# SILVER VESSELS of the SASANIAN PERIOD

VOLUME ONE: Royal Imagery

BY PRUDENCE O. HARPER

Curator, Ancient Near Eastern Art with a technical study

BY PIETER MEYERS

Senior Research Chemist

The Metropolitan Museum of Art, New York

Published in association with Princeton University Press

# SILVER VESSELS of the SASANIAN PERIOD

VOLUME ONE: Royal Imagery

Published with the aid of a grant from the HAGOP KEVORKIAN FUND, New York

# SILVER VESSELS of the SASANIAN PERIOD

VOLUME ONE: Royal Imagery

BY PRUDENCE O. HARPER

Curator, Ancient Near Eastern Art with a technical study

BY PIETER MEYERS

Senior Research Chemist

The Metropolitan Museum of Art, New York

Published in association with Princeton University Press

#### PUBLISHED BY

The Metropolitan Museum of Art, New York Bradford D. Kelleher, Publisher John P. O'Neill, Editor in Chief Anne M. Preuss, Polly Cone, Editors Peter Oldenburg, Designer

Maps by Joseph P. Ascherl Line drawings by Kathleen Borowik Type set by York Graphic Services, Inc., York, Pennsylvania Printed by Mercantile Printing Co., Inc., Worcester, Massachusetts Bound by Robert Burlen & Son, Inc., Hingham, Massachusetts

Copyright © 1981 by The Metropolitan Museum of Art

#### LIBRARY OF CONGRESS CATALOGING IN PUBLICATION DATA

Harper, Prudence Oliver. Silver vessels of the Sasanian period.

Bibliography: v. 1, p. Includes index.

CONTENTS: v. 1. Royal imagery.

1. Silverwork, Sassanid. 2. Silverwork, Ancient—Near East. 3. Kings and rulers in art. I. New York (City). Metropolitan Museum of Art. II. Title.

NK7173.H37 739.2'3735 80-26188 ISBN 0-87099-248-1 (v. 1)

# Contents

F	OREWORD BY Philippe de Montebello	vii
С	OLOR PLATES	ix
Part One		
Catalogu	ie and Interpretation	
	ence O. Harper	I
	ACKNOWLEDGMENTS	3
	INTRODUCTION	5
Chapter I.	Historical Outline	15
Chapter II.	Medallion Bowls with Human Busts	24
	Catalogue	24
Chapter III.	Vessels with Hunting Scenes	40
	The numismatic evidence	42
	Catalogue	47
	Elements having a chronological significance	86
	Definition of the different stylistic groups	88
	Relationship of the plates in Group I to those in the overall parallel-line and the paired-line drapery	
	styles	0.4
	Sources of the overall parallel-line and the paired-line	94
	drapery styles	96
Chapter IV.	Thrones and Enthronement Scenes	99
Chapter V.	Interpretation and Conclusions	I 24
	The initial stages	125
	The central Sasanian group	127
	The British Museum Shapur plate and provincial	
	silver plates	133

## Part Two

Technical	Study by Pieter Meyers	143
	ACKNOWLEDGMENTS	144
Chapter VI.	Technical Study	145
	Introduction	145
	Metal production	146
	Methods of manufacture	147
	Elemental composition	150
	Technical description of objects bearing royal images	152
	Table I. Elemental composition	159
	Technical description of individual objects	164
Appendices	s for Part One	185
	List of abbreviations in appendices, arranged by plate number	186
Appendix I.	Tabulation of iconographic details according to style;	
11	data on inscriptions and provenance	187
	TABLE I. Characteristics of the hunting plates on which the folds of the drapery are rendered as	
	overall parallel lines	189
	TABLE II. Characteristics of the hunting plates on which the folds of the drapery are rendered as	
	paired lines	191
	TABLE 111. Characteristics of early nonroyal hunting	
	plates	195
	TABLE IV. Inscriptions and provenance	196
Appendix II.		
ippenum ii.	PART 1. Touroucheva plate with Shapur II hunting lions	197
	PART 2. Hunting plate in the Guennol collection	198
Appendix III.	Chronology of kings	200
	PLATES	201
	BIBLIOGRAPHY	241
	INDEX	251

### Foreword

The publication of this volume brings to light the research of two eminent scholars on the staff of the Metropolitan Museum and demonstrates the value of studies undertaken jointly by scientists and art historians.

Silver Vessels of the Sasanian Period, Volume I: Royal Imagery is the fruit of many years' work on the part of Prudence O. Harper, curator of ancient Near Eastern art at the Museum. Dr. Harper obtained her doctoral degree at Columbia University under the tutelage of Edith Porada and wrote her dissertation on the subject of Sasanian silver.

The Metropolitan's collection of Sasanian art is an exceptional one and reflects to a large degree Dr. Harper's interest and expertise in this field. Since many of the finest Sasanian silver vessels are in collections in the Soviet Union, Dr. Harper has made several trips to that country to examine works of art there and to confer with Russian scholars.

In 1976 the Asia House Gallery invited Dr. Harper to be guest curator of the exhibition The Royal Hunter, Art of the Sasanian Empire and to be the principal author of the exhibition catalogue. An earlier volume to which Dr. Harper was the main contributor is Sasanian Remains from Qasr-i Abu Nasr, edited by R. N. Frye, and published in 1973 by Harvard University Press. She has also written a number of short works, including the section on Sasanian silver for the Cambridge History of Iran and Court Silver of Sasanian Iran for the Iran Center at Columbia University, as well as articles for the Metropolitan Museum of Art Bulletin and other journals.

In her years at the Museum Dr. Harper has become an authority of international prominence on the art of the Sasanians and other aspects of ancient Near Eastern art. In 1973 and again in 1978, Dr. Harper and Pieter Meyers organized conferences at the Metropolitan at which panelists discussed various phases of Sasanian art.

Pieter Meyers, senior research chemist at the Museum, was born in the Netherlands and studied chemistry and physics at the University of Amsterdam, where he received his doctoral degree in nuclear chemistry in 1968. He joined the staff of the Metropolitan Museum in 1970. His area of interest is the application of scientific techniques and viii FOREWORD

technical methods of examination to works of art. Dr. Meyers has published extensively in the scientific literature as well as in journals of archaeological and art-historical research.

Silver Vessels of the Sasanian Period, Volume I: Royal Imagery continues a distinguished tradition of scholarly studies in the field of Sasanian silver. The pioneering volume is Sasanidskii Metall, by J. A. Orbeli and K. V. Trever of the State Hermitage Museum in Leningrad, published in 1935. The German scholars Ernst Herzfeld and Kurt Erdmann also devoted particular attention to the subject in the 1930s, 40s, and 50s. Herzfeld's articles in Archaeologische Mitteilungen aus Iran and Erdmann's book Die Kunst Irans zur Zeit der Sasaniden are landmark publications in the field. In more recent times, important contributions have been made by Boris Marshak of the State Hermitage Museum, whose book Sogdiiskoe Serebro appeared in 1971. Now Dr. Harper's and Dr. Meyers's work takes its place among these publications and offers a new approach to the subject. The authors' use of classic arthistorical methods and the most recent technical advances will surely point the way for scholars of the future.

For the generous funding that has enabled the Museum to publish this work we are deeply indebted to the trustees of the Hagop Kevorkian Fund. Because of their continued involvement, works such as this one, representing an enormous investment in research, can be made available at a reasonable price through the Museum's publications program to the scholarly community at large.

PHILIPPE DE MONTEBELLO

Director, The Metropolitan Museum of Art

# Color Plates



Silver-gilt plate. Shapur II hunting boars
Freer Gallery of Art, Smithsonian Institution, acc. no. 34.23 (catalogue no. 15)



Silver-gilt plate. Yazdgard I slaying a stag

The Metropolitan Museum of Art, Harris Brisbane Dick Fund, acc. no. 1970.6 (catalogue no. 16). Photo: David Finn



Silver-gilt plate. Peroz or Kavad I hunting rams
The Metropolitan Museum of Art, Fletcher Fund, acc. no. 34.33 (catalogue no. 17)



Silver-gilt plate from Ufa. King hunting State Hermitage Museum, acc. no. S297 (catalogue no. 18). Photo: Pieter Meyers



Silver-gilt plate. Hunter slaying a boar State Hermitage Museum, acc. no. S24 (catalogue no. 23). Photo: Pieter Meyers



Silver-gilt plate from Klimova. King slaying a leopard State Hermitage Museum, acc. no. S42 (catalogue no. 24). Photo: Pieter Meyers



Silver-gilt plate from Klimova. Enthronement scene State Hermitage Museum, acc. no. S43 (catalogue no. 35). Photo: Pieter Meyers

# Part One CATALOGUE AND INTERPRETATION

by Prudence O. Harper

### Acknowledgments

THIS STUDY of royal Sasanian silver vessels was made possible through the help and support of a number of different people. Chiefly, I am indebted to Edith Porada, Lehman Professor of Art History and Archaeology at Columbia University, who advised me on all aspects of my work. Her ideas on the material to be included and the form in which it should be presented have served as the main guidelines throughout. Her constructive criticism, invariably accompanied by words of encouragement, has enabled me to complete this work.

Professor Richard Brilliant, Columbia University, read the initial version of the section concerning medallion portraits and discussed the problems outlined in the Introduction, contributing much to the present study. His references to publications and objects otherwise unknown to me and his view of this material from the field of Roman and Early Christian art have complemented this analysis of Sasanian silverware.

To my colleague Dr. Pieter Meyers, Research Chemist at The Metropolitan Museum of Art and Brookhaven National Laboratory, I give particular thanks. He became sufficiently interested in the problems of a curator and art historian to develop new scientific methods and to apply old ones for the better understanding of the objects which form the subject of this volume. His unfailing enthusiasm has been a support over a long period of time.

Without the cooperation of Dr. Vladimir G. Lukonin, Curator of the Oriental Section of the Hermitage Museum, this study could not have been made. From the start he made available to me and Dr. Meyers the rich collection of the Hermitage Museum for examination and analysis. With characteristic generosity he shared with me information and photographs of additional vessels in provincial Soviet museums (Pls. 1, 2, 8, 9). In my visits to Leningrad I have listened to his ideas and theories on many as-

pects of Sasanian art and history. Dr. Boris Marshak, also of the Oriental Department, Hermitage Museum, has discussed with me various art-historical problems and the chronological implications of recent finds, particularly the Sogdian wall paintings from Piandzhikent. His familiarity with this material is unparalleled, and I have benefited from hearing his carefully considered opinions.

Four of the earliest Sasanian silver vessels are in museums located in the Trans-Caucasian region of the Soviet Union. The assistance of colleagues during my visit to this area is greatly appreciated: in Sukhumi, Drs. A. Taria and E. Adzindzal; in Tbilisi, Dr. I. Gagoschidze; in Baku, Drs. I. Narimanov and A. Radzhabli.

Dr. Christopher J. Brunner of the Iran Center, Columbia University, has aided me in the interpretation and dating of the inscriptions on Sasanian works of art, particularly the silver vessels and the seals. He reviewed at a final stage the presentation of the historical background material, preventing errors of omission and commission.

Aside from my friends and colleagues at the Hermitage Museum, many curators generously made available the Sasanian silver in their collections for study and analysis and have provided all illustrations of their objects: Drs. Richard D. Barnett and Edmond Sollberger of the British Museum; Dr. Raoul Curiel, Bibliothèque Nationale, Paris; Dr. Klaus Brisch, Museum für Islamische Kunst, Staatliche Museen Preussischer Kulturbesitz, Berlin; Drs. Esin Atil and Thomas Chase, Freer Gallery of Art, the Smithsonian Institution, Washington, D.C.; Dr. Firouz Bagherzadeh, formerly Director of the National Research Center for the History of Art and Iran Bastan Museum, Archaeology, Dr. Richard Randall, formerly Director of the Walters Art Gallery, Baltimore; Dr. Sherman Lee, Director of the Cleveland Museum of Art; and Dr. Millard A C K N O W L E D G M E N T S

#### F. Rogers, Cincinnati Art Museum.

My visits to Russia, Europe, and Iran were made possible through the award of travel grants by The Metropolitan Museum of Art. I was also granted a six-month leave of absence by the Museum in order to work without interruption on my dissertation, which has formed the basis of this study. For this support and many other contributions I am grateful to members of the administration of The Metropolitan Museum of Art. Dr. Vaughn E. Crawford, Curator in Charge of the Ancient Near East Department, has borne with remarkable fortitude over a considerable span of time the presence of a colleague always slightly preoccupied with the problems of Sasanian

silver. He continuously urged the completion of my work on this volume in spite of the demands made on his time and energies as a result of my concentration on Sasanian silver vessels. In a real sense this study could not have been completed without his support.

Portions of this text have already appeared in Near Eastern Numismatics, Iconography, Epigraphy and History, ed. Kouymjian (a preliminary study of the medallion bowls, Chapter II), The Royal Hunter (the typology of the silver vessels in the Introduction and portions of the Historical Outline, Chapter I), and Iran, 17(1979) (an abbreviated version of Chapter IV on enthronement scenes).

#### Introduction

The subject of this volume is one class of Sasanian silver vessels, namely those with representations of the king. The aesthetic quality of these works of art and the nature of the imagery explain the great importance of the vessels for the study of Sasanian culture and history. As a source of information concerning the role of the monarchy in the Sasanian state, the designs on the royal silver plates are of paramount interest.

Considerable controversy has centered on the chronological and stylistic classification of the thirty-seven silver plates and one gold, glass, and rock-crystal bowl that will be considered here. This is explained by the fact that few have a meaningful archaeological provenance, and absolute criteria for the dating of these vessels and their attribution to Sasanian workshops are lacking.

Definition of the term "Sasanian." Because of the many questions raised by this class of silver plate, it is

of primary importance to provide, at the start, a precise definition of the term "Sasanian." This label has previously been rather loosely attached to works of art found in a wide geographical area and executed over a long span of time. In this study the term "central Sasanian" will be used to refer to those silver plates believed to have been manufactured during the period from A.D. 226 to 651 at the order or under the direction of the ruling members of the dynasty that controlled an area generally equivalent to that including present-day Iran, Iraq up to the Euphrates River, and parts of Armenia and Georgia in the Soviet Union (see map, Fig. 1).

The monuments upon which our understanding of central Sasanian art is based are, for the most part, found in Iran and southern Iraq, the center of the Sasanian kingdom. They are the dynastic rock reliefs, all of which are in Iran,<sup>2</sup> the stucco, mosaic, and painted decoration of the royal palaces in Iraq and Iran,<sup>3</sup> the coins, products of mints in many regions;<sup>4</sup>

Ghirshman, Persian Art; idem, Bîchâpour I; E. F. Schmidt, Persepolis III; Hinz, Altiranische Funde. For the Darabgird relief in particular, see Herrmann, "The Dārābgird Relief—Ardashīr or Shāhpūr?," pp. 63–88. For further publications, see the Bibliography.

<sup>1.</sup> The use of the term "Sasanian" in reference to works of art is discussed by Oleg Grabar in his introduction to Sas. Silver, pp. 19-83. Grabar explains that the purpose of the exhibition for which this is the catalogue is to include any objects that might conceivably be Sasanian in order to test the validity of the term through comparisons among the pieces collected. As early as 1909, Smirnov in Serebro, p. 8, warned against using the term "Sasanian" without proper care. This warning was repeated and expanded upon by Trever in an article entitled "K voprosu o tak nazyvaemikh sasanidskikh pamíatnikakh," pp. 282–286. She recommended that the term "Sasanian" be employed only for those works found in Iran or, if from elsewhere, in style and technique completely similar to such works. The opinion of Sauvaget, that it is impossible to define a specifically "Sasanian" art and isolate it from the rest of the family of Hellenistic-influenced art such as Coptic, Parthian, Byzantine, and Umayyad, is given in "Remarques sur l'art sassanide; questions de méthode à propos d'une exposition," pp. 113-131. See also A. Grabar, "Rayonnement," pp. 679-707.

<sup>2.</sup> General works in which the reliefs are illustrated are: Sarre and Herzfeld, *Iranische Felsreliefs*; Herzfeld, "La Sculpture rupestre de la Perse sassanide," pp. 129-142;

<sup>3.</sup> Chief among these are the buildings at: Bishapur—Ghirshman, Bîchâpour I, II; Susa—Ghirshman, Persian Art, fig. 224, and "Cinq campagnes de fouilles à Suse (1946-1951)," pp. 1-18; Hissar—E. F. Schmidt, Excavations at Tepe Hissar, Damghan, pp. 327-350; Ctesiphon—Reuther, Die Ausgrabungen der deutschen Ktesiphon-Expedition im Winter 1928/29; Kühnel, Die Ausgrabungen der zweiten Ktesiphon-Expedition (Winter 1931/32); J. H. Schmidt, "Figürliche sasanidische Stückdekorationen aus Ktesiphon," pp. 175-184; and Kish—Langdon and Harden, "Excavations at Kish and Barghuthiat 1933," pp. 113-136; Baltrušaïtis, "Sasanian Stucco," SPA I, pp. 601-630; Pope, "Sāsānian Stucco," SPA I, pp. 630-645. The results of new excavations at Seleucia-Ctesiphon by the University of Turin have been published in successive volumes of Mesopotamia, beginning with vol. I, 1966.

<sup>4.</sup> The two most recent and comprehensive studies of the coins are by Göbl, Sas. Num., and Lukonin, Kul'tura. For further publications, see the Bibliography.

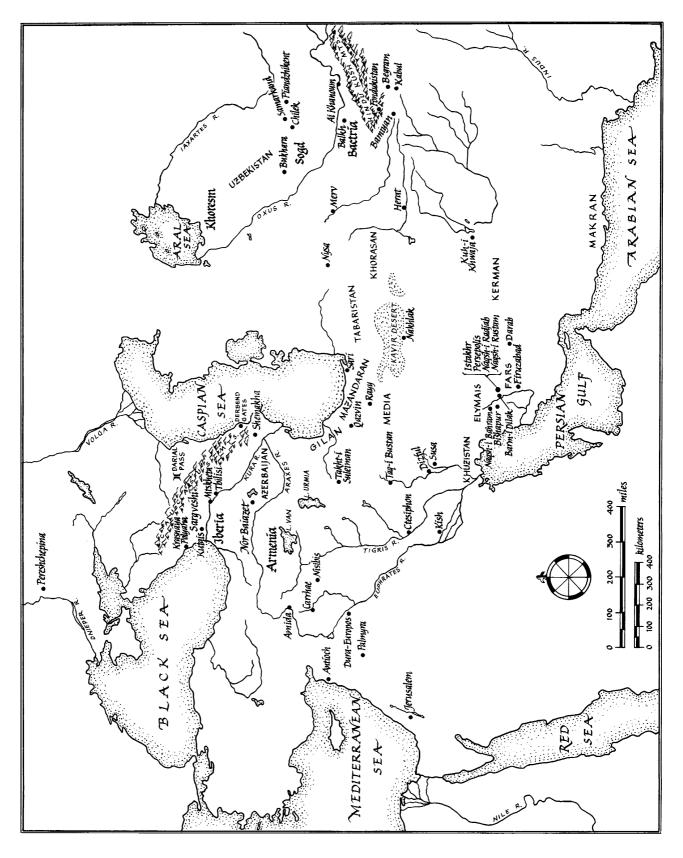


FIG. 1 Map of the Near East

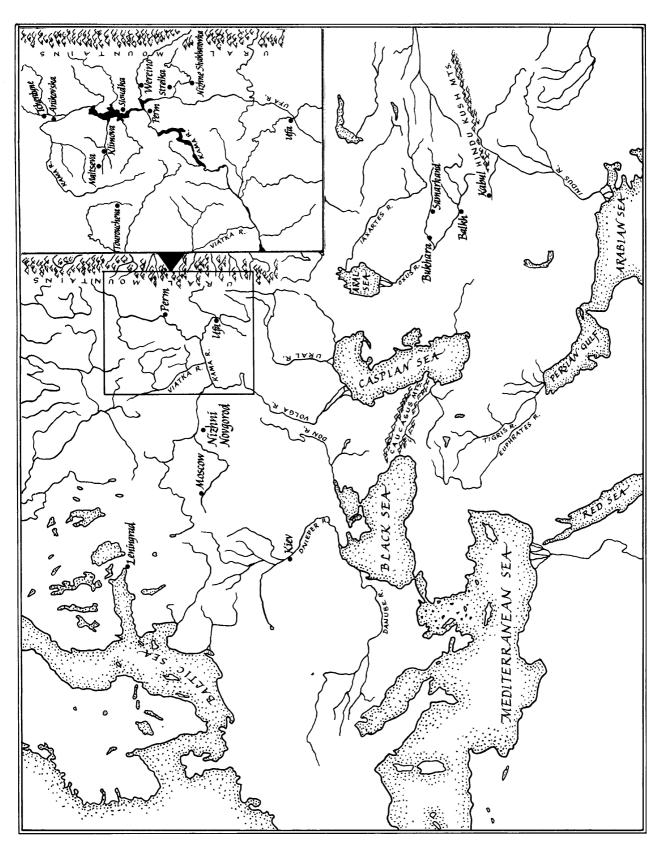


FIG. 2 Map of the Ural Mountain region

and the official and royal gems, the provenance of which is generally unknown.<sup>5</sup> It is with these monuments, largely the products of court workshops, that the royal silver vessels can be compared in order to determine whether they may be classified as Sasanian or not.

At times the Sasanian rulers expanded the frontiers of their empire west to the Mediterranean, east to Balkh and Merv in present-day Afghanistan and the Soviet Union, and north into parts of Soviet Uzbekistan.<sup>6</sup> It is probable that Sasanian silver was sent to these areas, but it is also conceivable that silver vessels were made there by local rulers in imitation of Sasanian originals. Questions of attribution arise with the silver because few of the objects come from Iraq and Iran, the heart of the Sasanian empire. The majority was found in the Perm, west of the Ural mountains, far from its place of manufacture or from the regions to which such vessels might have been sent as royal gifts (see map, Fig. 2).8 Consequently, it is necessary to determine whether the works are Sasanian or not largely on the basis of their appearance. When the representations of royal figures on the silver vessels differ in some respect from those in the above-mentioned categories of dynastic art, in the form of the royal crown or the nature of the drapery and weapons, the composition, or even to some degree the style, then the term "Sasanian" must be used with caution or withheld. It is possible that these variations from the norm indicate a departure from the mainstream of Sasanian dynastic art and are to be viewed as evidence of related but separate traditions. The imitations of the Sasanian types have a historical importance of their own, illustrating the extent of Sasanian influence on neighboring cultures, both during that period and for a time after the fall of the dynasty. As sources for the study of Sasanian kingship and society, these provincial works, as they will be designated in this study, are of negligible value. For this reason it is essential to recognize the central Sasanian royal silver, the court production, according to the definition proposed for this term, and to isolate these vessels from those manufactured elsewhere under Sasanian influence.

New evidence. Recent discoveries of Sasanian silver vessels with royal images and closely related motifs have been made in Iran and in the Soviet

Union. In form, iconography, and style, these works of art supplement the material studied earlier in this century, chiefly by German and Russian scholars. With few exceptions, archaeological information concerning these new finds is lacking: in Iran the excavations in which the silver objects were uncovered took place illicitly, and in the Soviet Union the vessels were chance discoveries made by local farmers or construction workers. Any evidence of an archaeological nature had disappeared by the time the objects reached the attention of scholars and officials. Nevertheless, the appearance of these vessels constitutes a major addition to this branch of Sasanian art.

Thirty-seven vessels and one fragmentary figure from a vessel are included in this study (Pls. 1-38). They constitute the total number of vessels with royal, princely, or noble images examined and studied in detail by this author and by Pieter Meyers. The

<sup>5.</sup> The collections in the State Hermitage Museum and the British Museum have been published with commentaries by Borisov and Lukonin, Sas. Gemmy, and Bivar, Sas. Seals. Bullae with seal impressions excavated at Qasr-i Abu Nasr in the 1930s by The Metropolitan Museum of Art are published in Frye, Qasr-i Abu Nasr. For further publications, see the Bibliography.

<sup>6.</sup> See the historical outline in Chapter I.

<sup>7.</sup> From Iran comes a group of medallion bowls with busts: Dimand, "Silver Bowls," pp. 11–14; see Chapter II below, Pls. 3–7. Plates with royal hunts allegedly discovered in Iran are in: 1) the Cleveland Museum of Art: Shepherd, "Sasanian Art in Cleveland," pp. 66–92; 2) the Tehran Museum: Ghirshman, "Notes iraniennes VI," pp. 5–19; Vanden Berghe, L'Archéologie, pl. 5d; 3) The Metropolitan Museum of Art, acc. no. 1970.5: Sas. Silver, no. 10 (where the plate is wrongly said to be in the Los Angeles County Museum). Iran is the provenance of a fragment from a hunting plate now lost, once in Berlin: Sarre, Die Kunst des alten Persien, fig. 14. A more complete bibliography appears in Chapter III where these objects are discussed.

<sup>8.</sup> A discussion of trade relations between the Kama River, pre-Ural region and the Near Eastern centers appears in Voshchinina, "O svíazíakh priuralía c vostokom v VI-VII vv. n.e.," pp. 183-196; Frye, "Sasanian Silver and History," pp. 255-262; idem, "Byzantine and Sasanian Trade Relations with Northeastern Russia," pp. 265-269. 9. For Iran, see note 7 above. For the Soviet Union:

<sup>9.</sup> For Iran, see note 7 above. For the Soviet Union: Fajans, "Recent Literature," pp. 55-76; Marshak and Krikis, "Chilekskie Chashi," pp. 55-81. A more complete bibliography appears in Chapters II and III.

<sup>10.</sup> The major publications are by Smirnov, Serebro; Orbeli and Trever, Sas. Metall; Erdmann, "Die sasanidischen Jagdschalen," pp. 193–231; idem, "Zur Chronologie," pp. 239–283. Many other articles were published on single plates or groups of plates during these same decades. These are cited in the Bibliography.

majority are at present in the collections of the Metropolitan Museum, the Cleveland Museum of Art, the British Museum, the Bibliothèque Nationale, the Museum für Islamische Kunst, Staatliche Museen Preussischer Kulturbesitz, Berlin, and the Hermitage Museum. The remainder are in Russian provincial museums, the Iran Bastan Museum, the Cincinnati Art Museum, the Freer Gallery of Art, and the Walters Art Gallery. Only two pieces, the Guennol and Fabricius plates, are at present in private collections. Both are in New York. Future study, examination of the techniques of manufacture, and analyses of the metal of other Sasanian silver vessels allegedly of Iranian provenance will undoubtedly enlarge this corpus of material.

In the last few decades, the study of already published historical sources as well as of new material has led to a re-evaluation of the social, political, and economic history of the Sasanian period. Although the work of Arthur Christensen remains the basis for an understanding of the Sasanian state, 11 certain lines of research have led to an expansion of our knowledge of this era. Chief among these is the reinterpretation of many of the Middle Persian inscriptions. 12 In particular, the application of a new paleography of the Middle Persian alphabet to the legends on Sasanian seals and bullae has provided valuable information on the development of social and economic conditions within the Sasanian empire. 13 Inscriptions on the silver vessels themselves have recently come under examination by scholars, and revised readings have been offered in many instances, replacing those made previously. 14 The numismatic material is crucial not only for a proper evaluation of the political and economic character of the Sasanian dynasty, but more specifically for the study of the silver vessels. The basic element in the royal imagery is the form of the crown, which changed throughout the period from reign to reign, as well as during the rule of a single king. The crowns can be identified with certainty only on coins where the image of the monarch is accompanied by his name. 15 In turn, the sole criterion for identifying a Sasanian king when he is represented in other works of art is the appearance of his crown. The significance of the coinage for the study of Sasanian art is therefore considerable.

Less easy to interpret than the above-mentioned sources of Sasanian history and culture is the infor-

mation gained from archaeological surveys and excavations at Sasanian sites. <sup>16</sup> Although these have produced no silver vessels with royal imagery, they are beginning to supply evidence of economic and social conditions within the Sasanian state. Most of the Sasanian levels at new sites are still in the process of excavation, the results published only in interim reports. It is therefore hazardous to draw too many conclusions from this data, but it represents a type of information not previously available.

The scientific examination of all the Sasanian silver vessels included in this study has made possible accurate descriptions of the techniques and methods of manufacture used for the construction of the vessels. <sup>17</sup> Analyses of the silver content of these objects have also been carried out in the Brookhaven National Laboratory. The results of these scientific studies are of considerable value for the classification of the silver vessels. Techniques used in the fabrication of the

<sup>11.</sup> Christensen, L'Iran.

<sup>12.</sup> Frye, "Notes on the Early Sassanian State and Church," pp. 314-335; Pigulevskaya, *Les Villes;* Lukonin, *Iran;* idem, *Kul'tura*. Also appearing at irregular intervals have been the volumes of the CII.

<sup>13.</sup> Borisov and Lukonin, Sas. Gemmy. The only work by Lukonin in English is the rather limited and popularly written volume Persia II. His Kul'tura is in the course of translation at Brown University.

14. Livshits and Lukonin, "Nadpisi," no. 3, pp.

<sup>14.</sup> Livshits and Lukonin, "Nadpisi," no. 3, pp. 155–176; Frye, "Sasanian Numbers and Silver Weights," pp. 2–11; Brunner, "Middle Persian Inscriptions on Sasanian Silverware," pp. 109–121.

<sup>15.</sup> See note 4 above. O. Grabar in his introduction to Sas. Silver stresses the point that although the crowns may identify the kings when they are represented in works of art, they do not necessarily date the object or monument upon which a given king is represented but supply only a terminus post quem. See also Bachhofer, "Sas. Jagdschalen," p. 62.

<sup>16.</sup> The chief archaeological survey material is to be found in Adams, Baghdad, pp. 69-83; Oates, Studies in the Ancient History of Northern Iraq. Most of the excavations are in Iran and are reported in volumes of Iran in the "Survey of Excavations in Iran," which appears in each issue: Malyan, Takht-i-Suleiman, Yahya, Qaleh-i-Yezdegird, War Kabud-Mihr, Siraf, Haftavan, Firuzabad, Kangavar.

<sup>17.</sup> Other technical studies of Sasanian silver have been published by: Chase, "The Technical Examination of Two Sasanian Silver Plates," pp. 75–93; Gordus, "Neutron Activation Analysis of Coins and Coin-streaks," pp. 127–148; Meyers, Van Zelst, and Sayre, "Major and Trace Elements in Sasanian Silver," pp. 22–23; Lechtman, "Ancient Methods of Gilding Silver: Examples from the Old and New Worlds," pp. 2–30.

silver appear to be characteristic of particular workshops, and the trace elements in the silver support the grouping of certain objects together.

Method to be followed. It is the aim of this study to provide a new survey of Sasanian silver vessels with royal imagery, including, to the greatest extent possible, the evidence provided by the different fields of scholarly research outlined above. Art-historical developments proposed in the past for this category of silver may remain acceptable, but unless they are reconsidered in the light of these findings, they are of uncertain value.

