004

Velázquez, Bernini, Luca Giordano: Le corti del Barocco. Exhibition, Scuderie del Quirinale, Rome, 2004. Catalogue by Fernando Checa Cremades and others. Milan: Skira, 2004.

Rome 2006

Roma barocca: Bernini, Borromini, Pietro da Cortona. Exhibition, Museo Nazionale di Castel Sant'Angelo, 2006. Catalogue by Marcello Fagiolo, Paolo Portoghesi, and others. Milan: Electa Editrice, 2006.

Rome 2007-8

Bernini pittore. Exhibition, Palazzo Barberini, Rome, 2007-8. Catalogue by Tomaso Montanari and others. Milan: Silvana Editoriale, 2007.

Rome and Berlin 2001

Caravaggio e i Giustiniani: Toccar con mano una collezione del Seicento. Exhibition, Palazzo Giustiniani, Rome; Altes Museum, Berlin, 2001. Catalogue by Silvia Danesi Squarzina and others. Milan: Electa Editrice, 2001.

Rome and Oxford 1991-92

Old Master Drawings from the Ashmolean Museum. Exhibition, Palazzo Ruspoli, Rome; Ashmolean Museum, Oxford, 1991-92. Catalogue by Catherine Whistler and others. Oxford: Ashmolean Museum; Oxford University Press, 1992.

Rome and Venice 1991-92

Alle origini di Canova: Le terrecotte della collezione Farsetti. Exhibition, Fondazione Memmo, Palazzo Ruspoli, Rome; Galleria Giorgio Franchetti alla Ca' d'Oro, Venice, 1991-92. Catalogue by Sergei O. Androsov, Nina K. Kosareva, and Giovanna Nepi-Scirè. Venice: Marsilio Editori, 1991.

Rosenberg 1998

Pierre Rosenberg. "Un Poussin inédit: La Sainte Famille à l'éléphant." In Curiosité: Études d'histoire de l'art en l'honneur d'Antoine Schnapper, edited by Olivier Bonfait et al., pp. 35-45, pl. 1. Paris: Flammarion, 1998.

Rossacher 1967

Kurt Rossacher. "Berninis Reiterstatue des Konstantin an der Scala Regia: Neues zur Werkgeschichte." Alte und moderne Kunste 12, no. 90 (January-February 1967), pp. 2-11.

Rossacher 1980

Kurt Rossacher. "Taube oder Transfiguration in Zentrum der Glorie des Petersdomes." Römische historische Mitteilungen 22 (1980), pp. 247-62.

Rossacher 1986

Kurt Rossacher. "Der Aufruf der Seligen zum Elysium als Konzept von Neu-St.-Peter." Pantheon 44 (1986), pp. 61-71.

Rossi 1967

Filippo Rossi, ed. Il Museo Horne a Firenze. Gallerie e musei minori di Firenze. Milan: Electa Editrice, 1967.

Roth 1999

Kendra Roth. "Decorative Coatings on the St. Longinus and St. Ambrose Modelli." In Gaskell and Lie, eds. 1999, pp. 125-27.

Russell 1926

Archibald G. B. Russell. "The Drawings of Bernini." *Apollo* 3 (April 1926), pp. 193–95.

Saint Petersburg 1999

Pod nebom Italii...: Proizydeniya skul'ptury, sozdannye v Italii evropeiskimi masterami/Sotto il cielo d'Italia ...: Sculture, eseguite in Italia dai maestri europei. Exhibition, State Hermitage Museum, Saint Petersburg, 1999. Catalogue by Sergei O. Androsov and others. Saint Petersburg: Gosudarstvennyi Ermitazh; Slaviia, 1999.

Salmi 1967

Mario Salmi. *Il palazzo e la collezione Chigi-Saracini*. Siena: Monte dei Paschi di Siena, 1967.

Salzburg 1979

Die Metamorphose: Künstlerentwürfe des Römischen Barock, dem Gedenken Gianlorenzo Bernini. Exhibition, Barockmuseum, Salzburg, 1979. Catalogue by Kurt Rossacher and others. Salzburg, 1979.

Sandrart 1675

Joachim von Sandrart. L'Academia Todesca della architectura, scultura & pittura: Oder Teutsche Academie der edlen Bau- Bild- und Mahlerey-Künste. Nuremberg, 1675.

Sandrart 1683

Joachim von Sandrart. *Academia* nobilissimae artis pictoriae. Nuremberg, 1683.

Sandrart 1925 ed.

Joachim von Sandrart. Academie der Bau-, Bild- und Mahlerey-Künste von 1675: Leben der berühmten Maler, Bildhauer und Baumeister. Edited by R[udolf] A[rthur] Peltzer. Munich: G. Hirth's Verlag, 1925.

Santa Maria Mannino 1987

Paola Santa Maria Mannino. "Progettazione e decorazione plastica: Bernini—disegni e bozzetti." In Martinelli, ed. 1987, pp. 23–27.

Santangelo, ed. 1954

Antonino Santangelo, ed. *Museo di Palazzo Venezia: Catalogo delle sculture.* Rome: De Luca, 1954.

Satzinger and Schütze, eds. 2008

Georg Satzinger and Sebastian Schütze, eds. Sankt Peter in Rom, 1506–2006: Beiträge der internationalen Tagung vom 22.–25. Februar 2006 in Bonn. Munich: Hirmer Verlag, 2008.

Savina 2000

Barbara Savina. "Bernini, Finelli e l'altare di S. Agostino." *Storia dell'arte,* no. 100 (2000), pp. 117–22.

Saviotti 1903

Alfredo Saviotti. "Feste e spettacoli nel Seicento." *Giornale storico della letteratura italiana* 41, no. 1 (1903), pp. 42–77.

Scannelli 1657

Francesco Scannelli. *Il microcosmo della pittura*. Cesena: Per il Neri, 1657.

Schlegel 1967

Ursula Schlegel. "Some Statuettes of Giuseppe Mazzuoli." *The Burlington Magazine* 109, no. 772 (July 1967), pp. [386], 388–93, 395.

Schlegel 1978

Ursula Schlegel. Die italienischen Bildwerke des 17. und 18. Jahrhunderts in Stein, Holz, Ton, Wachs und Bronze mit Ausnahme der Plaketten und Medaillen. Berlin: Verlag Gebr. Mann, 1978.

Schlegel 1981

Ursula Schlegel. "I crocifissi degli altari in San Pietro in Vaticano." *Antichità viva* 20, no. 6 (November–December 1981), pp. 37–42.

Schlegel 1984

Ursula Schlegel. "Zum Grabmal Alexanders VII. (1671–1678)." Mitteilungen des Kunsthistorischen Institutes in Florenz 28, no. 3 (1984), pp. 415–22.

Schottmüller 1913

Frida Schottmüller. Die italienischen und spanischen Bildwerke der Renaissance und des Barocks, in Marmor, Ton, Holz und Stuck. Berlin: G. Reimer, 1913.

Schottmüller 1933

Frida Schottmüller. Die italienischen und spanischen Bildwerke der Renaissance und des Barock. Vol. 1, Die Bildwerke in Stein, Holz, Ton und Wachs. 2nd ed. Berlin: Walter de Gruyter & Co., 1933.

Schulze 1989

Sabine Schulze. "Antikes Vorbild in barockem Pathos: Berninis Daniel in der Löwengrube." In Beck and Schulze, eds. 1989, pp. 173–91.

Schütze 2007

Sebastian Schütze. Kardinal Maffeo Barberini Später Papst Urban VIII und die Entstehung des Römischen Hochbarock. Römische Forschungen der Bibliotheca Hertziana, 32. Munich: Hirmer Verlag, 2007.

Schütze 2008

Sebastian Schütze. "Werke als Kalküle ihres Wirkungsanspruchs: Die Cathedra Petri und ihr Bedeutungswandel im konfessionellen Zeitalter." In Satzinger and Schütze, eds. 2008, pp. 405–25.

Sciberras 2006

Keith Sciberras. "Melchiorre Cafà: Maltese Genius of the Roman Baroque." In Sciberras, ed. 2006, pp. 1–19, 235–37.

Sciberras, ed. 2006

Keith Sciberras, ed. *Melchiorre Cafà: Maltese Genius of the Roman Baroque.*Valletta. Malta: Midsea Books. 2006.

Scribner 1991

Charles Scribner III. *Gianlorenzo Bernini*. New York: Harry N. Abrams, 1991.

Sénéchal 1988

Philippe Sénéchal. "Restaurations et remplois de sculptures antiques." *Revue de l'art*, no. 79 (1988), pp. 47–51.

Serck-Dewaide 1991

Myriam Serck-Dewaide. "The History and Conservation of the Surface Coating on European Gilded-Wood Objects." In *Gilded Wood: Conservation and History*, edited by Deborah Bigelow et al., pp. 65–78, 389–90. Madison, Conn.: Sound View Press, 1991.

Sestieri 1966–68

Ettore Sestieri. "Bozzetto del Bernini per la Fontana centrale di Piazza Navona." *Colloqui del Sodalizio* 1, ser. 2, 1 (1966–68), pp. 76–82.

Sestieri 1970

Ettore Sestieri. *La Fontana dei Quattro Fiumi e il suo bozzetto*. Rome: Fratelli Palombi Editori, 1970.

Sesto Fiorentino 1989

Pietro Bernini: Un preludio al Barocco. Exhibition, Teatro La Limonaia, Villa Corsi-Salviati, Sesto Fiorentino, 1989. Catalogue by Ugo Barlozzetti and others. [Florence]: Scramasax, 1989.

Shearman 1992

John Shearman. Only Connect: Art and the Spectator in the Italian Renaissance. Princeton, N.J.: Princeton University Press, 1992.

Siena 1989

La scultura: Bozzetti in terracotta, piccoli marmi e altre sculture dal XIV al XX secolo. Exhibition, Palazzo Chigi Saracini, Siena, 1989. Catalogue by Giancarlo Gentilini, Carlo Sisi, and others. 2 vols. Monte dei Paschi di Siena, collezione Chigi Saracini, 4. Florence: S.P.E.S., 1989.

Siena 2000-2001

Alessandro VII Chigi (1599–1667): Il papa senese di Roma moderna. Exhibition, Palazzo Pubblico and Palazzo Chigi Zondadari, Siena, 2000–2001. Catalogue by Alessandro Angelini, Monika Butzek, Bernardina Sani, and others. Siena: Protagon Editore Toscani, 2000.

Sigel 1999

Anthony B. Sigel. "The Clay Modeling Techniques of Gian Lorenzo Bernini." In Gaskell and Lie, eds. 1999, pp. 48–72, pls. 1–9, 11–14.

Sigel 2002-3

Anthony [B.] Sigel. "The Technical Study of a Terracotta Modello of *The Moor.*" In New York 2002–3, pp. 48–71.

Sigel 2006

[Anthony B.] Sigel. "The Clay Modeling Techniques of Melchiorre Cafà: A Preliminary Assessment." In Sciberras, ed. 2006, pp. 161–234, 254.

Sigel and Farrell 1999

Anthony B. Sigel and Eugene F. Farrell. "Technical Observations and Petrographic Analysis." In Gaskell and Lie, eds. 1999, pp. 73–118, pls. 8–9, 11, 13.

Simone 2010

Daniela Simone. "Committenza e collezionismo nella Roma chigiana: Il cardinale Giacomo Filippo Nini (Siena, 1628–Roma, 1680)." In *Salvator Rosa e il suo tempo, 1615–1673*, edited by Sybille Ebert-Schifferer, Helen Langdon, and Caterina Volpi, pp. 397–407. Rome: Campisano Editore, 2010.

Snow 1983

Carol Snow. "Examination of a Bernini Bronze." *The Journal of The Walters Art Gallery* 41 (1983), pp. 77–79.

Sotheby's London 1928

Catalogue of Valuable Drawings by Old Masters from the Collection of the late Rt. hon. F. Leverton Harris . . . A Choice Collection of Drawings, the Property of A. G. B. Russell, Esq. . . . Auction catalogue, Sotheby & Co., May 22, 1928. London, 1928.