Various methods of approach to be used in making a new evaluation of Sasanian silver have already been indicated by a number of persons. Oleg Grabar outlined a general thesis in which the initial step was to establish the original "types" of designs as they must have appeared on the earliest silver vessels. 18 He proposed that the explanation for changes or elaborations in these designs should be sought in the history of Sasanian society over the centuries or, in his opinion, in the appearance of a new social structure with the advent of Islam. Boris Marshak in a more restricted but detailed study gave definition to a single class of royal silver, illustrating a continuity in many aspects of the form, iconography, and style. 19 He rejected the unilateral sequence suggested in the late thirties by Kurt Erdmann<sup>20</sup> and sought to trace the history of one school of royal Sasanian silver. Borrowing from both these approaches, the following study will include all typological and stylistic categories of silver vessels with royal imagery that have been called Sasanian, and will examine the composition and iconography of the scenes as well as the evidence for distinct workshops or traditions. The purpose is to observe the development of this imagery and to determine the reasons for it. To what degree can these royal representations contribute to our understanding of the social and political events outlined for us in more conventional historical sources?

There are three types of royal images on Sasanian silver vessels: the king as a bust enclosed in a circular frame, the king hunting, and the king enthroned. These motifs will be considered in that order in the succeeding chapters. The analysis of these three types of imagery will vary somewhat because of the nature of the material. Essentially the first two classes can be

treated in the same fashion, the third in a slightly different way. The first two categories of royal images, the king portrayed as a medallion bust and the king hunting, form separate chapters. The subjects, however, constitute a whole as they follow one another in the overall chronological sequence, the first form of imagery disappearing as the second is gradually adopted. The chapter on the medallion busts is concerned with the first century and a half of Sasanian rule, while the motif of the hunt as a theme on royal silver appears on vessels datable to the remainder of the period. For these two classes of royal silver, the initial approach will be to trace the general chronological development of the vessels, based on the historical evidence if it exists, as well as on the form and specific details of the overall design. The changes this sequence reveals, and the interpretation of these changes as reflections of the events occurring within the period covered, will be the prime concern. The second part of the analysis will be the division of the vessels into stylistic groups. The appearance of new styles and the merging of separate traditions are significant factors requiring some explanation in terms of the structure of Sasanian society.

The image of the Sasanian king enthroned, the third type of royal image, comes appropriately at the end of this study, since there are only two plates (Pls. 19, 33) with this motif that may be Sasanian, and they belong to the final part of the period. <sup>21</sup> Because this subject is so rarely portrayed, there is no sequence of monuments available for consideration, nor do the existing plates offer new information in terms of style or artistic traditions beyond what has already been observed in the chapters devoted to the king as a medallion bust and the king hunting. The

<sup>18.</sup> The theories of Oleg Grabar presented in the form of general hypotheses appear in his introduction to Sas. Silver, pp. 19-89.

<sup>19.</sup> Marshak and Krikis, "Chilekskie Chashi," pp. 55-81. See note 9 above.

<sup>20.</sup> Marshak's predecessors Orbeli and Trever had already made the point, in their introduction to Sas. Metall, that it was impossible to impose a unilinear sequence upon the vessels. An English résumé of this was published by Ackerman in a "Review of Orsevrerie sasanide," pp. 104–105. Erdmann presented his ideas in the two studies referred to in note 10 above.

<sup>21.</sup> Erdmann, Kunst, fig. 67; SPA IV, pl. 203. See also Chapter IV.

iconography of the enthronement scene and, in particular, the form of the throne itself in Sasanian dynastic art have been discussed by this author in another publication.<sup>22</sup> A summary of that study is included in Chapter IV.

In conclusion, all three categories when considered together must reveal a coherent picture in terms of iconography as well as style, in terms of history as well as art. In fact, the first type, the bust of the king enclosed in a medallion, appears to be an initial stage in the development of royal imagery that was superseded by the theme of the king hunting. This subject remained predominant throughout the Sasanian period. The third class of royal image, the king enthroned, was apparently an expression of royal majesty that never came into widespread use. If the hypotheses proposed here cannot explain all of the monuments, they should be valid for most of them. The royal silver vessels should be meaningful not only as an isolated group but as illustrations of the larger world of Sasanian culture and society.

If the designation of this silver as royal is repeatedly stressed, it is because other classes of silver were manufactured during the Sasanian era that are not obviously a part of the state production or not clearly related to the institution of monarchy. Lacking explicit royal imagery, they are beyond the scope of this study, but in order to place the royal silver in proper perspective, a brief survey of the chief types of vessels and the designs occurring on them follows.

Typology of Sasanian silver vessels. In spite of the many recent finds of Sasanian silver in Iran, the types of vessels known are largely the same as those of half a century ago. The largest category consists of plates and bowls. Of these, the commonest type are circular plates, each having a simple, low, ring foot. Their average diameter is 25 cm., and the decoration is, without exception, on the inside surface. <sup>23</sup> Of approximately the same size are bowls, without feet, bearing in most instances some form of decoration on the interior surface. <sup>24</sup> One rare example has an exterior rather than an interior design. <sup>25</sup> A series of smaller hemispherical bowls, averaging 13 cm. in diameter, generally has designs on the exterior. <sup>26</sup>

Another bowl type is oval with a crescentic, longitudinal profile and no foot. Such vessels may be decorated on the interior as well as the exterior, or on

either surface alone.<sup>27</sup> This shape is one of the few known from an archaeological context, the French excavations at Susa and the American excavations at Malyan.<sup>28</sup> Regrettably, there is no information about the exact circumstances of the Susa find, made during the period in which J. de Morgan was conducting these excavations, but the Malyan bowl was unearthed in a tomb containing a coin of Khusro I or II.

Related in form but more complex are elongated, lobed bowls with oval foot rings. These have, in general, figural designs on the outer surface or are completely undecorated.<sup>29</sup> One last form of bowl has a fairly deep circular body with vertical fluting on the exterior and rests on a high pedestal foot. An example in the Louvre was also found by de Morgan at Susa.<sup>30</sup>

A form of vessel unique for the Sasanian period is the cup or *kylix* found at Sargveshi and decorated with roundels enclosing busts of the Sasanian king Bahram II (Pl. 2).<sup>31</sup> Because of the nature of the decoration, this vessel is certainly to be classed as Sasanian, but the shape is completely Western in origin and had apparently no wide popularity in Iran. This is the only Sasanian example that survives.

Ewers and vases constitute the next largest category of Sasanian silver vessels. In both cases the bodies are pear-shaped and usually have figural or ab-

<sup>22.</sup> Harper, "Thrones and Enthronement Scenes in Sasanian Art," pp. 49-64.

<sup>23.</sup> Orbeli and Trever, Sas. Metall, pls. 5, 7, 8, 13, 19; Harper, Royal Hunter, pls. 3, 6, 7, 8, 12.

<sup>24.</sup> Examples of this are the bowls described in Chapter II in the Iran Bastan Museum, Tehran (Pl. 7), the Cincinnati Art Museum (Pl. 3), the Freer Gallery of Art (Pl. 4) and The Metropolitan Museum of Art (Pls. 5, 6).

<sup>25.</sup> See The Metropolitan Museum of Art bowl, acc. no. 1970.5, described in Chapter II (Pl. 5).

<sup>26.</sup> BCMA, 54 (June 1967), p. 177; BMMA, 18 (April 1960), p. 267, fig. 32, acc. no. 59.130.1; BMMA, 21 (October 1962), p. 83, acc. no. 62.78.2; BMMA, 29 (October 1970), p. 63, acc. no. 1970.7; Harper, Royal Hunter, pls. 14, 15, 25.

<sup>27.</sup> Sas. Silver, nos. 28, 43; BMMA, 18 (April 1960), p. 267, fig. 32, acc. no. 59.130.1.

<sup>28.</sup> Amiet, "Antiquités parthes et sassanides," pp. 277–278, fig. 8; idem, "Orfèvrerie sassanide au Musée du Louvre," p. 52, fig. 1; Balcer, "Excavations at Tal-i Malyan," p. 91, fig. 9.

<sup>29.</sup> Orbeli and Trever, Sas. Metall, pls. 57, 58, 63. 30. Amiet, "Antiquités parthes et sassanides," fig. 9.

<sup>31.</sup> See Chapter II, note 4, for bibliography.

stract designs. The ewer has a short, horizontal spout, a tall neck, and roll moldings at the base of the neck as well as high on the pedestal foot. The handle is attached to the body at the widest point, curves upward to the level of the rim, and rejoins the body below the molding at the base of the neck. <sup>32</sup> If there is a lid, it is held to the vessel by a wire loop that encircles the handle. The vases are closely related to the ewers in the shape of the body and in the presence of a roll molding at the base of the tall neck. The rim of the vessel is circular, the foot low and flat. <sup>33</sup> A few vases of slightly different shape exist, but this is the standard Sasanian type.

To some extent the shapes described above fall into chronological periods. The large circular bowls without a foot bear designs in the style of the third and fourth centuries, as will be seen in the second chapter of this study. The elongated lobed bowls with a low foot are of a type represented in seventh-century Central Asian (Sogdian) wall paintings at Piandzhikent and appear in Iran as a result of influence from that source.34 Stylistically, the designs on them appear to be late Sasanian in date. The crescentic oval bowls also may belong to the latter part of the period, as the above-mentioned find at Malyan suggests. One such bowl in bronze was found in a late Sasanian or early Islamic context at Qasr-i Abu Nasr in Iran.<sup>35</sup> The fluted bowl with a high pedestal foot is typologically similar to late antique vessels of the fourth or early fifth century, 36 as are the Sasanian ewers. 37 One opinion is that the designs on the ewers are of approximately this date; another is that they are slightly later, of the sixth or seventh century. The vases with circular rims presumably belong to the latter period, as they have late Sasanian parallels in pottery from Ctesiphon and Kish.38

In the Sasanian period, only slight evidence survives of the horn-shaped rhyton, terminating in an animal protome or head, popular in many earlier periods in the Near East. <sup>39</sup> Complete animals in silver with holes for filling and pouring are equally rare, but additional examples are provided by recent finds made in Iran. <sup>40</sup>

In connection with the different types of Sasanian silver vessels, one final point should be made. Certain categories of design appear only on certain shapes. The royal scenes with the king hunting or enthroned occur exclusively on circular plates with low ring feet. Apparently these plates were the chief form of Sasanian propaganda or donative court silver. The only other types of vessels having royal figures as a part of their decoration are the large, deep bowls and the kylix from Sargveshi. In both these latter cases the royal figure is shown as a medallion bust, not hunting or enthroned. A form of design appearing solely on the ewers and vases consists of mythological or secular scenes including a number of dancing female figures holding specific objects or attributes. Although the exact meaning of this type of scene is unknown, the fact that its appearance is restricted to two forms of pouring vessel suggests that it may illustrate some particular rite.41 One other category of subject matter, considerably enlarged by recent

<sup>32.</sup> Smirnov, *Serebro*, pl. 41, no. 79 (ewer in the Stroganoff collection, Paris, found at Sloudka in the Perm in 1750, now lost), pl. 49, no. 83, pl. 40, no. 85; Harper, *Royal Hunter*, pl. 18.

<sup>33.</sup> Smirnov, Serebro, pls. 46, 47, 52, 55; Harper, Royal Hunter, pls. 13, 21, 22.

<sup>34.</sup> Yakubovskii, Zhivopis, pl. 7. O. Grabar made the same observation in his introduction to Sas. Silver, p. 42. A vessel of this shape is among the finds made recently in China. It is datable to the Northern Wei dynasty (386-534): Cultural Relics Unearthed during the Period of the Great Cultural Revolution, p. 149.

<sup>35.</sup> Frye, Qasr-i Abu Nasr, p. 21, fig. 22. Harada mentions the appearance of lobed cups for the first time in China during the T'ang period (see note 34 for a refutation of this) but states that oval cups had been known there for centuries: "The Interchange of Eastern and Western Cultures," pp. 55-57. One variation of this type has slightly pointed ends: Sas. Silver, figs. 16, 28. Fig. 28 is now in the Norbert Schimmel Collection, Ancient Art, ed. Muscarella, no. 189. Gyllensvärd notes the occurrence of rather pointed ends on oval lobed bowls in China and states that these belong, in all probability, to the ninth or tenth century: T'ang Gold and Silver, p. 58.

<sup>36.</sup> Strong, Silver Plate, p. 204, pl. 66A. The Sasanian form and its antique prototypes are discussed by Harper, "Female Representations," p. 511.

<sup>37.</sup> For references, see Harper, "Female Representations," p. 511.

<sup>38.</sup> Ettinghausen, "Parthian and Sasanian Pottery," *SPA* I, p. 665, fig. 226, p. 667, note 3; *BMMA*, 27 (August 1932), p. 194, fig. 11.

<sup>39.</sup> Shepherd, "Sasanian Art in Cleveland," p. 88, fig. 27; idem, "Two Silver Rhyta," p. 300, fig. 11; Harper, Royal Hunter. pl. 5.

Royal Hunter, pl. 5. 40. Shepherd, "Two Silver Rhyta," pp. 297, 298; Sas. Silver, p. 43, fig. 49.

<sup>41.</sup> Harper, "Female Representations," pp. 503-515.

discoveries in Iran, is the genre or narrative scene, with wine-making, games, and noble banquets. 42 Without exception such scenes occur on small, hemispherical bowls, whose owners were probably mem-

bers of the large middle class of nobility or the new military class, both of which achieved wealth and position under Khusro I (531-579) and his successors.

<sup>42.</sup> See note 26.

# Chapter I

# Historical Outline

 $oldsymbol{A}$  general review of the events that occurred during the four centuries of Sasanian rule in the Near East will provide the reader with a background and point of reference for the theories concerning the royal silver production in the following chapters. It is not the intention here to offer a new reconstruction and interpretation of Sasanian history but rather to give a picture of the monarchy and of the forces, both internal and external, that influenced the form and nature of this institution during the Sasanian period (see Appendix III for a chronology of Sasanian kings). Specific happenings that are of significance in interpreting the representations on single silver vessels will be enlarged upon, for convenience' sake, in the parts of the text devoted to those particular vessels.

This historical survey is presented with the reservation that no comprehensive history of the Sasanian period exists from which one can draw the relevant facts with confidence. The sources for such a history are lacking. When contemporary Middle Persian texts are available, which is seldom, the meaning of the terms recorded in the Pahlavi script is often unclear and their interpretation uncertain. Later Arab and Persian writers, in spite of their dependence on Pahlavi works, frequently confused the different Sasanian monarchs. In many instances they reflected the opinions of only one segment of Sasanian society, notably that of the Zoroastrian clergy.2 To some degree this can be balanced by reference to other sources, particularly Western ones, but there remain wide areas for speculation.3 Reconstructions of Sasanian history by scholars are in many cases based on likelihoods rather than facts. It is with these limitations in mind that the following consideration of the Sasanian monarchy is given.

The role of the king in Sasanian Iran can be traced at different levels through a study of three aspects of Sasanian history. The first of these concerns the relationship between the king and the governmental hierarchy. In the Sasanian dynasty this hierarchy included not only the secular powers but also the Zoroastrian ecclesiastical order. A second aspect, closely allied to the first, is the effect upon the government of social and economic factors within Iran. At times these factors influenced or molded the institution of kingship, while at others they were the result of initiatives originating with the ruler. At a third level there is the relationship between the Sasanian dynasty and contemporary external powers to the west and east. Whether peaceful or hostile, these communications with the outside world were important in the history of the Sasanian monarchy.

The trends revealed through a consideration of

<sup>1.</sup> The most complete listing of the sources is in Christensen, L'Iran, pp. 50 ff.; see also Pigulevskaya, Les Villes; Olmstead, "The Mid-Third Century of the Christian Era," pp. 241-262. In most instances there are some difficulties in interpreting the various texts. A good example of this is the suggested translation of a passage in the inscription on the Paikuli monument proposed by Henning in "Farewell," pp. 501-522.

<sup>2.</sup> Three examples of the methods used in interpreting conflicting textual sources are: Christensen, Le Règne du roi Kawādh et le communisme mazdakite; Widengren, "Xosrau Anōšurvān," pp. 69–94; idem, "Establishment of the Sasanian Dynasty," pp. 711–782.

<sup>3.</sup> Problems arising from the dependence on Western sources are discussed by Cameron, "Agathias," pp. 69–

these three aspects can provide some idea of the nature of the monarchy, and of its periods of strength and weakness, during the years of Sasanian rule in the Near East.

The establishment of the Sasanian state took place with the rise to power and the decisive victory of Ardashir, the king of Istakhr in southern Iran, over the Parthian Artabanus V, king of the ruling Arsacid dynasty, in the beginning of the third century A.D.4 Ardashir succeeded rapidly in bringing about the collapse of the Arsacid dynasty, which had by the third century only limited control of a small area in Iran. The essential structure of the new state was created under Ardashir I and his son Shapur I (241-272). These rulers achieved a strong centralized government in spite of the survival, for a time, of a number of local and independent kingdoms in Mesopotamia and Iran as well as certain autonomous towns originally founded by the Graeco-Macedonian predecessors of the Parthians.5

Among the highest classes of society in the Sasanian period were, in descending order of importance: kings (shahrdaran); princes or persons with a close relationship to the royal clan (waspuhrakan); the great noble families (wazurgan); and the freemen or lesser nobles (azatan). 6 The heads of the large clans (wazurgan) of Iran were almost completely independent rulers by the end of the Arsacid period. Under the early Sasanian monarchs they continued to exert considerable power through their ownership of vast domains within the kingdom, but their authority lessened to some degree. In the new government, persons who held the highest administrative offices attained the rank of wazurgan if it was not already theirs by inheritance. The struggle of the Sasanian monarchs to control and remain dominant over this class, which held certain military and civil offices, was to last until the reign of Khusro I in the sixth

A source of wealth and loyal support for the king were the newly conquered lands, which became part of his personal domain (dastkart) and served as a buttress for the monarchy against the threat of the great landed nobility. The system of governing the different territories and the change in their status as Sasanian power expanded are reflected in the early Sasanian inscriptions that give the names and titles of

the persons who ruled over these lands. Some were governed by members of the dynasty, Sasanian princes, who had the title of "king." Among these lands at the time of Shapur I were Mesene, Gilan, Sakastan, and Armenia. Other areas, such as Iberia, Abarshahr, and the land of the Kushans, east of Iran, kept their hereditary monarchies at least during the reign of Shapur I, but only as vassalages of the Sasanian king. Rulers of both these categories formed the highest class of society, the *shahrdaran*. The political center of the new dynasty was to be Babylonia, but the capital may not have been established at Ctesiphon until later in the period.

The authority of the state from the beginning of the Sasanian period extended over many areas of life and society. As early as Ardashir I there was centralized control of the mints with a rigid adherence to a strict typology throughout. Deviations from the normal types occurred, according to Göbl, only on coins minted in the eastern part of the empire, especially under Shapur II (309–379) and his successors up until the reign of Yazdgard I (399–421). The form of the model may have been a sample coin (Göbl sug-

<sup>4.</sup> Taqizadeh, "Early Sasanians," pp. 36-51; Widengren, "Establishment of the Sasanian Dynasty," pp. 732-759; Lukonin, *Kul'tura*, p. 33. Frye states that the royalty "passed from the family of the Arsacids to the family of the Sasanids": "History and Sasanian Inscriptions," p. 219.

<sup>5.</sup> Pigulevskaya, Les Villes, p. 157; Frye, Heritage, p. 200. On the gradual rather than abrupt change in affairs from the Parthian to Sasanian periods, see Yar-Shater, "Were the Sasanians Heirs to the Achaemenids?," pp. 517-531; Lukonin, "Var. II," p. 60; Göbl, Sas. Num., p. 64.

<sup>6.</sup> Lukonin, "Parthian and Sassanid Administration." The identification of the great families (wazurgan) of Iran is uncertain. Their names and their order of precedence changed, as Henning noted, during the period: "Farewell," p. 510; Frye, Heritage, pp. 184, 206.

p. 510; Frye, Heritage, pp. 184, 206.
7. Lukonin, "Var. II," p. 60; idem, Persia II, pp. 21, 23; idem, "Kush.-Sas. monety," p. 17. The founding of cities by Sasanian kings is described as an instrument for consolidating royal power at the expense of the nobility by Altheim and Stiehl in Staat, pp. 12 ff.

<sup>8.</sup> See note 5 above. Chaumont, Recherches, p. 67; Frye, "History and Sasanian Inscriptions," p. 219.

<sup>9.</sup> Gignoux, "La Liste des provinces de l'Ērān," pp. 86–89. On the question of the location of Sasanian Ctesiphon, see Gullini, "Problems of an Excavation in Northern Babylonia," pp. 20 ff. For representations of Parthian Ctesiphon on the arch of Septimius Severus in Rome, see Brilliant, "The Arch of Septimius Severus in the Roman Forum."

<sup>10.</sup> Göbl, Sas. Num., p. 31.

gests that the substance was a base metal such as lead) or a drawing. The Sasanian silver coinage continued to be relatively stable throughout the period, in contrast to the gold and copper coinage of Byzantium.

On the coins of Bahram IV the presence of the mint name becomes canonical. Throughout the Sasanian period the names of the mints on the coins are abbreviated, and therefore, in many instances, the locations of the mints remain unknown or are the subject of controversy.11 As the dies are often executed in clearly distinct styles or have various idiosyncrasies in their designs, positive knowledge of a mint location might, in some cases, serve as an aid to better understanding other branches of Sasanian dynastic art, particularly the silver vessels. Date formulae first occur on the coins even later than the appearance of mint names, during the reign of Peroz in the fifth century. Under his son, Kavad I, the inclusion of a legend giving the date of minting according to the number of years that had passed in the king's reign becomes canonical, and an absolute chronological arrangement of the coins, as well as an accurate sequence of the different crown types within the reign of a single king, can be established.

Within this system of government, combining inherited and appointed offices, the Sasanian monarchy was alternately free to act independently or restricted and weakened by opposing powers inherent in the structure. The first of many internal conflicts over the succession to the throne began as early as the end of the third century. These dynastic struggles, with the introduction of lateral branches of the family, tended to strengthen the hands of noble and priestly factions, without whom such usurpations of royal power could scarcely have taken place. The course of events suggests that the three Bahrams who came to the throne successively at the death of Hormizd I (273), the son of Shapur I, managed to do so with the support of a priestly group, in which Kartir was dominant.

Kartir, a herbad in the Zoroastrian church under Shapur I, rose under Bahram II to a position where, as chief organizer and director of the ecclesiastical structure, he became head of the hierarchy (mobad), chief judge of the empire, and attained the rank of high nobility (wazurgan). Narseh (293–302), with the aid of certain elements of the nobility, gained the

throne by force from Bahram III, <sup>12</sup> and a new unity within the realm is perhaps indicated by the inclusion, in the inscription of this king on the monument of Paikuli (the tower, on the Iraqi side of the modern border with Iran, marks the spot where Narseh gathered his forces and celebrated his accession to the throne), of the names of both Persian and Parthian royal princes, and of the great and small nobles among those who joined his ranks. <sup>13</sup>

The extraordinarily long occupation of the throne by Shapur II (309-379), and his unquestioned ability, enabled him to increase the authority of the monarchy and the central government. Defining the royal authority, Shapur II established certain prerogatives for the monarchy, thereby curtailing the rights of both the nobility and clergy, powerful forces that had caused frequent disputes over the royal succession during the first century of Sasanian rule. At a different level of society Shapur organized the artisans, separating the workers into corporations according to metier. 14 Shapur resided with his court at Karkha de Ledan in Khuzistan, where the royal workshops were near the palace. Over all the artisans there was a chief, kirrokbad, appointed by the king. Posi, a Syrian, was at first chief of the court workers at Karkha de Ledan, becoming later chief of the artisans of other regions in the empire. His duties included the direction of the royal artisans as well as the inspection of workshops in different parts of Iran. It would appear from this that the artisans were part of an officially

<sup>11.</sup> For the identification of Sasanian mints, see: Göbl, Sas. Num., pp. 31, 82, table XVI; Göbl in Altheim and Stiehl, Staat, pp. 75-93. A review of the last-cited article by Miles appears in ArsOr, 2 (1957), p. 589. Bivar, "A Sasanian Hoard from Hilla," pp. 157-178. See Lukonin, Kul'tura, p. 179, where the statement is made that the first mint marks appear on coins of Bahram II. For a conflicting opinion, see Göbl, Sas. Num., p. 46, where it is stated that the first safe evidence of a mint mark exists with Hormizd I.

<sup>12.</sup> Henning, "Farewell," pp. 517-518. Lukonin discusses the succession through the senior member of the clan rather than from father to son in "Parthian and Sassanid Administration."

<sup>13.</sup> Frye, "Notes on the Early Sassanian State and Church," pp. 314-335; Christensen, L'Iran, pp. 231 ff. Lukonin also notes that those who supported Narseh were in favor of a strong centralized power because of the economic situation: "Var. II," p. 54.

<sup>14.</sup> Pigulevskaya, Les Villes, pp. 160 ff.; Altheim and Stiehl, Staat, p. 23; Tafazzoli, "A List of Trades and Crafts in the Sassanian Period," p. 192.

regulated system, their productions controlled by the state. This information concerning the existence of a central atelier, at the time of Shapur II, is important for the study of the royal silver vessels.

With few exceptions, the Sasanian rulers up to the time of Shapur II appeared in rock reliefs carved in various regions of Fars. With Shapur II there was a break in this tradition, an indication that the dynasty, now established and accepted as legitimate, no longer felt a need for this official form of proclamatory art.<sup>15</sup>

If Shapur's long rule made the fourth century one of relative internal stability and prosperity, the fifth century, in contrast, brought increasing disorder and hardship within Iran. After the reign of Yazdgard I, the heir to the throne was chosen not by the king but by a group comprising members of the highest nobility, lay administration, and clergy. 16 The long reigns of such rulers as Yazdgard I (399-421), Bahram V (421-439), Yazdgard II (439-457), and Peroz (459-484), brought about not a rise in the prestige and power of the monarchy but, rather, an increasing control over this institution by the lay and religious hierarchy. A list of ranks within the government given by the tenth-century Arab historian Mas'udi in Kitabu't-Tanbih (Book of Admonition) is believed to reflect the form of the Sasanian state hierarchy under Yazdgard II.17 The mobadan mobad, chief of the priests, ranked first, followed by the vuzurg-framadar, grand vizier; the spahbad, chief of the army; the diberbad, chief of the secretaries; and the hutukhshbad, chief of the workers. The power of the Zoroastrian church was supreme. Perhaps reflecting this situation is a change that occurred on the reverse of the coins of Yazdgard II: the image of the fire altar remained, but the inscription naming the fire as that of the king disappeared.

Toward the end of the fifth century, conditions within Iran became increasingly desperate. As a result of an extensive drought lasting for seven years, from 483 through 490, there was widespread famine. <sup>18</sup> At the end of the fifth century Kavad I, the son of Peroz, came to the throne, following Valash, an ineffective ruler who was the brother of Peroz. At the beginning of the sixth century a series of events finally led to the restoration of the fortunes of the monarchy. A spiritual leader, Mazdak, established a sect that achieved considerable power. Among the social reforms preached by Mazdak was the equal distribution of all

material goods among men. This explains in part the success of the Mazdakite movement. The sufferings of the people, exploited by the ruling classes, were extreme. The preachings of the new religious leader directly threatened the great landed nobility. The king, Kavad, for reasons that are unclear, initially gave Mazdak support. Kavad may have seen in the Mazdakites a way of finally freeing the monarchy from the dangers presented by this powerful feudal class, or it may be that the king was sincerely influenced by the humane doctrines of Mazdak. In any event, Kavad's espousal of Mazdakism cost him his throne. He was imprisoned in 497, but escaped and fled eastward to the court of the Hephthalite Huns. Returning, with the support of the Hephthalites, to Iran in 499, Kavad deposed his brother Zamasp. 19

The reign of Kavad constitutes a turning point in the history of the country and the monarchy. The Mazdakite revolution achieved, to a large extent, the downfall of the old nobility, but the protective aegis of royal favor was soon withdrawn. In 528/529, the king, reversing his former policy, permitted the

<sup>15.</sup> Lukonin mentions Trever's opinion that changes in the art were to be linked to changes in the social and economic conditions: Iran, p. 65. It is true that both Ardashir II and Shapur III have reliefs in the north at Taq-i Bustan. Both reliefs seem to have been carved for reasons connected with the question of the legitimacy of their claim to the throne. In this sense they differ markedly from the earlier series and are an isolated phenomenon. Herzfeld believed that the Shapur II-Shapur III relief at Taq-i Bustan was carved during the reign of Shapur II: "Khusrau Parwēz," p. 114. Ghirshman identifies the enthroned king in the incomplete relief IV at Bishapur as Shapur II: Bîchâpour I, pp. 79 ff. Lukonin identifies the king on this relief as Bahram II in Kul'tura, pp. 113-114. In view of the fact that the two circles of the clasp holding the cloak are clearly apparent, and that this form of dress disappeared with Shapur II, the earlier dating of the relief proposed by Lukonin is convincing. Moreover, Bahram II had himself portrayed in this same enthroned pose at Naqsh-i Bahram: Hinz, Altiranische Funde, pl. 128.

<sup>16.</sup> Christensen, L'Iran, p. 263. Lukonin quotes the passage in the sixth-century "Letter of Tansar" in "Var. II," p. 50.

<sup>17.</sup> Christensen, L'Iran, pp. 265, 518 ff.

<sup>18.</sup> Pigulevskaya, Les Villes, pp. 195-230; Altheim and Stiehl, Staat, p. 25.

<sup>19.</sup> The number of times that Kavad held the throne and was deposed is disputed. See Göbl, Sas. Num., p. 51. The conflicting opinions on the career and personality of Kavad I are comprehensively treated by Christensen, Le Règne du roi Kawādh I et le communisme mazdakite.

bloody massacre of the Mazdakites by his son and heir-designate Khusro.

An indication of the rising fortunes of the monarchy is the mention in most sources that Khusro I was chosen by his father, Kavad, to be his successor.<sup>20</sup> The council of dignitaries who had acted as advisors to the crown in the preceding century now served only as an instrument of the king's will. A number of factors contributed to the extraordinary success of Khusro I (531-579). The restructuring of the fiscal basis of the government, primarily the introduction of tax reforms based on those of the Roman emperor Diocletian according to plans worked out during the reign of Kavad, was in large part the reason for the increase of prosperity within the empire.<sup>21</sup> The new revenue permitted the initiation of vast irrigation projects still traceable in Babylonia.<sup>22</sup> In turn, these made possible the complete utilization of all irrigable areas. The growth of the class of lower nobility (azatan), to whom the king granted lands, establishing thereby strong feudal ties, enlarged the base of loyal support for the monarchy.23 In a list of ranks in Mas'udi's Muruju'dh-dhahab (Les Prairies d'or) attributed to the reign of Khusro I,24 all the lay ministers are named before the mobadan mobad, a significant change in the hierarchy from the time of Yazdgard II. Neither the clergy nor the old nobility were to regain their hold over the state. The division of Iran into four military and administrative parts, with the creation of four spahbad to replace the single army chief of the preceding centuries, meant an increasingly efficient control of internal affairs. This system was to lead, in the following decades, to the growth of a new threat to the Sasanian monarchy, but, for the time being, Khusro I had radically changed the social, economic, and administrative structure of his kingdom.25

The final great ruler of the Sasanian dynasty was Khusro II (591–628). He gained the throne of Iran only by overwhelming Bahram VI (Chobin), a general and member of the Mihran family who had seized power shortly after the death of Khusro I. During a short period (591/592–597) at the beginning of Khusro's reign, Bistahm, a member of the Aspahbad family, declared his independence and ruled in Khorasan. This was, however, only a brief interval in a reign that was marked by great victories and prosperity. The magnificence and luxury of the

court of Khusro II at Dastagird is legendary. Descriptions of the loot taken from this royal palace by the emperor Heraclius at the end of Khusro's reign give some idea of the immense wealth of this monarch. Mention is made of quantities of silver bullion, embroidered carpets, silks, and spices, and many statues of the king.26 Although married to Maria, the daughter of the Byzantine ruler Maurice, Khusro, according to literary traditions, favored a Christian, Shirin. Qasr-i Shirin, built for this wife, lies, as does Dastagird, on a main route between Iraq and Iran. According to Arab tradition, the large, vaulted, rock-cut niche at Taq-i Bustan also was constructed at the order of Khusro II, an attribution which, in spite of considerable controversy, is probably to be accepted as accurate. The sculptures at this site may well have been executed in 501 in celebration of Khusro's victory over Bahram VI (Chobin).27

A period of anarchy followed the death of Khusro II. He was succeeded by a series of monarchs who ruled briefly between 628 and 632, probably over

<sup>20.</sup> Christensen, L'Iran, p. 361. The king named his successor in a sealed letter given to one official to open at the king's death. On this subject, see Widengren, "La Royauté de l'Iran antique," pp. 84–89.

<sup>21.</sup> Altheim and Stiehl, Staat, pp. 41 ff., pp. 129-255; idem, Finanz, pp. 7-31; idem, Hunnen II, pp. 182-191. The Eastern Roman land tax, iugatio, and the head tax, capitatio, were those upon which Khusro modeled his tax system. They had, in turn, originally been developed in the reign of Diocletian. Frye, Heritage, p. 218, describes the new taxes as follows: 1) a land tax of a fixed sum rather than being based on yield; 2) a head tax according to the capability of the man (state employees, magi, soldiers, and the high nobility were exempt).

<sup>22.</sup> Adams, *Baghdad*, pp. 71, 83. The weakness of the new systems lay in the need for a powerful centralized authority to implement them. When this authority disappeared, the whole structure collapsed.

<sup>23.</sup> Christensen, L'Iran, pp. 111 ff.; Pigulevskaya, Les Villes, pp. 157, 158.

<sup>24.</sup> Christensen, L'Iran, p. 519; Altheim and Stiehl, Staat, p. 165.

<sup>25.</sup> Christensen, L'Iran, p. 374; Altheim and Stiehl, Staat, p. 138.

<sup>26.</sup> Christensen, L'Iran, p. 469; Sarre and Herzfeld, Arch. Reise II, p. 89; Altheim and Stiehl, Staat, p. 50; Adams, Baghdad, pp. 69, 80. Adams comments on the evidence for an increasing number of settlements in the area of Dastagird and for the resettling of Syrian and Egyptian captives there by Khusro II.

<sup>27.</sup> Marshak and Krikis, "Chilekskie Chashi," p. 65. On the geography of the region in which the defeat of Bahram VI by Khusro II and his Byzantine and Armenian allies

20 HISTORICAL OUTLINE

only parts of Iran. Yazdgard III, the last Sasanian ruler, came to the throne in 632. As titular head of the government until 651, Yazdgard was in fact increasingly under the control of the military. Rustam, in his office of spahbad, was the most powerful person in Iran. Each of these military governors had come to consider his own province almost as a fief. This trend could have led to the destruction of the central authority.<sup>28</sup> However, the downfall of the Sasanian dynasty occurred before this threat from within had time to develop. In 636 the Arabs defeated the Sasanian army at Qadisiyya and in 642 at Nehavend. In 637 Jerusalem and Antioch were conquered; in 641 Egypt, with the occupation of Alexandria in 646. The date of the foundation of the Umayyad dynasty and the beginning of Islamic rule is 661.

Within the structure of the Sasanian state, as described above, the monarchy was frequently drawn into internal conflicts with diverse elements that attempted to usurp the supreme power. Strife also characterized the relations maintained by the Sasanian dynasty with the outside world. Wars with the West were continuous, although the reasons for them varied. Some were designed to increase the territorial limits of the Sasanian empire to provide a labor source, while others were primarily aimed at procuring much-needed revenues in the form of booty, loot, or ransom. The wars of the third and fourth centuries not only expanded the boundaries of the empire, but brought about a tremendous influx of prisoners, enlarging and supplementing the labor force within the Sasanian kingdom. 29 The conquests of parts of Armenia and the maintenance of a boundary on the Euphrates by Ardashir I and the two Shapurs, I and II, were largely permanent, but both Shapurs also temporarily reached and destroyed Antioch on various occasions during these centuries. 30 The capture of the Roman emperor Valerian in 260 during the third campaign of Shapur I in the West formed the chief subject of his dynastic reliefs at Nagsh-i Rustam and Bishapur.31 Other Roman emperors were more successful against the Sasanians, Carus<sup>32</sup> and Julian<sup>33</sup> reaching Ctesiphon during the reigns of Bahram II and Shapur II, while Galerius defeated Narseh in 297, capturing the royal household and taking prisoner the Sasanian king's wife, Arsane.<sup>34</sup>

During periods of peace, exchanges between the Sasanian and Roman empires took place. Among

those recorded during the third century are gifts of silver plate sent from the Sasanian court to the emperor Aurelian. 35 In the fifth century, relations with the West became more peaceable as the Byzantine rulers, concerned with Visigothic invasions of Western Europe, were fully occupied elsewhere. 36 (At that time, the Sasanians, as will be seen below, were themselves faced with new enemies in the East.) The Eastern Roman emperor Arcadius is supposed to have asked Yazdgard I to act as a guardian for his son Theodosius, an effort to establish a symbolic tie between the two realms.<sup>37</sup> A more concrete agreement with Byzantium was the establishment of Persian garrisons at the Caspian Gates at Derbend to guard against incursions of nomadic Huns, in repayment for a set sum in gold.38

During the sixth century, as Procopius recounts,

took place, see Minorsky in "Roman and Byzantine Campaigns in Atropatene," pp. 243-265. One of the wives of Khusro II was Gorduya, the sister of Bahram Chobin: Faravashi, "Les Causes de la chute des sassanides," p. 480. A résumé of the opinions concerning the date of the large rock-cut niche at Taq-i Bustan appears in Peck, "Taq-i-Bustan," pp. 102, 103. Soucek also describes this niche as a victory monument in "Farhad and Tāq-i-Būstan," pp. 27-52. This view is questioned by Hillenbrand, who considers the sculptures a symbol of royal power: "Recent Work in Islamic Iconography." pp. 201-213.

28. Christensen, L'Iran, pp. 499-502; Altheim and Stiehl, Staat, pp. 138, 142, 375. For the career of Rustam, see Faravashi, "Les Causes de la chute des sassanides," p. 481.

29. Pigulevskaya, Les Villes, p. 135.

- 30. Shahid, "Heraclius," pp. 295 ff.; Chaumont, "Rois sassanides d'Arménie," pp. 81–93. The author discusses the areas controlled at various times by the Sasanians in Ar-
- 31. The Valerian reliefs are at Bishapur and Nagsh-i Rustam: MacDermot, "Roman Emperors in the Sassanian Reliefs," pp. 76-80; Hinz, Altiranische Funde, pp. 172-188.
- 32. There is some disagreement on whether Carus actually reached Ctesiphon: Chaumont, Recherches, pp. 100, 102; Bivar, "Cavalry Equipment," p. 280.
  33. Ammianus Marcellinus, Book XXIX, 5, 3; Adams,
- Baghdad, p. 70.
- 34. Christensen, L'Iran, p. 233; Chaumont, Recherches, p. 113. Galerius illustrated this triumph on his arch at Salonika: Laubscher, Der Reliefschmuck des Galeriusbogens in Thessaloniki. See also Schoenebeck, "Triumphalreliefs am Galeriusbogen," pp. 361-371.
  - 35. Christensen, L'Iran, p. 480. See also Chapter III, note

  - 36. Shahid, "Heraclius," p. 314. 37. Cameron, "Agathias," pp. 125, 149.
- 38. Göbl links the cessation of this gold payment to the absence of any gold coinage under Valash: Sas. Num., pp.

HISTORICAL OUTLINE 2 I

the wars of Kavad and Khusro I in the West were aimed not so much at territorial expansion as at the replenishment of the national treasury.<sup>39</sup> Although this goal was achieved through almost constant hostilities, the flow of communications with the West continued on a peaceful level throughout this period. The closing of the School in Athens in 529 brought many Western scholars to the East as temporary residents, while Greek artisans were sent by Justinian to help embellish the capital at Ctesiphon. 40 Mosaics decorating the palace illustrated the siege of Antioch and the combats of Khusro I.

Only under Khusro II did the nature of the conflict with Byzantium change, and once more a Persian monarch aimed at the expansion of his territories to limits reached previously by his Achaemenid predecessors. 41 In 606/607, Syria was overrun by the Persians, and in 611 Antioch was captured, remaining in Persian hands until 628. Khusro II took Jerusalem in 614, setting out from there to devastate Asia Minor. With the invasion of Egypt in 616 and the capture of Alexandria in 617, the Sasanian empire reached its greatest extent. The fall, however, came rapidly. During the 620s, with few reverses, the offensive passed to the West. Heraclius, from his headquarters in Armenia, was successful against Media, taking Ganzak in 623/624.42 In 626 the Persians responded briefly, reaching Constantinople, but Heraclius achieved a major victory in 628 when, with Khazar allies from north of the Caucasus, he defeated the Persians at Nineveh. 43 The sack of Dastagird, northeast of Ctesiphon, has been mentioned above, and following this series of disasters Khusro was overthrown by his own generals. His son Kavad II, whose mother was allegedly a Byzantine princess, made peace, evacuating Antioch and releasing Roman captives in Iran.

Hostilities in the East were of a different nature from those with the Byzantine enemy in the West. From the time of the formation of the Sasanian dynasty under Ardashir until the reign of Shapur II, territorial expansion into the Kushan lands in Bactria and northern India was the foremost consideration.<sup>44</sup> The final conquest of the Kushans, whether in the third or fourth century, did not produce for long a stable situation in this area. In the middle of the fourth century, a new group of peoples, Altaicspeaking Huns called Chionites, arrived in the formerly Kushan lands north of the Oxus, and with them Shapur II concluded a peace. 45 Ammianus Marcellinus, the last great Roman historian, describes the Chionites as allies of Shapur at the battle with the Romans at Amida in 356,46 and the enormous increase in the production of coinage under this king has been explained by the fact that the Chionite army was paid not with loot or booty but with money. Relations with these nomads as well as with those who followed them in the East never remained amicable for any length of time. By 400, the Sasanians had lost their lands in the East around Kabul and Peshawar to the Huns permanently, 47 and by the middle of the fifth century a new menace to Sasanian sovereignty appeared in the form of another group of Huns, the Hephthalites. 48 Bahram V (Gur) was successful against these nomads in the Khorasan region, but the kings who followed him were less fortunate. Hephthalite armies defeated and captured Peroz. 49 The Byzantine emperor Zeno is alleged to have ar-

50-51; Altheim and Stiehl, Staat, p. 24. Henning, "Fare-

43. Shahid, "Heraclius," p. 297.

45. Frye, Heritage, pp. 216-217.

well," p. 503. 39. Altheim and Stiehl, Staat, pp. 48, 49; Shahid, "Heraclius," p. 314. Innumerable references can be found in Procopius, History of the Wars, Books I, II.

<sup>40.</sup> Cameron, "Agathias," pp. 172-176; Christensen, L'Iran, p. 397, p. 428. 41. Shahid, "Heraclius," pp. 314-315.

<sup>42.</sup> Ibid., p. 310. Shahid notes that Sebeos states that the Heraclids were related to the Arsacids. Sarre and Herzfeld, Arch. Reise II, pp. 87 ff.; Faravashi describes the taking of the True Cross by Khusro II as a vital error which turned the Byzantine offensive into a "crusade": Faravashi, "Les Causes de la chute des sassanides," p. 477.

<sup>44.</sup> The extent of the Kushan lands is described by Rosenfield, Kushans, p. 41. The exact date of the territorial expansion of the Sasanians in the East is the subject of much discussion: Henning, "Manichean Texts," p. 54; Frye, "History and Sasanian Inscriptions," pp. 220 ff. For an historical résumé defending the third-century conquest of this realm by the Sasanians, see Brunner, "Chronology," pp. 145-164. See also the section on Kushano-Sasanian coins in Chapter III.

<sup>46.</sup> Ammianus Marcellinus, Book XVIII, 8.

<sup>47.</sup> Göbl, Sas. Num., p. 66.

<sup>48.</sup> Hannestad, "Byzance," pp. 435-456; Altheim and Stiehl, Staat, p. 275; Maenchen-Helfen, "Huns and Hsiung-Nu,"pp. 222-243; Widengren, "Xosrau Anošurvan," pp. 69-94.

<sup>49.</sup> The question of whether Peroz was captured once or twice is discussed by Göbl in Sas. Num., p. 49; Altheim and Stiehl, Staat, p. 25.

HISTORICAL OUTLINE

ranged for the ransom of Peroz, who left his son the future Kavad I, possibly for as long as two years, a hostage at the Hephthalite court until the full ransom was paid.<sup>50</sup> In 484, in a new war with the Hephthalites, Peroz was killed, and his daughter fell into their hands. The Hephthalites occupied Marw-rud and Herat. For several years Iran remained tributary to the Hephthalites.<sup>51</sup> The domination by the Hephthalites of Central Asia, including the prosperous towns in which the Sogdians carried on the inner Asian trade, lasted until the reign of Khusro I in the sixth century. The end of this humiliation for Iran came only with a change in the balance of power in Central Asia and the arrival of the Turks in the sixth century. Allied with these newcomers, the Persians defeated the Hephthalites and divided their lands.<sup>52</sup> One result of this alliance with the Turks was the large-scale penetration of Persian merchants and culture into China and Central Asia.53 In 567, during the reign of Khusro II, a Persian embassy went to the Chinese court, and in the same reign, a Chinese delegation arrived in Iran. The influence of Indian civilization led to the introduction into Iran of the game of chess, and a Pahlavi translation from Sanskrit was made of the Pañcatantra, a collection of fables that was to remain a favorite, as Kalila wa Dimna, during the centuries of Islamic rule.54

It is evident from this survey that the Near Eastern countries under Sasanian rule were open to a wide variety of cultural and political contacts with close neighbors as well as with more distant contemporary powers. This resulted in the adoption in Iran of foreign forms of government and culture as well as in the dissemination of Iranian ideas and material products over a vast area. The earliest period of Sasanian history, the third and fourth centuries, witnessed the establishment of the dynasty and the state and religious hierarchy, as well as the basic territorial expansion of the Sasanian empire. The central government achieved considerable power, maintaining a patrimonial relationship with the great landed nobility. 55 When the physical expansion of the boundaries ceased in the fifth century, the sources of labor became restricted, increasing the burdens of the masses in Iran. The costly wars with the Huns during the second part of this century brought the resources of the Iranian nation to their lowest point. Natural ca-

tastrophes worsened an already desperate situation. Finally, under Kavad and Khusro I in the sixth century, renewed territorial conquests and the reform of the fiscal system brought needed revenues to the state, while royal support of the Mazdakite social movement destroyed the power of the old nobility, giving at least temporary respite to the monarchy. The rise of a new middle nobility, loyal to the king, provided the monarchy with the form of support and potential strength it had lacked in the preceding centuries. Feudalism was established in Iran. The military system that formed a part of this new structure was initially efficient but potentially dangerous to the central authority. It was held in check by Khusro II, but this last extravagant and extraordinarily ambitious ruler extended his territories beyond what he could control, and a brief period of brilliance was followed by a rapid collapse.

Although the end of the Sasanian dynasty came, technically, with the death of Yazdgard III at Merv, the situation within Iran during the first century and a half of the Islamic era deserves notice, as it has some bearing on the problem of the imitation of royal silver after the collapse of the Sasanian dynasty.

In general, the landed nobility maintained their own local power in Iran during the century of Umayyad rule, from 660 to 750. There are three re-

<sup>50.</sup> Christensen, L'Iran, p. 293; Hannestad, "Byzance," pp. 438-441. Hannestad gives the date of Peroz' capture as 475 and that of his death as 481.

<sup>51.</sup> Pigulevskaya, Les Villes, p. 206.

<sup>52.</sup> Widengren, "Xosrau Ånösurvān," pp. 69-94. Widengren establishes the frontiers of Iran according to the evidence of the "Letter of Tansar."

<sup>53.</sup> Bivar, "Trade between China and the Near East in the Sasanian and Early Muslim Periods," pp. 1–8; Whitehouse and Williamson, "Sasanian Maritime Trade," pp. 29 ff.; Hannestad, "Byzance," pp. 421–456; Harmatta, "Chinese-Sāsānian Relations," pp. 370 ff. Harmatta gives the following dates for the arrival of Persians in China: 455, 518, 520, 553, 555. He states that under Khusro I a Chinese delegation arrived at the Sasanian court and another Chinese delegation to Persia arrived in 616/617 before the Turco-Persian war.

<sup>54.</sup> Christensen, L'Iran, p. 429. Wilkinson gives a summary of the traditions in Persian literature concerning the introduction of the game of chess to the Persians during the Sasanian period: Dennis and Wilkinson, Chess: East and West, Past and Present. Wilkinson also cites Murray, The History of Chess, as the authoritative work on this subject.

<sup>55.</sup> Altheim and Stiehl, Staat, p. 167.

HISTORICAL OUTLINE 23

gions in particular where Sasanian traditions may well have survived during the early centuries of Islamic dominion.<sup>56</sup> The south Caspian provinces have been frequently cited, since they are the alleged provenance of so much recently discovered Sasanian silver. It has been proposed that the Iranian nobility might well have guarded their wealth along with their freedom and independence in this inaccessible region. Another center was in Khorasan, where there was a conservative landed nobility that played an important role in the successful revolt of the Abbasids against the Umayyad dynasty. (A "Persian" library at Merv is recorded in the early ninth century.) Finally, there is the "Gypsum Castle" that was still standing as late as the tenth century in Fars, the original home of the Sasanians.<sup>57</sup> It is possible that a priestly Zoroastrian community lived there, maintaining religious traditions and watching over the rock reliefs at Bishapur. Alternatively, this may have been the domain of a noble family who kept alive the memory of Sasanian culture.

It should be remembered that in his flight eastward the last Sasanian monarch Yazdgard III was accompanied by members of his court who, in many instances, must have carried their treasured belongings, quite possibly their silver plate, with them. <sup>58</sup> As this royal "enclave" retreated gradually to the East, it may have been that silver vessels of typically royal Sasanian form were produced, to bolster the morale of the followers of the defeated rulers. The appearance of misunderstandings or confusions in the designs of this final class of "royal" silver is understandable, since the vessels must have been modeled only in general on the original types and were therefore subject to less stringent and exacting controls than the earlier Sasanian works.

The pieces to be examined in the following pages are almost exclusively made of silver. The one exception is a gold plate in the Bibliothèque Nationale with extensive glass and rock-crystal inlays. No other vessels of gold with royal scenes have survived. Whether this is to be considered an accident of time or whether the nobler material, gold, was reserved for royal use alone, is not known. It is unlikely that any large

amount of donative court plate would have been made of gold, which is not found in Iran, <sup>59</sup> and it is therefore not surprising that the majority of the vessels intended for gifts or manufactured for export were fashioned from silver. The chief medium of exchange in Sasanian Iran, the coinage, was silver, and the weights inscribed on the vessels indicate that the value of the silver plate was carefully reckoned according to the standard coin weights. <sup>60</sup> Some attention has been called to Arabic texts that suggest that, in terms of status, silver was placed above gold in Sasanian Iran. <sup>61</sup> If this can be further documented, it would provide another explanation for the fact that all the preserved Sasanian vessels are made of silver.

It is against the background provided by the preceding survey of Sasanian history and society that the phenomenon of the royal silver production must be placed. Changes that occur in the designs on the silver vessels—in the subject matter, composition, and style—should be explained in terms that reflect the events roughly sketched above. The royal silver production, however, is itself a potential source of information concerning the Sasanian monarchy, providing another viewpoint from which this institution can be considered. The aims of the monarchy in Sasanian Iran are reflected in the images chosen by the heads of this dynasty for representation on the royal court silver.

<sup>56.</sup> Rypka, History of Iranian Literature, pp. 128-129; Harmatta, "Sino-Iranica," pp. 141-143. Harmatta describes the temporary success of Peroz, son of Yazdgard III, against the Arabs and his reconquest of Sijistan from 658-663. After this he fled to China. Harmatta notes that in 728-729 Khusro, a descendant of Yazdgard III, was in the army of the Western Turks and still held hopes of regaining his throne.

<sup>57.</sup> Stern, "Arabico-Persica," pp. 409-416. On the Caspian provinces, see Minorsky, La Domination des Dailamites.

<sup>58.</sup> Marshak, Sog. Serebro, p. 152.

<sup>59.</sup> Forbes, "Gold in the Ancient Near East," pp. 243 ff.; idem, "Silver and Lead in Antiquity," pp. 501 ff.

<sup>60.</sup> Frye, "Sasanian Numbers and Silver Weights," pp. 2–11; Brunner, "Middle Persian Inscriptions on Sasanian Silverware," pp. 109–121.
61. Sperber, "Silver as a Status-Symbol in Sasanian Per-

<sup>61.</sup> Sperber, "Silver as a Status-Symbol in Sasanian Persia," pp. 103–105.

## Chapter II

## Medallion Bowls with Human Busts

Lhe Sasanian silver vessels that form the subject of this chapter have as the major element in their design representations of male or female busts enclosed within circular frames. 1 The form of the decoration is closely allied to the images on Sasanian coins (Fig. 3) and gems (Figs. 4, 5), and frequent reference will be made to these works in the present study. Among the vessels with medallion portraits, there is a cup from Sargveshi in Georgia (Pl. 2) having the image of a king wearing an identifiable Sasanian crown. This is the only example of an image of the ruler as a bust within a medallion on a Sasanian silver vessel. It is, moreover, the earliest silver vessel with the representation of a Sasanian king. The Sargveshi cup therefore serves as a fixed chronological point for the arrangement of the other pieces in the series.

The total number of Sasanian medallion vessels is only seven, and they belong to a period lasting approximately one century, from the middle of the third to the middle of the fourth century. The form and details of the representations constitute the basis for the following chronological arrangement and for another grouping in terms of stylistic workshops or traditions. Because there is a clear development within the series and a few exact dates to which the sequence can be attached, the arrangements proposed, both chronological and stylistic, can be made with some confidence. Much more hypothetical are the theories offered at the end of the chapter, concerning both the identification of the persons on the vessels and the problem of why these works were made for such a brief period in the Sasanian Near East.

### Catalogue

The following descriptions of the vessels are as comprehensive as possible. Examination of the pieces was in almost all instances possible and confirmed the method of manufacture used.

Mtskheta plate (PL. 1). The provenance of the first vessel to be described is Mtskheta, Georgia.<sup>2</sup> The plate, with ring foot, was found in the grave of a female. It is decorated on the interior with four rows of concave disks, concentrically arranged. The corresponding convexities are visible on the exterior surface.<sup>3</sup> Directly beneath the rim on the exterior is a

<sup>1.</sup> This chapter is a revision of an article entitled "Sasanian Medallion Bowls with Human Busts," pp. 61–81. Medallion bowls have been discussed generally by Dimand, in his original publication of the four bowls allegedly found together (Pls. 3, 4, 6, 7): "Silver Bowls," pp. 11–14. The methods of fabrication described by Dimand are inaccurate, as no scientific examination of the pieces had been made at that time. See also O. Grabar in Sas. Silver, pp. 55, 56; Negro Ponzi, "Some Sasanian Moulds," pp. 74–83.

<sup>2.</sup> Museum of History, Tbilisi, acc. no. 18–55:53; diam. 24 cm.; diam. central roundel 9 cm.; height with foot 4.1 cm.; weight 850 gm.; Apakidze, *Mtskheta* I, pp. 52, 53, fig. 21, pls. 47–49; Fajans, "Recent Literature," p. 61, note 48, figs. B,C; Amiranashvili, "Une Coupe en argent," pp. 149–162; Henning, "A Bowl from Georgia," pp. 353–356; Lukonin, *Kul'tura*, fig. 23; Harper, "Medallion Bowls," p. 62, fig. 1; Brunner, "Middle Persian Inscriptions on Sasanian Silverware," p. 110; Machabeli, *Pozdneantichnaūa torevtika Gruzii*, pp. 106–116.

<sup>3.</sup> The plate is not made of two shells of metal as claimed in the literature.





FIG. 3 Silver coin of Ardashir I American Numismatic Society

line that circles the entire vessel. In the center of the interior is a medallion enclosing a male bust, profile to the right, over an acanthus-leaf base. The design is worked in the metal of the plate. There are no added pieces. The figure wears a tall cap, curving forward at the peak. The brim and outer rim are beaded, and on the surface of the cap are groups of triple dots and a crescent, cradling a six-pointed (?) star. The plate has a Middle Persian inscription around the outside of the rim. Gilding is apparent on the thickened rim.

Sargveshi cup (PL. 2). Entirely different in form is the previously mentioned silver cup from Sargveshi, Georgia.4 The exterior of the body is decorated with four medallions, two enclosing portraits of the Sasanian king Bahram II (276-293), profile to the right facing the person in the adjacent medallion. In each case the right hand of the king is raised in a gesture with one finger extended. The persons in the other roundels are in profile to the left. They have been identified as the king's son and wife. The son, wearing a cap ending in a horse's head, is beardless and holds a beaded ring. The figure identified as the wife has three long twisted locks of hair falling behind her neck and wears a tall curved cap, the brim of which has a row of disks, the outer rim a series of curls. A flower with four petals is held before her face in the right hand. All figures wear necklaces, and the king and his son have earrings. Each bust rests on a stylized acanthus-plant base. The medallions are separated by plants with birds in two instances among the leaves. A vine scroll with five birds and four animals decorates the vessel below the rim. One bird has a long neck and is probably a goose or a swan. The others are of undetermined species. The animals include one rabbit or hare, a fox (?), and two other creatures of an unknown type. The relief design is





FIG. 4 Impression of seal of *lw'gn wyst* State Hermitage Museum, acc. no. Gl 978

FIG. 5 Impression of seal of Narseh-shah
British Museum, acc. no. 120210

entirely achieved by carving the background away and otherwise tooling the metal. No elements are added. The cup is partially gilded: alternate leaves on the foot, certain areas on the petaled frames of the medallions, and the headdresses and drapery of the figures. The curving populated vine below the rim and the rosettes on the handles also retain traces of gilding.

Cincinnati Museum bowl (PL. 3). The next vessel is a silver bowl in Cincinnati,<sup>5</sup> allegedly of Iranian provenance, and somewhat similar in appearance to the

<sup>4.</sup> Museum of the Society for the History of Ethnography of Georgia, Tbilisi, acc. no. P 134; diam. rim 12.3 cm.; height with foot 8.9 cm.; diam. foot 5.7 cm.; weight without foot 550.5 gm.; weight of foot 115.9 gm. The site is described by Chubinashvili as having two high points and being covered with potsherds: Chubinashvili, "Der Fund von Sargweschi," pp. 83–86, pl. 2. However, the vessel is said to come from a grave: see Machabeli, Pozdneantichnaia torevtika Gruzii, pp. 116–121. See also Lukonin, Iran, pp. 57–58, pls. 13–15; idem, Kul'tura, pp. 179, 193, figs. 22a, b; idem, Persia II, fig. 207; Harper, "Medallion Bowls," p. 63, fig. 2. A similarly shaped vessel is held by a figure identified as the Sasanian king Narseh in one register of the arch of Galerius in Salonika: Laubscher, Der Reliefschmuck des Galeriusbogens in Thessaloniki, pl. 44.

<sup>5.</sup> The Cincinnati Art Museum, acc. no. 1955.71; diam. 23.5 cm.; diam. central roundel 9 cm.; height 7.3 cm.; weight 775 gm. The provenance given in the earliest publications, cited here, is east of Qasr-i Shirin on the road to Kermanshah. Dimand, "Silver Bowls," pp. 11-14, fig. 2; Goldman, "Early Iranian Art in the Cincinnati Art Museum," p. 339, fig. 15; O. Grabar in Sas. Silver, p. 99, fig. 11; idem, "Sasanian and Islamic Art through the Ages," p. 225; Harper, "Medallion Bowls," pp. 64-65, fig. 4; idem, Royal Hunter, no. 2.

Mtskheta plate (Pl. 1). The bowl has a plain exterior except for three concentric rings at the center of the base (diam. 0.7 cm., 1.8 cm., and 2.2 cm.). The interior design consists of eight rows of convex disks arranged in concentric circles around a central medallion with a male bust, profile to the right. The corresponding concavities on the exterior have been removed by tooling. Low moldings run around the rim of the medallion on the interior. The figure within the medallion has a pointed beard and a mustache curving in a crescent up the cheek. The short hair falls in waves that end in tight curls around the head. Circular patches are on both shoulders of the garment. The figure wears a beaded necklace and an earring with a single oval bead. Beneath the bust is a stylized acanthus-plant base. Both figure and plant base are formed from a single piece of metal added to the bowl and held in place by a lip cut up from the background shell. There is no gilding visible on any part of the bowl.

Freer Gallery bowl (PL. 4). Allegedly found with the Cincinnati bowl, in Iran, is a vessel of similar form now in the Freer Gallery. 6 The exterior of the bowl is undecorated except for two concentric circles at the base. Fluted lines on the interior radiate outward from the low moldings of the central roundel to the rim. Inside the roundel is the bust of a male, profile to the right, placed over a stylized acanthus base. His hair is long and falls to the shoulder in spirally twisted locks. Tight curls cover the top of his head. The necklace is beaded, and the earring has a small bead and an oval pendant. Circular patches with elaborate designs decorate the shoulders of the garment. The bust is attached to the bowl in two separate pieces consisting of the head and neck, and the lower bust. Both are fitted under a lip cut up from the bowl itself. The outer rim of the medallion retains traces of gilding, which is also visible on the diadem around the head, the necklace, drapery, and leaf base.