Souchal 1973

François Souchal. "L'inventaire après décès du sculpteur Lambert-Sigisbert Adam." Bulletin de la Société de l'Histoire de l'Art Français, 1973, pp. 181–91.

Soussloff 1987

Catherine M. Soussloff. "Old Age and Old-Age Style in the 'Lives' of Artists: Gianlorenzo Bernini." *Art Journal* 46, no. 2 (Summer 1987), pp. 115–21.

Sparti 1998

Donatella Livia Sparti. "Tecnica e teoria del restauro scultoreo a Roma nel Seicento, con una verifica sulla collezione di Flavio Chigi." Storia dell'arte, no. 92 (1998), pp. 60–131.

Spezzaferro 1993

Luigi Spezzaferro. "La collezione 'accademica' di Charles Errard." *Roma moderna e contemporanea* 1, no. 3 (1993), pp. 13–35.

Spiers 1918-19

Walter Lewis Spiers. "The Note Book and Account Book of Nicholas Stone." Walpole Society 7 (1918–19), pp. [ii]–[xx], 1–200.

Spike 1982

John T. Spike. Review of Drawings by Gianlorenzo Bernini from the Museum der Bildenden Künste Leipzig, German Democratic Republic, by Irving Lavin et al. The Burlington Magazine 124, no. 954 (September 1982), pp. 581–82.

Staccioli, ed. 1981

Sara Staccioli, ed. *Le collezioni della Galleria Borghese, Roma*. I grandi musei.
Milan: Touring Club Italiano, 1981.

Steinmann 1907

Ernst Steinmann. "Zwei neuerworbene Terrakotta-Modelle Berninis im Grossherzoglichen Museum zu Schwerin." *Münchner Jahrbuch der bildenden Kunst* 2, no. 2 (1907), pp. 39–52.

Stockholm 1966

Christina, Queen of Sweden—A Personality of European Civilisation: Eleventh Exhibition of the Council of Europe. Exhibition, Nationalmuseum, Stockholm, 1966.
Catalogue by Per Bjurström and others.
Stockholm, 1966.

Stone 1981

Richard E. Stone. "Antico and the Development of Bronze Casting in Italy at the End of the Quattrocento." *Metropolitan Museum Journal* 16 (1981), pp. 87–116.

Strinati 1924

Remigio Strinati. "La Galleria Borghese di Roma: Gli ultimi acquisti—Giulio Cantalamessa." *Emporium* 60, no. 358 (October 1924), pp. 601–12.

Strunck 2001

Christina Strunck. "L'humor peccante' di Vincenzo Giustiniani: L'innovativa presentazione dell'Antico nelle due gallerie di palazzo Giustiniani a Roma (1630–1830 circa)." In Rome and Berlin 2001, pp. 105–14.

Strunck 2003

Christina Strunck. "Bellori und Bernini rezipieren Raffael: Unbekannte Dokumente zur Cappella Chigi in Santa Maria del Popolo." *Marburger Jahrbuch für Kunstwissenschaft* 30 (2003), pp. 131–82.

Titi 1987 ed.

Filippo Titi. Studio di pittura, scoltura, et architettura nelle chiese di Roma (1674–1763). Edited by Bruno Contardi and Serena Romano. 2 vols. Florence: Centro Di, 1987.

Tormo y Monzó 1929

Elías Tormo y Monzó. Cartillas excursionistas Vol. 8. La visita a las colecciones artísticas de la Real Academia de San Fernando. Madrid: Hauser y Menet, 1929.

Tratz 1988

Helga Tratz. "Werkstatt und Arbeitsweise Berninis." *Römisches Jahrbuch für Kunstgeschichte* [Bibliotheca Hertziana] 23–24 (1988), pp. 395–483.

Tratz 1991-92

Helga Tratz. "Die Ausstattung des Langhauses von St. Peter unter Innozenz X." Römisches Jahrbuch der Bibliotheca Hertziana 27–28 (1991–92), pp. 337–74.

Treu 1871

Georg Treu. Ukazatel' skul'pturnogo muzeya imperatorskoy akademii khudozhestv: Skul'ptura XIV—XVIII stoletii (Index of the sculpture museum of the imperial academy of the fine arts: Sculpture of the fourteenth through eighteenth centuries). Saint Petersburg: Akad. Nauk., 1871.

Turin and other cities 1999-2001

The Triumph of the Baroque: Architecture in Europe, 1600–1750. Exhibition, Palazzina di Caccia di Stupinigi; Montreal Museum of Fine Arts; National Gallery of Art, Washington, D.C.; Musée des Beaux-Arts, Marseille, 1999–2001. Catalogue by Henry A. Millon and others. Milan: Bompiani, 1990.

Uginet 1980

François-Charles Uginet. Le palais Farnèse. Vol. 3, pt. 1, Le palais Farnèse à travers les documents financiers (1535–1612). Rome: École Française de Rome, 1980.

Valcanover 1986

Francesco Valcanover. *Ca' d'Oro, la Galleria "Giorgio Franchetti."* Milan: Electa Editrice, 1986.

Vannucchi 1976

Giulio Vannucchi. *La casa natale di Pietro Bernini*. Sesto Fiorentino: Sesto Miglio Club, 1976.

Vasari/Milanesi 1878-85

Giorgio Vasari. Le vite de' più eccellenti pittori, scultori ed architettori scritte da Giorgio Vasari, pittore aretino, con nuove annotazioni e commenti di Gaetano Milanesi. 1568. 9 vols. Florence: G. C. Sansoni Editore, 1878–85.

Vasari/Milanesi 1906 ed.

Giorgio Vasari. Le vite de' più eccellenti pittori, scultori ed architettori scritte da Giorgio Vasari, pittore aretino, con nuove annotazioni e commenti di Gaetano Milanesi. 1878–85. 2nd ed. 9 vols. Florence: G. C. Sansoni Editore, 1906.

Vatican City 1981

Bernini in Vaticano. Exhibition, Braccio di Carlo Magno, Vatican City, 1981. Catalogue by Anna Gramiccia and others. Rome: De Luca Editore, 1981.

Vatican City 2003-4

Visioni ed estasi: Capolavori dell'arte europea tra Seicento e Settecento. Exhibition, Braccio di Carlo Magno, Vatican City, 2003–4. Catalogue by Giovanni Morello and others. Milan: Skira, 2003.

Velasco y Aguierre 1941

[Miguel Velasco y Aguierre.] *Cátalogo de la sala de dibujos*. Madrid: Real Academia de Bellas Artes de San Fernando, 1941.

Venice 1788

Museo della casa eccellentissima Farsetti in Venezia. Venice, 1788.

Vienna 1936-37

IV Ausstellung: Bozzetti und Modelletti der Spätrenaissance und des Barock. Exhibition, Kunsthistoriches Museum, Sammlung für Plastik und Kunstgewerbe, Vienna, 1936–37. Catalogue by Ernst Kris and Leo Planiscig. Vienna: J. Weiner, 1936.

Viligiardi 1920

Arturo Viligiardi. "Bozzetti in terra cotta di Gian Lorenzo Bernini rinvenuti a Siena." Rassegna d'arte senese: Bullettino della Società degli amici dei monumenti 13, no. 1–2 (1920), pp. 36–38.

Villani 2008

Adriana Villani. "I bozzetti di Gian Lorenzo Bernini nella collezione Chigi." *Miscellanea Bibliothecae Apostolicae Vaticanae* 15 (2008), pp. 421–95.

Visonà and Marcellini 1990

Mara Visonà and Carlo Marcellini. Accademico "spiantato" nella cultura fiorentina tardo-barocca. Ospedaletto (Pisa): Pacini, 1990.

Vitzthum 1971

Walter Vitzthum. *Il barocco a Roma*. Milan: Fabbri Editori, 1971.

Voss 1910a

Hermann Voss. "Berninis Fontänen." Jahrbuch der Königlich Preussischen Kunstsammlungen 31 (1910), pp. 99–129.

Voss 1910b

Hermann Voss. "Über Berninis Jugendentwicklung." *Monatshefte für Kunstwissenschaft* 3, no. 10 (1910), pp. 383–89.

Voss 1914-15

Hermann Voss. "Lorenzo Bernini: Entwurf für das Grabmal Urbans VIII. und die Cattedra di S. Pietro; Zwei Studien für das Grabmal Alexanders VII." *Archiv für Kunstgeschichte* 2, no. 3–4 (1914–15), nos. and pls. 159–60.

Voss 1922

Hermann Voss. "Bernini als Architekt an der Scala Regia und an den Kolonnaden von St. Peter." Jahrbuch der Preussischen Künstsammlungen 43 (1922), pp. 1–30.

Waddy 1990

Patricia Waddy. Seventeenth-Century Roman Palaces: Use and the Art of the Plan. New York: The Architectural History Foundation; Cambridge, Mass.: The MIT Press, 1990.

Walker 1998-99

Dean Walker. "Surveying the History of Collecting Italian Sculptural Models." In Chicago, Philadelphia, and Washington, D.C. 1998–99, pp. 14–29, 114–15.

Walker 2000

Dean Walker. "A Portrait Bust of Gian Lorenzo Bernini, and Notes from the 'Fifties." *The Sculpture Journal* 4 (2000), pp. 65–71.

Walsh et al. 1988

John Walsh et al. "Acquisitions/1987." The J. Paul Getty Museum Journal 16 (1988), pp. 133–99.

Wardropper 1998-99

Ian Wardropper. "The Role of Terracotta Models in Italian Baroque Sculptural Practice." In Chicago, Philadelphia, and Washington, D.C. 1998–99, pp. 30–42, 115.

Washington, D.C., New York, and Cambridge, Mass. 1981–82

Fingerprints of the Artist: European Terracotta Sculpture from the Arthur M. Sackler Collections. Exhibition, National Gallery of Art, Washington, D.C.; The Metropolitan Museum of Art, New York; Fogg Art Museum, Cambridge, Mass., 1980–82. Catalogue by Charles Avery and others. Washington, D.C.: Arthur M. Sackler Foundation; Cambridge, Mass.: Fogg Art Museum, 1981.

Waźbiński 1994

Zygmunt Waźbiński. *Il cardinale Francesco Maria del Monte*, 1549–1626. 2 vols. Florence: Leo S. Olschki Editore, 1994.

Weber 1978

Christoph Weber. Kardinäle und Prälaten in den letzten Jahrzehnten des Kirchenstaates: Elite-Rekrutierung, Karriere-Muster u. soziale Zusammensetzung d. kurialen Führungsschicht zur Zeit Pius' IX. (1846–1878). 2 vols. Päpste und Papsttum, 13. Stuttgart: Hiersemann, 1978.

Weil, M. 1966-67

Mark S. Weil. "A Statuette of the Risen Christ Designed by Gian Lorenzo Bernini." The Journal of The Walters Art Gallery 29–30 (1966–67), pp. 6–15.

Weil, M. 1971

Mark S. Weil. "The Angels of the Ponte Sant' Angelo: A Comparison of Bernini's Sculpture to the Work of Two Collaborators." *Art Journal* 30, no. 3 (Spring 1971), pp. 252–59.

Weil, M. 1974

Mark S. Weil. The History and Decoration of the Ponte S. Angelo. University Park, Pa.: The Pennsylvania State University Press,

Weil, M. 1999

Mark S. Weil. "Bernini Drawings and Bozzetti for the Ponte Sant'Angelo: A New Look." In Gaskell and Lie, eds. 1999, pp. 144–50, pls. 2–3, 9–11.

Weil, M. 2002-3

Mark S. Weil. "Bernini and the Modello for the *Fountain of the Moor.*" In New York 2002–3, pp. 30–47.

Weil, P. 1967

Phoebe Dent Weil. "Contributions towards a History of Sculpture Techniques. I: Orfeo Boselli on the Restoration of Antique Sculpture." *Studies in Conservation* 12, no. 3 (August 1967), pp. 81–101.

Weil, P. 1978

Phoebe Dent Weil. "Bozzetto-Modello: Form and Function." In Boselli 1978 ed., pp. 113–34.

Weisbach 1921

Werner Weisbach. Der Barock als Kunst der Gegenreformation. Berlin: P. Cassirer, 1921.