Metropolitan Museum bowl with five medallions (PL. 5). The next bowl, in the Metropolitan Museum, is also allegedly of Iranian provenance and has the decoration on the exterior rather than the interior surface. A Pahlavi inscription runs a third of the way around the outside of the rim.<sup>7</sup> Five medallions decorate the vessel, each with the same female bust. In the

center on the base the female is in profile to the right. On the sides she is twice represented facing to the right and twice to the left. A stylized acanthus plant is placed between each roundel. The interior of the vessel is undecorated. The female figure has long hair arranged in four groups of spiral locks resting on both shoulders and on the chest. Three of the busts have only two locks of hair on the shoulders, while on the other two females there are three. Shorter locks are arranged before and behind the ear, and a single curl is visible on the cheek. Two rows of curls rise above the forehead, which is bound with a long fillet having a bead at the front and at the side before the ear. The remaining hair is drawn up into a globular bunch on top of the head, where it forms four rows of curls secured by a small fillet. The female wears a necklace of beads and an earring with two small beads and an oval pendant. The mantle placed over her shoulders has a pattern of regularly scattered groups of three dots, and a dotted border. It is attached at the center of the chest by a pin, shown twice as a single circle and three times as a pair of circles. The females having the same type of pin have the same hair arrangement, two forms of which are noted above. Beneath the busts are stylized acanthus bases. Each bust is partly carved in relief and has, in addition, four applied parts: the bunch of hair on top of the head, the head itself with the hair falling behind the head on the chest, and each breast. These are held to the bowl in the standard fashion by a lip cut up

<sup>6.</sup> Freer Gallery of Art, Smithsonian Institution, acc. no. 57.20; diam. 20.7 cm.; diam. central roundel 10 cm.; height 6 cm.; weight 728 gm. Dimand, "Silver Bowls," pp. 11–14, figs. 1a, b; Frye, "A Parthian Silver Bowl," pp. 143–144; Harper, "Medallion Bowls," p. 65, fig. 5.

<sup>7.</sup> The Metropolitan Museum of Art, acc. no. 1970.5; diam. 23.7 cm.; diam. central roundel 9.7 cm.; diam. side roundels 9.3 cm.; height 8.1 cm.; weight 1235.4 gm. BMMA, 27 (May 1970), p. 394; Ghirshman, "Un Nouveau Bas-relief sassanide," fig. 3; Hinz, "Das sasanidische Felsrelief von Tang-e Qandīl," p. 209. Harper, "Medallion Bowls," pp. 64–65, fig. 3; Brunner, "Middle Persian Inscriptions on Sasanian Silverware," p. 111. Walther Hinz, in correspondence, has suggested that the second word is not the name but  $\bar{a}bzan$  (water vessel) and the third may be  $s\bar{e}m\bar{e}n$  (silver). Following the break Hinz amends the reading to: NPSH (belonging) HN' (this)  $\bar{a}bzan$  (vessel). The inscription reads in total: "this silver water vessel belonging to - - - this vessel 296 drahms by weight." Lukonin also read  $\bar{a}bzan$  (water vessel) and suggested that the inscription is a later addition to the bowl.

from the background. This was then crimped over the inlaid piece. The bowl itself was hammered into its present form. No traces of gilding are visible, and no mercury appeared in samples taken from different areas on the exterior surface and analyzed by thermal neutron activation. It is possible that corrosion and cleaning could have removed all remains of the original gilding.

Metropolitan Museum single medallion bowl (PL. 6). Another bowl in the Metropolitan Museum was found with the vessels in Cincinnati and Washington (Pls. 3, 4).8 The decoration is on the interior. The exterior is plain except for a line running directly beneath the rim and two small concentric circles (diam. 1.5 cm. and 2 cm.) at the center of the base. The interior has nineteen concentric circles of fluting running from the rim to the outer molding of the central medallion. Within this is a male bust, profile to the right, having a pointed beard, a crescentic mustache, and short curled hair bound by a long fillet. The fillet has a chased design, scarcely visible, at the front above the middle of the forehead. The garment is decorated with two beaded bands reaching from shoulder to waist and segments of circular patches on the shoulders. Punched circles on the necklace are probably beads. The earring has a small bead and an oval pendant. Under the bust is a leaf base. Only slight traces of the original gilding remain. The section of the fillet around the head is gilded, as are the necklace, chest straps, and decorative shoulder roundels. The leaf base and the molding that frames the roundel are also gilded.

Iran Bastan Museum bowl (PL. 7). The final vessel in this series is said to have been found with the bowls in Cincinnati, Washington, and New York (Pls. 3, 4, 6). The exterior of the bowl, now in the Iran Bastan Museum, is undecorated except for two small concentric circles (diam. 2.5 cm. and 2.8 cm.) at the center of the base. The interior of the vessel has approximately fourteen concentric circles of fluting from the rim to the outer edge of the central roundel. Chased lines divide the frame of this roundel. The bust of the female in the center is in profile to the right. Her right arm reaches across her body, and she holds a plant with a circular flower, bound with a ribbon, before her nose. The long spirally twisted locks fall in a mass

on one side behind the head and on the other side in three strands before the head. Shorter locks and curls fall before and behind the ear. A single row of curls rises above a beaded fillet, wound around the forehead. The remaining hair is gathered above the head in a ball of tight curls bound with a small fillet. An earring consists of a small bead and an oval pendant; the necklace of a row of beads. The dotted border of the mantle worn over the shoulders is just visible. A base consisting of a pair of half-leaves is placed beneath the bust. Many details of hair and dress are worn away. The female figure and plant base consist of at least three or possibly four pieces added separately to the shell of the bowl. No traces of gilding are visible.

The intention of the artists who made the images on these vessels appears to have been to represent a particular person. The person was identifiable through his or her dress and general appearance and a number of details that indicate the rank and status as well. There is little evidence that any serious attempt was made to portray the facial features of the subject accurately, and in this sense these are essentially type-portraits. <sup>10</sup>

The choice of the *imago clipeata* or medallion portrait as a form of decoration for a vessel is an indication of Western influence on Sasanian art. Roundels enclosing human busts are to be found not only on metal vessels but on many different types of objects in the West.<sup>11</sup> In the third and fourth centuries A.D.

<sup>8.</sup> The Metropolitan Museum of Art, acc. no. 55.57; diam. of bowl 23.4 cm.; diam. of central roundel 9.7 cm.; height 7.2 cm.; weight 597 gm. Dimand, "Silver Bowls," pp. 11-14, fig. 3; idem, A Handbook of Muhammadan Art, p. 351, fig. 214; Harper, "Medallion Bowls," pp. 66-67, fig. 6.

<sup>9.</sup> Iran Bastan Museum, Tehran, acc. no. 1385; diam. of bowl 18.2 cm. Dimand, "Silver Bowls," pp. 11-14, fig. 4; Harper, "Medallion Bowls," pp. 66-67, fig. 7.

<sup>10.</sup> The problematical use of the word "portrait" in this particular sense is discussed by A. Grabar in his study of certain representations in Graeco-Roman and Early Christian Art: Christian Iconography, p. 60.

<sup>11.</sup> Winkes, Clipeata Imago; Strong, Silver Plate, pp. 175 ff. Comments on the continued use of this type of decoration in Christian art appear in A. Grabar, Christian Iconography, p. 73. A number of fourth-century examples in pottery and bronze are illustrated in Salomonson, "Late-Roman Earthenware with Relief Decoration Found in Northern-Africa and Egypt," pp. 82–83.



FIG. 6 Glass bowl The Metropolitan Museum of Art, acc. no. 17.194.318, Gift of J. P. Morgan

some of the closest parallels in Roman art for the Sasanian medallion portraits, particularly of the type on the Sargveshi cup (Pl. 2) and the Metropolitan Museum bowl with five females (Pl. 5) are to be found in cut designs on hemispherical glass bowls (see Fig. 6). Many of the objects with this form of decoration are small in size and made of precious materials. As portable, minor works of art, they circulated throughout Europe and the eastern Mediterranean world. Their influence on the artistic production of the Near East is hardly surprising.

A search for antecedents in the pre-Sasanian Near East reveals that there is little evidence in that region for this type of design. An example, possibly of Eastern manufacture, is a silver bowl with vegetal ornament and extremely small medallions from Bartym in the Kama River region.<sup>13</sup> It has been dated to the last centuries B.C. or the first century A.D., and the suggestion has been made that it is a product of a Central Asian workshop. A number of other silver bowls from Central Asia, some as late as the fifth century A.D., illustrate the continued use of the medallion bust as a form of decoration, but in most instances the human figure is a small part of a larger design.<sup>14</sup>

An analysis of the details on the Sasanian vessels

with medallions enclosing human busts reveals that there are clear variations in style between the pieces. The studies of Lukonin have defined the general characteristics of human representations in Sasanian art in the third and fourth centuries, the type of dress and hair styles, and the plant base, a detail whose significance in Sasanian art still remains enigmatic.<sup>15</sup>

<sup>12.</sup> The Metropolitan Museum of Art, acc. no. 17.194.318, illustrated in Haberey, "Römische Grabkammer bei Rondorf, Ldkr. Köln," pp. 337, pl. 66, with another fourth-century piece excavated at Rondorf. A glass bottle with medallions enclosing protomes of a bear, a boar, and a bull, similar in design to the Sasanian silver plate from Nizhne Shakharovka (Fig. 8; note 28 below) appears in Alarcão, "Abraded and Engraved Late Roman Glass from Portugal," p. 30. These glasses having lightly abraded designs are associated with Egyptian and Syrian workshops. The gold-glass medallions with single busts or family groups are also a related type: Schüler, "A Note on Jewish Gold Glasses," pp. 48–61.

<sup>13.</sup> Fajans, "Recent Literature," p. 68, pl. 8, figs. 19, 20.
14. Dalton, Oxus, pl. 29, no. 201, pl. 34, no. 205;

<sup>14.</sup> Dalton, Oxus, pl. 29, no. 201, pl. 34, no. 205; Marshak and Krikis, "Chilekskie Chashi," pp. 67–76. A recently discovered Parthian stucco provides a close parallel for the early Sasanian form, although the figure is, typically, full-front Keall, "Oal'ch-i Yazdirird" p. 7, pl. III.

cally, full-front: Keall, "Qal'eh-i Yazdigird," p. 7, pl. IIIa. 15. Lukonin, *Iran*. Borisov and Lukonin, *Sas*. Gemmy, pp. 12–20. Jucker, *Das Bildnis im Blätterkelch*.

The sepulchral meaning of this feature in Western art is certainly absent in the Sasanian East, since the leaf base appears, as just noted, on gemstones as well as on silver vessels. The importance of the seven Sasanian vessels under consideration here is that they permit a more precise dating of changes in form and style, to decades within these centuries. The closest parallels for the details on the vessels are on early Sasanian plates, gems, and coins. The early Sasanian rock reliefs are less directly comparable, since the scale and the medium are so different. Moreover, it is still true that a complete photographic record of the reliefs does not exist, and a thorough analysis of specific details is, therefore, impossible.

The plate from Mtskheta (Pl. 1) is inscribed with the name of Papak the bitaxš, a title referring to a high dignitary. Henning and Lukonin have suggested that this Papak is the same person mentioned by Narseh in the inscription on the Paikuli monument in Iraq (293) as holding the office of bitaxs at the start of this king's reign in Iran. 16 Papak appears on the plate inside a circular frame with his head in true profile, his body full-front. The eye is almond-shaped, and the pupil rests just beneath the upper lid, slightly closer to the tear duct than to the outer corner of the eye. The vertical strands of the hair in the beard are clearly divided by a system of horizontal lines. Beneath the bust is a large plant base, curving up and enclosing the figure to the level of the shoulders. The broken outline of the leaves, their subtly articulated surface, and the curvilinear treatment of the base as a whole are details that give a naturalistic appearance to the plant. The design is finely worked on the surface of the plate and in extremely low relief.

There is a close similarity between this bust and that of *lw'gn wyst* (a Middle Persian name) on a third-century gem in the Hermitage Museum (Fig. 4). <sup>17</sup> On the seal the symmetrical curve of the lower eyelid gives the impression that the eye is full-front, and the long hairs of the beard are divided into horizontal bands. A finer example of the same type of human bust is carved on the renowned Devonshire gem (Fig. 7) with the inscription of Bahram, the Kermanshah. <sup>18</sup> The exquisite naturalism of the portrayal and the appearance of the eye and beard indicate that this is probably not Bahram IV (388–399), as has been suggested, <sup>19</sup> but possibly the future Bahram I who ruled Kerman in 270. <sup>20</sup> Another



FIG. 7 Impression of seal of Bahram Devonshire Collection, Chatsworth

Bahram is named in the inscription on a silver plate found at Krasnaya Polyana showing a mounted figure who wears a tall cap (not a crown), lassoing bears (Pl. 9). <sup>21</sup> This plate, which will be described in detail in Chapter III, has been attributed to both Bahram I and Bahram II in the period before they assumed the kingship of Iran. The date of the vessel in either case would be in the sixties or early seventies of the third century. <sup>22</sup> The eye of the male is still essentially full-front, and the beard is not only divided horizontally

<sup>16.</sup> Lukonin, Iran, p. 61. Henning, "A Bowl from Georgia," p. 354. Recently this identification has been questioned: Chaumont, "Etats vassaux dans l'empire des premiers sassanides," pp. 105–108. For a discussion of the office of bitaxš: Metzger, "A Greek and Aramaic Inscription Discovered at Armazi in Georgia," p. 21; Hinz, Altiranische Funde, pp. 149–153.

<sup>17.</sup> Herzfeld, *Paikuli* I, p. 77; II, pl. 140, no. 8. Lukonin, "Reznoĭ ametist," pp. 381 ff., fig. 1. Borisov and Lukonin, *Sas. Gemmy*, p. 15, fig. 1. The provenance of the gem is Armenia. Lukonin, *Iran*, p. 45.

<sup>18.</sup> Herzfeld, *Paikuli* I, p. 78, no. 4. Herzfeld compares the treatment of the hair and beard with that of *lw'gn wyst*, p. 77, no. 8. Harper, *Royal Hunter*, p. 142, no. 65.

<sup>19.</sup> See note 18 above; also Bivar, Sas. Seals, pp. 2, 15. 20. Lukonin states that the sign on the headdress of Bahram on the Devonshire gem (Fig. 7) is the same as that on the headdress of a Bahram appearing on the Krasnaya Polyana plate (Pl. 9; see note 21 below). He does not say that the person on the Devonshire gem is Bahram I: Lukonin and Dandamayev, review of Hinz, Altiranische Funde, p. 161, note 26. In fact the sign on the two headdresses is not the same, and in Iran, p. 58, Lukonin originally indicated that the signs were only similar, not identical. He places the Devonshire gem in his group of thirdand early fourth-century gems in "Reznoĭ ametist," p. 380. For the date of Bahram's rule over Kerman, see Lukonin, Kul'tura, p. 197.

<sup>21.</sup> Melikhov, "Serebrîanoe blîudo iz Krasnoĭ Polîany," pp. 74–79. Fajans, "Recent Literature," pp. 60–61, pl. 5, fig. 11. Lukonin, *Iran*, pp. 55–64, pl. 11: the figure is identified as the future Bahram II. Lukonin compares the plate to the Sargveshi cup (Pl. 2) and the Mtskheta plate (Pl. 1). For further discussion, see Chapter III, pp. 50 ff.

<sup>22.</sup> Lukonin's latest theory is that the hunter is Bahram, king of Kerman (the future Bahram I): Lukonin and

by lines, but also within these horizontal sections by broader crescents placed at intervals. A similar division occurs in the twisted locks of hair.

Related to these works in the appearance of the profile head with full-front eye is a figure on another silver plate from Shemakha in Soviet Azerbaijan (Pl. 8), <sup>23</sup> to be described in the following chapter. The beard is differently schematized, but otherwise the execution of the details suggests a date close to that of the Krasnaya Polyana plate (Pl. 9) and not much later than the vessel found at Mtskheta (Pl. 1).

The most likely reading of the inscription on the Mtskheta plate is that given by Lukonin: "[The property of] Papak, bitaxš, son of Ardeshir, son . . . of Ardeshir, bitaxš. Drachms of silver—253 drachms."24 Henning, in a publication that appeared almost simultaneously with Lukonin's, was hindered in his study by poor photographs. He states that: "The whole name may, therefore, have been: 'Papak the bitaxš, the son of Artaxsa $\theta$ r the bitaxš, the son of Shapur the bitaxš'."25 The importance of these two genealogical tables is that the date around 290 suggested by Henning for the Mtskheta plate (on the basis of the correspondence between the Papak named on the silver bowl and the Papak in the Paikuli inscription) allowed for almost two decades (266-283) when Papak's father was bitax's, following his grandfather, whom Henning believed to be Shapur, also bitaxš. If Papak's father never was bitaxš, as in Lukonin's reading, then a generation disappears from Henning's table. Papak could have directly succeeded Shapur, bitaxš under Shapur I of Iran (Shapur-Ka'ba of Zoroaster inscription). The grandfather of Papak would not be this Shapur but in Lukonin's reading, Ardashir, bitaxš under Ardashir I (Shapur-Ka'ba of Zoroaster inscription). If the correspondence between the persons named as bitaxs on the silver plate and those on the Sasanian rock-cut inscriptions is accepted, the plate could still be as much as twenty years older than the date estimated by Henning. It should, however, be remembered that there is no proof that Papak, and Ardashir who held the office of bitaxs of Iberia under the first Sasanian kings, are identical to the Papak and Ardashir named as bitaxš in the inscription on the Mtskheta bowl. This title and these names were in use outside Iran in the third century A.D. Members of the great families

of Iberia who were interred in the necropolis at Mtskheta could have had both the title bitaxs and the name Ardashir or Papak.<sup>26</sup> The grave in which the vessel was found must date from at least as late as the second half of the third century, since it contained an aureus of Valerian minted in 253–260. At present, this coin supplies the only certain evidence for the date of the grave and its contents. The appearance of the design on the plate, and its comparison with the next piece, suggests that the Mtskheta vessel is closer in date to the coin of Valerian than to Henning's estimate of 290.

The cup from Sargveshi (Pl. 2) was probably made during the reign of Bahram II (276–293), whose image appears on it twice. The tall curved cap worn by the figure holding a flower on the cup has been compared by Lukonin to one of the headdresses of Bahram's queen Shapurdukhtak, whose name appears after the king's on a Sasanian coin in the collection of the Hermitage Museum. Lukonin places this vessel in the same period as the coin issue on which the queen has this specific headgear, namely between 276 and 283.<sup>27</sup> On the cup all of the figures are rather worn, and the details of the faces are not visible. The most significant difference between these representations and that of Papak is the nature of the plant base. On the Sargveshi cup it is considerably reduced in

Dandamayev, review of Hinz, Altiranische Funde, p. 161, note 26. In the opinion of Hinz the person represented is Papak, the bitaxš: Altiranische Funde, p. 217. It is not true, however, that the sign on the cap is the same as that on the cap of Papak on the Mtskheta plate (Pl. 1).

<sup>23.</sup> See Chapter III, pp. 48 ff., note 43.

<sup>24.</sup> See note 16 above. This reading is cited by Brunner, "Middle Persian Inscriptions on Sasanian Silverware," p. 110. He reads the weight, however, as "53 s[ter], 1 drahm." Another facsimile appears in Frye, "Sasanian Numbers and Silver Weights," p. 3.

<sup>25.</sup> See note 16 above.

<sup>26.</sup> See Chaumont in note 16 above. For the changing status of the Caucasian provinces within the Sasanian state during the second half of the third century, see Gignoux, "La Liste des provinces de l'Ērān," pp. 90–91. In Shapur's inscription on the Ka'ba, Iberia is listed as part of the Sasanian state, while in the inscriptions of Kartir, the Caucasian provinces are part of Aneran.

<sup>27.</sup> Lukonin, Kul'tura, pp. 112, 174, subtype IIb. In Kul'tura, pp. 176, 177, Lukonin discusses his dating of the reliefs and coins of Bahram II and their relationship to the vessel from Sargveshi (Pl. 2).

size and lacks the naturalism of the plant beneath Papak. On either side of the upright central leaf are two leaves obliquely slanting to the side, with the tips of those on the outside curling over. By comparison with the Mtskheta plate (Pl. 1) the plant is much abbreviated in form and has a rigid quality. This is less true of the vegetal ornament that spreads between the medallions on the body of the cup. A branch springing from the base of the vessel divides into two curvilinear vines. On one side the plant curls around and ends in a flower, while on the other it spreads out in an undulating half-leaf. The tip and the base of this leaf turn into small spirals. In this detail the design is exactly similar to that on a silver plate from Nizhne Shakharovka (Fig. 8) decorated with roundels enclosing animal protomes.<sup>28</sup> The date suggested for this vessel is close to that of the Sargveshi cup, the second half of the third century. The animals appearing on the headgear of the royal family on the Sargveshi cup, as well as on the Nizhne Shakharovka plate, may have symbolized various Zoroastrian divinities.<sup>29</sup> The circular frames of the medallions on the Nizhne Shakharovka plate and the Sargveshi cup differ in appearance. The Nizhne Shakharovka plate is considerably worn, and only dots remain at the outer rim of the circle. On the cup from Sargveshi there are concave lines dividing the frame into segments, and within these segments at the outer edge are deep circular indentations. On both these vessels the frames may once have had this petal-like appearance.

It is clear that there is a difference in the height of the relief used for the busts on the Mtskheta plate and the Sargveshi cup (Pls. 1, 2). The bust of Papak is essentially a line drawing, while the figures on the Sargveshi cup are clearly worked into relief. On the Nizhne Shakharovka plate (Fig. 8), and on the other Sasanian medallion bowls in this series, the relief is even greater and is achieved through the addition of separate pieces to the background shell. These form the highest parts of the design.

The five remaining medallion bowls can be divided into two further groups. The first, chronologically, includes three bowls executed in somewhat different styles. One is the bowl in Cincinnati (Pl. 3); another, allegedly from the same find, is in the Freer Gallery, Washington (Pl. 4); and a third piece, with five representations of females, is in the Metropolitan

Museum (Pl. 5). These vessels share a number of features. The plant bases are more linear and less naturalistic in form than those on the Sargveshi cup (Pl. 2). The busts are clearly modeled, but the modeling is exaggerated and unnatural. This effect is particularly noticeable on the chests of the males, where the surface is divided into four distinct lobes in a fashion similar to that found on early Sasanian gems. 30 The heads of the Freer male (Pl. 4) and the Metropolitan Museum females (Pl. 5) are set out from the background along the line of the profile, giving the impression that the head is partly in the round, and on these two plates the eyes are correctly shown in true profile. A less skillful attempt at this view on the Cincinnati bowl (Pl. 3) is made by placing depressions at the corners of the eye. The busts on the Cincinnati bowl and the Metropolitan Museum bowl fill the frames in spite of the fact that the right arm is not represented. On the vessel in the Freer Gallery, the head of the male does not reach to the top of the inner rim of the frame, and in this sense the artist has been less successful in utilizing the available space.

The surface of the drapery on the five females and on the male bust in the Freer Gallery is rather worn. The triple-beaded decoration on the mantles of the females consists of dots, a simplification of the beads on Papak's dress, which are in the form of punched circles. The soft ripples of the drapery on the Freer example appear not unlike those on the drapery of the Krasnaya Polyana hunter (Pl. 9) and the figures

<sup>28.</sup> State Hermitage Museum, acc. no. S74; diam. 22.8 cm. Smirnov, Serebro, pl. 14, no. 36. Marshak compares this vessel with the Krasnaya Polyana plate (Pl. 9), and with the Sargveshi cup (Pl. 2). On the basis of style and detail he dates the Nizhne Shakharovka plate (Fig. 8) to the middle or end of the third century: Marshak, Sog. Serebro, p. 79, note 4; p. 151 (English summary); Lukonin, Kul'tura, p. 95.

<sup>29.</sup> Lukonin, "Kartir i Mani," pp. 78, 79; idem, Kul'tura, pp. 95–96. This interpretation is not universally accepted: Duchesne-Guillemin, "Art et religion sous les sassanides," pp. 381–383 ff. See note 12 above for animal protomes within medallions, as on the Nizhne Shakharovka plate, on fourth-century Roman glass.

<sup>30.</sup> Borisov and Lukonin, Sas. Gemmy, p. 15.

<sup>31.</sup> Since there is a tradition in Near Eastern art for the dotting of fabric surfaces, it may be incorrect to assume that the dots on the garment in this instance are a simplification of punched circles: Porada, "Nomads and Luristan Bronzes," p. 18.

on the Sargveshi cup (Pl. 2). A quite different drapery style is depicted on the Cincinnati bowl (Pl. 3). Deeply tooled lines come from the shoulders in concentric curves toward the central depression on the chest. Down this depression there runs a row of small crescents, the ends of which join the drapery lines on the sides of the chest. The leaves of the base beneath this bust are treated in a similar fashion and are quite different from the leaves beneath the female images in the Metropolitan Museum (Pl. 5) and the male figure in the Freer Gallery (Pl. 4). All have the spine marked by parallel lines, but on the Cincinnati bowl other lines cover the leaf in a decorative and unnatural design. On the vessel in the Freer Gallery there are slight indentations in the outlines of the leaves, but the clear divisions of the leaf, visible on the Sargveshi cup, are not indicated on either the Metropolitan or the Freer bowl. A comparison between the plant motifs separating the roundels on the Sargveshi cup and those on the Metropolitan Museum bowl emphasizes the development from a curvilinear, modeled form to a more linear and rigid treatment of the floral design. The petals of the flowers on the Metropolitan Museum bowl consist of a number of lines and dots, and the body of the flower is decorated with a mesh of crossed diagonal lines.<sup>32</sup> The leaves curve but do not curl under at the tip and base. The decorative spirals on the leaves of the Sargveshi and Nizhne Shakharovka (Fig. 8) plants are nowhere to be seen on the Metropolitan Museum bowl. Further evidence of this trend toward a schematic linearity is the transformation of the petaled frames of the roundels on the Sargveshi cup into a design of simple lines on the Metropolitan Museum bowl.

The hair of all figures in this third group is formed by a series of fine lines broken at intervals by open spaces and combined with small tight curls.<sup>33</sup> The latter can be seen clearly only on the Cincinnati bowl (Pl. 3), where curving lines radiate from a central point. In general, the hair patterns are tighter and more schematic than those on the Sargveshi cup (Pl. 2).

An extremely close comparison can be made between the Freer portrait (Pl. 4) and the figure of a hunter once in the collection of the Berlin Museum (Pl. 12).<sup>34</sup> The alleged provenance of this piece, originally part of a plate, is Dizful, Iran. The fragment is now lost, but the view from the reverse shows that

the head is almost completely in the round. Sarre claimed that a diadem with three lily-like plants surrounds the forehead and that the person represented might, therefore, be the Sasanian king Narseh (293–303). In photographs groups of triple curving lines rest on the diadem, and these might indeed be plants rather than curls of hair. On a gem in the British Museum, however, inscribed Narseh-shah (Fig. 5) and dated to the third century, the forehead curls are certainly hair. The identity of the British Museum Narseh is uncertain, although he is certainly not the king of kings. Similarly the Berlin hunter is probably not a Sasanian ruler.

There are fewer representations of females in early Sasanian art among which to search for parallels for the females on the Metropolitan Museum bowl (Pl. 5). The scanty evidence that has survived suggests that some variety existed in the form of female hair styles in the third and fourth centuries. One arrangement is that seen on the reliefs at Naqsh-i

<sup>32.</sup> An acanthus bush in flower is illustrated on a portion of a vessel from Traprain. This silver treasure, buried at the time of Honorius (395-423), was found at a site near Edinburgh. A North African or Near Eastern provenance has been claimed for the vessel described here. The flower is covered with punched circles, which give it a decorative appearance rather similar to the flower on the Metropolitan Museum bowl (Pl. 5): Curle, The Treasure of Traprain, p. 26, pl. 11. The plant forms on a silver ewer from Apahida, now in the Cluj Museum of History in Romania, are also related, both in the decorative dotting of the central flower and in the presence of a second flower springing up from the first. The curling tendrils of the acanthus plant end in circular, four-petaled rosettes, somewhat less stylized than those in the same position on the Metropolitan Museum bowl (Pl. 5). The date proposed for the pair of Apahida ewers is ca. 300: Fettich, "La Trouvaille de la tombe princière hunnique à Szeged-Nagyszéksós," pp. 145-147, pl. 25. I am grateful to Dr. C. Daicoviciu, Director of the museum at Cluj, for photographs and assistance.

<sup>33.</sup> Negro Ponzi, "Some Sasanian Moulds," pp. 74-75, where there is a description of a mold with a male head having much the same arrangement of the hair as the figure on the Freer bowl (Pl. 4).

<sup>34.</sup> Sarre and Herzfeld, *Iranische Felsreliefs*, p. 219; Sarre, "Ein Silberfigürchen des Sassanidenkönigs Narses im Kaiser-Friedrich-Museum zu Berlin," pp. 73–78; idem, *Die Kunst des alten Persien*, fig. 14; Erdmann, "Die sasanidischen Jagdschalen," pp. 209, 210, fig. 8. The comparison between the Berlin fragment (Pl. 12) and the male on the Freer bowl (Pl. 4) was made by Dimand in "Silver Bowls," p. 13.

<sup>35.</sup> Bivar, Sas. Seals, pl. 1, AA3 (acc. no. 120210).



FIG. 8 Silver plate from Nizhne Shakharovka State Hermitage Museum, acc. no. S74



FIG. 9 Relief at Barm-i Dilak Photo: The Metropolitan Museum of Art

Radjab, Tang-i Qandil, and Barm-i Dilak (Fig. 9).36 Some of the hair is short, reaching only to the nape of the neck, while a separate bunch of longer curls is drawn up on top of the head. The hair-dos of royal and divine females in most instances consist of long twisted locks reaching down to the shoulders with shorter curls falling before the ear. When the top of the head is uncovered, the hair is visible drawn up above the head. A seal of Denak in the Hermitage Museum (Fig. 10)37 provides a good illustration of this form of hair arrangement and shares with the representations of the Metropolitan Museum females a horizontal division of the waves that cover the top of the head. The long twisted locks on the Denak gem all fall behind the head, and there is no clear division into separate bunches. A closer parallel for the Metropolitan Museum bowl in this respect is to be found on the relief of Narseh at Nagsh-i Rustam (Fig. 11), where the goddess Anahita has her hair arranged in almost exactly the same fashion.<sup>38</sup>

On the basis of these different elements, a somewhat later dating is indicated for this third stage than for the second. In all probability, the vessels were made sometime in the last decade of the third century or the first decade of the fourth, quite possibly during the period in which Narseh ruled in Iran.