Welcker 1957

Luise Schütte Welcker. "Die Beurteilung Berninis in Deutschland im Wandel der Zeiten." Ph.D. diss., Universität Köln, 1957.

White, Whistler, and Harrison 1992

Christopher White, Catherine Whistler, and Colin Harrison. *Old Master Drawings from the Ashmolean Museum*. Oxford: Ashmolean Museum; Oxford University Press, 1992.

Winckelmann 1776

Johann Joachim Winckelmann. Geschichte der Kunst des Alterthums. 2nd ed. 2 vols. 1764. Vienna: Akademischen Verlage, 1776.

Winckelmann/Fuseli 1765

Johann Joachim Winckelmann. Reflections on the Painting and Sculpture of the Greeks with Instructions for the Connoisseur. Translated by Henry Fuseli. London: A. Millar, 1765.

Winner 1998

Matthias Winner. "Ratto di Proserpina." In Rome 1998, pp. 180–203.

Wittkower 1928

Rudolf Wittkower. "Die Rölle des Modells in der römischen Barockplastik." Sitzungsberichte der Kunstgeschichtliche Gesellschaft Berlin, 1928, pp. 5–7.

Wittkower 1951a

Rudolf Wittkower. *Bernini's Bust of Louis XIV.* London: Oxford University Press, 1951.

Wittkower 1951b

R[udolf] Wittkower. "Works by Bernini at the Royal Academy." *The Burlington Maga*zine 93, no. 575 (February 1951), pp. 51–56.

Wittkower 1955

Rudolf Wittkower. Gian Lorenzo Bernini: The Sculptor of the Roman Baroque. London: Phaidon Publishers, 1955.

Wittkower 1961

Rudolf Wittkower. "The Vicissitudes of a Dynastic Monument: Bernini's Equestrian Statue of Louis XIV." In *De Artibus opuscula XL: Essays in Honor of Erwin Panofsky*, edited by Millard Meiss, vol. 1, pp. 497–531, vol. 2, pp. 168–74. New York: New York University Press, 1961.

Wittkower 1963

Rudolf Wittkower. "The Role of Classical Models in Bernini's and Poussin's Preparatory Work." In Studies in Western Art: Acts of The Twentieth International Congress of the History of Art, vol. 3, Latin American Art and the Baroque Period in Europe, pp. 41–50. Princeton, N.J.: Princeton University Press, 1963.

Wittkower 1966

Rudolf Wittkower. *Gian Lorenzo Bernini:* The Sculptor of the Roman Baroque. 2nd ed. 1955. London: Phaidon Press, 1966.

Wittkower 1970-71

Rudolf Wittkower. "Two Bronzes by Bernini in the National Gallery." *Art Bulletin of Victoria* [Melbourne], no. 12 (1970–71), pp. 11–18.

Wittkower 1975a

Rudolf Wittkower. "The Role of Classical Models in Bernini's and Poussin's Preparatory Work." In Studies in the Italian *Baroque*, by Rudolf Wittkower, pp. 103–14, 285. 1963. London: Thames and Hudson, 1975.

Wittkower 1975b

Rudolf Wittkower. "The Vicissitudes of a Dynastic Monument: Bernini's Equestrian Statue of Louis XIV." In *Studies in the Italian Baroque*, by Rudolf Wittkower, pp. 83–102, 282–85. 1961. London: Thames and Hudson, 1975.

Wittkower 1977

Rudolf Wittkower. Sculpture: Processes and Principles. New York: Harper & Row, 1977.

Wittkower et al. 1981

Rudolf Wittkower et al. *Gian Lorenzo Bernini: The Sculptor of the Roman Baroque*. 3rd ed. 1955. Ithaca: Cornell University Press, 1981.

Wittkower et al. 1997

Rudolf Wittkower [et al.]. *Bernini: The Sculptor of the Roman Baroque*. 4th ed. 1955. London and New York: Phaidon Press, 1997.

Worsdale 1978

Marc Worsdale. "Bernini Studio Drawings for a Catafalque and Fireworks, 1668." *The Burlington Magazine* 120, no. 904 (July 1978), pp. 462–66.

Wrede 2000

Henning Wrede. "L'Antico nel Seicento." In L'idea del bello: Viaggio per Roma nel Seicento con Giovan Pietro Bellori, vol. 1, pp. 7–15. Exhibition, Palazzo delle Esposizioni and Teatro dei Dioscuri, Rome, 2000. Catalogue by Evelina Borea, Carlo Gasparri, and others. 2 vols. Rome: Edizioni De Luca, 2000.

Yeide, Akinsha, and Walsh 2001

Nancy H. Yeide, Konstantin Akinsha, and Amy L. Walsh. *The AAM Guide to Provenance Research*. Washington, D.C.: American Association of Museums, 2001.

Zamboni 1968

Silla Zamboni. "Gian Lorenzo Bernini: Un modello per la 'Fontana dei Quattro Fiumi' ritrovato." In *Da Bernini a Pinelli*, by Silla Zamboni, pp. 9–25, pls. 1–8. Bologna: Accademia Clementina di Bologna, 1968.

Zamboni 1971

Silla Zamboni. "G. L. Bernini: Un modello per la Fontana dei Quattro Fiumi ritrovato." Rapporto della Soprintendenza alle Gallerie di Bologna 7 (1971), pp. 31–43.

Zanotti 1739

Giampietro Zanotti. Storia dell'Accademia Clementina di Bologna aggregata all'Instituto delle scienze e dell'arti. 2 vols. Bologna: L. dalla Volpe, 1739.

Zaretskaia and Kosareva 1960

Zinaida Vladimirovna Zaretskaia and Nina K. Kosareva. Gosudarstvennyi Ermitazh: Zapadnoevropeyskaya skul'ptura XV–XX vekov (The State Hermitage: Western European sculpture of the fifteenth through twentieth centuries). Moscow, 1960.

Zaretskaia and Kosareva 1970

Zinaida Vladimirovna Zaretskaia and Nina K. Kosareva. *Zapadnoevropeyskaya skul'ptura v Ermitazhe* (Western European sculpture in the Hermitage). Leningrad, 1970.

Zaretskaia and Kosareva 1975

Zinaida Vladimirovna Zaretskaia and Nina K. Kosareva. *Zapadnoevropeyskaya skul'ptura v Ermitazhe* (Western European sculpture in the Hermitage). 2nd ed. 1970. Leningrad, 1975.

Zitzlsperger 2002

Philipp Zitzlsperger. Gianlorenzo Bernini— Die Papst- und Herrscherporträts: Zum Verhältnis von Bildnis und Macht. Munich: Hirmer Verlag, 2002.

Zollikofer 1994

Kaspar Zollikofer. Berninis Grabmal für Alexander VII.: Fiktion und Repräsentation. Römische Studien der Bibliotheca Hertziana, 7. Worms: Wernersche Verlagsgesellschaft, 1994.

Zuraw 1996

Shelley E. Zuraw. "'With Superior Thought': Renaissance and Baroque Sculpture from the Palazzo Venezia." In Athens, Ga. 1996, pp. 25–38.

Index

Page numbers in **boldface** refer to main catalogue entries. Page numbers in *italics* refer to illustrations.

Abbatini, Guido Ubaldo, *Transferral of the Lance of Saint Longinus* (fig. 172), 123,
123, 381n

Accademia Clementina, Bologna (now Accademia di Belle Arti), 159 Accademia del Disegno, Florence, 6 Accademia di San Luca, Rome, 6, 7, 144,

Adam, Lambert-Sigisbert, 63–64, 73 additive vs. subtractive methods of constructing models, 79, 89, 89, 107, 107, 126, 139, 170, 184, 185, 193, 194, 201, 240, 242, 274, 280, 306, 315, 316, 340, 347, 349

Agostini, Leonardo, 137, 372n Agucchi, Giovanni Battista, 65–66 Albertoni, Cardinal Paluzzo Paluzzi degli, 206

Aldobrandini Chapel, Santa Maria sopra Minerva, 373*n*

Alexander VII, Pope, 27, 30, 31, 39, 49, 52, 71, 137–38, 217, 233, 235, 242, 250, 258, 273, 343, 373*n*, 377*n*

Algardi, Alessandro, 10, 45, 48, 49, 50, 51–52, 63–64, 67, 258, 335, 375n Baptism of Christ (fig. 56), 48, 48 Encounter of Saint Leo the Great and

Attila, 49, 58

Tomb of Leo XI, 49

Vision of Saint Agnes, 58

Allegorical Figure (cat. 2), 3, 25, 26, 51, 85, 98, 102, 104, 106, 106, 111, 113–14, 115, **118–21**, 118, 120, 121, 130, 193, 269

Altieri Chapel, San Francesco a Ripa, 189, 206, 207

Altieri family, 206

Altieri family, 206

Andreani, Andrea, 373n

Andrew, Saint, 123

Androsov, Sergei, 81–83, 212, 255

Angel with the Cross (cat. 46), 52, 99, 104,

104, 243, 298, **334–38**, 334, 336, 337, 338

Angel with the Crown of Thorns (cat. 35), 40, 89, 93, 93, 98–99, 99, 100, 101–2, 102, 115, 160, 196, 197, 225, 260, 285,

288–91, 288, 290, 291, 293, 329

Angel with the Crown of Thorns (cat. 36), 89, 95, 95, 98–99, 99, 104, 179, 196, 277, 285, **292–95**, 292, 293, 294, 295, 297, 300, 302, 303, 325 Angel with the Crown of Thorns (cat. 40), 15, 98–99, 99, 102, 106, 115, 161, 179, 196, 267, 285, 294, 302, 303, 306, 306, 309, **310–13**, 310, 311, 312, 313, 323

Angel with the Crown of Thorns (cat. 43), 85, 94–95, 96–97, 97, 101, 101, 102, 179, 196, 220, 236, 285, 289, 295, 300, 302, 313, **322–25**, 322, 323, 324, 325

Angel with the Crown of Thorns (cat. 45), 82, 99, **330–33**, 330, 332, 333, 385n

Angel with the Scourge (cat. 37), 41, 89, 94, 94, 98–99, 99, 102, 103, 179, 196, 197, 204, 238, 287, 293, 293, 294, **296–300**, 296, 298, 299, 300, 316,

328, 335

Angel with the Superscription (cat. 38), 77, 81, 89, 97, 97, 98, 99, 100, 101, 101,

104, 133, 179, 196, 267, 285, **301–4**, 301, 302, 303, 304, 307–8, 315

Angel with the Superscription (cat. 39), 98, 99, 106, 115, 179, 196, 267, 285, 294, 302, 303, **305–9**, 305, 306, 307, 308, 309, 311, 312, 313, 315, 317, 319

Angel with the Superscription (cat. 41), 89, 91, 94, 95, 97, 97, 98, 101, 107, 107, 161, 176, 179, 196, 267, 285, 302, 303, 308, 311, 313, **314–17**, 314, 315, 316, 317, 319, 357

Angel with the Superscription (cat. 42), 91, 92–93, 95, 95, 98–99, 98, 101, 101, 102, 104, 104, 115, 179, 196, 285, 302, 303, 308, 313, **318–21**, 318, 319, 320, 321, 324, 327–28, 341, 350

Angel with the Superscription (cat. 44), 82, 89, 89, 97, 98–99, 98, 99, 115, 179, 196, 298, 302, 303, 313, **326–29**, 326, 328, 329

Angel with the Superscription (cat. 47), 99, **339–41**, 339, 340, 341

Ariosto, 66-67

armature, 104, 336, 338

"Art of Gianlorenzo Bernini, The: Selected Sculpture" (exhibition), 81

Avery, Charles, 82, 84, 374*n Avviso di Roma*, 165

Bacchi, Andrea, 82

Bacci, Pèleo, 76, 265

Baggi, Francesco, 187

Baglione, Giovanni, 4–5, 6, 372n

Baker, Thomas, 69

Baldinucci, Filippo, 9–10, 51, 53, 66, 67, 69, 72, 73, 338, 378*n*

Baratta, Francesco, 53

Raising of the Dead (attributed) (fig. 59),

53-54, 54

the Rio de la Plata from the Fountain of the Four Rivers (after Bernini) (fig. 200), 37–38, 152, 154

Barberini, Cardinal Francesco, 27, 28, 52, 71, 116, 137, 138

Barberini, Carlo, 25, 111, 118

Barberini, Maffeo see Urban VIII, Pope Barberini, Maria Giulia, 81, 83–84

Barberini, Prince Don Maffeo, 138

Barberini, Taddeo, 135

Barberini Chapel, Sant'Andrea della Valle,

Barberini-Colonna, Anna, 138 Barberini-Colonna, Vittoria Felice, 138

Barberini family, 67, 138 Barcham, William, 192

Barga, Pietro da, *Pluto and Proserpina* (attributed) (fig. 17), 19, 20, 84

Bariola, Giulio, 187

Barock-Bozzetti (Brinckmann), 77, 78, 379n

bases, 306, 315

ground, 90–91, 90, 91, 194 laid-paper impressions on, 90, 96

sanded, 90, 90

saw-cut, 91, 106, 120, 274, 354

spiral-pattern, 90, 90, 91, 179, 319

wire-cut, 90, 120, 128, 201 wood-grain impressions on, 90

Battaglia, Roberto, 379n

Bellori, Giovanni Pietro, 58, 64, 65

Beltrami, Luca, 187

Belvedere Antinous, 289

Benedict XIII, Pope, 61

Berl, Rudolf, collection of, 77-78

Bernini, Domenico (son), 21, 53, 54, 375*n* Bernini, Gian Lorenzo, drawings, 25–45,

77–78

academy, 37

bozzetti and, 81

DOZZEM and, or

as collectible art, 71

for complete statues, 34-41

of details, 41-45

as documents of the artist's creative

process, 78

overall views, 25-34

presentation, 27

see also specific works

Bernini, Gian Lorenzo, life:

as antiquities restorer, 7

comedy staged by, 68-69

early model making by, 8, 13

early portraiture by, 12-14

early portraiture by, 12–14

passion for modeling discovered by, 4 personality cult surrounding, 72–73

as Pietro's student, 4, 5–6, 8, 9–10, 23,

48-49

Bernini, Gian Lorenzo, models by: authenticity of, 75, 78, 83 bozzetti, 14-21, 25, 50-51, 75-76, 78-79, 80, 82, 85 as collectible art, 81, 85, 103 contemporary accounts of, 13-14 as documents of the artist's creative process, 75-76, 78-79, 80, 82, 85, 88 drawings and, 81 early drawings compared to, 15 early sculpture and, 14-21 as having intrinsic artistic value, 75, 76, 87-88 head studies and, 21-23 historiography of, 75-85 later sculptures as reflecting techniques of, 15-16 modelli, 50, 51-55, 68-71, 103 modelli grandi, 55-61, 84 modernity of, 83-84 presentation, 14, 48, 103 spontaneity of, 79, 80, 85 as unvalued by Bernini's circle, 67 workshop role of, 47-60, 80, 83 see also specific works Bernini, Gian Lorenzo, models by, forensic analysis of, 75, 83, 94-95, 94, 95, 320, fingerprints, 78, 83, 95-96, 95, 153, 179, 350, 380n X-radiography, 83, 87, 106-7, 107, 120, 126, 148, 170, 177, 198, 201, 215, 223, 227, 253, 256, 302, 311, 315, 328, 336, 340, 347, 355, 357 Bernini, Gian Lorenzo, models by, stylistic devices and techniques of, 82, 84 additive vs. subtractive methods, 79, 89, 89, 107, 107, 126, 139, 170, 184, 185, 193, 194, 201, 240, 242, 274, 280, 306, 315, 316, 340, 347, 349 applied hair, 89-90, 89, 150, 166, 229, 312, 320, 321, 324, 362 assembly methods, 89-90, 120 bases, see bases bole, 103, 103, 124 brushes, brush smoothing, 103-4, 103, 104, 105, 105, 174, 241, 264, 303 buttresses, 91, 91, 101, 101, 117, 219, 224, 300, 309, 313, 323, 329, 346, 353 chiaroscuro, 64 clay pushed around limbs, 98-99, 98, 99, 220, 290, 302 clay, use of, 91-92, 91, 141, 210, 241 cloth smoothing, 103, 146, 350 damage and restoration, 89, 90, 92-93, 93, 94, 107, 177, 319, 321

dowels and staples, 107, 107, 177 drapery treatments, 15-16, 43, 44, 64, 131, 157, 238, 268, 281, 293, 358, 368, 370 fingernail marks, 105, 224, 321 finger smoothing, 103, 103, 165, 229, 295, 298 finger strokes, 94, 100, 100, 120, 224, 259, 269, 280, 294, 298, 317, 320, 321, 326, 358 finger sweep around head, 100, 100, 115, 294, 298, 321, 326 gesso, 103, 126 gilding, 95, 103, 124, 165 gold- and bronze-colored paint, 95, 103 hair buttresses, 101, 101, 309 hollowing, 96, 126, 157, 211, 219, 224, 227, 243, 253, 263, 275, 340 joins, 89, 89, 274 layout lines, 98, 98, 146, 148, 294, 304, 325 massing, 89 measuring marks, 97-98, 97, 98, 130, 153, 156, 230, 291, 317, 324, 361, 362 measuring scales, 96-97, 325, 329, 360, 380n multisession pieces, 102, 321, 324 neck fingernail pinch, 99-100, 99, 100, 298, 308, 317, 320, 351 nexus, 97, 98, 156, 230, 317, 324, 361 over-the-shoulder finger strokes, 100, 100, 298, 317 point mark repair, 98, 98, 153, 291 point marks, 97, 97, 362 refreshing, 102, 102 revision, 102, 102, 121, 211, 259, 260, 313, 347 struck lines, 97-98, 98, 130, 153, 362 struts, 90, 197, 210, 291 surface decoration, 95, 102-3, 103, 124, 126, 165 surface textures, 103-4, 103, 104, 121, 146, 174, 228, 294, 298, 303, 350 wedging, 89, 90, 91, 242, 277, 319 wing-root feathers, 101-2, 101, 102 Bernini, Gian Lorenzo, models by, tools and tool marks, 104-6, 135, 153, 193 armature, 104, 336, 338 chisel, 105, 116, 252, 275, 300, 309, 351, dividers, 97, 97 draping cloth, 105, 358 impressed, 101, 103, 124, 161, 165, 175, 176, 229, 316

knife, 91, 105, 105, 126, 252, 263, 309,

317, 329

oval-tip, 15, 105, 105, 115, 153, 167, 208, 210, 213, 224, 237, 261, 298, 299, 302, 313, 320, 337, 351, 358, 361, 362 props, 106, 106, 276 rasp, 106, 180, 194, 230, 256, 313 saw, 91, 106, 120, 274, 354 straight, 33 toothed tools and textures, 33, 34, 100-101, 100, 101, 104, 106, 106, 114, 121, 125, 160, 260, 315 see also fingernail marks Bernini, Gian Lorenzo, works: Academy Study of a Male Nude (cat. D.19; fig. 41), 38, 38, 152, 367 Academy Study of a Male Nude Seen from Below (cat. D.18; fig. 40), 37-38, 37, 152, 367 Allegorical Figure (cat. 2), 3, 25, 26, 50, 85, 98, 102, 104, 106, 106, 111, 113-14, 115, **118-21**, 118, 120, 121, 130, 193, 269 Altar of the Blessed Sacrament (fig. 400), 31, 44, 57–58, 81, 281, 343, 345, 353 Anatomical Studies? (cat. D.15, verso), 366-67 Angel with the Crown of Thorns (cat. 35), 40, 89, 93, 93, 98-99, 99, 100, 101-2, 102, 115, 160, 196, 197, 225, 260, 285, **288-91**, 288, 290, 291, 293, 329 Angel with the Crown of Thorns (cat. 36), 89, 95, 95, 98–99, 99, 104, 179, 196, 277, 285, 292-95, 292, 293, 294, 295, 297, 300, 302, 303, 325 Angel with the Crown of Thorns (cat. 40), 15, 98-99, 99, 102, 106, 115, 161, 179, 196, 267, 285, 294, 302, 303, 306, 306, 309, **310–13**, 310, 311, 312, 313, 323 Angel with the Crown of Thorns (cat. 43), 85, 89, 94-95, 96-97, 97, 98, 101, 101, 102, 179, 196, 220, 236, 285, 289, 295, 300, 302, 313, 322-25, 322, 323, 324, 325 Angel with the Crown of Thorns (fig. 46), 31-33, 40-41, 41, 293, 385n Angel with the Crown of Thorns (fig. 337), 15, 16, 39, 48, 50, 285, 286, 306-7, 323, 327, 333 Angel with the Scourge (cat. 37), 41, 89, 94, 94, 98-99, 99, 102, 103, 179, 196, 197, 204, 238, 287, 293, 293, 294, **296–300**, 296, 298, 299, 300, 316, 328, 335 Angel with the Superscription (cat. 38), 77, 81, 89, 97, 97, 98, 99, 100,

- 101, 101, 104, 133, 179, 196, 267, 285, **301–4**, 301, 302, 303, 304, 307–8, 315
- Angel with the Superscription (cat. 39), 98, 99, 106, 115, 179, 196, 267, 285, 294, 302, 303, **305–9**, 305, 306, 307, 308, 309, 311, 312, 313, 315, 317, 319
- Angel with the Superscription (cat. 41), 89, 91, 94, 95, 97, 98, 101, 107, 107, 161, 176, 179, 196, 267, 285, 302, 303, 308, 311, 313, **314–17**, 314, 315, 316, 317, 319, 357
- Angel with the Superscription (cat. 42), 91, 92–93, 95, 95, 98–99, 98, 101, 101, 102, 104, 104, 115, 179, 196, 285, 302, 303, 308, 313, **318–21**, 318, 319, 319, 320, 321, 324, 327–28, 341, 350
- Angel with the Superscription (cat. 44), 82, 89, 89, 97, 98–99, 98, 99, 101, 101, 115, 179, 196, 298, 302, 303, 313, **326–29**, 326, 328, 329
- Angel with the Superscription (assistant or copyist of) (cat. 47), 99, **339**–**41**, 339, 340, 341
- Angel with the Superscription (fig. 336), 48, 51, 285, 286, 306–7, 315, 319,
- Apollo and Daphne (figs. 1, 12), 3, 3, 14, 15, 16–17, 16, 21, 47, 49, 77, 79, 84
- Architectural Studies and Three Leg Studies for Saint Longinus (cat. D.3; fig. 424), 365, 366
- Bacchanal: A Faun Teased by Children (and Pietro Bernini) (fig. 3), 4, 5, 116
- Baldacchino (fig. 55), 11, 47, 47, 49, 58, 60, 111, 124
- Blessed Ludovica Albertoni, The (cat. 20), 92, 96, 120, 189, **206–11**, 206, 208, 210, 211, 213, 214, 215
- Blessed Ludovica Albertoni, The
 (associate or copyist of) (cat. 21),
 80, 96, 96, 189, 207, 208–9,
 212–15, 212, 213, 214, 215
- Blessed Ludovica Albertoni, The (fig. 255), 42, 189, 207, 212
- Blessed Soul (fig. 19), 22, 22
- Bust of Antonio Coppola (fig. 11), 12–13, 12 Bust of Louis XIV (fig. 67), 13, 68, 69–70, 70, 176, 302–3
- Cathedra Petri (fig. 281), 47, 49, 55–59, 56, 57, 71, 77, 81, 84, 233, 233, 245, 250–51, 255, 269, 341, 345, 384n
- Celestial Glory (figs. 281, 320), 233, 233, 251, 269, 270