The final group of two vessels includes a bowl with a male bust in the Metropolitan Museum (Pl. 6) and one with a female bust in the Iran Bastan Museum in Tehran (Pl. 7). Although the style of these two representations is quite different, they share a number of features. One of these is that the image has

<sup>36.</sup> Lukonin identifies the female on the relief of Shapur I at Naqsh-i Radjab as the queen: *Kul'tura*, p. 189. For Tang-i Qandil, see: Hinz, "Das sasanidische Felsrelief von Tang-e Qandīl," pp. 201-212; Frye, "The Sasanian Bas-relief at Tang-i Qandil," pp. 188-190; Vanden Berghe, "De iconografische Betekenis van het sassanidisch Rotsrelief van Sarāb-i Qandīl (Irān)," pp. 3-46. There is some disagreement about the identity of the female on the Barm-i Dilak relief: Erdmann, "Die sasanidischen Felsreliefs von Barm i Dilak," pp. 56-57. Erdmann states that the female is the queen and gives references to earlier publications. E. F. Schmidt suggests that the male is perhaps a crown prince and the lady a foreign princess: *Persepolis* III, p. 133.

<sup>37.</sup> Herzfeld states that Denak is the mother of Peroz and Hormizd III and regent in 457 in *Paikuli* I, p. 75. Lukonin claims, as is undoubtedly correct, that this is Denak, wife of Ardashir I, in "Reznoĭ ametist," pp. 383 ff. and in *Iran*, pp. 46–48. Bivar objects to the late dating given by Herzfeld and notes that the name "is attested for the Sasanian royal family as early as the time of Shapur I": *Sas. Seals.* p. 15.

<sup>38.</sup> E. F. Schmidt, *Persepolis* III, pl. 90. Sarre and Herzfeld, *Iranische Felsreliefs*, p. 84, pl. 9.

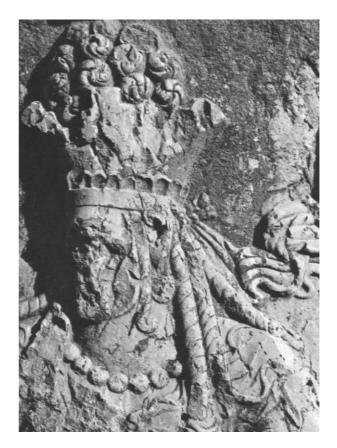
FIG. 10 Impression of seal of Denak State Hermitage Museum, acc. no. Gl 979



FIG. 11 Relief of Narseh, detail of Anahita, Naqsh-i Rustam Photo: Herzfeld Archives, Freer Gallery of Art

shrunk in proportion to the circular frame. The figure has contracted not only vertically but also horizontally. The right arm is included in the representation of the female, but she still does not fill the roundel. The plant base has also diminished in size, and an open space is left between the leaves and the inside edge of the molding. The form of the leaves differs on the two vessels, but in both cases they are only a residual element compared to the luxuriant leaves under Papak on the Mtskheta plate (Pl. 1).

Of the two representations, that of the female is the less well preserved, and the treatment of her face, drapery, and the finer details of her hair are now almost invisible. She apparently wears a mantle with a dotted border not unlike those worn by the females on the Metropolitan Museum bowl (Pl. 5). Around her head is a short diadem, and her hair is arranged in the standard royal or divine fashion described above. The chief differences are that the forehead curls are reduced to a single row, and the long twisted locks are divided into two, rather than four groups, one hanging before, the other behind the neck. A curl is visible in relief before the ear. Another may have been chased on the surface of the cheek. The lady holds a flower in her right hand, toward her nose, in a gesture related but not identical to that made by the figure identified as Bahram's wife on the Sargveshi cup (Pl. 2). The form of the flower is more stylized on the Tehran bowl than on the earlier cup, but the type of plant is the same. It differs from the most



common form, the lotus, but there are illustrations of many varieties of flowers in Sasanian art, held by both male and female figures.<sup>39</sup> The significance of this gesture is uncertain, and there may be a difference in meaning between the two forms on the Sargveshi cup and the Tehran bowl.

The condition of the male bust on the Metropolitan Museum bowl (Pl. 6) is excellent, and the facial features, hair style, and drapery can be examined in detail. Because of the markedly linear rendering of the drapery, the obvious comparison to make is between this male and the one on the Cincinnati bowl (Pl. 3). In most respects the latter is more naturalistic than the former. The only exception is in the treat-

<sup>39.</sup> The bunch of flowers presented to the female on the Barm-i Dilak relief (note 36 above) is unique in form, as is the oval plant at Tang-i Qandil (note 36 above). At Darab, in southern Iran, the male figures in the front row hold lotus flowers, and this is the form of flower most commonly held by male and female figures on the Sasanian gems: Hinz, *Altiranische Funde*, pl. 78. A rosette with four heart-shaped petals or one such petal is often represented in the hands of female figures on a specific group of Sasanian vessels: Harper, "Female Representations," p. 512. A round flower appears on a vessel in the Bibliothèque Nationale that may be post-Sasanian: Smirnov, *Serebro*, pl. 17, no. 40.

ment of the eye, which, on the Metropolitan Museum bowl, is accurately shown in profile. Otherwise the variegated and careful execution of the hair, beard, and mustache of the Cincinnati portrait are in contrast to the deliberately simplified and schematic stylization of these areas on the representation in the Metropolitan Museum. On the latter a series of small crescents form the waves of the beard and of the hair on the crown of the head, but the horizontal and vertical divisions of these areas apparent on the Cincinnati bowl are gone. A related development occurs in the gems, as a comparison between the Devonshire amethyst (Fig. 7) or the seal of lw'gn wyst (Fig. 4) and the seal of Papak, son of Khosrov-Hormizd, shahrab, clearly illustrates. 40 The many-armed hair whorls on the head of the figure in Cincinnati are depicted in a simpler fashion on the example in the Metropolitan Museum. The lines covering the drapery of the image on the Cincinnati bowl have a decorative and unrealistic appearance but reflect the curving surface of the human body. On the Metropolitan Museum bowl the lines are almost meaningless and are drawn with little relation to the body beneath. The pattern is not unlike that on fourth-century gems, where a system of horizontal and obliquely curving lines is used to depict drapery folds. 41 The crescents running down the center of the chest of the figure on the bowl no longer join the lines of drapery coming vertically from the neck, and these in turn are unrelated to those that come from the shoulders in concentric curves. The closest parallel for this treatment of the garment is on a plate with a king killing deer in the British Museum (Pl. 13). 42 This person has been identified as both Shapur I (241-272) and Shapur II (309-379).43 Suggestions concerning the identification of the king are made in the following chapter. Here it is sufficient to note that stylistically the vessel appears to have been made during the reign of Shapur II. The plate in the British Museum is superior in workmanship to the vessel in the Metropolitan Museum, but the unrealistic, linear form of the drapery, with crescents arranged in a "stitched" pattern on the chest unconnected with the adjacent vertical folds, is exactly the same. There is also a close resemblance in the way the profile eye, the eyebrow, mustache, and mouth are represented in both works.

Another plate belonging to this group is in the Hermitage Museum (Pl. 23).<sup>44</sup> On it the figure of a

king wearing a horned crown appears. Because of this headdress the plate has been variously dated by those who argue in favor of one or another chronology for the coins of the Kushano-Sasanians and later Kidarites (rulers in the region of present-day Afghanistan) on which a similar horned headdress is worn by royal figures. 45 The striated globe above the head of the hunter on the silver plate is an additional detail linking this work to the images on these coins. It is a perfectly circular form, the surface of which has vertical lines. Viewed apart from the controversy surrounding the dating of Kushan coins, and instead in the light of the development traced above for the medallion bowls, the figure on the Hermitage plate is closer to the stage reached on the Cincinnati bowl (Pl. 3) than to that on the Metropolitan Museum bowl with a male bust (Pl. 6) or the British Museum's hunting plate (Pl. 13). This is apparent in the rather fine and careful treatment of the hair curls and mustache, the almost full-front view of the eye, and the form of the folds in the drapery-irregular crescentic lines, the ends of which turn out toward the folds of the drapery on the chest. The chest folds ripple vertically over the body more schematically than on the Cincinnati bowl but in a similar fashion. In contrast, the figures on the vessels in the Metropolitan Museum and the British Museum (Pls. 6, 13) wear drapery on which a series of crescents runs ver-

<sup>40.</sup> Borisov and Lukonin, Sas. Gemmy, pp. 48–49. Lukonin, Persia II, fig. 60; Lukonin dates the seal to the fourth century. The reading given was suggested in a personal communication from V. G. Lukonin.

<sup>41.</sup> Borisov and Lukonin, Sas. Gemmy, p. 18.

<sup>42.</sup> Dalton, Oxus, pl. 36, no. 206. See Chapter III, pp. 57 ff.

<sup>43.</sup> Lukonin, "Kush.-Sas. monety," p. 22. Because of the chest halter and the form of the ball above the head, the king is identified as Shapur II. Also Marshak and Krikis, "Chilekskie Chashi." p. 63.

<sup>&</sup>quot;Chilekskie Chashi," p. 63.
44. Orbeli and Trever, Sas. Metall, pl. 4. Smirnov, Serebro, pl. 25, no. 53. See Chapter III, pp. 72 ff.

<sup>45.</sup> This plate has been variously attributed to Bahram I and II, Shapur II and III. A list of these attributions and full bibliography appears in Negro Ponzi, "Some Sasanian Moulds," p. 77. A recent suggestion that this is Bahram, son of Bahram IV, who begins his reign as Kushanshah in 388, is in Marshak and Krikis, "Chilekskie Chashi," p. 63. Lukonin notes the similarity between this plate and that in the British Museum showing Shapur II stabbing a stag (Pl. 13) in "Kush.-Sas. monety," p. 22. On pp. 30–31 of the same article Lukonin discusses the horned crown on the coins and gives bibliography.

tically down the center of the chest, and on both sides the folds are depicted as straight or slightly curving parallel lines. The stylization of the drapery has become rigidly geometric. The provenance of the Hermitage plate is the Perm, but the original place of manufacture is unknown. It is not impossible that this is a provincial work, following the Sasanian style of the Cincinnati bowl but actually made in the Kushan East. <sup>46</sup> The formal and stylistic development of such Eastern works could lag behind the artistic production in Iran. In comparison with Iranian works, however, the Hermitage plate should fall at the end of the third or beginning of the fourth century A.D.

It is difficult to suggest a precise date for the stage reached on the Metropolitan Museum bowl with a male bust (Pl. 6) and the vessel in Tehran with a female (Pl. 7). The sequence outlined above and a detailed analysis of the design in the following chapter indicate that the British Museum plate can be assigned with confidence to the first half of the fourth century. This vessel is closely comparable to the Metropolitan Museum bowl (Pl. 6). It is probable, therefore, that the two latest medallion bowls belong to the same period as the British Museum plate.

Summary. The series of vessels with medallion portraits begins with the Mtskheta plate (Pl. 1), for which a date between 260 and 270 is probable. The Sargveshi cup (Pl. 2), illustrating a somewhat later stage, falls, in all likelihood, between 276 and 293, the period during which Bahram II was king of Iran, and it may well belong to the first of these two decades rather than the second. The third stage, including three vessels (Pls. 3, 4, 5), has its closest parallels in works of art from the time of Narseh (293–302). As much as twenty years may fall between this stage and the final group including two pieces (Pls. 6, 7).

The objects in the last two chronological groups indicate that the medallion bowls were not products of a single stylistic school. With some degree of confidence it can be suggested that the Cincinnati bowl (Pl. 3) and the Metropolitan Museum bowl with a single male (Pl. 6) are products of one tradition. Other works belonging to or influenced by the same tradition are the Hermitage plate showing a king wearing a horned headdress (Pl. 23) and the plate in

the British Museum showing Shapur hunting (Pl. 13).47 A different and more naturalistic style is illustrated by the designs on the Sargveshi cup (Pl. 2), the Freer bowl (Pl. 4), the Metropolitan Museum bowl with five females (Pl. 5), and such other pieces as the Krasnaya Polyana plate (Pl. 9) and the fragment once in Berlin (Pl. 12). 48 These different styles are probably to be explained by the existence of a number of workshops. The elemental analysis of the silver indicates that with the exception of the Metropolitan Museum bowl with a single male bust (Pl. 6) and the Hermitage plate showing a hunter wearing a ram's-horn headdress (Pl. 23), all the works in this early period (Pls. 1-5, 9, 13) are made from metal that comes from a specific area. Within this area, there was probably more than one ore source (see Part 2 of this volume).

It is apparent from the descriptions given above that the rank of only two persons among those represented within the medallions on the vessels is known: Papak, the bitaxš, and Bahram II, king. The other figures on the Sargveshi cup (Pl. 2) are not so certainly recognizable. The one wearing a horsehead cap is thought to be a son of Bahram who appears on the coins with this same headgear. The other, holding a flower, is said to Shapurdukhtak, Bahram's queen. 49

<sup>46.</sup> Maenchen-Helfen, "Crenelated Mane," p. 112. He attributes the plate to Bahram I or II. See Chapter V, pp. 133 ff.

<sup>47.</sup> Marshak and Krikis, "Chilekskie Chashi," pp. 62, 66. The authors place these vessels and many others, including the Krasnaya Polyana plate (Pl. 9), in a single group. This theory is discussed below in Chapter III, pp. 90 ff. In Part 2 some of the vessels in Marshak's group are arranged according to the chemical analysis of the metal, and it is apparent that the metal used for many of the pieces comes from different sources.

<sup>48.</sup> For a discussion of the early silver vessels that appear, from the elemental analyses, to have been made from metal coming from a single source, see Part 2.

<sup>49.</sup> Chubinashvili, "Der Fund von Sargweschi," pp. 83–86. It is noted that the son of Bahram II on the coins wears a horsehead cap and that one figure on the cup might be female. Lukonin states in *Kul'tura*, p. 112, that the persons are Bahram II, his wife, who wears the same tall cap as on the coins, and the heir apparent wearing the cap decorated with a horse protome. Erdmann, "Die sasanidischen Felsreliefs von Barm-i Dilak," p. 57, describes the queen on the Sargveshi cup as the figure holding the corona. This is the person with the cap decorated with a protome of a horse.

Her tall curved cap is related to that worn by this queen, not only on a coin of Bahram II but also on the relief of Bahram II at Sar Meshed.<sup>50</sup> At Naqsh-i Rustam, on another relief carved during the reign of this king, a person who wears the same form of headgear, and may be the queen, stands immediately to the left of the king.<sup>51</sup> There is, however, no certain evidence in the treatment of the hair or dress that the figure on the Naqsh-i Rustam relief or on the Sargveshi cup is a female, although this is probable.<sup>52</sup>

The representation of the king is set apart from the others and given special emphasis through the projection of the covered ball of hair into the frame of the roundel. The gesture made by Bahram is also an important part of the image, and it is unlikely that it is directed toward the figures in the opposing medallions. In Roman and Early Christian art the hand raised in this fashion is "indicative both of speech and of the enabling power which makes its exercise possible." Although in Sasanian art various persons make the gesture toward the king, the monarch uses it only in the divine presence or before cult objects such as the fire altar. 54

Some of the coins of Bahram II show the king beside his wife, facing the heir apparent who holds the ribboned ring symbolic of his investiture. A similar family group appears to be represented on the Sargveshi cup (Pl. 2). However, the ring held by the son on the Sargveshi cup has no ribbons attached to it, and it may therefore be intended as a symbol of his authority over some specific part of the Sasanian kingdom rather than as an indication of his role as heir apparent.

The females on the Metropolitan Museum bowl (Pl. 5) are almost identical and therefore probably one and the same person. The combination of the long fillet and the "royal" ball of hair drawn up above the head suggests that this lady may be a queen in the royal family. In the central and most important roundel, on the base of the bowl, the hair on top of the head of the female cuts into the surrounding frame. As was noted above in the representation of Bahram II on the Sargveshi cup (Pl. 2), this is probably an indication of the royal status or particular importance of the person shown. The fact that in the other medallions on the Metropolitan Museum bowl the hair ball does not extend into the frame does not seem sufficient reason to suggest that these are actually dif-

ferent persons. By depicting the same personage in five medallions rather than one, the artist underscored her importance and high rank. Whether it is also significant that the images are on the outside of the vessel as are those of the royal family on the Sargveshi cup, in contrast to the other examples on which the busts are on the inside, is impossible to tell. The inscription does not give any answer to the question of whom this might be, Narseh's queen, or the queen mother and regent of Shapur II, or perhaps a wife of one of the royal sons who never became the king of kings. <sup>55</sup>

The figures on the other two bowls in the third group are certainly not members of the highest royalty. Around the head of the male on the Cincinnati

<sup>50.</sup> The female figure on the Sar Meshed relief is identified by Trümpelmann as Anahita in "Šāpūr mit der Adlerkopfkappe," p. 175. See Trümpelmann, "Das sasanidische Felsrelief von Sar Mašhad," pp. 3–12. I do not find this identification convincing, nor can I accept the other identifications of Anahita on the relief of Ardashir I at Naqsh-i Radjab and on the obverse of the coins of Bahram II made by Trümpelmann in "Šāpūr mit der Adlerkopfkappe," pp. 173 ff.

<sup>51.</sup> In Persepolis III, p. 129, E. F. Schmidt gives Sarre's identification of the person directly to the left of the king as the future Bahram III but disagrees with this opinion and suggests that this is the wife of Bahram II. In Kul'tura, p. 194, Lukonin identifies the queen as the figure wearing a horsehead cap, but this must be a misprint in the text. Hinz places the queen Shapurdukhtak directly to the left of the king: Altiranische Funde, p. 194. Göbl uses the Naqsh-i Rustam relief to support his theory that there are four different princes on the coins of Bahram II. Three of these, he claims, appear on the left side of the relief at Naqsh-i Rustam, Sas. Num., p. 44. Herrmann, "The Sculptures of Bahrām II," pp. 165–171.

<sup>52.</sup> The preceding footnote serves as an indication of the difficulties involved in positively identifying female figures when they are not represented full-length in early Sasanian art. Generally a lock of hair is shown before as well as behind the neck of a female figure, but since this is not always the case, the absence of a lock in front of the neck is not proof that the figure is male.

<sup>53.</sup> Brilliant, Gesture and Rank, p. 207. Examples of what may be images of the king alone making this gesture before an altar occur on the rock reliefs at Barm-i Dilak and at Guyum: Vanden Berghe, L'Archéologie, pls. 73, 83. See also Frye, "Gestures of Deference to Royalty in Ancient Iran," pp. 102–107.

<sup>54.</sup> Hinz, "Das sasanidische Felsrelief von Tang-e Qandil," p. 210.

<sup>55.</sup> Chaumont, "A propos de quelques personnages feminins figurant dans l'inscription trilingue de Šāhpuhr Ier à la 'Ka'ba de Zoroastre,'" pp. 194–199.

bowl (Pl. 3) there is no fillet, and the Freer male (Pl. 4) wears only a short one, the ends of which flutter behind his head. The suggestion has been made that the latter is a member of one of the old noble families of Iran (wazurgan), and this could be true of the former as well, although the absence of a fillet may be significant. <sup>56</sup>

The male and female in New York and Tehran (Pls. 6, 7) are both represented in a fashion that suggests that they are higher in rank than the figures on the Cincinnati and Freer bowls (Pls. 3, 4). The long fillet around the head of the Metropolitan Museum male and the beaded chest straps distinguish him from these other persons. In the middle or second half of the fourth century the halter, consisting of beaded straps placed over the shoulders and around the chest, became part of the royal dress. It provides a useful indication of the date of representations of Sasanian rulers, who were shown before this period with a pin holding the garment together on the chest.<sup>57</sup> The personage on the Metropolitan Museum bowl is certainly not the king of kings of Iran, and it is therefore evident that the jeweled bands were not yet restricted in use to the Sasanian monarch. They are, however, probably to be interpreted as an indication of high rank much in the same sense as the long fillet bound around this figure's head. The ball of hair above the head of the Tehran female is a "royal" sign, but this female wears only a short fillet, and it is unlikely that her status is equal to that of the female on the Metropolitan Museum bowl (Pl. 5). Since there is nothing to indicate that these are members of the

immediate royal family, they may belong to the class of waspuhran, personages having a close relationship to the royal clan.<sup>58</sup>

In the period immediately following, representations of human figures other than the king ceased to appear on silver vessels, and at the same time certain details of dress and hair arrangement were restricted to the monarch, setting him apart from persons of lesser rank. The absence of all other human images on the silver seems to indicate that the production became, in this period, an instrument of royal propaganda. As such, it was reserved for the king alone.

Four of the bowls in this group (Pls. 3, 4, 6, 7) were, allegedly, found stacked together in a hoard. Their condition supports this record of the original find, as the centers of the bowls are generally the least corroded areas, and a variation in the corroded surface of the metal on the exterior of the Metropolitan Museum male medallion bowl (Pl. 6) reflects the placement of this piece within another circular vessel. Were these silver bowls, perhaps part of a family's inheritance, put away for safekeeping at the time of the introduction of new royal restrictions on the production and use of silver plates with human images?

These speculations are difficult to prove. More certain is the fact that the vessels illustrate a rather precisely datable development in the art of Iran in the third and early fourth century. In this sense they have an importance that belies their rather simple appearance and considerable value as evidence for the art and culture of early Sasanian Iran.

<sup>56.</sup> Frye, "A Parthian Silver Bowl," p. 144. Lukonin in "Parthian and Sassanid Administration" cites the passages in Faustus of Byzance, Book III, chapter 11; Book IV, chapter 2, describing persons of this rank at the court of the Armenian Arsacids as having the right to a throne, a cushion, and an insignia of honor to wear on their heads.

<sup>57.</sup> See note 43 above.

<sup>58.</sup> Lukonin gives this definition of the term waspuhran in "Parthian and Sassanid Administration."

## Chapter III

# Vessels with Hunting Scenes

Most of the royal scenes on the silver vessels that have been preserved are in the form of hunts. The portrait of the ruler as a bust, enclosed in a medallion, occurs only on the Sargveshi cup (Pl. 2) of the late third century. At present, there is no evidence to suggest that the medallion portrait continued, after this period, to be a form in which royal figures were represented on Sasanian silver plates. The study of the image on the Sargveshi cup in the last chapter included references to five early Sasanian hunting plates (Pls. 8, 9, 12, 13, 23), and on these vessels the figures of the hunters bore some relation in form and style to those of the royal and nonroyal persons on the "medallion" vessels (Pls. 1-7). In the present chapter, these and other plates with hunting scenes will be examined in greater detail. All aspects of the design, the composition of the scene, and the plant, animal, and human forms will be described below.

Some of the silver plates with hunting scenes are clearly related in design, iconographic detail, and style. In spite of this, it is difficult to trace a chronological development. The iconography and style of the scenes on the plates are somewhat similar to those of dated Sasanian monuments in other media, but there are few close parallels. For lack of such external evidence to support an absolute chronology, it is necessary to turn to the vessels themselves and develop an internal method for their classification. Caution is required, however, since many of the silver plates with hunting scenes, in contrast to the vessels with medallion portraits, were found outside Sasanian Iran, and the problem of establishing with certainty which pieces are of Sasanian manufacture therefore arises.

In the first comprehensive study of the hunting plates, written in the nineteen thirties, Kurt Erdmann analyzed the scenes in considerable detail. So accurate are his observations and so convincing many of his arguments that it is almost impossible, even at this much later date, to consider the royal hunting vessels entirely afresh, free from the influence of his work. In many instances Erdmann's observations led him to justifiable conclusions, and his ideas are therefore worth reviewing before attempting a new arrangement of the material.

Erdmann divided the hunting plates into three main stages in an overall chronological sequence. The first includes vessels of the third and fourth centuries. On these there is, initially, a two-figure composition: the king hunts a single quarry.<sup>2</sup> This form is quickly elaborated, however, to include two animals rather than one. On all these plates the hunt is conceived of as an enlivened chase or dramatic combat. The sense of direct conflict is heightened by the eye-to-eye contact between the hunter, whose head is in pure profile, and the animal sought. The figures are completely tied to the surface of the plate through this use of the profile view of the heads. The modeling is low, and the transition from the relief area to the back-

<sup>1.</sup> Erdmann, "Die sasanidischen Jagdschalen," pp. 193–231. In later studies Erdmann expanded his theories: Erdmann, "Zur Chronologie," pp. 239–283; idem, "Entwicklung," pp. 87–123.

<sup>2.</sup> Erdmann, "Eine unbekannte sasanidische Jagdschale," pp. 209–217. Erdmann states that on the earliest known hunting plates the animal quarry is already doubled, but we know of the original single-animal prey type from the Shemakha plate (Pl. 8) and the now lost Burnes plate (Pl. 11).

ground abrupt. Erdmann noted the triangular composition of the scenes. He cited as examples of this early stage a plate in the Hermitage Museum showing a figure wearing a ram's-horn headdress (Pl. 23) and another plate in the British Museum depicting the stag-hunting Shapur (Pl. 13). The gilding on the vessels in this first group Erdmann described as delicately and carefully applied to the figural part of the design. The background is left plain.

In Erdmann's sequence, the second stage begins in the fourth century and reaches a high point in the mid-fifth. The major change is from a representation of the hunt as a contest to what Erdmann described as a Treibjagd, in which the animals no longer confront their attacker, but flee from him. One animal is invariably shown alive, the other dead (an identical beast and thus perhaps the same one), a scheme that lessened the tension or excitement of the scene. The eye-to-eye contact is broken by a new freedom in the arrangement of the figures. The head of the hunter is turned outward in a three-quarter view, and on some examples, such as the plate from Pereshchepina in the Hermitage Museum (Pl. 28) and the Shapur II plate in the Freer Gallery of Art (Pl. 15), the horse's foreleg is modeled in the round. The animals at this stage increase in number while diminishing in size. There is no longer a dramatic hunt but a picturesque scene almost free from the flat surface of the plate. In this stage Erdmann recognized the existence of what he felt were intermediate pieces (e.g., the Shapur II plate in the Freer Gallery, Pl. 15), and contemporary but inferior works that could not have been manufactured in the same workshop that produced the royal models. As an example of a minor work, he cited a plate in the Hermitage Museum showing Shapur III slaying a leopard (Pl. 24). In this second stage the gilding continues, in most instances, to be applied to the figural design.

A high point in this second stage is reached with a plate in the Metropolitan Museum showing an equestrian archer-king identified by Erdmann as Peroz (Pl. 17). Signs of a reaction, a return to a flat, two-dimensional scheme, are already apparent, however, since the king is in pure profile. The scene is described as having less life and a more mannered form than the Pereshchepina hunt (Pl. 28). Erdmann placed a hunting plate in the Bibliothèque Nationale (Pl. 22) in this decline of the second stage, as he be-

lieved the crown worn by the king to be that of Peroz. He considered this vessel a peripheral work, since it differed radically from the Metropolitan Museum plate depicting Peroz. Notable changes apparent in the Bibliothèque Nationale plate are the increase in the number of animals, the lack of empty space, and the relief, which in the latter part of the second stage is uniformly at a single level. Erdmann believed that this vessel, of foreign manufacture, influenced the form of those he placed in his last stage.

In the third stage, on the Sasanian vessels of the sixth and seventh centuries, Erdmann noted an almost total absence of relief, likening the designs to drawings with strong contours. A variety of animal species are represented. The gilding is more carelessly applied, appearing on the background, not on the design. Two plates, one in the Hermitage Museum showing an enthroned king with a hunt in the exergue (Pl. 19), the other in the Berlin Museum depicting a hunt (Pl. 20), illustrate this last Sasanian type. In spite of the archaistic trend apparent in the return to a two-dimensional design, Erdmann detected in these two works a new development in the sense or meaning of the scene. Elements of apotheosis are combined with the hunt: a winged figure bearing a jeweled band toward the king on the Berlin Museum plate, and winged horses supporting the throne on the Hermitage Museum vessel.

In addition to these Sasanian hunting plates, Erdmann listed a large number of pieces that he considered to be post-Sasanian. For the most part these were, in his opinion, imitations of original vessels belonging to the first and earliest stage. Erdmann observed that in all instances the kings wore crowns later in date than those of the early Sasanian period they were intended to imitate, and the designs included details such as the strong contours apparent only in his latest Sasanian group. The presence of certain stylistic details, however, the rendering of the drapery, and the simple form of the composition (figure hunting one or two animals) suggested to him that these pieces were deliberate copies of earlier works. The designs on these plates are usually chased and incised on the background with no parts in relief. Notable examples are a vessel in the British Museum showing "Bahram Gur" hunting lions (Pl. 25) and a broken vessel in the Hermitage Museum depicting an unidentified king hunting tigers (Pl. 31).

Many of the ideas presented by Erdmann were contested or questioned from the start. Two scholars, a Russian, Orbeli,3 and a German, Herzfeld,4 offered rather different reconstructions. Both stressed the fact that a division of the silver should be based on geographical as much as chronological factors. Neither could follow Erdmann in his commitment to an essentially unbroken chronological sequence or in his arrangement and dating of the vessels within that sequence. In recent years another Russian scholar, Boris Marshak, has convincingly grouped together many works attributed to the post-Sasanian period by Erdmann, ascribing them to a single workshop or tradition lasting a number of centuries contemporary with the period of Sasanian rule in Iran.<sup>5</sup> Erdmann acknowledged, in his description of certain plates as peripheral products (e.g., the hunting vessel in the Bibliothèque Nationale, Pl. 22), or as minor works (e.g., the Hermitage Museum plate showing Shapur III stabbing a leopard, Pl. 24), that all the silver plates with hunting scenes could not be considered products of a single royal workshop. His arrangement of a sequence of silver vessels was, however, influenced by his preoccupation with the forms of the royal crowns. The strict identification of the crown types led him to believe that the king represented in the great rock-cut niche at Taq-i Bustan (Fig. 18) was Peroz, and that consequently the highest point in the development of Sasanian art came under that king.6 Thereafter he saw a steady and slow degeneration or a return to older forms and styles. Herzfeld was equally influenced by the crown types but more aware of the variations between those appearing on the coins and those on other official works of Sasanian art such as the rock reliefs. For this reason he held to his identification of the Taq-i Bustan king as Khusro II, while admitting that the crown differed in design from those on the coins of that king.<sup>7</sup> In his opinion the representations on silver vessels accorded well with this theory. Herzfeld saw a high level achieved with the earliest group of vessels, followed by a large number of minor works in the middle period, and another peak at the end of the Sasanian period, in which he placed the plate in the Bibliothèque Nationale (Pl. 22).8 Herzfeld explained the obvious excellence of the workmanship on the plate in the Metropolitan Museum depicting Peroz (Pl. 17) as an indication of the approaching end of a long period of

mediocrity, seeing this work as a precursor of the last great phase.

#### The Numismatic Evidence

Neither Herzfeld nor Erdmann, who depended so much on the evidence of the coins, had available the series of Sasanian types now established by the work of Göbl<sup>9</sup> and Lukonin. 10 This was, of course, a major limitation, as was an unfamiliarity with the coins of Eastern mints related to the Sasanian types. It is still true that for those who are not numismatists (familiar with the coins through firsthand examination of large collections), there is still no reliable, comprehensive work illustrating the full range of types in either coinage. The plates in Paruck's volume on Sasanian coins are often unclear when it comes to small details, and many types attributed by Paruck to certain rulers are no longer accepted as such. 11 More dangerous for the art historian is the inclusion in this work of coins that are not Sasanian at all but products of Eastern mints, especially those of the Kidarites or other nomadic invaders. Such Eastern coins and those classed as Kushano-Sasanian have been published in great quantity, with good illustrations, by Göbl. 12 Other scholars, notably Lukonin 13 and

<sup>3.</sup> Orbeli and Trever, Sas. Metall. Orbeli's theories appear in summary in SPA I, pp. 716-770. A résumé of the introduction of Orbeli and Trever, Sas. Metall, appears as "Review of Orfevrerie sasanide," by Ackerman, pp. 104-105; Trever, "K voprosu o tak nazyvaemikh sasanidskikh pamiatnikakh," pp. 282-286.