- Charity with Four Children (cat. 1), 81, 91, 91, 92, 103, 106, 111, **112–17**, 112, 114, 115, 233, 282
- Charles II on Horseback (or associate) (fig. 280), 231, 231
- Coat of Arms for the Four Rivers Fountain (or assistant) (fig. 213), 163, 163
- Constantine the Great on Horseback (cat. 23), 31, 79, 82, 90, 90, 97, 99, 101, 102, 140, 217, 220, **222–25**, 222, 223, 224, 228, 268, 290
- Constantine the Great on Horseback (fig. 265), 30, 45, 217, 217, 219, 223, 227
- Countess Matilda of Tuscany (after Bernini) (cat. 5), **132–35**, 132, 135 Damned Soul. 21
- Daniel in the Lions' Den (cat. 25), 39, 81, 92, 93, 93, 95, 95, 103, 106, 106, 107, 107, 117, 153, 166, 213, 233,
 - **234–38**, *234*, *237*, *238*, *242*, *258*, *263–65*, *276*
- Daniel in the Lions' Den (fig. 282), 39-40, 44, 233, 235, 235
- David (fig. 2), 3, 3, 14, 21, 68, 84, 174
- David (after) (fig. 71), 82, 82, 373n
- Design for a Fountain, A (or workshop) (fig. 28), 29–30, 29, 183
- Design for an Elephant with an Obelisk (cat. D.14; fig. 25), 27, 27, 28, 137, 266
- Design for Fountain with Dolphins Bearing a Conch Shell (or assistant) (cat. D.21; fig. 26), 28–29, 28, 165, 367
- Design for Fountain with Tritons and Dolphins (cat. D.22; fig. 27), 28–29, 28, 165, 367
- Design for the Altar of the Blessed
 Sacrament (and assistants)
 (cat. D.35; fig. 32), 31–33, 33, 84,
 345, 370–71
- Design for the Cathedra Petri (or workshop) (cat. D.28; fig. 300), 245, 250, 251, 369
- Drapery Studies (cat. D.32, verso), 369–70
- Drapery Study for Saint Teresa (cat. D.16, verso; fig. 52), 42–43, 44, 259, 367
- Eight Studies for the Torso of a Partially Draped Figure, Probably Saint Longinus (cat. D.4; fig. 425), 365, 366
- Elephant with an Obelisk (cat. 6), 27, 28, 52, 71, 77, 92, 93, 96, 104, 111, **136–41**, 136, 139, 140, 141

- Equestrian Statue of Louis XIV (and assistants) (fig. 279), 55, 68, 217, 219, 230–31, 231
- Fountain of the Four Rivers (and assistants) (figs. 72, 191, 192, 197, 200), 28, 37–38, 48, 52, 55, 79, 87–88, 87, 143, 144–45, 145, 152, 154, 156, 156, 165, 172
- Four Members of the Cornaro Family (cat. 16), 92, 93, 94, 94, 95, 95, 106, 106, 119, **190–94**, 190, 193, 194,
- Habakkuk and the Angel (associate of [Ercole Ferrata?]) (cat. 26), 81, 96, 103, 181, 233, **239–43**, 239, 241, 242, 243, 258
- Habakkuk and the Angel (fig. 287), 240, 240, 242
- Half-Kneeling Angel (cat. 48), 90, 99, 99, 100, 102, 106, 115, 237, 238, 267, 300, **344–47**, 344, 345, 346, 347, 349, 350, 351, 354
- Half-Kneeling Angel (cat. 49), 33, 91, 99, 101, 101, 103, 106, 115, 238, 263, 267, 300, 317, 345–47, **348–51**, 348, 349, 350, 351, 354, 362
- Head of Proserpina (after) (fig. 70), 77, 79, 79, 373n
- Head of Saint Athanasius (fig. 63), 47, 56–57, 57
- Head of Saint Jerome (cat. 30), 43, 85, 96, 102, 106, 130, 179, 200, 221, 233, **257–61**, 257, 259, 260, 261
- Head of Saint John Chrysostom (fig. 62), 47, 56–57, 57
- Head of Saint Teresa of Avila (associate or copyist of) (cat. 18), 43, 189, 199–202, 199, 201, 202
- Head of the Moor (associate of [Giovanni Antonio Mari?]) (cat. 14), 81, **178–81**, 178, 179, 180
- Kneeling Angel (cat. 50), 90, 100, 101, 115, 267, 268, 345, 346, 351, **352– 55**, 352, 354, 355, 357, 358
- Kneeling Angel (cat. 51), 91, 91, 92, 101, 101, 102, 106, 204, 346, 349, **356–58**, 356, 357, 358, 361
- Kneeling Angel (cat. 52), 34, 89, 89, 92, 93, 97, 97, 100, 100, 106, 107, 115, 329, 346, 350, 354, **359–61**, 359, 360, 361
- Martyrdom of Saint Lawrence (fig. 13), 16. 17
- Members of the Cornaro Family (and associates) (fig. 238), 191, 191
- Members of the Cornaro Family (and associates) (fig. 239), 191, 191, 192

- Model for the Cathedra Petri (and associates) (cat. 27), 78, 90, 93, 98, 235, **244-48**, 244, 245, 246, 247, 248, 252, 311, 385n
- Model for the Equestrian Statue of Louis
 XIV (cat. 24), 55, 93, 93, 96, 104,
 107, 107, 160, 217, 219, 224, **226 31**, 226, 227, 228, 229, 230, 290, 313
- Model for the Fountain of the Moor (cat. 13), 11–12, 11, 14, 47, 51, 54–55, 61, 84, 89, 89, 90, 93, 93, 96, 96, 102, 102, 104, 104, 107, 125, 131, 143, 147–48, 150, 153–54, 160, 165–66, 167, 171–77, 171, 173, 174, 175, 176, 177, 179, 180–81, 185, 197, 215, 228, 229, 236, 237, 238, 240–41, 263, 313, 338
- Model for the Four Rivers Fountain (and assistants) (cat. 10), 79, 154, 158–63, 158, 160, 161, 162
- Model for the Lion on the Four Rivers Fountain (cat. 7), 12, 80–81, 86, 87–88, 87, 90, 96, 98, 98, 103, 103, 104, 106, 121, 130, **144–50**, 144, 146, 148, 150, 166, 236, 237
- Model for the Nile (cat. 9), 55, 82, 96, 97, 98, 109, 154, **155–57**, 155, 156, 157, 198, 379n
- Model for the Rio de la Plata (cat. 8), 55, 82, 95–96, 95, 98, 104, **151–54**, 151, 153, 154, 156, 157, 198, 240, 379*n*
- Modello grande for angel on the Cathedra Petri (workshop of) (fig. 60), 47, 56, 56
- Modello grande for angel on the Cathedra Petri (workshop of) (fig. 61), 47, 56, 56
- Model of an Angel and Cherub for the "Celestial Glory" (cat. 32), 88, 88, 92, 99, 99, 100, 102, 115, 225, **266–71**, 266, 267, 268, 269, 277, 350
- Pluto and Proserpina (figs. 14, 20), 3, 14, 15, 16, 17, 19–23, 19, 22, 34, 174, 372n, 373n
- Pope Alexander VII (cat. 33), 89, 94, 94, 96, 106, 130, 242, 267, **272–77**, 272, 274, 275, 276, 277
- Saint Ambrose (or associate) (cat. 28), 96, 103, **249–53**, 249, 252, 253, 255, 317
- Saint Ambrose (copyist of) (cat. 29), **254–56**, 254, 255, 256
- Saint Bibiana (fig. 66), 22, 23, 63, 63, 79 Saint Jerome (or copyist) (cat. 31), 40, 96, 103, 103, **262–65**, 262, 263, 264, 265

- Saint Jerome (fig. 308), 39–40, 61, 79, 258, 258, 263, 384n
- Saint Longinus (cat. 3), 50, 69, 96, 103, 106, 107, 107, 111, **122–26**, 122, 124, 125, 126, 128, 130, 131, 264, 277, 317
- Saint Longinus (cat. 4), 50, 69, 81, 84, 92, 96, 106, 111, 125, **127–31**, 127, 128, 130, 131, 204, 253
- Saint Longinus (figs. 159, 175, 180), 42, 50, 111, 111, 124, 125, 129
- Saint Teresa in Ecstasy (or copyist) (cat. 17), 79, 189, **195–98**, 195, 196, 197, 198
- Saint Teresa in Ecstasy (fig. 237), 42, 189, 189, 190, 192, 196, 200
- Saint with Book (Saint Luke or Saint Leonard?) (cat. 19), 81, **203–5**, 203, 204, 205
- Self-Portrait (cat. D.2; fig. 423), 364, 365, 373n
- Sketch for the Tomb of Countess Matilda (fig. 24), 26–27, 27
- Studies for Saint Longinus (cat. D.5; fig. 426), 365, 366
- Studies for the Blessed Ludovica Albertoni (fig. 54), 43, 45
- Studies for the Four Rivers Fountain (fig. 197), 149, 149
- Studies for the Head or Hand of Daniel (cat. D.27, verso), 369
- Study for a Church Father (cat. D.29, recto; fig. 302), 250, 251, 369
- Study for a Church Father (cat. D.29, verso; fig. 301), 250, 251, 369
- Study for a Frame with Acanthus Motif (cat. D.33, verso), 370
- Study for a Kneeling Angel (cat. D.36; fig. 34), 33–34, 33, 353, 371
- Study for a Kneeling Angel (cat. D.37; fig. 35), 34, 35, 353, 371
- Study for a Kneeling Angel (cat. D.38; fig. 36), 34, 35, 371
- Study for an Altar and Monstrance (fig. 31), 30, 31
- Study for Angels and Clouds in Glory (cat. D.33, recto; fig. 321), 271, 271, 370
- Study for a Triton (cat. D.15, recto; fig. 38), 36–37, 36, 52, 52, 150, 366–67
- Study for Daniel (cat. D.24, recto; fig. 43), 39, 39, 368
- Study for Daniel (cat. D.26; fig. 42), 39, 39, 41–42, 368–69
- Study for Daniel (cat. D.27, recto; fig. 283), 236, 236, 369

- Study for Pluto and Proserpina (cat. D.1; fig. 37), 15, 17, 19, 34–35, 36, 365
- Study for Saint Augustine (cat. D.30; fig. 69), 75, 77, 250, 369
- Study for Saint Jerome (cat. D.32, recto; fig. 44), 39–40, 40, 316, 369–70
- Study for Saint Jerome (fig. 45), 39–40, 40, 316
- Study for the Angel (cat. D.17, verso), 367 Study for the Equestrian Statue of Constantine (cat. D.23; fig. 29),
- 30–31, 30, 219, 223, 368 Study for the Equestrian Statue of Constantine (and assistant) (cat. D.41; fig. 30), 30, 31, 372
- Study for the Head of an Angel (cat. D.40; fig. 47), 41, 41, 371
- Study for the Head of Constantine (cat. D.34; fig. 273), 225–26, 225, 259, 370
- Study for the Head of Saint Teresa (cat. D.16, recto), 367
- Study for the Head of Saint Teresa (cat. D.17, recto; fig. 53), 43, 44, 259, 367
- Study for the Memorial to Carlo Barberini (fig. 23), 25, 26, 119
- Study for the Sea Deity with Dolphin Fountain at the Palazzo Ducale, Sassuolo (cat. D.20; fig. 22), 25, 29, 52, 183, 367
- Study for the Torso of Saint Longinus (cat. D.6; fig. 48), 42, 42, 365
- Study for the Torso of Saint Longinus (cat. D.7; fig. 49), 42, 42, 365
- Study of a Draped Figure and Study of a Drapery Detail (cat. D.12, verso),
- Study of a Horse (cat. 22), 31, 81, 96, 99, 101, 130, 160, 217, **218–21**, 218, 220, 221, 225, 229
- Study of an Arch, Pier, and Entablature (cat. D.24, verso), 368
- Study of a Window Frame and the Left Arm of Saint Longinus (cat. D.8; fig. 427), 365, 368
- Three Studies of Drapery Details, Probably for Saint Longinus (cat. D.9; fig. 428), 365, 368
- Three Studies of Drapery Details, Probably for Saint Longinus (cat. D.10; fig. 429), 365, 368
- Tomb of Alexander VII (fig. 322), 116, 273, 273, 274–75, 279
- Tomb of Alexander VII in Saint Peter's Basilica (workshop of) (cat. D.31; fig. 323), 274, 274, 276, 369

Tomb of Countess Matilda of Tuscany Bewer, Francesca, 134 Cartari, Giulio, 54, 67, 212-13, 298, 329, 377n (and assistants) (fig. 183), 30, biological deterioration, 93, 94 Angel with the Superscription (after 44-45, 133, 133, 134-35, 217 Blessed Ludovica Albertoni, The (cat. 20), Bernini) (fig. 382), 287, 327, 327 Tomb of Pope Urban VIII (fig. 160), 111, 92, 96, 120, 189, 206-11, 206, 208, Casino Chigi, Quattro Fontane, 71, 116, 113, 113, 116 210, 211, 213, 214, 215 235, 242 Triton Fountain (and assistants) Castelli, Domenico, 381n Blessed Ludovica Albertoni, The (cat. 21), (fig. 39), 36, 36 80, 96, 96, 189, 207, 208-9, 212-15, Castel Sant'Angelo, 285 Tritons with Dolphins (cat. 11), 28-29, 212, 213, 214, 215 Cattedra berniniana di San Pietro, La 36, 89, 97-98, 98, 99, 103, 143, bole, 103, 103, 124 (Battaglia), 379n 164-67, 164, 165, 166, 167, 379n Bolgi, Andrea, 53, 54, 58 Cavaceppi, Bartolomeo, 67, 84, 381 Tritons with Dolphins (assistant of) Memorial to Carlo Barberini (fig. 167), Chantelou, Paul Fréart de, 13, 69-70, 73, 48, 51, 113, 118-19, 119 (cat. 12), 166, 167, 168-70, 168, 169, 170 Borboni, Giovanni Andrea, 71 Chapel of the Madonna del Voto, Siena Two Studies for Daniel (cat. D.25; Borghese, Scipione, 13, 14, 34, 67, 68, 69, Cathedral, 39, 58, 59, 61, 79, 258, fig. 431), 368, 370 258, 263 85, 372n, 374n Two Studies for the Angel with the Borghese family, 372n Charity (cat. 34), 54, 77, 117, 278-83, 278, Superscription (cat. D.39; fig. 338), Borghini, Raffaello, 6, 380n 280, 281, 282, 283 Borromini, Francesco, 205 40-41, 289, 289, 371 Charity with Four Children (cat. 1), 81, 91, Two Studies for the Drapery of Saint Boschini, Marco, 66 91, 92, 103, 106, 111, **112–17**, 112, 114, Longinus (cat. D.11, recto: Boselli, Orfeo, 80, 323 115, 233, 282 fig. 430), 366, 370 Boucher, Bruce, 84, 340, 341 Chéron, François, Gian Lorenzo Bernini Two Studies for the Knot of Drapery bozzetti, 4, 47-48 (fig. 68), 72, 72 beside Saint Longinus's Left Arm authenticity of, 77 Chigi, Cardinal Flavio, 71, 73, 81, 84, 116, (cat. D.11, verso), 366 in Berl collection, 77-78 233, 235, 242-43, 252, 372n, 380n Two Studies of a Draped Figure, Probably as collectible art, 64-65, 67, 71-73, 81 Chigi, Fabio see Alexander VII, Pope Saint Longinus (cat. D.12, recto; as documents of the creative process, Chigi, Fabio di Carlo Corradino, 265 fig. 50), 43, 366 77, 78 Chigi Chapel, Santa Maria del Popolo, 39, Two Studies of Details of Drapery, One gilding of, 66 233, 235, 240, 240, 242, 243, 258, 375n with Left Arm of Saint Longinus as having intrinsic artistic value, 77 Chigi family, 103, 116-17, 233, 238, 258, 265 (cat. D.13, recto; fig. 51), 43, 366 modelli vs., 14, 48, 77, 78 Chigi Saracini collection, 265 Bernini, II: La sua vita, la sua opera, il suo see also Bernini, Gian Lorenzo, chisel, use of, 105, 116, 252, 275, 300, 309, tempo (Fraschetti), 76 models by 351, 354 "Bozzetto-Modello: Form and Function" Bernini, Pier Filippo (son), 70 Christina, Queen of Sweden, 73 Bernini, Pietro (father), 4-10, 17, 372n, (P. Weil), 80 Cicognara, Leopoldo, 61 Bracci, Pietro, 144 Cipriani, Angela, 80-81, 144 Brandegee, Mrs. Edward D., collection of, as antiquities restorer, 6-7 Assumption of the Virgin (fig. 6), 8, 9 pushed around limbs, 98-99, 98, 99, 76, 78 Bacchanal: A Faun Teased by Children Brauer, Heinrich, 29, 77-78 220, 290, 302 (and Gian Lorenzo Bernini) break surfaces, 94-95, 95, 323 shrinkage of, 89, 90, 92, 93, 294, 316, (fig. 3), 4, 5, 116 Breton, Luc-François, Kneeling Angel 383n Cherubs (and Gian Lorenzo Bernini) (fig. 422), 362, 362 use of, 91-92, 91, 141, 210, 241 (fig. 5), 9 Brinckmann, A. E., 76-77, 78, 179, 235, Clement IX, Pope, 285, 287, 327 Clement X, Pope, 31, 189, 206, 327, 343, 345 Coronation of Pope Clement VIII, 8, 240, 379n Brugnoli, Maria Vittoria, 79 Clement XI, Pope, Museum of Models 191-92 design knowledge of, 4-5, 6, 7, 9 brushes, brush smoothing, 103-4, 103, 104, created by, 61, 64, 84 early life of, 6-7 105, 105, 174, 241, 264, 303 Clement XIV, Pope, 137 Gian Lorenzo as student of, 4, 5-6, 8, cloth smoothing, 103, 146, 350 buttresses, 91, 91, 101, 101, 117, 219, 224, 9-10, 23, 48-49 Colasanti, Arduino, 76-77, 79 300, 309, 313, 323, 329, 346, 353 Colbert, Jean-Baptiste, 55, 70, 226-27, 230 modeling by, 4-5, 8, 375n Saint Bartholomew (fig. 4), 7–8, 7 Cafà, Melchiorre, 246-47, 384n Coliva, Anna, 84, 380n Bernini (Hibbard), 80 Cannata, Pietro, 200, 202 Conati, Bernardino, 144 Canova, Antonio, 61 Bernini: Genius of the Baroque (Avery), 82 Congregazione della Fabbrica di San Pietro, Bernini and Other Studies in the History of Caravaggio, 65 49, 123 Carpio, Gaspar de Haro y Guzmán, Art (Norton), 76 Constantine the Great on Horseback Marquis of, 71 "Bernini in Vaticano" (exhibition), 81 (cat. 23), 29, 31, 82, 90, 90, 97, 99, Carracci, Annibale, 36, 374n Bernini scultore: La tecnica esecutiva 101, 102, 140, 217, 220, **222–25**, *222*, Carracci family, 35, 65

(Coliva, ed.), 84

223, 224, 228, 268, 290

Cordier, Nicolas, 372n, 373n Elephant with an Obelisk (cat. 6), 27, 28, 52, Fracchi, Giovanni Maria, lion from the Cornaro, Cardinal Federico, 189, 191-92 Fountain of the Four Rivers (after 71, 77, 92, 93, 96, 104, 111, **136–41**, Cornaro, Doge Giovanni, 192 136, 139, 140, 141 Bernini) (figs. 192, 194), 144-45, 145 Cornaro, Marco, 192 Elizabeth of Portugal, Saint, 11 Fraschetti, Stanislao, 76 Cornaro Chapel, Santa Maria della Vittoria, Este, Francesco I d', Duke of Modena, 29, French Academy, Rome, 230 Frey, Alexander von, 311, 384n, 385n 51, 189, 189, 190-94, 191, 196, 200 52, 183, 382n Corsini, Bartolomeo, 138 Corsini, Tommaso, 138 Fagiolo dell'Arco, Maurizio, 163 Galileo, 66-67 Corsini family, 138 Falaschi, Laura, 380n Galleria Estense, Modena, 183, 185-87, 186 Cortona, Pietro da, 33, 49, 343 Falconieri, Paolo, 51 Gaskell, Ivan, 83 Countess Matilda of Tuscany (cat. 5), 132-Fancelli, Cosimo, 184, 298 gesso, 103, 126 Fancelli, Giacomo Antonio, 51, 184 35, 132, 134, 135 Ghetti, Santi, 374n cross-section analysis, 95, 95 the Nile from the Fountain of the Four Giambologna, 15, 80, 373n Cureau de La Chambre, Pierre, 66 Rivers (after Bernini) (fig. 205), Rape of the Sabine Women (fig. 18), Curtius, Marcus, 217, 231 152, 154, 156, 156 19, 20 Farnese, Cardinal Girolamo, 71, 384n "Gian Lorenzo Bernini: Regista del Dal Pozzo, Cassiano, 382n Farnese, Odoardo, 372n Barocco" (exhibition), 83 damage and restoration, in modeling Farrell, Eugene F., 83, 380n Gian Lorenzo Bernini (Wittkower), 80 process, 89, 90, 92-93, 93, 94, 107, Farsetti, Filippo, 79, 80, 81, 82, 84, 169, Giardè, Arrigo, 50 177, 319, 321 gilding, 95, 103, 124, 165 Daniel in the Lions' Den (cat. 25), 39, Fedini, Domenico, 13-14 Giorgetti, Antonio, 373n-74n, 384n 81, 91, 92, 93, 93, 95, 95, 103, 106, Félibien, André, 66 Giovanni Lorenzo Bernini (Kauffmann), 80 106, 107, 107, 117, 153, 166, 213, Female Head (formerly attributed to Girardon, François, 231 233, **234–38**, 234, 237, 238, 242, 258, Bernini) (fig. 21), 23-24, 24, 373n-74n Giustiniani, Vincenzo, 66, 372n, 376n 263-65, 276 Ferrata, Ercole, 50, 51-52, 54, 56, 58, 84, Goodwin, David, 95 death masks, 12-13, 373n 246, 252, 258, 335, 384n Gorga, Evan, 373n Del bene (Pallavicino), 72 Angel with the Cross (cat. 46), 52, 99, Gregorian Chapel, Saint Peter's Basilica, Delle statue (Borboni), 71 104, 104, 243, 298, **334–38**, 334, Del Monte, Cardinal Francesco Maria, 372n 336, 337, 338 Gualengo, Francesco, 183 Angel with the Cross (fig. 391), 335, 335 Guidi, Domenico, 49, 61 modeling and drawing as tools of, 4, 7 Elephant with an Obelisk (after Bernini) Guidiccioni, Lelio, 13, 68, 85 Pietro Bernini's knowledge of, 4-5, 6, 7, 9 (fig. 186), 28, 52, 137-38, 137 Vasari on, 4, 61 Habakkuk and the Angel (possibly) Habakkuk and the Angel (cat. 26), 81, 96, De Vecchi, Ludovico, 54 (cat. 26), 81, 96, 103, 181, 233, 103, 181, 233, **239–43**, 239, 241, 242, Dictionary of Art, The (Turner, ed.), 82 239-43, 239, 241, 242, 243, 258 243, 258 Di Gioia, Elena Bianca, 81, 84, 129, 204, Saint Catherine of Siena (fig. 64), 58, 59 hair, applied, 89-90, 89, 150, 166, 229, 312, Ferri, Ciro, 51 320, 321, 324, 362 "Discorso sopra la scultura" (Giustiniani), Finelli, Giuliano, 16, 47, 48, 54, 58, 374n Half-Kneeling Angel (cat. 48), 33, 90, 99, 372n, 376n fingernail marks, 105, 224, 321 99, 100, 102, 106, 115, 237, 238, 267, dividers, 97, 97 neck pinch, 99-100, 99, 100, 298, 308, 277, 300, **344-47**, 344, 345, 346, 347, dowels and staples, 107, 107, 177 317, 320, 351 349, 350, 351, 354 fingerprints, 78, 83, 95-96, 95, 153, 179, drapery treatments, 15-16, 43, 44, 64, 131, Half-Kneeling Angel (cat. 49), 33, 91, 99, 157, 238, 268, 281, 293, 358, 368, 370 101, 101, 103, 106, 115, 238, 263, 267, 350, 380n draping cloth, 105, 358 300, 317, 345-47, **348-51**, 348, 349, finger smoothing, 103, 103, 165, 229, 295, drawings: 350, 351, 354, 362 academy, 37 Hawley, Henry, 79 finger strokes, 120, 224, 259, 269, 280, 358 as collectible art, 71, 75 forensic analysis of, 94, 320, 358 Head of Saint Jerome (cat. 30), 43, 85, 96, presentation, 27 102, 106, 130, 179, 200, 221, 233, over-the-shoulder, 100, 100, 298, 317 as primary design tool, 4, 7 sweep around head, 100, 100, 294, 298, **257-61**, 257, 259, 260, 261 see also Bernini, Gian Lorenzo, drawings Head of Saint Teresa of Avila (cat. 18), 43, 321, 326 Du Quesnoy, François, 49, 58, 63, 64, 67, 189, 199-202, 199, 201, 202 firing, of clay, 92 375n-76n Head of the Moor (cat. 14), 77, 81, 178-81, Fontana, Francesco Antonio, 81, 84, 128, Saint Andrew, 49, 123, 124, 129 178, 179, 180 204, 380n Forti Bernini family, 382n Helen, Saint, 123 "Earth and Fire: Italian Terracotta Hemingway, Colette Czapski, 84, 380n Four Members of the Cornaro Family Hercules and Antaeus (Roman) (fig. 16), Sculpture from Donatello to Canova" (cat. 16), 92, 93, 94, 94, 95, 95, 106, (exhibition), 83-84 19, 19 106, 119, 190-94, 190, 193, 194, 246