<sup>4.</sup> Herzfeld, "Khusrau Parwez," pp. 91-158; idem, "Der

Thron," pp. 1-24; 103-147.

5. Marshak and Krikis, "Chilekskie Chashi," pp. 55-81.

6. Erdmann, "Das Datum des Tāk-i Bustān," pp. 79-97.

7. Herzfeld, "Khusrau Parwēz," pp. 91-158.

8. Herzfeld noted the same three-stage development in

the coinage. The silver vessels in his earliest stage are essentially those of Erdmann: the Hermitage ram's-horn hunter (Pl. 23), the British Museum Shapur (Pl. 13) and the Sargveshi cup (Pl. 2); "Khusrau Parwez," pp. 116, 127.

<sup>9.</sup> Göbl, Sas. Num., with bibliography.

<sup>10.</sup> Lukonin, Kul'tura, pp. 152–184; idem, "Monnaie d'Ardachir I et l'art officiel sassanide," pp. 106-117.

<sup>11.</sup> Paruck, Sāsānian Coins.

<sup>12.</sup> Göbl, "Die Münzprägung der Kušan, von Vima Kadphises bis Bahrām IV," in Altheim and Stiehl, Finanz, pp. 173-256; Göbl, Dokumente I-III.

<sup>13.</sup> Lukonin, "Kush-Sas. monety," pp. 16-33.

The Numismatic Evidence 43

Bivar, <sup>14</sup> have also catalogued these coins, including some that do not appear among Göbl's groups. In turn, not all of Göbl's coins are illustrated by them. In spite of the fact that no final comprehensive publication of this material exists, the tremendous advance in the state of our knowledge of the coins minted in the East gives us a clearer idea of the extent to which Sasanian crown types were known and imitated outside Iran. This material is presented here to clarify the study below of the hunting plates.

For our purposes, not all of the Eastern coin types are relevant. Only representations of persons wearing crowns closely related to those on Sasanian coins have some bearing on the subject under discussion. The following survey of Eastern coins of this type will include those belonging to the categories designated as Kushano-Sasanian (also Sasanian-Kushan), Kidarite, and others grouped by Göbl under the headings of "Al $\chi$ on," "NSPK-šah" (or Napki, a personal name referring to a ruler in the Hindu Kush region) and "Hephthalite." <sup>15</sup>

There is considerable uncertainty concerning the period in which the Kushano-Sasanian coins were minted. While the Kidarite coin series is generally placed in the second half of the fourth century, scholars disagree on the dating of the Kushano-Sasanian coins, some preferring a date in the third and the first half of the fourth centuries, others placing the group entirely within the fourth century. 16 Moreover, questions remain as to the specific sequence in issuance of the copper, gold, and silver coins and of the identities of the persons who minted them. Bivar and Brunner, following Herzfeld, have placed the beginning of Sasanian Persian rule over the Kushan lands in the third century. Göbl, Lukonin, Vainberg, Frye, and Harmatta maintain that Ardashir I may have reduced these peoples to the status of vassals but that the actual conquest and initiation of Sasanian rule began only in the lifetime of Shapur II in the fourth century. The minting of Kushano-Sasanian coins would begin, in their opinion, at some point in the early or mid-fourth century. The names on these coins, which have been divided by some scholars into two groups, Kushano-Sasanian and Sasanian-Kushan, 17 Sasanian, and it is generally agreed that they were minted by Sasanian governors or princes. Harmatta and Frye have further speculated that these rulers rebelled against central Sasanian control and became

independent.<sup>18</sup> This could explain why they minted their own coins, while other Sasanian governors did not have this right. Some time in the second half of the fourth century, newcomers who were probably Huns (Kidarites) moved peaceably into the Kushan lands. The Kidarites eventually became sufficiently powerful to mint their own coins. These immediately follow the Kushano-Sasanian series. It is evident that at this time, the end of the fourth century and the beginning of the fifth, Sasanian control was broken in the Kushan realm. Lukonin and Vainberg are of the opinion that this break was followed by a final period of Sasanian domination in the mid-fifth century after the campaign of Yazdgard II to the East in 440.19 They would place in this period two further Kushano-Sasanian coin types, one before 457, belonging to Hormizd (the future Hormizd III of Iran), and the other before 459, belonging to Peroz (Hormizd's successor on the throne of Iran). 20 These coins would have been minted only at Merv and Herat. In 484, Peroz was killed fighting east of Balkh in a war with the Hephthalites, another group of invaders, and the Sasanians lost their dominion over the Kushan realm.

<sup>14.</sup> Bivar, "Kushano-Sass. Coins," pp. 13-42; idem, "Kushan and Kushano-Sasanian Seals," CII.

<sup>15.</sup> Göbl, Dokumente I, pp. 24-26.

<sup>16.</sup> For the third- to fourth-century dating of the Kushano-Sasanian coinage, see: Herzfeld, "Kushano-Sasanian Coins"; Bivar, "Kushano-Sass. Coins," pp. 13-42; Brunner, "Chronology," pp. 145-164. For a fourth- to fifth-century dating of this same material, see: Göbl, Dokumente I, p. 20; Lukonin, "Kush.-Sas. monety," pp. 16-33; Frye, "Napki Malka," pp. 118-122; Harmatta, "Minor Inscriptions," pp. 182-195; idem, "Late Bactrian Inscriptions," pp. 384 ff.; Vaĭnberg, "Nekotorye voprosy," pp. 129 ff.

<sup>17.</sup> Lukonin, "Kush.-Sas. monety," pp. 16-33. Frye agrees with the use of the terminology Kushano-Sasanian and Sasanian-Kushan: "History and Sasanian Inscriptions," pp. 220-221. See also: Lukonin, "Zavoevaniîa sasanidov na vostoke i problema kushanskoĭ absolutnoĭ khronologii," pp. 20-44.

<sup>18.</sup> Harmatta, "Late Bactrian Inscriptions," pp. 387–388; Frye, "Napki Malka," p. 122.

<sup>19.</sup> Lukonin, "Kush.-Sas. monety," pl. 1, g, h; Vaĭnberg, "Nekotorye voprosy," p. 136.

<sup>20.</sup> Brunner illustrates coins of both Hormizd II Kushanshah (276–284) and Peroz II Kushanshah (284–?) that are similar but not identical to those published in drawings by Lukonin (see note 19 above): "Chronology," p. 161, pl. 24; 6, 7.





FIG. 12 Kushano-Sasanian copper coin
American Numismatic Society

The many questions concerning this sequence of events can be answered only by numismatists and linguists studying a common body of material. As stated above, Göbl, Lukonin, Brunner, and Bivar have published their theories, each illustrating some coin types known in common and some apparently unknown to the others. A survey of the Sasanian crown types reproduced on the coins of these peoples ruling in the lands on Iran's eastern border follows. The examples are largely drawn from the publications of Göbl, as he has illustrated the most material.

In the group designated Kushano-Sasanian, there are three crowns of importance for the study of Sasanian silver. The first (Fig. 12) is a clear imitation of the crown with a beaded band of Shapur II. It appears on large copper coins, but not on any silver or gold coinage.<sup>21</sup> The second occurs on both copper and gold coins in the series. A male figure wears a cap

FIG. 13 Kushano-Sasanian gold coin British Museum



with ram's horns, having a lotus flower rising between the horns (Fig. 13). The legend on these coins names a Bahram.<sup>22</sup> Lukonin dates this type to the last decade of the fourth century.<sup>23</sup> Others have attributed it to Bahram I or II, placing it in the late third century.<sup>24</sup> It is largely on the basis of this coin type that a silver hunting plate in the Hermitage Museum showing a figure wearing a similar ram's-horn headdress (Pl. 23) has been dated.<sup>25</sup>

In Lukonin's arrangement, one of the latest coins in the Kushano-Sasanian series is that of a Hormizd, who wears a crown in the form of a bird (Fig. 14).<sup>26</sup>



FIG. 14 Kushano-Sasanian coin with the name of Hormizd

British Museum. Drawing after Lukonin, "Kush.-Sas. monety," Table I, g

This is clearly related to the crown of the Sasanian king Hormizd II (302–309), but on the Eastern coins the crown is topped by a lotus rather than a cloth-covered globe. Lukonin believes that this Kushano-Sasanian ruler is the future king of Iran, Hormizd III (457–459).

Other coins on which figures are represented wearing crowns closely similar to those on the Sasanian coins are attributed to the Kidarites who, it is generally believed, followed the Kushano-Sasanian rulers in the late fourth century, continuing in power into the early fifth century. One Kidarite crown (Fig. 15) resembles that later chosen by Yazdgard II except that it is surmounted by a striated rather than a

<sup>21.</sup> Bivar, "Kushan and Kushano-Sasanian Seals," CII, pl. 4, no. 7.

<sup>22.</sup> Bivar, "Kushan and Kushano-Sasanian Seals," CII, pl. 7, no. 2; pl. 10, nos. 9, 10.

<sup>23.</sup> Lukonin, "Kush.-Sas. monety," pp. 21, 22.

<sup>24.</sup> See Herzfeld and Bivar references in note 16 above; Brunner, "Chronology," p. 154, pl. 24.

<sup>25.</sup> Orbeli and Trever, Sas. Metall, pl. 4.

<sup>26.</sup> Lukonin, "Kush.-Sas. monety," pl. 1, g. See note 20 above for Brunner's opinion on the dating of a similar coin of Hormizd. It is clear in Brunner's illustration that the bird does not have a head and the globe is striated. In a private communication, however, Lukonin maintains that his drawing is accurate. There are no existing photographs of this coin.

The Numismatic Evidence 45



FIG. 15 Kidarite silver coin
British Museum

cloth-covered globe.<sup>27</sup> The king is unbearded, unlike representations of Sasanian rulers.

Göbl has placed in this same period a rather enigmatic group of coins minted in the East. He classifies them as an "in-between" group, localizing them in the Kabul-Jelalabad region.<sup>28</sup> Many of the coins are almost exactly the same as those minted in the East by Shapur II (309–379), Shapur III (383–388), and Bahram IV (388–399). On all of Göbl's examples, however, the name of Bahram appears in Middle Persian. Because of the presence of this name, Göbl states that all were minted around 400, or after the time of Bahram IV.

Another series grouped together by Göbl under the heading "Alxon" begins sometime between 338 and 400.<sup>29</sup> In this instance, the actual Sasanian obverse dies of Shapur II were used by a group of anonymous clan chiefs ruling north of the Hindu Kush. Later, these same rulers reproduced the Shapur II type on their own dies.

Much rarer are a few coins that imitate those of Shapur III, with the difference that the customary palmette forms are replaced by dots or pearls arranged in pairs (Fig. 16).<sup>30</sup> Another important variation is that the king appears not to be bearded. The legends are bilingual in Sogdian and Bactrian. Göbl's examples were purchased on the market in Peshawar. Their precise date is unknown.

A small number of coins copying the first crown type of Kavad I forms a category attributed by Göbl to the "NSPK-šah," more commonly called Napki.<sup>31</sup>



FIG. 16 Eastern silver coin of a king of uncertain date

American Numismatic Society

Göbl locates the production of these in Khorasan.

Coins minted by the Hephthalites in imitation of those of Peroz (showing his third crown) comprise another group established by Göbl. <sup>32</sup> Some of these coins remain close to Sasanian prototypes. The earliest date for these is, according to Göbl, some time around 476, although it is possible that they were not minted until the sixth century. The legends are in Bactrian. Other coins illustrating the same crown differ considerably in style from the Sasanian coins of Peroz. These examples are still later in date, having been issued in the second half of the seventh century. <sup>33</sup>

A somewhat different but related phenomenon is the presence and use in the lands east of Iran of countermarked Sasanian coins. The two chief groups, placed by Göbl under the heading "Hephthalite," are those dating from the reign of Bahram V (421–439) to that of Peroz (459–484; there are no examples of the first crown of Peroz) and those falling in the period of Valash, Kavad I, and Khusro I (484–579). Göbl states that the first group constitutes Sasanian tribute to the Hephthalites, as

<sup>27.</sup> Göbl, Dokumente III, Em. 14, pl. 11, no. 14.

<sup>28.</sup> Ibid., I, p. 24, Em. 28A, 29, 30, 31.

<sup>29.</sup> Ibid., I, p. 25, Em. 33-39.

<sup>30.</sup> Ibid., I, p. 24, Em. 19; III, pl. 13.

<sup>31.</sup> Ibid., I, p. 25, Em. 260, 261; III, pl. 71.

<sup>32.</sup> Ibid., I, pp. 26, 197, Em. 287; III, pl. 78.

<sup>33.</sup> Ibid., I, pp. 26, 199, Em. 289; III, pl. 79.

<sup>34.</sup> Ibid., I, pp. 26, 193, Em. 282-286; III, pls. 75-78.

there are Hephthalite countermarks as well as those of other peoples of different periods who took the coins from the Hephthalites, "Western Turks, Sogds, Huns south of the Hindu Kush, kings of Bukhara and others unknown." Of the second group of countermarked coins, Göbl writes that they date from the second half of the sixth century, a period when the Hephthalites north of the Hindu Kush were held between the growing power of the Sasanians and the western Turks. Most of the countermarks on both groups are from the time of the Arab invasion of Khorasan in the late seventh century.

With the Arab invasion and conquest of the Near East and Central Asia, the minting of coins resembling those of the Sasanian rulers was not ended abruptly. Some Sasanian coins have Arab countermarks, and some coins minted by the Umayyad governors in the East are copies of certain Sasanian types.<sup>35</sup> The commonest of these (Fig. 17) imitates the crown of Khusro II, with side and back stepped crenelations and a cap surmounted by wings, a crescent, and a star. 36 It is not surprising that the image of Khusro II was chosen as a "model" by the Arabs when, in the second half of the seventh century and early in the eighth, they first minted coins in their newly acquired eastern lands. The coins of Khusro II were so plentiful that this was an obvious choice. At the same time the Arabs minted a few coins that are imitations of the coins of the last Sasanian king, Yazdgard III.37

Coins of Hormizd IV were copied by the princes

FIG. 17 Arab-Sasanian silver coin based on Khusro II type British Museum



of Georgia as early as the sixth and seventh centuries, and Walker places this type in his Arab-Sasanian class because of one example that has a marginal Arab inscription.<sup>38</sup> The coins Walker labeled "Arab-Hephthalite," and some of those placed by Göbl in his "NSPK-šah" category and under the heading "Hephthalite (?)," are related to the Arab-Sasanian coinage, since they copy the same crown type of Khusro II as is on the coins described above.<sup>39</sup> Their probable date is the end of the seventh century.

A stylized geometric version of the Khusro II crown type in which the front and back stepped crenelations are replaced by disks was, according to Walker, used on coins minted by the Abbasid governors of Tabaristan in the eighth and early ninth centuries. 40 In style and appearance these crowns are far removed from the Sasanian models. In the first half of the eighth century, before the Arab conquest of Tabaristan, the local princes or *ispahbads* had more faithfully copied the Khusro II crown type. 41

The victories of Bahram V against the Hephthalites resulted in the presence of his coins in some quantity in the East. They were imitated by the Bukharan princes at the time of the Umayyad caliphate in the last quarter of the eighth century and the beginning of the ninth. 42

<sup>35.</sup> Walker, Arab-Sas. Coins; Miles, in a review of Walker's volume, gave additional references: ArsOr, 3 (1959), pp. 207–213. See also short notes by Curiel entitled "Monnaies Arabo-Sasanides," RN, 1965, pp. 321–328; 1966, pp. 61–69; 1967, pp. 103–116.

<sup>36.</sup> Walker, Arab-Sas. Coins, p. 5, pls. 2, 30. It is apparent that there is a Khusro coin type which has neither a front crenelation nor a crescent in this position, although this variation is not illustrated by Göbl.

<sup>37.</sup> Ibid., p. 3, pls. 1, 30. These coins are identical to those of Khusro II except for the legend naming the king.

<sup>38.</sup> Ibid., p. 24, pl. 30, 1; Lang, Studies in the Numismatic History of Georgia in Transcaucasia, p. 12. According to Tsotselisa the maximum influx of Sasanian coins in eastern Georgia occurred in the reign of Kavad. There are also Sasanian drahms of Khusro I, II. In the eighties of the sixth century in Georgia (Kartli), local coins of the Sasanian type were minted: Iz istorii vzaimootnoshenii Kartli c sasanidskim Iranom, pp. 24, 28.

<sup>39.</sup> Walker, Arab-Sas. Coins. p. 127, pls. 22, 38; Göbl, Dokumente I, p. 25, Em. 211–213, 247–251, 271A–281.

<sup>40.</sup> Walker, Arab-Sas. Coins, p. 133, pl. 24, nos. 7, 9, 13.

<sup>41.</sup> Ibid., pp. 130, 131, pl. 23, a-d.

<sup>42.</sup> Ibid., p. 162, pl. 28; Frye mentioned that these Bukharan imitations of the coins of Bahram V are found as late as the eleventh century A.D. in Central Asia: "Napki Malka," p. 121.

In spite of the many problems in exactly attributing and dating these Eastern coins, their existence indicates that, in the territories outside of Sasanian rule, Sasanian crowns were copied. The Eastern copies are sometimes contemporary with and sometimes later than the Sasanian originals. The crown type does not therefore provide a positive identification of a royal personage on a silver vessel, and does not necessarily indicate Sasanian manufacture of the vessel upon which it appears. Nevertheless, in the following catalogue of silver hunting plates, the form of the crown will be one of the chief criteria for establishing separate categories of vessels. On royal silver plate this element of the design is of first importance, and it supplies at least a terminus post quem for a vessel.

### Catalogue

The catalogue will include a detailed description of each plate. The necessity for this lies in the fact that in order to determine the period and stylistic school or tradition to which any work belongs one must rely on the form of the most minute details. Following this catalogue there will be a section devoted to a stylistic analysis of the representations. From this study it will be evident that two distinct stylistic traditions exist. These are referred to as the paired-line and the overall parallel-line drapery styles. The majority of the hunting plates belong to one or the other of these stylistic traditions. The most striking feature of these two styles is, as the names suggest, the method of rendering the drapery. In one style, a series of short paired lines define the folds and give substance to the fabric. In the other style, a series of parallel lines curve over the entire body and reflect, to a greater or lesser degree, the form beneath. The styles are further defined by the persistent appearance of certain iconographic details on works belonging to one or the other of these groups. In one, Sasanian crowns are accurately portrayed, while in the other there are, with one exception, variations of Sasanian crown types. All these factors—style, iconographic detail, and crown type-provide the final basis for establishing a corpus of silver hunting plates, which, with some assurance, can be called Sasanian.

Within the catalogue, the hunting plates will be separated into four different categories. The first,



FIG. 18 Figure of Khusro II, Taq-i Bustan Fukai and Horiuchi, Taq-i-Bustan II, pl. 4

Group I, includes the earliest vessels, datable to the third or early fourth century. Some of these have already been mentioned in Chapter II. Although the hunter depicted is not characterized as a Sasanian king, the vessels in Group I have some clear connection with Sasanian Iran and Mesopotamia: in provenance, in the presence of Middle Persian inscriptions, or in style, as established in the preceding study of the medallion bowls.

The second category, Group II, contains those plates found both in Iran and elsewhere on which royal persons are depicted, their crowns identifiable by comparison with the images on Sasanian coins. The crowns are either identical to the standard crowns on coins or on other official Sasanian works of art, for example the great rock-cut niche at Taq-i Bustan (Fig. 18). With these vessels a chronological

sequence can be established in a broad fashion, the crown type indicating the period during or after which the plates and their designs were made.

In the third category, Group III, the figures depicted wear crowns that are not identical to those appearing on Sasanian coins or other identified Sasanian monuments. There is, however, a clear relationship to Sasanian works in the general form of the crown and in the iconography of the scenes. None of the vessels was actually found in Iran.

In the fourth category, Group IV, are fragmentary vessels on which the crown is incomplete and hence unidentifiable. Also included in this group is one vessel so crudely executed that it may be an unfinished work. The crown is depicted only in rough outline.

The analysis of the designs on these hunting plates will take into account not only the overall arrangement of the scenes, the form of the landscape, and the poses of the animal and human figures, but also such minor features as the details of the dress, the arrangement of the hair, the types of weapons, the horse trappings, and the treatment of the animal bodies. Although described in the text, the presence of these details on individual works is noted in Tables for easy reference in Appendix I.

GROUP I. Silver vessels of the third and early fourth centuries, with scenes of hunters wearing headdresses unrelated to Sasanian crown types (lacking a combination of globe and crown base). There is some definite connection with Sasanian Iran.

This group comprises four vessels as well as a fragment that was originally part of another vessel. The relationships between these works are complex, but each piece shares some features with others in the group. These features define the relationships between the representations and will be mentioned in the descriptions that follow. At the end, the major similarities as well as the important distinctions in composition and design will be summarized.

As has been pointed out in Chapter II, two plates found in the Soviet Socialist Republic of Azerbaijan and in the Autonomous Republic of Abkhaz in the Soviet Union (Pls. 8 and 9) provide the earliest illus-

trations of the theme of the hunt on a Sasanian silver vessel. Both vessels were probably made in the sixties or early seventies of the third century. The composition and details of the designs on these two works are of considerable interest, for this must be the type that served as the model for the later royal plates.

Shemakha plate (PL. 8). Since firm distinctions in date are difficult to establish among the vessels in Group I, a somewhat arbitrary beginning will be made with a plate recently found by chance in a stone box recovered by workers in a vineyard near Shemakha in Soviet Azerbaijan.<sup>43</sup> The composition is clear in spite of the damaged condition of the vessel. Slightly to the right of the center is the figure of an archer astride a horse outstretched in a flying gallop toward the right. The outside foreleg of the horse is shown below the inside leg. This schema is consistently repeated on all the silver hunting plates and on all Sasanian rock reliefs that illustrate this motif.44 The archer has the upper part of his body turned backward so that he shoots to the rear, in the pose often referred to as the "Parthian shot." 45 That the

<sup>43.</sup> See Chapter II, p. 30. Museum of the History of Azerbaijan, Baku; diam. 29.1 cm., height with foot 4.9 cm. Khalilov, "Serebrianoe bliudo c pozolotoĭ iz drevneĭ Shemakhi," pp. 146–149.

<sup>44.</sup> This is also characteristic of Parthian representations. See Perkins, The Art of Dura-Europos, figs. 16, 26; Rostovtzeff, Dura-Europos, Fourth Season, pls. 18, 21; Dura-Europos, Fifth Season, pl. 35. Ghirshman illustrates a hunting scene on one of the seal impressions from Nysa where this same view of the forepart of the horse is depicted: Persian Art, fig. 39. The presence of this schema on a Hephthalite bowl in the British Museum and in the seventh- to eighth-century paintings of Sogdian Piandzhikent indicates its long and widespread use: Dalton, Oxus, pl. 29, no. 201; Belenitski and Marshak, "L'Art de Piandjikent à la lumière des dernières fouilles (1958–68)," p. 34, fig. 13; p. 36, fig. 17; p. 37, fig. 19.

<sup>45.</sup> Erdmann gives references to the literature in which this shot is described as typical of the Parthians. He also notes that there was a legend that Ardashir I killed Artabanus V in this fashion: "Die sasanidischen Jagdschalen," p. 203, note 4; Rostovtzeff, "The Parthian Shot," pp. 174–187; Sulimirski, "Les Archers à cheval, cavalerie légère des anciens," pp. 447–461. Sulimirski discusses the expanded use of this shot under the Sasanians because of their constant contact with the steppe peoples. Sidonius describes a fabric from a "far land" upon which Ctesiphon and the mountains of Armenia appear as a background to a hunting scene. In the scene a "Parthian" is said to shoot backward at fleeing animals: Sidonius, p. 203, Book IX,

Catalogue—Group I 49

back of the hunter is toward the viewer is indicated by the disappearance of his right or bowstring hand behind his head and by the presence of a bowed ribbon holding together his necklace, a detail that could be seen only from the rear. Although the body turned in reverse is depicted on five other hunting plates (Pls. 9, 10, 14, 18, 19), this is the sole instance in which the back of the body is shown rather than the front. In Sasanian art the only other example of this view occurs on the side wall of the rock-cut niche attributed to Khusro II at Taq-i Bustan. 46 The hunter's quarry on the silver vessel is a goat, 47 awkwardly placed in a vertical position parallel to that of the archer, on the left side of the vessel. Both the foreand hind legs of this animal are bent inward under the belly. The broken shaft of an arrow is visible, protruding from the head.48 The feathered end of the arrow has fallen to the ground and appears beneath the horse's hind legs. No landscape elements are included in this scene, which fits into the circular frame of the plate. The simple design consists of two vertical elements, the rider and his quarry, and a connecting horizontal line in the form of the horse.

The archer is rather elaborately dressed. Most striking is the headdress, a cap from the top of which there rises an immense crest somewhat resembling a palmette in shape. A short ribbon is tied to the base of this part of the headdress, and a long ribbon bound around the perimeter of the cap flutters off behind the head. 49 The surface of the cap is covered with pearls. 50 The hunter wears an earring and a necklace. On the left shoulder of his garment, a circular patch of embroidery with a design of lines and punched circles is depicted. Little can be seen of the belt gathering the long-sleeved upper garment at the waist. The portion of the plate with his foot is missing. Only the chased design of the ribbon leading from the foot remains on the background. The drapery covering the leg, however, is clearly defined as a series of fine parallel lines running down the surface. Similar parallel lines are faintly visible on other parts of the drapery as well.

The head of the archer is in pure profile to the left, and the treatment of the hair in long curled locks, the dotted beard, and the wavy mustache have been referred to in Chapter II, where they were compared to those on the medallion portraits.<sup>51</sup> These features are rendered in considerable detail. Slung from a strap attached to the archer's belt is a quiver full of arrows. The surface is divided into four compartments bearing designs. A cross-hatched pattern of lozenges, each containing a single dot, fills the lowest panel, and part of a monogram or tamga (clan mark) is visible in the third panel from the top. Plant motifs are shown in the two uppermost compartments. The archer holds a large compound bow with long straight ears disappearing at the bottom behind his body and at the top reaching to the highest point of his headdress. On this plate, and on all others in this group depicting archers, an accurate distinction is made between the larger upper arc of the bow and the smaller lower one.<sup>52</sup>

Letter XIII. The term "Parthian" is consistently used by Sidonius for Sasanian Persian. The poem in which this passage occurs was apparently written in A.D. 461 (ibid., p. 251, note 202.2).

For a reference to the later Turks as accurate in archery both in attack and retreat (presumably the reverse shot), see Latham, "The Archers of the Middle East: The Turco-Iranian Background," p. 97.

46. Fukai and Horiuchi, Taq-i-Bustan I, pl. 86. A back view of a Parthian archer horseman occurs on a Roman cup in the Moore collection, ca. first century B.C. in date: Rostovtzeff, "The Parthian Shot," pls. 18-19. The continued use of this view in Western art is suggested by the appearance of the pose on a mosaic hunting pavement found at Apamea, Syria, dated to ca. A.D. 539; Mayence, "La Ve campagne de fouilles à Apamée," pp. 2-13; Taylor, "In Defense of the Classics," p. 21, fig. 25.

47. See note 43 above. Khalilov calls the animal a wild

goat.

48. On one of the wall paintings in the Mithraeum at Dura an arrow protruding from the back of an antelope is similarly shown broken in half: Rostovtzeff, Dura-Europos and Its Art, pl. 18, no. 1.

49. Dayet discusses the satrapal bonnet with a diadem as the headgear of feudal princes at the beginning of the Arsacid dynasty: "Monnaies arsacides à bonnet satrapal," pp. 13 ff. I am grateful to Richard Brilliant for this reference. See also note 71 below.

50. Procopius, History of the Wars, Book I, XVII, 26-29. Procopius mentions a Persian ally who wore a headdress decorated with gold and pearls. This reference also appears in Schlumberger, "Deux Fresques omeyyades," p. 97, note 4. Helmut Nickel remarks on the fact that helmet crests, for reasons of weight, were made of gaily colored plumes or flimsy materials (painted parchment, fabric-covered basketwork): "The Art of Chivalry," p. 90.

51. See Chapter II, p. 30.

52. Brown, "A Recently Discovered Compound Bow," pp. 2, 5-6. The author notes that one end of the bow was stiffened for a greater length than the other. The bowstring was held permanently on the longer end and looped onto the more flexible shorter end when the bow was strung.

The figure of the horse is damaged at the head, where a piece is missing. The forelock is drawn up into a vertical tuft above the head, the mane is short and evenly clipped, and a part of the bridle is visible, although the precise form is impossible to distinguish because of the damage. The hair of the horse's tail is elaborately bowed or knotted, the fine lines intricately chased on the surface of the vessel. Across the shoulder and rump are stretched beaded bands from which small circular ornaments are suspended. The saddle girth, decorated with a chevron pattern, runs under the horse's belly.53 A portion of the square saddle blanket with a narrow beaded border appears in the region of the quiver and from the side of this saddle blanket, at the back, protrude two small ribbons. At the front of the saddle, a guard or support comes up and partly over the archer's leg. Such a saddle is also represented on early Sasanian rock reliefs.<sup>54</sup> It is a feature which, however, occurs on no other silver plate except the following one from Krasnaya Polyana (Pl. 9).

The method of manufacture is apparent, since a number of the repoussé pieces have broken out of the lips that were cut up from the background of the plate to hold them in place. Part of the design is chased on the shell of the plate, but most of the human figure and that of the caprid appear to have been made up of supplementary pieces. In contrast, only portions of the horse's head, chest, and foreleg are separately added. A dotted sign, perhaps a worker's mark (since it does not seem to consist of letters), is visible on the shell.<sup>55</sup> The now missing piece of silver representing the horse's head would originally have covered it. On the reverse of the plate a single line runs just below the rim. Only portions of the design are gilded, including parts of the drapery, weapons, animal bodies, and horse trappings.

Krasnaya Polyana plate (PL. 9). The scene on a plate found at Krasnaya Polyana having an inscription with the name Bahram, beneath the rim on the exterior, <sup>56</sup> is somewhat more complex in composition than that on the Shemakha vessel (Pl. 8). On the plate the hunter is seated upright in a vertical position on a horse galloping to the right. The hunter turns his upper body and lassos a bear, <sup>57</sup> placed behind him to the viewer's left. <sup>58</sup> Beneath the horse, spread out horizontally on the ground, is the dead

figure of a second bear. The hunter is depicted with the front of his body facing the viewer. No landscape elements appear in the scene, and in spite of the addition of a second animal, the design still fits perfectly within the circular frame. In order to achieve this the artist has let some parts overlap others. The composition of the scene essentially follows that of the plate from Shemakha. Two parallel, vertical lines dominate the design, and the slightly oblique and rising line of the horse's body is balanced by the faintly oblique and falling line of the dead bear.