History and Decoration of the Ponte S. Mancini, Giulio, 66 229, 236, 237, 238, 240-41, 263, 313 Angelo, The (M. Weil), 80 Mannino, Paola Santa Maria, 380n Model for the Four Rivers Fountain (cat. 10), hollowing, 96, 126, 157, 211, 219, 224, 227, Mantovani, Francesco, 382n 79, 154, **158–63**, 158, 160, 161, 162 243, 253, 263, 275, 340 Marder, Tod, 197, 223 Model for the Lion on the Four Rivers Horne, Herbert Percy, 267 Mari, Baldassare, 51 Fountain (cat. 7), 12, 80-81, 86, Mari, Giovanni Antonio: 87-88, 87, 90, 96, 98, 98, 103, 103, impressed tool marks, 101, 103, 124, 161, Fountain of the Moor (after Bernini) 104, 106, 121, 130, **144–50**, *144*, *146*, 165, 175, 176, 224, 229, 316 (fig. 221), 29, 51, 55, 78, 143, 172, 148, 150, 166, 236, 237 Innocent X, Pope, 30, 143, 165, 217, 343, 172, 173, 177, 181 Model for the Nile (cat. 9), 55, 82, 96, 97, 374n Head of the Moor (possibly) (cat. 14), 98, 104, 154, **155–57**, 155, 156, 157, 77, 81, **178–81**, 178, 179, 180 198, 379n joins, 89, 89, 274 Mariani, Camillo, 373n Model for the Rio de la Plata (cat. 8), 55, 82, Mariani, Valerio, 77 95-96, 98, 98, 104, **151-54**, 151, 153, Kauffmann, Hans, 80 Marsili, Luigi Ferdinando, 159 154, 156, 157, 198, 240, 379n Kneeling Angel (cat. 50), 90, 100, 101, 115, modelli, 4, 47, 50, 51–55, 103 Martinelli, Fioravante, 53 267, 268, 345, 346, 351, **352–55**, *352*, massing, 89 bozzetti vs., 14, 48, 77, 78 354, 355, 357, 358 matching-angle photography, 87, 94 as collectible art, 64, 71-73 Kneeling Angel (cat. 51), 33, 91, 91, 92, 101, Matilda of Tuscany, Countess, 26-27, 133 public function of, 68-71 101, 102, 106, 204, 346, 349, 356-58, Mattei, Cardinal Mario, 384 modelli grandi, 4, 47–48, 55–61, 77, 84 356, 357, 358, 361 Mattei della Pergola family, 311, 372n, 384n, modelli piccoli, 4, 47 Kneeling Angel (cat. 52), 34, 89, 89, 92, 93, Model of an Angel and Cherub for the 97, 97, 100, 100, 106, 107, 115, 329, Matzulevitsch, Giannetta, 79 "Celestial Glory" (cat. 32), 88, 88, 92, 346, 350, 354, **359-61**, 359, 360, 361 Mazarin, Cardinal, 69 99, 99, 100, 102, 115, 225, **266-71**, knife, use of, 91, 105, 105, 126, 252, 263, 309, 266, 267, 268, 269, 277, 350 Mazzuoli, Bartolomeo, 54 317, 329 Mazzuoli, Giuseppe: Kosareva, Nina, 80, 82-83, 212 Charity (attributed) (cat. 34), 54, 77, 117, Bernini on importance of, 65 Kris, Frnst, 78 Bernini's role in evolution of, 63-73 **278–83**, 278, 280, 281, 282, 283 Kruft, Hanno-Walter, 80 Charity (after Bernini) (fig. 329), 279, as collectible art, 64-65, 67, 71-73, 75, 81 279, 381n of lifted figures, 19-20 Laocoön (Hellenistic period), 39 Mazzuoli, Giuseppe Maria, 54, 282, 385n as preparation for larger works, 3-4 Larsson, Lars Olof, 80 presentation, 8, 14, 48, 51, 103 measuring marks, 97-98, 97, 98, 98, 130, Lavin, Irving, 15-16, 78-79, 80, 81, 83, 85, 153, 156, 230, 291, 317, 324, 361, 362 as primary design tool, 4, 7 123-24, 196, 235, 240, 267, 297, 362, role of, in Bernini's workshop, 47-60, measuring scales, 96-97, 325, 329, 360, 380n 380n Medici, Cosimo III de', 50, 51 80, 83 layout lines, 98, 98, 146, 148, 294, 304, 325 Medici, Ferdinando de', 372n types of see bozzetti; modelli; modelli Lee, Sherman E., 78, 83 Medici, Leopoldi de', 372n grandi; modelli piccoli Legros, Pierre, 61 Modena, Duke of, 29, 52, 183, 382n Memorial of Maria Raggi, 81 Lie, Henry, 83 Merz, Conrad Martin, 384n Mola, Giovanni Battista, 55 lifted figures, modeling of, 19-20 Mezzatesta, Michael P., 81, 82 Monanni, Monanno, 372n Lives of the Modern Painters, Sculptors and Michelangelo, 65, 67, 80 Montagu, Jennifer, 84, 373n, 382n Architects (Bellori), 65 Mignard, Pierre, 72 Montanari, Tomaso, 205 Lloyd, Nancy, 83, 95 Mochi, Francesco, 375n Montesquieu, 63-64, 376n Longinus, Saint, 123 Monte Vaticano, 91-92 Saint Veronica, 49 Louis XIV, King of France, 13, 70, 72, 217, Model for the Cathedra Petri (cat. 27), 78, Morandi, Giovanni Maria, 50 230-31, 373n, 378n 90, 93, 98, 235, **244–48**, 244, 245, 246, Morelli, Lazzaro, 51, 54, 57, 243, 246 Ludovisi, Ludovico, 372n 247, 248, 252, 311, 385n Angel with the Scourge (fig. 347), Ludovisi family, 372n Model for the Equestrian Statue of Louis XIV 297-98, 297 (cat. 24), 55, 93, 93, 96, 104, 107, 107, Saint Leonard (after Bernini) (fig. 253), Maderno, Stefano, 10-12, 23, 58, 373n 160, 217, 219, 224, **226-31**, 226, 227, 204-5, 205 Hercules and Antaeus (figs. 8, 10), 10, 10, 11-12, 11 228, 229, 230, 290, 313 multisession pieces, 102, 321, 324 Nicodemus with the Body of Christ Model for the Fountain of the Moor Museum of Models, 61, 64, 84 (cat. 13), 11-12, 11, 14, 47, 51, 54-55, (fig. 7), 10, 10 61, 84, 89, 89, 90, 93, 93, 96, 96, Naldini, Paolo, 298 Saint Cecilia, 11 102, 102, 104, 104, 107, 125, 131, 143, Angel with the Crown of Thorns Maidalchini, Olimpia, 165 (attributed) (cat. 45), 54, 82, 99, 147-48, 150, 153-54, 160, 165-66, Malgouyres, Philippe, 212 Malvasia, Carlo Cesare, 66 167, 171-77, 171, 173, 174, 175, 176, 177, **330-33**, 330, 332, 333, 385n

Mancinelli, Fabrizio, 380n

179, 180-81, 185, 197, 213, 215, 228,

Hibbard, Howard, 80

Angel with the Crown of Thorns (after Bernini) (fig. 386), 287, 327, 331, negative space, toothed textures as, 100-101, 100, 101, 160, 315 nexus, 97, 98, 156, 230, 317, 324, 361 Nini, Cardinal Giacomo Filippo, 71 Niobe (Roman), 22-23 Norton, Richard, 76, 78 O'Grody, Jeannine, 250, 380n Opdycke, Leonard, 78 Oratorio dei Filippini, 58 Orsini, Paolo Giordano II, Duke of Bracciano, 13-14 Orvieto Cathedral, 8 Osservazioni della scoltura antica (Boselli), oval-tip tools, 15, 105, 105, 115, 153, 167, 208, 210, 213, 224, 237, 261, 298, 299, 302, 313, 320, 337, 351, 358, 361, 362 paint, gold- and bronze-colored, 95, 103 painting, status of sculpture vs., 8-9, 65-66 Palazzo Barberini, 27, 44, 137 Palazzo Chigi, Santi Apostoli, 372n Palazzo del Quirinale, 49 Palazzo Ducale, Sassuolo, 48, 183, 183 Palazzo Farnese, 372n Palazzo Pitti, Florence, 19 Pallavicino, Cardinal Pietro Sforza, 72 Palma Vecchio, 35 Pamphilj family, 165, 172, 181 paragone, 8-9, 65 Pascoli, Lione, 56 Passeri, Giovanni, 58 Paul I, Czar of Russia, 81 Paul V, Pope, 373n Pauline Chapel, Santa Maria Maggiore, 8, 373n Piancastelli, Giovanni, 67 Piazza Barberini, 36 Piazza della Minerva, 52, 137, 137 Piazza Navona, 29, 52, 54-55, 87-88, 87, 143, 143, 145, 152, 165, 172, 172 Piles, Roger de, 66 Planiscig, Leo, 78 Poggi, Geminiano, 183-84 point mark repair, 98, 98, 153, 291 point marks, 97, 97, 362 Ponte Sant'Angelo (fig. 335), 39, 48, 49, 51, 80, 83-84, 124, 281, 285, 285, 287, 327,

Ganges from the Fountain of the Four Rivers (after Bernini) (fig. 57), 52, 53 Poussin, Nicholas, 140, 382n Preimesberger, Rudolf, 82 props, 106, 106, 276 Quattro Fontane, 116, 235, 242 Raggi, Antonio, 51, 52-53, 54, 154, 184, 243, 252, 382n Danube from the Fountain of the Four Rivers (after Bernini), 38, 55, 154, Sea Deity with Dolphin (attributed) (cat. 15), 29-30, 48, 52-53, 54, **182–87**, 182, 184, 185 Sea Deity with Dolphin (attributed) (figs. 234, 236), 29, 48, 52-53, 54, 184, 185-87, 186 Sea Deity with Dolphin Fountain (and assistants) (after Bernini) (fig. 232), 30, 183, 183, 185 Raggio, Olga, 71, 81, 84, 113, 240, 246, 380n Raimondi Chapel, San Pietro in Montorio (fig. 58), 53, 53 raking-light examination, 94, 94 rasp, use of, 106, 180, 194, 230, 256, 313 refreshing, 102, 102 Reggio Emilia Cathedral, 57-58 restorers, artists as, 6-7, 372n revision, 102, 102, 121, 211, 259, 260, 313, 347 Richardson, E. P., 78 Richelieu, Cardinal, 69, 374n Ridolfi, Carlo, 66 Rinaldi, Giovanni, 54, 57-58, 353, 360 Riposo, II (Borghini), 6 Rosa, Salvator, 73 Rospigliosi, Cardinal Giacomo, 67, 287, 327 Rossi, Mattia de', 55, 70 Roth, Kendra, 381n Sacchi, Andrea, 56 Saint Ambrose (cat. 28), 96, 103, 249-53, 249, 252, 253, 255, 317 Saint Ambrose (cat. 29), 254-56, 254, 255, 256 Saint Helen, 58, 124 Saint Jerome (cat. 31), 40, 96, 103, 103, **262-65**, 262, 263, 264, 265 Saint Longinus (cat. 3), 50, 69, 96, 103, 106, 107, 107, 111, **122–26**, 122, 124, 125, 126, 128, 130, 131, 264, 277, 317 Saint Longinus (cat. 4), 50, 69, 81, 84, 92, 96, 106, 111, 125, **127–31**, 127, 128, 130, 131, 204, 253 Saint Peter's Basilica, 51, 61, 123, 123, 204,