The Krasnaya Polyana hunter is dressed differently from the archer on the first plate. He wears a tall curved cap with a beaded perimeter and surface. A row of upright palmettes decorates the forehead band. This type of headgear is a standard one for Sasanian princes and nobility and remains in use, by a

<sup>53.</sup> This is one of two standard ways of decorating the girth. The other is with beading. The chevron design appears on a number of other hunting plates: (Burnes [Pl. 11], Freer Gallery Shapur II [Pl. 15], Berlin [Pl. 20]). It also occurs on the seventh- to eighth-century wall paintings at Piandzhikent: Belenitskii, Monumental'noye iskusstvo Piandzhikenta, fig. 23.

<sup>54.</sup> Examples occur on the reliefs of Ardashir I, Shapur I, and Hormizd II. See Hinz, *Altiranische Funde*, pls. 51, 60, 72, 73, 91, 133b. A recent article on this and later Sasanian saddle types is by Ghirshman, "La Selle en Iran," pp. 94–107.

<sup>55.</sup> I am grateful to Christopher R. Brunner for this explanation of the dotted signs.

<sup>56.</sup> See Chapter II, p. 29. Abkhazian State Museum, Autonomous Soviet Socialist Republic of Abkhaz, acc. no. 47–71; diam. 28.5 cm.; height with foot 3.2 cm.; weight 1820 gm.

<sup>57.</sup> Lukonin quotes Melikov as stating that the bear is the typical prey of the Caucasian region. This fact and the realistic rendering of the animals led Melikov to suggest that the plate must have been manufactured in the Caucasus. Lukonin disagrees with this opinion and states that bears were also common in northern Iran. He also cites the appearance of bears on stucco plaques found at Ctesiphon: *Iran*, pp. 55–57. Trever states that the bear never appears as the prey on a vessel made by Sasanians. She mentions a silver plate with representations of bears seen by Smirnov in Tbilisi, but one cannot now determine what vessel this was: "K voprosu o tak nazyvaemikh sasanidskikh pamīātnikakh," p. 284.

In the description of a game park near Ctesiphon, Ammianus Marcellinus specifically mentions the presence of bears, calling them "savage beyond all manner of madness (as they usually are in Persia)": Ammianus Marcellinus, Book XXIV, 5, 2.

<sup>58.</sup> The lassoed bear is described as running away by Fajans in "Recent Literature," p. 61. This opinion is contradicted by Francovich in "Il concetto della regalità," p. 11.

Catalogue—Group I 51

variety of officials, throughout the period.<sup>59</sup> On the surface of this cap is a tamga or monogram, a feature that also occurs on Sasanian seals and early Sasanian rock reliefs. 60 Short ribbons rather than long ones spread out from the forehead band. The hunter wears a necklace and an earring similar to those worn by the archer on the Shemakha plate (Pl. 8). The necklace resembles that of the king on the Sargveshi cup (Pl. 2) and on third- and fourth-century coins and reliefs. 61 In addition to a light upper garment the hunter wears a cape held at the chest by a fibula with two circular bosses. 62 The end of the cloak flutters out behind, to the viewer's left. The pantaloons, or leggings, are of the same light material as the upper garment and are brought together at the base by a circular clasp, while straps pass under the arch of the foot, holding the leggings in place. Short ribbons are tied at the foot. The surface of the leggings is covered with punched circles arranged in groups of three. With the exception of the headgear this form of dress resembles that of the king on all early Sasanian rock reliefs. The head of the figure on the silver plate is in pure profile to the left, and the square beard, rippling mustache, and long twisted locks have been described in Chapter II where they were compared to those on the medallion busts. 63 The representation of a mounted archer with head turned to the left necessitates a view of the back rather than the front of his body. Only a right-profile archer can be portrayed with a complete front view of the torso, a much-preferred position. On the Krasnaya Polyana plate a solution was found by making the hunter lasso rather than shoot with bow and arrow at his quarry. Slung from the belt around the hunter's waist, on his right side, is a strap holding the quiver, full of arrows. The surface of the quiver is divided into three compartments, the top and bottom panels having plant designs and the middle a geometric ornament in the shape of a lozenge. Although the hunter uses a lasso, his compound bow hangs over his left shoulder, the bottom half disappearing behind the horse.

The horse is, in this instance, complete. A ball, possibly of curled hair, is drawn up above the head, and the mane, cut short, is apparently trimmed in a curving line. Both these features are to be seen on the early Sasanian reliefs. <sup>64</sup> The horse's ear lies flattened down against the skull. The form of the bridle is difficult to detect, but the leather reins appear to be at-

tached to sections of chain leading to the actual bit. 65 Across the chest and rump are elaborate circular phalerae from which tiny bells are suspended, chased onto the surface of the vessel. Chains, stretching from the back of the square saddle blanket, hold oval balls of hair that rise above the horse's rump. 66 The wide border of the square blanket is decorated with a punched design of circular rosettes. A small ribbon extends backward from the bottom rear edge of the blanket. As noted on the Shemakha plate (Pl. 8), a guard comes up over the rider's leg. The tail of the horse is knotted in a fashion similar to, but simpler than, that of the Shemakha plate.

The poses of the bears differ. The fleeing bear has both forepaws raised upward, while the hind legs are spread apart. The lasso encircles one hind leg and the body. The head of this bear is reversed so that it faces the hunter. Although captured, the animal would appear to be alive. The horizontally outstretched bear

<sup>59.</sup> Harper in Frye, Qasr-i Abu Nasr, p. 66. On impression D103 a row of palmettes, more stylized than those on the cap of the Krasnaya Polyana hunter, can be seen.

<sup>60.</sup> On the relief of Shapur I at Naqsh-i Radjab a number of these signs can be seen: Hinz, *Altiranische Funde*, p. 142. See also Bivar, "Details and 'Devices' from the Sassanian Sculptures," pp. 11–14; Nickel, "Tamgas and Runes, Magic Numbers and Magic Symbols," pp. 165–173.

<sup>61.</sup> Göbl, Sas. Num., pls. 1-6; Hinz, Altiranische Funde, pls. 74, 120, 126.

<sup>62.</sup> For a discussion of this type of clasp as characteristic of early Sasanian sculptures and gems, see Borisov and Lukonin, Sas. Gemmy, pp. 14,15, figs. 1, 2.

<sup>63.</sup> See Chapter II, p. 29.

<sup>64.</sup> The same round forelock appears on the horses in relief II of Shapur I at Bishapur (Ghirshman numbering), on the battle relief of Ardashir I at Firuzabad, and on the battle relief of Hormizd II at Naqsh-i Rustam: Ghirshman, Bîchâpour I, pl. 14; Hinz, Altiranische Funde, pls. 51, 133b.

The cut of the mane appears to be related to that on a number of early Sasanian reliefs, notably those of Shapur I at Naqsh-i Radjab and at Darab: Hinz, Altiranische Funde, pls. 73, 91.

<sup>65.</sup> I am grateful to Mary V. Littauer for her suggestion concerning the actual form of the bit.

<sup>66.</sup> The large circular phalerae on the harness straps and the chains with balls of hair occur in Parthian and Palmyrene art. For the phalerae, see Rostovtzeff, Dura-Europos . . . Fourth Season, pl. 21, 3; Fifth Season, pls. 35, 4; 36, 3; Seventh and Eighth Seasons, pl. 14. For the hair tassels, see idem, Dura-Europos . . . Fourth Season, pl. 17; Fifth Season, pl. 36; Seventh and Eighth Seasons, pl. 56, 2. For comments on these trappings as characteristic of Parthian and Palmyrene art, see Rostovtzeff, "Dura and the Problem of Parthian Art," p. 251, figs. 57, 78.

beneath the horse is certainly dead. Details characteristic of death are the open mouth with protruding tongue, the forelegs spread apart, and the closed eye. Most of the surface of both animal bodies is covered with rows of crescentic punches intended to depict their fur. This pattern is omitted only on the paws and on the inner surface of the legs.

Some areas on the Krasnaya Polyana plate are in higher relief than others and consist of pieces added to the background shell. Published descriptions state that the plate is cast, and that the joins of the mold are clearly visible on the back surface. This is not the case. The vessel was hammered and worked in the standard Sasanian fashion. The scene is partially gilded, and gilding also covers the thickened part of the rim on the interior. On the design, the gilding covers certain portions of the human drapery and equipment, parts of the horse and the harness trappings, and various areas on the bodies of the animal quarry. Within the ring foot are two concentric circles and a centering mark.

It is a point of some importance that the equestrian figures on the Shemakha and Krasnaya Polyana plates are shown with their heads in pure profile to the left. On the medallion bowls discussed in the preceding chapter, the figures, royal and nonroyal, are, in contrast, in profile to the right, the customary view for Sasanian kings on their coins and for Sasanian personages on seal impressions. In the following descriptions of the hunting plates it will be apparent that the king is always portrayed in right profile. This preference of the Sasanians for the right profile position of the head probably reflects their desire to make a clear break with the royal imagery of their Arsacid predecessors, who were depicted on the coins in left profile.

How does one explain the left profile heads of the figures on the Shemakha and Krasnaya Polyana plates? There is no clear answer to this question. As late as the reign of Bahram II (276–293), the Sasanian king was portrayed in a hunting scene, on the Sar Meshed relief, in left profile. It is evident therefore that in this early period no set form existed for royal representations except on coins. However, the use of the left profile on the Shemakha and Krasnaya Polyana plates distinguishes the images from those on all other early Sasanian vessels.

Sari plate (PL. 10). On the two following plates in this group the hunter is in profile to the right. The first of these plates was an accidental discovery made near Sari in the northwest Iranian province of Gilan. 68 On the reverse inside the ring foot is a worker's mark surrounded by two concentric circles. 69 On the obverse, the archer, seated upright on his horse, aims to the rear in a Parthian shot. Since he is in right profile, however, the scene is reversed from those previously described, and the human figure is placed on the left side of the plate, the direction toward which the horse, outstretched in a flying gallop, also moves. On the right is a lion in a vertical position, facing outward toward the rim of the plate. Beneath the horse and rider is another lion spread horizontally along the ground. A particularly noticeable new addition to the scene is the large expanse of landscape. 70 Small hills, arranged in two rows, spread from the bottom center two thirds of the way to the top, along the circumference on the right side of the plate. Each hillock has a hatched outline and encloses a small flower on a stalk or a leafy plant. All are rather naturalistically rendered.

The representation fits the circular frame, with part of the design overlapping others. The horse's hind legs cut rather abruptly across the hindquarters of the vertical lion. On the Krasnaya Polyana plate (Pl. 9) there was some overlap between the horse and the hunted animal, but the line of the horse's legs matched the profile of the animal's rump, producing a continuous line.

Aside from the reversal of the position of the

<sup>67.</sup> Fajans, "Recent Literature," p. 61. The heavy weight of this vessel in comparison to others that are hammered may have led to the belief that the plate is cast.

<sup>68.</sup> Iran Bastan Museum, Tehran, acc. no. 1275; diam. 28.8 cm.; height with foot 5.5 cm.; weight 1302 gm. Ghirshman, "Notes iraniennes VI," pp. 5-19 (some son of Shapur II, perhaps Shapur III); Annales du service archéologique de l'Iran, 3 (1956), pp. 329-364 (Guzarishhayi bastanshinasi, 3 [1334], pp. 329-364); Shepherd, "Sasanian Art in Cleveland," p. 70 (Ardashir II?); Göbl, "Zum Chronologieproblem," p. 33 (Hormizd I); Marshak and Krikis, "Chilekskie Chashi," p. 62 (stage 2, fourth century, unknown hunter).

<sup>69.</sup> This is the observation of C. J. Brunner.

<sup>70.</sup> Ghirshman describes both this vertical-horizontal composition and the unusually large expanse of landscape in "Notes iraniennes VI," pp. 5–19.

human figure, the composition of the Sari plate is close to that of the vessel from Krasnaya Polyana. The vertical figure of the mounted archer is paralleled by that of the fleeing lion; the horizontal body of the horse is balanced by the dead lion outstretched beneath. On both works the horse gallops in one direction and the hunter turns to slay an animal fleeing off in the other direction.

The dress of the hunter is more elaborate than that on the preceding examples. His headdress is related to that of the figure on the Shemakha plate (Pl. 8). A cloth covered with a dotted lozenge pattern, instead of a close-fitting cap, covers the crown of the head. Drawn up above it is an elaborate fan-shaped crest, decorated with various geometric designs.<sup>71</sup> A small ribbon spreads from the base of this crest, and a much larger one flies out behind, coming from the diadem encircling the forehead. Above this diadem is a row of curls. New additions are the two circular balls attached to twisted strands coming from the left side of the hunter's head and projecting forward and outward. The earring consists of a small bead with an oval pendant, and the necklace is made of large, modeled beads from which an oval bead hangs, chased on the surface of the garment. Down the sides and across the front of the chest runs a halter with a central beaded roundel enclosing a rosette. From the back of this halter two ribbons with pairs of beads attached at the corners fly out behind the figure. The belt, in this case fully visible, is a band with beading, joined at the center by two circular clasps and tied in a bow, the loops appearing above and falling down below the waist. The light material of the upper garment is decorated at the shoulders with two embroidered roundels having dotted outer borders. The leggings are held in the customary fashion with circular clasp, strap, and ribbons at the foot. This hunter wears a guard on his right or bowstring hand. The crossed lines holding the protective finger coverings are visible.<sup>72</sup> The index and little fingers of the hand are straight, the two middle fingers bent. 73 The line from the bent arm arches slightly from elbow to index finger.

The head of the hunter is in pure profile to the right. His hair sweeps out behind his head, ending in whorl curls similar to those on the earliest rock reliefs and continuing through the reign of Bahram II. Only

on this plate and on the Sargveshi cup with the medallion portrait of Bahram II (Pl. 2) are the long wavy strands of hair shown in a fashion similar to that of the early rock reliefs at Naqsh-i Rustam, Naqsh-i Radjab and other sites. Small dots enclosed in circles are used to represent the curls of the beard, which is bound with a ribbon. There is a smoothened area beneath the lip, a feature appearing on another plate to be discussed below (Pl. 28). The mustache is a straight line curving up at the end. A small curl appears on the archer's right temple, a detail also to be seen on the rock reliefs of Shapur II/III and Ardashir II at Taq-i Bustan. Weapons include both sword and bow, the first time the two have been depicted on a single plate. The sword is slung at the waist on a

72. This detail is mentioned by Ghirshman, in "Notes iraniennes VI," p. 19. He compares this hand chain with one allegedly from Ziwiye. Bulanda speaks of the outstretched finger of the bowstring hand and of the hand cover necessary to allow for this position: Bogen und Pfeil bei den Völkern des Altertums, pp. 44, 45.

73. Bivar gives a detailed description of the Sasanian method of gripping the bowstring in "Cavalry Equipment," p. 285. Bivar does not observe, however, that two different grips appear on Sasanian silver vessels, one in which both fore- and little finger are outstretched, the other in which the little finger is bent under.

74. This curl appears frequently on Parthian coins: Sellwood, An Introduction to the Coinage of Parthia. As far as I know it does not exist on Sasanian coins. For the reliefs of Shapur II/III and Ardashir II at Taq-i Bustan, see Fukai and Horiuchi, Taq-i-Bustan II, pls. 64–92. Mention is made of this feature by Shepherd in "Sasanian Art in Cleveland," p. 73. The interpretation of this forehead curl as a device to cover a temple lesion that appears to have been a genetic defect of the Arsacid rulers is presented by Hart, "The Diagnosis of Disease from Ancient Coins," pp. 123–127. That the disease causing lesions on the temple was restricted to the Arsacid ruling branch is suggested by the fact that neither lesion nor hair curl appears on the coins of independent rulers of Persis or Elymais. By the Sasanian period it appears that the hair curl may have become a "royal" detail.

<sup>71.</sup> A few monuments illustrate what may be a related form of headdress. On a graffito at Persepolis perhaps illustrating Shapur, son of Papak, a huge fan-shaped object projects above the head: E. F. Schmidt, *Persepolis* I, pl. 199A; Calmeyer, "Zur Genese altiranischer Motive, III. Felsgräber," p. 66. Lukonin has speculated on whether the headdress of Shapur is not connected with his role as the priest of Anahita: "Monnaie d'Ardachir I et l'art officiel sassanide," p. 113. It is possible that the small figure placed between Narseh and Anahita on the relief at Naqsh-i Rustam wears a related form of headgear. Regrettably, the head is damaged: E. F. Schmidt, *Persepolis* III, pl. 90.

decorated strap. Its hilt has a wide guard, and the pommel ends in a circular knob. Below the hilt a pattern decorates the unsharpened segment of the blade. The leg of the mounted archer crosses the upper part of the scabbard, the lower part of which emerges below the thigh. This too is decorated, having a design of lozenges. The huge compound bow has long straight ears stretching back to the archer's headdress at the top and to his waist below.

As elaborate as the archer's dress are the trappings and harness of the horse. The double reins have pendent beads hanging from them.<sup>77</sup> The snaffle bit is bow-shaped, a form similar to that seen on some of the early Sasanian rock reliefs. 78 In place of the ball of hair above the head of the horse, there is a circular plaque with a rosette and leaf pattern. Presumably it was made of metal. Behind this device the curving trimmed edge of the mane is depicted as on the Krasnaya Polyana plate (Pl. 9). Toward the base of the neck, in the center of the clipped arc, there is also a square projection. A single lock of long hair falls down below this projection, against the neck. As usual, the tail is tied in an elaborate knot. Straps crossing the chest and rump of the horse have hanging from them triangular forms, undoubtedly bells, since small punched circles represent the ends of the clappers. The saddle blanket has a narrow dotted border, and the surface is covered with a quatrefoil design. The empty spaces between the leaflike forms have crosses in them. Ribbons project at the back from the vertical edge. The girth running beneath the horse's belly has a beaded pattern on it. Rising from the horse's rump on long chains are large balls of hair horizontally divided into waves and emerging at the base from a plant motif. As on the Krasnaya Polyana plate (Pl. 9), the head of the horse is rather long, and the ear lies flattened back against the head. The nostrils are pronounced, the far one visible beyond the bridge of the nose against the background of the plate.

On the Sari plate (Pl. 10), the lions are shown in poses that suggest that one is alive, the other dead. The vertically placed lion, seemingly the immediate object of the hunt, is wounded (an arrow is embedded in the front shoulder), and the horizontally outstretched lion below, with head turned down on his paw, is depicted in a fashion long used for dead animals.<sup>79</sup> In this case also the feathered end of an

arrow is portrayed on the front shoulder. The lion bodies are covered with lines of dots meeting to form whorls on the shoulder and rump. Both animals are males, their manes consisting of elaborately twisted curls and pointed tufts.

The plate is clearly made up of a number of pieces attached to the background shell. One of these is the head of the hunter. The line of the inlaid piece can be seen running beyond the figure's profile, as on some of the medallion bowls (Pls. 3, 6) and on the vessel in the British Museum depicting Shapur hunting (Pl. 13). Other added pieces include parts of the bodies. Some details are chased, and major outlines are incised, on the background shell. The transition between the applied areas and the background is quite noticeable, as it was on the plate from Shemakha (Pl. 8). Only certain elements in the design are gilded. On the exterior a single line can be seen below the rim.

Significantly, the fact that this is a lion hunt and the lion is a royal quarry <sup>80</sup> is paralleled by the form and dress of the human figure, which relate him more closely than the figures previously described to the Sasanian king. The right profile, the tied beard, the row of curls above the diadem, the presence of a

<sup>75.</sup> See below, p. 58.

<sup>76.</sup> Although this appears to be a clumsy method of depicting the leg and scabbard, it is not uncommon for persons seated or reclining to be shown with their leg over the scabbard: Herzfeld, Samarra, pp. 40-44.

<sup>77.</sup> This double rein is cited by Ghirshman as evidence for the close association in date of the Sari plate (Pl. 10) and the vessel in the Hermitage Museum with a hunter wearing a ram's-horn headdress (Pl. 23): Ghirshman, "Notes iraniennes VI," p. 14.

<sup>78.</sup> The pair of horses drawing the chariot on the Darab relief has this form of bit as does the horse of Shapur I at Naqsh-i Rustam and that of the defeated enemy of Hormizd II at the same site: Hinz, Altiranische Funde, pls. 82, 106, 133b. The same bit is represented in a painting dated A.D. 114-116 in the Temple of Zeus Theos at Dura-Europos: Rostovtzeff, Dura-Europos . . . Seventh and Eighth Seasons, pp. 199, 209, pl. 21.

<sup>79.</sup> See, for instance, the relief of Bahram II at Sar Meshed: Hinz, Altiranische Funde, pl. 134. That this was a conventional pose by the Sasanian period is suggested by its repeated use on Assyrian reliefs of the ninth to seventh centuries B.C.: Barnett, Assyrian Palace Reliefs, pls. 26, 27, 67.

<sup>80.</sup> Ghirshman suggests that a victory over a lion, the king of beasts, is, in Sasanian art, a royal prerogative: *Persian Art*, p. 209.

Catalogue—Group I 55

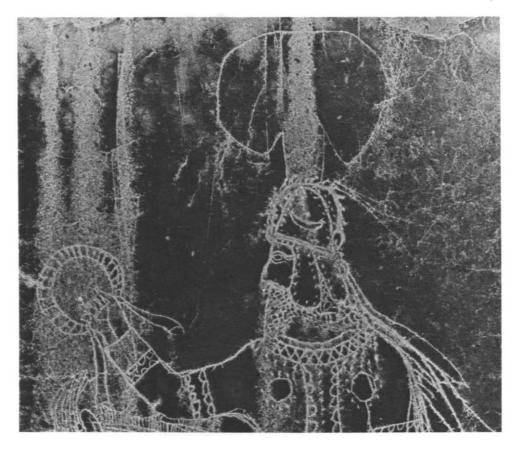


FIG. 19 Grafitto showing Shapur (?), son of Papak, Persepolis Photo: Carol Bier

sword, are all such "royal" details. The crowns of two Sasanian kings, Hormizd I and Shapur II, as well as that of the figure identified as the supreme Zoroastrian divinity Ahuramazda on the relief of Ardashir II at Taq-i Bustan, include a band surmounted by a similar row of curved forms. It is clear, however, that the closest parallel for the headdress of the Sari hunter is that worn by Shapur, son of Papak, on a graffito at Persepolis (Fig. 19).81 This is not a royal Sasanian crown type; rather it suggests that the figure on the Sari plate is a crown prince rather than a Sasanian king.

Burnes plate (PL. 11). The final complete vessel belonging to this group must be more summarily treated, as it is known to us only from drawings made in the first half of the nineteenth century. 82 The piece itself disappeared when its owner, Sir Alexander Burnes, was murdered in 1841 in Afghanistan. Allegedly once in the collection of the Emir of Badakhshan, it was brought with another plate to Kabul by Dr. Percival B. Lord and at his death entered the Burnes collection. In spite of this evidence of an Eastern provenance outside the borders of Sasanian Iran, the plate is included here because it has a Middle Persian inscription giving its weight.83 It shares, as well, a number of formal characteristics with the plates already described. The vertical position of the hunter is balanced by the nearly vertical figure of the quarry, a single lion. As with the Sari plate (Pl. 10), the hunter is in right profile. Entirely new, however, is the rearing position of his mount, understandable because the figure of the lion faces toward rather than away from the horse. The front hooves of the horse cut slightly into the lion's body. The strong oblique line

<sup>81.</sup> See note 71 above.

<sup>82.</sup> Diam. 28 cm. For bibliography up to 1936, see Erdmann, "Die sasanidischen Jagdschalen," pp. 226–227, note 4. The best reproduction of the Wade drawing appears in Burnes, *Cabool*, pl. 18. Erdmann, "Zur Chronologie," p. 240; Erdmann, "Entwicklung," p. 102, note 59. In the last article Erdmann says the plate may be an Arsacid work, a view he had already expressed in "Zur Chronologie." Marshak and Krikis, "Chilekskie Chashi," p. 63. The king is identified as Yazdgard I, and the plate is placed in Marshak and Krikis' fifth stage. 83. Livshits and Lukonin, "Nadpisi," p. 163.

of the spear suggests for the first time the triangular form of composition that Erdmann traced in a number of the royal hunting plates, among them this one. 84 As both drawings indicate, the entire scene does not quite fit within the circular surface of the plate, for parts of the horse trappings, the balls of hair, are cut off by the vessel's rim. In neither drawing are any landscape elements included in the design.

In his dress, this hunter is closest to the figure on the Shemakha plate (Pl. 8). Only the headdress is rather different, consisting simply of a crescent, shown full-front, resting on the top of the profile head, which is left bare and covered with tight curls. 85 The ends of the long ribbon around the head, and the necklace, earring, and circular shoulder patches, are closely related on these two vessels. The belt was evidently tied in a bow as on the plate from Sari (Pl. 10). Ribbons and bow appear on the foot below the soft material of the leggings. A quiver hangs from a strap at the hunter's waist, and, in the Wade drawing (Pl. 11a), appears to be at least partly covered with a pattern of zigzags.

The forelock of the rearing horse is drawn up above the head in three separate bunches or tufts. The mane is cut short, the tail tied in a bow. Both reins have pendants of some sort hanging from them, as on the Sari plate (Pl. 10). Suspended from the straps across the chest and rump are two palmette-shaped elements from which oval pendants hang. On the rump the strap cuts across the saddle blanket in the same fashion as on the Krasnaya Polyana plate (Pl. 9) and to a lesser degree on the Shemakha vessel (Pl. 8). Decorating the blanket in the Wade drawing (Pl. 11a) is a checkerboard pattern, the large squares enclosing a design of five circles. On the Krasnaya Polyana plate the blanket is also divided into squares, but these contain circles arranged around a central point. From the corner of the blanket on the Burnes plate hang the usual ribbons. The girth is shown in both the Archer and Wade drawings. On the Archer reproduction (Pl. 11b) the girth has a chevron pattern, as on the Shemakha plate. On the Wade drawing (Pl. 11a) there appears to be a double row of pearls. No details of the large hair balls projecting in the customary fashion from the back are given in the Archer drawing. Wade, however, drew horizontal lines across them, undoubtedly to give the waved effect produced by such lines on the vessels from Krasnaya Polyana and Sari.

The body of the lion may have been covered by hatched or dotted lines. This is at least suggested by the Wade drawing (Pl. 11a). However, the elaborate treatment of the lions' manes on the Sari plate (Pl. 10) could not have existed on the Burnes plate, since there is no indication of it on either drawing; instead there are only simple tufts. The position of the lion is similar to that of the goat on the Shemakha plate (Pl. 8). The animal's back is against the rim of the plate in an awkward fashion, his legs beneath his body. On these two vessels the single animal is pierced by the weapon and must be supposed to be dead.

Erdmann in his consideration of the plate in the Burnes collection left open the question of whether it was an original work of the third century, possibly even pre-Sasanian, or a later work imitating plates of this early period. Ref. A number of the details described above place it, as will be apparent at the end of the present survey, in Group I, consisting of works belonging to the earliest period. More difficult to prove, in view of its provenance and the fact that only drawings exist, is whether the piece was executed by Sasanian craftsmen or not. For the time, it is included in Group I because of the presence of a Middle Persian inscription and because in so many respects it is related to the other works in this category.

Summary. All these plates (Pls. 8–11) share in common a number of features also to be seen on the early Sasanian rock reliefs of Firuzabad, Naqsh-i Rustam, Bishapur, and other sites. The form of dress and the horse trappings are in general the same. More specific are the resemblances in the decorative trim of the horse's mane, the bowed tail, the Sari type of bit (Pl. 10), the rows of circular *phalerae*, the ribbons projecting from the saddle blanket, the leg guard of the saddle, and the broad folds of the hunter's garment where it rests on the back of the horse. The

<sup>84.</sup> Erdmann, "Die sasanidischen Jagdschalen," p. 227.

<sup>85.</sup> Erdmann notes that a diadem with crescent is a form of headdress appearing on the pre-Sasanian coins of Persis: "Zur Chronologie," p. 240.

<sup>86.</sup> Erdmann, "Die sasanidischen Jagdschalen," p. 227.

triangular composition of the Burnes plate (Pl. 11) is related to that of the Sar Meshed relief.<sup>87</sup>

The vessels in Group I are larger than most of those to be considered in Group II: 28 to 29 cm. in diameter rather than 23 to 24 cm. In the three instances where the presence of gilding can be detected, on the Shemakha vessel (Pl. 8), the Krasnaya Polyana plate (Pl. 9), and the plate from Sari (Pl. 10), it is spotted on certain parts and does not cover the entire design.

There are in Group I essentially three types of composition. The first is illustrated by the Shemakha plate. The hunter slays a single animal. The vertical lines of the bodies of both man and beast run parallel to each other, bound by the long horizontal figure of the horse. The second type appears on the Krasnaya Polyana plate and the Sari plate. The verticalhorizontal relationship of the hunter, the quarry, and the horse remains the same, but another identical victim is shown horizontally beneath the horse's feet. On both these vessels parts of the design overlap others, but on all except the Burnes vessel (Pl. 11), the whole design appears within the circular frame. On the Burnes plate the presence of a hunter and his quarry, a single animal, repeats the first scheme. The slanting line of the spear and the obliquely rearing horse, however, introduce an entirely new, triangular composition.

Berlin fragment (PL. 12). If, following this résumé, an attempt is made to reconstruct a scene around the Berlin fragment found in Iran, described in Chapter II,88 it is evident that the design cannot have been the triangular type of the Burnes plate (Pl. 11). The hunter was probably vertically positioned and may well have been aiming at an animal, which, if the angle of the spear is followed, was rearing before him. It is impossible to judge whether or not this hunter was turned and reversed in a Parthian shot or whether both hunter and horse faced in the same direction. As with the Sari plate (Pl. 10), the hunter is shown in profile to the right, but his dress, even allowing for some missing part of the headdress originally chased on the background of the plate, is far simpler. A central circular clasp holds a cloak similar to that worn by the Krasnaya Polyana hunter (Pl. 9). This would have hidden any decoration that might have been on an undergarment, notably the embroidered shoulder patches. It is significant that the head of the hunter is, for the first time, turned in a three-quarter view toward the front. In Chapter II the identification of this figure by Sarre as the Sasanian king Narseh was noted. 89 There is, however, no basis for Sarre's statement, and the simplicity of the headdress suggests that this is not the king of kings but a member of the high nobility or a Sasanian prince.

GROUP II. Hunting plates with scenes of Sasanian kings wearing crowns closely resembling those on Sasanian coins and dynastic monuments.