217, 219, 223, 250

(fig. 400), 31, 44, 57-58, 81, 84, 281, 343, 345, 353 Baldacchino (fig. 55), 11, 47, 47, 49, 58, 60, 111, 124 Cathedra Petri (fig. 281), 47, 49, 55-59, 56, 57, 71, 77, 81, 84, 233, 233, 245, 250-51, 250, 255, 269, 341, Celestial Glory (figs. 281, 320), 233, 233, 251, 269, 270 Colonnade, 49, 50, 181, 204, 205, 205, 285, 380n Gregorian Chapel, 343 Saint Longinus (figs. 159, 175, 180), 42, 50, 111, 111, 124, 125, 129 Tomb of Alexander VII (figs. 322, 329), 116, 273, 273, 274-75, 279 Tomb of Countess Matilda of Tuscany (fig. 183), 26, 30, 133, 133, 134–35, Tomb of Pope Urban VIII (fig. 160), 111, 113, 113, 116-17 Saint Teresa in Ecstasy (cat. 17), 79, 189, **195–98**, 195, 196, 197, 198 Saint with Book (Saint Luke or Saint Leonard?) (cat. 19), 81, 203-5, 203, 201. 205 Sale, Nicola, 53 Salvator Rosa (Baldinucci), 73 Sandrart, Joachim von, 50, 69, 128 San Francesco a Ripa, 189, 206, 207 San Giovanni dei Fiorentini, 12, 13 San Giovanni in Laterano, 204, 205, 375n San Pietro in Montorio, 53, 53 Santa Bibiana, 63 Santa Cecilia in Trastevere, 11 Santa Maria della Vittoria, 51, 189, 189, 190-94, 191, 196, 200 Santa Maria del Popolo, 39, 50, 233, 235, 240, 240, 242, 243, 258, 375n Santa Maria in Aracoeli, 25-27, 48, 118 Santa Maria Maggiore, 8, 9, 11, 274, 373n Santa Maria sopra Minerva, 137, 373n Sant'Andrea della Valle, 8, 9 Sant'Andrea delle Fratte, 48, 286, 287, 306-7, 315, 319, 323 Santi Apostoli, 372n Saracini collection, 265 Scala Regia, 30, 217, 219, 223 Scannelli, Francesco, 66 Schlegel, Ursula, 279 sculpture: artists as collectors of, 84 public role of, 67, 71 status of painting vs., 8-9, 65-66 Sculpture: Processes and Principles (Wittkower), 80

Altar of the Blessed Sacrament

327, 331, 331

275, 276, 277

Poussin, Claude, 154, 184

Pope Alexander VII (cat. 33), 89, 94, 94, 96,

106, 130, 242, 267, **272–77**, 272, 274,

Sea Deity with Dolphin (cat. 15), 29-30, 48, 52-53, 54, **182-87**, 182, 184, 185 Segni, Cristoforo, 48 Sestieri, Ettore, 79 Shearman, John, 73 shrinkage, shrinkage cracks, 89, 90, 92, 93, 294, 316, 383n Siena Cathedral, 39, 54, 58, 59, 61, 79, 258, 258, 263 Sigel, Anthony, 83, 84 Sirigatti, Ridolfo, 6, 7 Sketches in Clay for Projects by Gian Lorenzo Bernini (Gaskell and Lie, eds.), 83 soluble salts, 93 Spada, Virgilio, 375n spalling, 93 Speranza, Stefano, 381n Memorial to Carlo Barberini (fig. 167), 44, 48, 51, 113, 118-19, 119 Model for the Angel with the Cross (after Bernini) (fig. 65), 60, 61 Steinmann, Ernst, 76 Stone, Nicholas, 69 Storia della scultura (Cicognara), 61 struck lines, 97-98, 98, 130, 153, 362 struts, 90, 197, 210, 291 Study of a Horse (cat. 22), 31, 81, 96, 99, 101, 130, 160, 217, **218–21**, *218*, *220*, 221, 225, 229 surface decoration, 95, 102-3, 103, 124, 126, 165

surface textures, 103-4, 103, 104, 121, 146,

174, 228, 294, 298, 303, 350

Tacca, Pietro, Hercules and Antaeus (attributed) (fig. 16), 19, 19 Tasso, 66-67 Tempesta, Antonio, 372n Tessin, Nicodemus, 65, 71 Testa, Pietro, 140, 382n Tintoretto, 35 Titi, Filippo, 55, 156 toothed tools and textures, 33, 34, 100-101, 100, 101, 104, 106, 106, 114, 121, 125, 160, 260, 315 Torlonia collection, 311 Treu, Georg, 255 Trevi Fountain, 71 Tritons with Dolphins (cat. 11), 28-29, 36, 89, 97–98, 98, 99, 103, 143, **164–67**, 164, 165, 166, 167, 379n Tritons with Dolphins (cat. 12), 166, 167, **168–70**, 168, 169, 170 True Cross fragment, 123

Ubaldini, Cardinal Roberto, 49 *ultima mano, l'*, 61 Urban VIII, Pope, 8, 26, 31, 42, 68, 69, 111, 118, 133, 135, 189, 233, 343, 374*n*

Tumidei, Stefano, 267

Vacca, Flaminio, 372n
Vasari, Giorgio, 4, 61, 65, 75, 373n
Vatican foundry, 50
Veronica, Saint, 123
Viligiardi, Arturo, 76–77
Villa Borghese, 3, 3, 372n

Villa Doria Pamphilj, 374n
Villa Farnese, Caprarola, 6, 7, 372n
Villa Mattei, 78
Villa Medici, 372n, 373n
Villani, Adriana, 84
Voss, Hermann, 76, 379n

Walker, Dean, 82
Wardropper, Ian, 82–83
wedging, 89, 90, 91, 242, 277, 319
Weil, Mark S., 80, 84
Weil, Phoebe Dent, 80
Winckelmann, J. J., 75
wing-root feathers, 101–2, 101, 102
Wittkower, Rudolf, 29, 39, 69, 70, 77–78,
80, 133–34, 230, 235, 240, 289, 311
Worsdale, Marc, 113, 240

X-radiography, 83, 87, 106–7, 107, 120, 126, 148, 170, 177, 198, 201, 215, 223, 227, 253, 256, 302, 311, 315, 328, 336, 340, 347, 355, 357

Young, Suzanne M. M., 83

Zamboni, Silla, 79 Zanuso, Susanna, 82 Zeichnungen des Gianlorenzo Bernini, Die (Brauer and Wittkower), 77–78

Photography Credits

Jacket photograph by Anthony Sigel

Principal photography of Bernini's terracotta models by Anthony Sigel: pp. ii–v, pp. 108–9; figs. 9, 70–132, 134–56, 161–67, 169–71, 173–77, 178–82, 184–88, 190, 192–95, 198–99, 201–4, 206–13, 214–19, 222–31, 233–36, 240–45, 247–48, 250–52, 256, 261–63, 266–69, 271–72, 275–78, 284–86, 288–98, 303, 305–6, 309–20, 325–28, 330–34, 339–46, 348–52, 354–57, 360, 366–81, 384–85, 387–90, 393–97, 399, 401–4, 406–13, 416–22; and cats. 1, 12, 20–21, 23, 25–27, 33

Photographs of works in the collections of the Harvard Art Museums: © President and Fellows of Harvard College

Photographs of works in the collections of the Vatican Museums: © Musei Vaticani

Figs. 1, 6, 13, 59, 66, 175, 282, 287, 308: Alinari / Art Resource, NY; figs. 2, 12, 14, 39, 57, 159, 191, 205, 237-39, 255, 322: Scala / Art Resource, NY; fig. 4: Fototeca della Soprintendenza Speciale per il PSAE e per il Polo Museale della Città di Napoli; figs. 5, 56: Soprintendenza Speciale per il Patrimonio Storico. Artistico ed Etnoantropologico e per il Polo Museale della Città di Roma; figs. 7, 32 and cats. 17, 29, 44-47: © The State Hermitage Museum (photographs by Vladimir Terebenin, Leonard Kheifets, Yuri Molodkovets); fig. 15: Photograph © The Art Institute of Chicago; fig. 19: Rome 1998 p. 148; fig. 20: Universal Images Group / SuperStock; figs. 23, 30-31, 33, 37, 43-46, 52-54, 69, 283, 301-2, 321, 431: BPK, Berlin / Museum der Bildenden Künste, Leipzig, Germany / Art Resource, NY; fig. 24: © Royal Museums of Fine Arts of Belgium, Brussels (photograph by Grafisch Buro Lefevre); figs. 25-27, 34-36, 300, 323: The Royal Collection © 2012 Her Majesty Queen Elizabeth II; fig. 28, and cats. 20, 33: V&A Images / Victoria and Albert Museum; figs. 47, 273, 338: Ministero per i Beni e le Attivitá Culturali della Città di Roma; figs. 55, 160, 172, 183, 265, 281, 299, 400: Fabbrica di San Pietro in Vaticano; figs. 58, 200, 336-37: Erich Lessing / Art Resource, NY; figs. 60-63, and cats. 1, 25-26: © Musei Vaticani; fig. 65: Rome 2006 p. 174; fig. 67: Peter Willi / The Bridgeman Art Library; fig. 133: Kimbell Art Museum, Fort Worth (photograph by Robert LaPrelle); fig. 157: Laboratorio di Diagnostica per

la Conservazione ed il Restauro, Musei Vaticani; figs. 158, 196, 249, 274, 353: Emmebi Diagnostica Artistica, Rome; figs. 168, 304, 405, 414-15: Henry Lie and Eugene Farrell; fig. 189, and cats. 4, 6-7, 14, 18-19, 22, 31-32, 34, 38: Zeno Colantoni; figs. 220-21, 246, 264, 270, 307, 383, 392, 398: Courtesy Shelly Sturman and Sheila Payagui, National Gallery of Art, Washington; fig. 232: © Marka / SuperStock; fig. 236: Ministero per i Beni e le Attività Culturali – Archivo Fotografico SBSAE di Modena e Reggio Emilia; fig. 253: Martinelli, ed. 1987 p. 60; fig. 279: Giraudon / The Bridgeman Art Library; fig. 280: Montanari 2003 p. 405; fig. 329: St. Peter's Basilica, Vatican, Rome, Italy / The Bridgeman Art Library; fig. 335: Prisma / SuperStock; figs. 358, 359, 361-62, 364-65: Anthony Sigel and Robert LaPrelle; figs. 363, 383: Apex Inspections, Carrollton, TX; fig. 422: (C) Besançon, Musée des Beaux-Arts et d'Archéologie (photograph by Pierre Guenat); cats. 2, 3, 5, 16, 28, 30, 35, 37, 41-43, 48-52: Harvard Art Museums @ President and Fellows of Harvard College; cats. 8-9: Studio Pym (photographs by Giuseppe Nicoletti); cat. 10: Studio Pym / G. Nicoletti e Technites / E. Drudi, Bologna; cats. 13, 39-40: Kimbell Art Museum, Fort Worth; cat. 24: Galleria Borghese, Rome, Italy / Alinari / The Bridgeman Art Library; cat. 36: Réunion des Musées Nationaux/Art Resource, NY; cats. 42, 197: BPK, Berlin / Museum der Bildenden Künste, Leipzig, Germany / Art Resource, NY (photograph by Ursula Gerstenberger)



PRINTED IN ITALY