British Museum Shapur plate (PL. 13). The first plate in this series has already been mentioned briefly in Chapter II, on the medallion bowls. 90 The plate is in the British Museum and comes allegedly from Anatolia, although it was purchased in Iran. The king is in an upright position astride a stag, which is outstretched in a flying gallop. 91 Both figures, animal and human, are in pure profile, facing right. The king with his left hand grasps the antlers of the stag, while with his right hand he administers the death blow with a sword thrust to the animal's neck. 92 Beneath this stag is another, in a horizontal crouching position, legs drawn up beneath the body. 93 That this ani-

<sup>87.</sup> Hinz, Altiranische Funde, pl. 134.

<sup>88.</sup> See Chapter II, pp. 32 ff.

<sup>89.</sup> Sarre, "Ein Silberfigürchen des Sassanidenkönigs Narses im Kaiser-Friedrich-Museum zu Berlin," pp. 73-78. See Chapter II, p. 32.

<sup>90.</sup> See Chapter II, pp. 36 ff.; British Museum, acc. no. 124091; diam. 17.9 cm.; height with foot 4.5 cm.; weight 394.7 gm.

<sup>91.</sup> Frankovich describes the animal as an elk, but Sandor Bökönyi in a private communication identified it as a fallow deer: Francovich, "Il concetto della regalità," p. 10. Ghirshman notes that the same species appears on the hunting plate in the Bibliothèque Nationale (Pl. 22): Ghirshman, Persian Art, p. 213. See also Reed, "Imperial Sassanian Hunting of Pig and Fallow-deer," pp. 3-7.

<sup>92.</sup> Erdmann describes the king as standing over the animal in Kunst, p. 90.

<sup>93.</sup> The pose of this animal has frequently been compared to that of the stag in Scythian art: Erdmann, Kunst, p. 90; Haskins, "Northern Origins," p. 328; Rice "The Third International Congress and Exhibition of Iranian Art and Archaeology, Leningrad, 1935," p. 105.

mal is dead is suggested by the upward thrust of the head and by the streams of blood, shown as hatched lines on the background of the plate coming from the muzzle. The vertical and horizontal lines of the composition are broken by the oblique line of the king's arm slashing downward at the stag he rides. Although this movement does not produce the markedly triangular effect of the Burnes design (Pl. 11), the general impression is somewhat similar. 94

No landscape elements are included in the scene, and the design does not fit exactly onto the plate. The hind legs of the animal upon which the king rides are cut off above the hooves by the molding inside the rim.

The king wears a crown that has been the subject of much discussion.95 By comparison with those of the coins and the rock reliefs, this appears to be the crown of Shapur I, with stepped crenelations, a cloth-covered globe above the head, and a plain unbeaded forehead band beneath the stepped crenelations. On the coins, Shapur I is shown with a long lappet covering his ear, but this detail does not occur on the rock reliefs of Shapur I, at Naqsh-i Rustam and Bishapur, which are in this respect closer to the image on this plate. Short ribbons project from behind the globe, and longer ones are attached to the diadem. The king wears an earring, a necklace, and bracelets. The soft material of the upper garment is decorated on the shoulders with circular roundels having a dotted border design and is gathered at the waist by a bowed belt. This belt, similar to that on the Sari plate (Pl. 10), is of the standard type seen on the early reliefs and on much of the silver. Beneath the belt is a beaded band. This is the strap from which the scabbard of the sword hangs on the farther side of the body. The hem of the upper garment spreads out on the back of the horse in broad folds stylized in the same fashion as on the rock reliefs and on the plates in Group I. Scarcely visible on the chest are the straps of a halter like the one so elaborately portrayed on the Sari plate. 96 In this instance only a small portion of the beading can be detected on the left shoulder. A single straight line under the king's extended sword arm is probably the cross band of this halter. From the back of the halter fly two ribbons, each having three pairs of jewels or bells attached to them. The uppermost pair is hidden behind the long ribbon coming from the king's crown. The leggings appear

to be of the same material as the upper garment and are gathered in the usual fashion by a disk just behind the bow on the foot. Single punched dots covering the leggings are perhaps intended to suggest jewels. The long line running down the front of the leg indicates another form of decoration, perhaps embroidery. The king's quiver, full of arrows, is suspended from a beaded band at the hips. It is divided into two zones, the lower having a geometric lozenge pattern, the upper an elaborate, naturalistic plant motif.

The head of the king, with spiral curls bunched behind the neck, tied beard, and crescentic mustache, was described in Chapter II, where the treatment of these details was compared to that on other early Sasanian works of art. <sup>97</sup> Both Seyrig and Haskins have commented on the position of the sword hand with the placement of the index finger over the guard. <sup>98</sup> The fact that a small line runs across the blade slightly below this guard indicates that this portion of the blade was unsharpened, allowing the index finger to cross over the guard and aid in the balance of the weapon.

The animals' bodies are covered with rows of hatched lines running horizontally in an uninterrupted sequence from one end to the other. They are absent only on the animals' heads. Blood spurts from the sword wound on the upper animal and, as mentioned above, from the muzzle of the lower one. On the hind legs are two semicircular forms in low relief, intended to suggest the muscles.

Both the shape of the vessel and its method of manufacture are of interest. Unusual is the deep,

<sup>94.</sup> Erdmann, "Die sasanidischen Jagdschalen," pp. 190–200.

<sup>95.</sup> The king is identified as Shapur II by the following authors: Bachhofer, "Sas. Jagdschalen," p. 65; Dalton, Oxus, p. 60; Marshak and Krikis, "Chilekskie Chashi," p. 63; Lukonin, "Kush.-Sas. monety," p. 22; Herzfeld, "Khusrau Parwēz," pp. 125-126; Erdmann and Haskins claim that the king is Shapur I: Erdmann, "Die sasanidischen Jagdschalen," p. 200; Haskins, "Northern Origins," p. 328.

<sup>96.</sup> Marshak and Krikis note the presence of the ribbons coming from the royal halter and, because of this detail and of the form of the globe rising above the head, state that this must be Shapur II: Marshak and Krikis, "Chilekskie Chashi," p. 63.

<sup>97.</sup> See Chapter II, p. 36.

<sup>98.</sup> Seyrig, "Antiquités syriennes 20," p. 28; Haskins, "Northern Origins," p. 328; Nickel, "The Art of Chivalry," p. 72.

bowl-like form, which places this piece typologically between the early medallion bowls and the flatter hunting plates. A ring foot is attached to the reverse. Compared to most of the medallion bowls and to the other hunting vessels, this piece is rather small, eighteen centimeters in diameter. High relief areas are formed by the addition of separate pieces. The outline of the section that includes the king's head is visible beyond the line of his profile, as it is on some of the medallion bowls and on the plates from Shemakha and Sari (Pls. 8, 10). Also in relief and applied separately are the king's sword arm, the left hand grasping the horns, the upper part of the quiver, the animals' heads, parts of their horns, and their shoulders and thighs. Only parts of the decoration are gilded. The inner molding is gilded, as are the king's crown, the necklace and shoulder roundels, the bracelets, belt, sword, and quiver straps as well as the horizontal bands on the quiver itself. The heads, hooves, tails, and underbellies of the stags also are gilded. On the hunting plates in Group I the application of the gilding to restricted areas was likewise noted. In the future gilding in this manner will be referred to as "spot gilding," and the reader can sometimes detect in the illustrations the exact locations of the gilded areas. On the exterior of the vessel there is a single line below the rim, and at the center of the base two concentric circles around the centering mark.

The nature of the representation on this vessel is so extraordinary that a word concerning its significance will be included here. In Chapter II of this study, it was decided, on the basis of certain stylistic details, that this vessel in the British Museum should be assigned to the fourth century, the period in which Shapur II was king of Iran. 99 That the king's crown is the same as that of Shapur I has already been noted. It has neither a beaded band at the base nor volutes above a plain band, features appearing on the crowns portrayed on coins of Shapur II. Two possibilities therefore exist. Either the artist who made this plate was not bound to the rigid canons of the carver of the coin dies and could omit the forehead beading or row of volutes, or this is a purposeful representation of Shapur I, made at the time of Shapur II. In favor of the latter theory is the unusual nature of the design. The mythological, heroic or divine form of the combat has led some scholars to liken this scene to

Mithraic hunts in which Mithra characteristically grasps the head and pierces the throat of his quarry, a bull.<sup>100</sup> In this connection mention can be made of a passage in the *Scriptores Historiae Augustae*<sup>101</sup> describing a plate sent by Shapur I to the Roman emperor Aurelian (270–275) on which there was a representation of the sun god. Although this is not a reliable historical source, it may be true that at some time

99. See Chapter II, p. 36.

100. Trever, "Otrazhenye v iskusstve dualisticheskoĭ kontseptsiĭ Zoroastrizma," p. 248; O. Grabar in his introduction to Sas. Silver, pp. 54-55; Campbell, Mithraic Iconography and Ideology, p. 247, note 3. Erdmann, recognizing the unreal, heroic nature of the scene, thought there might be some relation between this motif and that of Herakles slaving the Cerynean Hind. Since Herakles wounded the hind with an arrow, this is obviously an unacceptable interpretation: Erdmann, "Die sasanidischen Jagdschalen," p. 200, note 6. An allegedly Sasanian sardonyx gem in the Bibliothèque Nationale shows a figure identified as Ardashir I perhaps slaying a bull. The front portion of the gem is missing; otherwise this might provide an illustration of a Sasanian monarch in a Mithraic pose: Babelon, Catalogue des camées antiques et modernes, pl. 42, no. 359. On p. 192 of the Bibliothèque Nationale catalogue the scene is described as Ardashir I slaying Nandi. Rostovtzeff discusses the possibility that the figure of the god on horseback and that of the hunter god influenced Mithraic iconography: Dura-Europos . . . Seventh and Eighth Seasons, p. 114. Rostovtzeff further discusses the Eastern derivation of the idea of Mithra as a hunter in "Dura and the Problem of Parthian Art," pp. 280-281. It should be remembered that, at Dura, Mithra hunts a stag as does the king on the plate in the British Museum (Pl. 13). In a recent study of Iranian Mithraism, it is noted that modern Zoroastrian practices during the celebration of Mihragan include references to animal sacrifices: Hinnells, "The Iranian Background of Mithraic Iconography," pp. 247 ff. See also the discussions of Iranian Mithraism in Mithraic Studies I, II, ed. Hinnells: particularly Gershevitch, "Die Sonne das Beste," p. 86; Bivar, "Mithra and Mesopotamia," pp. 275–289; Hinnells, "Reflections on the Bull-Slaying Scene," pp. 290–312.

101. Scriptores Historiae Augustae III, The Deified Aurelian, chapter V, 5, p. 201. This passage is cited by Herzfeld in "Khusrau Parwēz," p. 131, note 1. See also Sarre, Die Kunst des alten Persien, p. 49, where it is mistakenly said that Diocletian rather than Aurelian received such presents. Rostovtzeff quotes this passage in reference to a silver bowl found at Dura-Europos. He states that the Persian gift was probably similar to the patera preserved in the Hermitage Museum (Smirnov, Serebro, no. 306). This is the Klimova plate with an enthroned figure (Pl. 35) to be discussed in the next chapter: Rostovtzeff, Dura-Europos . . . Fifth Season, p. 308. Admittedly, the Scriptores have been described as "little more than literary monstrosities" (Scriptores Historiae Augustae I, p. XXIV) and are not considered to be a reliable historical source.

divine rather than royal personages were the subjects depicted on the court silver. In this case, the British Museum plate portraying Shapur I could represent an intermediate phase: a royal ancestor is shown in a fashion designed to liken him to a solar divinity. It is possible that, during the long period of the minority of Shapur II (ca. 309–324), the representation of a royal predecessor in this glorified form was chosen as a prestigious subject for the royal silver plate of the child-king who bore the same name.

At present, there is no clear solution to this question, but it is evident that there are many ways in which, at this particular point in Sasanian history, the phenomenon of representing an ancestor on a silver vessel might be explained. Alternatively, it is possible that this is intended to be Shapur II and that the vessel was fabricated in a region where strict adherence to the official Sasanian crown type and to the standard hunt iconography was not maintained. This point will be raised again in Chapter V.

Cleveland Museum Hormizd plate (PL. 14). A vessel of alleged Iranian provenance in the Cleveland Museum of Art presents a similar problem. There appears to be a difference between the date of the crown worn by the king and the probable date of the manufacture of the plate. 102 The king wears the crown of Hormizd II (302–309), a fact that suggests that the plate is earlier than any other vessel in Group II. As will be seen in the chronological comments following the catalogue (pp. 86 ff.), and as will become evident as the form of the hunting plates is described below, so early a date is unlikely.

The vertical position of the archer-king who executes a Parthian shot is here countered by the obliquely rearing quarry facing the hindquarters of the horse, as on the Shemakha plate (Pl. 8). The horizontal line of the horse runs almost parallel to that of the dead lion stretched over a series of small hills at the base of the plate. Between the two lions is a triple hillock. The composition is carefully fitted into the circular frame.

The head of Hormizd is in three-quarter view surrounded by a nimbus. <sup>103</sup> An unusual feature is the dot in the center of the forehead. Punched circles represent the hair, bunched on either side of the head. The beard closely follows the line of the chin. The mustache is a simple crescent, without waves or hatching.

The dress is depicted in an entirely new fashion, the folds being defined by short paired lines, and there is an emphasis on linearity rather than modeling in the folds of the leggings. In this respect, the representation is similar to that of the equestrian and enthroned figures on a vessel from Strelka in the Hermitage Museum to be discussed below (Pl. 19). The king's halter on the Cleveland Museum plate is without ribbons. A slight variation in the shape of the compound bow is to be noted, for pronounced ridges are indicated where the upper arc joins the ear. The uneven shape of the two arcs is faithfully recorded, as it had been on the earlier plates (Pls. 8, 10). The bowstring hand is shown in a slightly different position from that of the Sari plate (Pl. 10), with the little finger bent rather than straight.

The horse is represented in a flying gallop to the left. The trimmed mane, having a broad projection with three sharp tufts, is similar to that on the Freer Gallery plate (Pl. 15) to be described next, although there is less of the long hair falling on the neck. The reins, coming from the snaffle bit, appear to have pendent disks with dotted decoration. The blanket itself has a narrow beaded border enclosing an overall crossed-line pattern similar to that on the Freer Gallery plate. No ribbons project from it. The customary hair balls flying up beyond the horse's back are omitted in this scene, possibly because of the crowd-

102. Cleveland Museum of Art, acc. no. 62.150; diam. 20.6 cm.; height with foot 4.5 cm.; weight 546 gm. Shepherd, "Sasanian Art in Cleveland," pp. 73–79. The king is identified as Hormizd II (302–309), and the plate is dated accordingly. Lechtman, "Ancient Methods of Gilding Silver: Examples from the Old and New Worlds," fig. 1.14; Lukonin, *Persia* II, fig. 151; Shepherd, "Some Problems of Sassanian Silver," pp. 326–352; Thompson, "Stucco Plaque," p. 88, note 10. Thompson calls the plate a late copy of a Sasanian prototype but no reasons for this are given. Harper, *Royal Hunter*, pp. 38–39, no. 6.

103. Widengren, Les Religions de l'Iran, pp. 72, 75 ff. Widengren speaks of the aureole surrounding the Sasanian king's head as the Xvarnah also to be seen in the art of lands east of Iran, on Kushan monuments, and in the later paintings at Bamiyan and Piandzhikent. He mentions the "aureole of fortune" possessed by kings in the West as well as the East (p. 179). Rosenfield describes the circular halo visible on the statue of the Kushan king Kanishka at Mathura. He states that no other "contemporary Parthian, Sasanian or Roman ruler made such extravagant symbolic allusions to his divinity" as the Kushan and Kushano-Sasanian kings: Rosenfield, Kushans, pp. 197–201.

ing that would have resulted from their inclusion in a design where the hunter executed a Parthian shot. On the horse's chest is either a tamga or a muscle pattern, <sup>104</sup> and on the hind leg the folds of the flesh are shown by short paired lines echoing the drapery stylization.

The upper lion is alive and attacking; the lower one is dead, shot by the arrow protruding from his back. Characteristically, the head of the dead animal is turned backward and down on the paw. The eye is closed. The manes of the lions are elaborate in treatment as on the Sari plate (Pl. 10), but the curls and tufts are represented in a more schematic form. The underbelly is set off from the rest of the body by a row of tufts. This area and the inner surfaces of the legs are dotted.

The vessel was manufactured in the same fashion as the British Museum Shapur plate (Pl. 13); sixteen added pieces give a general impression of high relief. Unlike the figures on some of the other vessels (Pls. 13, 15, 16), the bodies of man and beast are entirely made up of these applied pieces, and there is no clumsy transition on the body surfaces from the relief area to the background shell. Except for the king's face, neck, and hands, and for the landscape pattern, the design is entirely gilded. A line runs around the rim on the exterior of the vessel.

The small punched dot in the center of the forehead of the king on the Cleveland Museum plate is a detail occurring only on divine or cult figures in Sasanian art. This is not, therefore, a standard representation of a Sasanian monarch. If this is not a contemporary image of Hormizd II, and details of the design and style suggest that the vessel is later than the early fourth century, how can the representation on this plate be explained? The most likely person to depict Hormizd II on a silver plate is some royal successor of the same name. The next Hormizd (III), reigned for only two years (457-459) before being deposed by Peroz. He minted no coins within the Sasanian homeland, but Lukonin attributes to this Hormizd coins in the Kushano-Sasanian series (Fig. 14). 105 On these the crown is in the shape of a bird and is surmounted by a lotus, a deliberate imitation of the coins of Hormizd II. It is possible that the Cleveland Museum plate was commissioned by Hormizd III as an attempt to emphasize the legitimacy of his claim to the Sasanian throne through direct reference to his royal ancestor and namesake, Hormizd II. However, the plate may even be later in date than the fifth century, as the concluding comments in this chapter will reveal. The dotted Pahlavi inscription within the ring foot gives the name of the owner and the weight. According to Brunner and Frye, it is not to be dated before the late fifth or early sixth century. <sup>106</sup>

Freer Gallery plate (PL. 15). The next royal hunt appears on a plate found in 1872 at Wereino in the Perm and once in the Stroganoff collection. The vessel was purchased by the Freer Gallery in Washington in 1934. 107 With this work a new feature occurs in the representation of the royal dress: the striated form of the globe rising above the king's head. It appears on this plate and on two others (Pls. 16, 23), but is never part of the royal image on Sasanian coins. A number of scholars observing this detail have claimed that it makes the identification of this figure as the king of kings of Iran, Shapur II, impossible. 108 They have pointed out that the same type of globe appears above some of the crowns on Kushano-Sasanian coins, and they would connect the image on this plate with that of the Sasanian rulers of the Kushan lands. This argument is not entirely valid, as the same globe

<sup>104.</sup> Shepherd, "Sasanian Art in Cleveland," p. 77, fig. 16. Gall states that he believes these are simply wrinkles in the skin caused by the movement of the horse: Gall, "Entwicklung und Gestalt des Thrones," p. 232.

<sup>105.</sup> Lukonin, "Kush.-Sas. monety," p. 31, pl. 1g.

<sup>106.</sup> Brunner, "Middle Persian Inscriptions on Sasanian Silverware," p. 115; Frye, "Inscriptions on the Sasanian Silver," pp. 92-93. Trousdale notes that both the shape of the bow and the rosette "slide" on the scabbard suggest a date later than the fourth century for this plate: The Long Sword and Scabbard Slide in Asia, p. 283, note 363.

<sup>107.</sup> Freer Gallery of Art, Smithsonian Institution, Washington, D.C., acc. no. 34.23; diam. 23.9 cm.; height with foot 4.8 cm.; weight 870.2 gm. For bibliography before 1936, see Erdmann, "Die sasanidischen Jagdschalen," p. 202. Idem, "Zur Chronologie," p. 281; idem, Kunst, p. 93, pl. 60; Chase, "The Technical Examination of Two Sasanian Silver Plates," pp. 78–85.

108. Herzfeld, "Khusrau Parwēz," pp. 131, 138;

<sup>108.</sup> Herzfeld, "Khusrau Parwēz," pp. 131, 138; Erdmann, "Zur Chronologie," p. 266, note 4; Maenchen-Helfen, "Crenelated Mane," p. 113. Brunner describes this globe as it appears on Kushano-Sasanian coins as the closed form of the lotus flower: Brunner, "Chronology," pp. 154, 157. This is in agreement with my suggestion that the striated globe surmounting the head of a king in the Metropolitan Museum gives the impression of being a floral bud: Harper, "Portrait of a King," p. 141.

appears on Sasanian rock reliefs where Sasanian kings battle human enemies or, at Taq-i Bustan, sit astride horses in full armor. Herzfeld suggested that the striated globe was a sign of battle rather than court dress, to be associated with helmets rather than royal crowns. <sup>109</sup> The presence of the striated globe on the crowns of the Sasanian overlords in the Kushan East must in any event be seen as a later imitation of an already known Sasanian form.

On the plate in the Freer Gallery the scene consists of a hunter on horseback riding toward the right and shooting with a bow and arrow at two boars, one placed before the horse, the other beneath the royal mount.

The composition of the scene on this plate is similar to that already described on earlier silver hunting vessels (Pls. 9, 10). The vertical figure of the king is balanced by the vertical animal facing outward toward the rim of the plate (as in Pl. 10). The horizontal position of the horse is matched by that of the figure of the slain boar, its head placed, as is customary, in the same direction as that of the horse.

No landscape elements appear on the Freer plate, and the scene fits perfectly within the circular surface. <sup>110</sup> The three-quarter position of the king's head is a feature already described on the fragment from a hunting plate once in Berlin (Pl. 12) and on the Cleveland Hormizd plate (Pl. 14).

Apart from the form of the striated globe, the king's dress closely resembles that already observed on the preceding vessels, although no shoulder patches decorate the upper garment. The beaded straps of the halter are clearly visible. 111 The king's curly hair, bunched in a ball behind his head, is rendered by punched circles; the beard is short, following closely the line of the chin. A hatched crescent above the lip represents the mustache. The bow arm of the king is slightly bent at the wrist. Index and little fingers of the bowstring hand are straight; the remainder are bent. As on the Sari plate (Pl. 10), the hilt of the sword is shown. The king uses a compound bow, 112 the ears of which are not so long as on some previous examples (Pls. 8, 10). From straps on the king's belt there hangs a quiver, divided into three unequal registers. Two are filled with geometric designs and the largest, in the center, with a curving vine.

As on the Cleveland Hormizd plate (Pl. 14) the mane of the horse is clipped to form a projection topped by three small tufts. 113 A new development is the presence of a saddle bow in place of the lappet previously acting as a guard over the rider's leg. 114 The bit is clearly a curb bit, a type shown frequently on the

109. This striated globe is also represented rising from the shoulders of a figure in full armor on an unpublished capital now at Taq-i Bustan. The other Sasanian reliefs with representations of striated globes are cited by Herzfeld, "Khusrau Parwēz," pp. 133 ff.; Harper, "Portrait of a King," pp. 141–142; Sarre, "Die altorientalischen Feldzeichen," pp. 356–358.

110. Trever, "Khudozhestvennoe znachenye sasanid-skikh monet," p. 279. Trever considered the perfect arrangement of the design on this plate within the circular frame as comparable to the first excellent period of the coinage. The plate is referred to as being in the Stroganoff collection.

111. Erdmann says that Herzfeld considered this to be the earliest example of the royal halter and pectoral but that this was, in reality, a jacket with long sleeves. Such a jacket would cover the shoulder ornament, which, Erdmann noted, does not appear: Erdmann, "Die sasanidischen Jagdschalen," p. 202. That this is, in fact, a halter and not a jacket is evident from the two separate ribbons floating from the back. Herzfeld was mistaken in his opinion that this was the earliest illustration of the halter. He had not observed the halter line on the British Museum Shapur plate (Pl. 13) and, of course, did not know of the as yet undiscovered Sari plate (Pl. 10).

112. Bulanda, Bogen und Pfeil bei den Völkern des Altertums, p. 57. fig. 39.

113. This feature is discussed in detail by Maenchen-Helfen, "Crenelated Mane," pp. 100-115.

114. This form of saddle is noted by Erdmann as first appearing on this vessel: Erdmann, "Die sasanidischen Jagdschalen," p. 202. This saddle may be represented on the relief of Shapur I at Naqsh-i Rustam: E. F. Schmidt, Persepolis III, pl. 83. Horses without riders on two reliefs at Bishapur wear a saddle with a bow: Ghirshman, Bîchâpour I, pls. 15, 19. On a Hephthalite bowl in the British Museum a saddle bow is visible before each of the riders: Dalton, Oxus, pls. 30, 31. A saddle bow is represented on the felt tapestry from Pazyryk datable around 300 B.C.: Jettmar, Art of the Steppes, pl. 18. A fragment of a first-century B.C. terracotta from Khalchayan shows a horse with a saddle and a saddle bow: Pugachenkova, Skul'ptura, p. 66. A stylization of the saddle bow into an oval loop occurs on the Mithraeum painting at Dura-Europos: Perkins, The Art of Dura-Europos, fig. 16. For discussions of the saddle, see: Johansen, "Der Reitsattel bei den altaischen Völkern," pp. 269-285; Ghirshman, "La Selle en Iran," pp. 94-107. Bálint mentions the high pommel of the saddle represented at Taq-i Bustan and says that this is a Turco-Avar type: "Vestiges archéologiques de l'époque tardive des sassanides,' p. 189, note 47.

rock reliefs. The horse is moving in a flying gallop, the ears upright and turned forward. Resembling the bands on the Krasnaya Polyana and Burnes plates (Pls. 9, 11), the straps across the front and back of the horse's body pass over the saddle blanket. The blanket itself has a narrow border and an overall pattern of crossed lines, producing a lozenge design. No ribbons appear at the back from beneath the blanket, but the small jewel pendants occurring on the Burnes plate are repeated here. The harness bands are decorated with pendent palmettes, another point of resemblance between this plate and the one once in the Burnes collection. The hair balls on chains from the rump strap are now oval balls of wavy hair strands, lacking the linear horizontal divisions of the previously described vessels (Pls. 9, 10, 11), but still held at the base in a leafy cup. The paired-line stylization of the drapery is echoed in the treatment of the muscles on the horse's hind leg. In contrast to the British Museum plate (Pl. 13), but in a form related to that on the Cleveland plate (Pl. 14), three pairs of lines rather than single crescents indicate the modeling of the flesh. The linear pattern on the horse's chest, considered by some authorities to be a tamga, but perhaps only a stylized muscle pattern, recurs on this plate. 115

The animals, boars, are shown appropriately in positions of injury or death. <sup>116</sup> The wounded animal with forelegs bent and tongue protruding appears before the horse, while the horizontally placed boar beneath has both fore- and hind legs parted and tongue out. He is therefore certainly dead. The arrow piercing his body is visible below the line of the back. The hair of the boars' bodies is shown in tufts spread at intervals over each body except on the underbelly. The inside surfaces of the legs, as on the Krasnaya Polyana plate (Pl. 9), are also differentiated from the other surfaces and covered with small hatches.

In construction this plate is as ambitious a work as the preceding example in the Cleveland Museum. 117 The freestanding foreleg of the horse is the most noteworthy feature, but much of the design is in relief. The transition between these relief areas and the background is rather abrupt and creates an unrealistic division of the animal bodies. The design, with the exception of the king's face and hands, is gilded. Beneath the rim on the reverse there is a single line.

Metropolitan Museum Yazdgard I plate (PL. 16) This plate was allegedly found in Iran and was purchased by the Metropolitan Museum in 1970. 118 For the first time there is a striking change in the compositional scheme: the king stands and slays an upright stag rearing before him. The weapon is a crescent-tipped spear, and the stag is of the same species as that represented on the Shapur plate in the British Museum (Pl. 13). 119 The king wears the crown of Yazdgard I, topped, however, by a striated rather than a cloth-covered globe. Both animal and human figures are vertically placed, fitting easily within the circular frame. No landscape elements are included.

As on the preceding plates in the Cleveland Museum and the Freer Gallery (Pls. 14, 15), the king's head is in a three-quarter view. Around the head, chased on the background of the plate, is a halo with punched circles at the perimeter and groups of triple dots placed over the surface. <sup>120</sup> The most notable innovation in the king's dress is the skirt, held up at the sides or cut so that it has a downward-curving hem decorated with beading at the front. The same form of dress appears on the rock reliefs of Shapur II and Shapur III and of Ardashir II at Taq-i Bustan. <sup>121</sup> A

<sup>115.</sup> See note 104 above.

<sup>116.</sup> Erdmann, "Eberdarstellung," p. 358. The use of the boar on seals, on Sasanian coins as a Hephthalite countermark, as a family name ("Varaz," widespread in Iran and east of Iran), as a symbol of the god Verethragna, as a form of demon, and as a symbol on flags, is the subject of Erdmann's article. See note 171 below.

<sup>117.</sup> Chase, "The Technical Examination of Two Sasanian Silver Plates," pp. 75-85.

<sup>118.</sup> The Metropolitan Museum of Art, New York, acc. no. 1970.6; diam. 23.4 cm.; height with foot 4.4 cm.; weight 713 gm. Sas. Silver, p. 98, no. 10, where it is erroneously stated that the plate was in the Los Angeles County Museum. In fact, at that time it was in a dealer's hands. In his introduction to this catalogue, O. Grabar makes this type, with a standing hunter, his "second model." For the inscription, see Brunner, "Middle Persian Inscriptions on Sasanian Silverware," p. 116, fig. 4.

<sup>119.</sup> See note 91 above. The spotted coat of the male fallow deer explains in all probability the pattern present on this plate.

<sup>120.</sup> See note 103 above.

<sup>121.</sup> Peck, "Taq-i-Bustan," p. 111. Peck gives a bibliography and a full discussion of this skirt, in particular whether it is to be interpreted as pulled up or tailored. From the appearance of the skirt on this vessel it would seem certain that the garment is pulled up at the sides.

broad single ribbon from the royal halter projects stiffly behind the king. It is unusual in form, as are the oval ends of the ribbons on the feet. <sup>122</sup> A beaded and embroidered seam is visible on both leggings, at the right side of the leg shown in profile and in the center of the leg shown full front. The halter is decorated with rows of circular beads and square rectangular plaques in the elaborate tradition of the Sari archer (Pl. 10) and the rock-carved figures of Shapur II and Shapur III at Taq-i Bustan. Sword and dagger are of the usual types, but the spear with the crescentic tip is unique among the weapons represented on silver plates. <sup>123</sup> At the end it has a counterweight in the form of a human fist.

On the body of the stag a clover leaf or trilobed pattern is regularly spaced at intervals. It is missing only on the inside surface of the foreleg and on the underbelly, areas that are left plain. The quarry is presumably dead or dying, as the tongue is shown protruding from the mouth, falling at a right angle to it.

The relief on the vessel is generally high, but the joins between the added pieces, which form the body parts shown in relief, and the background shell, upon which the remainder of the body surfaces are depicted, are obvious and disturbingly abrupt. Gilding covers the entire design with the exception of the king's face and hands. On the reverse a line runs below the rim.

Metropolitan Museum Peroz-Kavad I plate (PL. 17). This sequence of plates depicting identifiable Sasanian kings reaches an apex, in terms of artistic achievement, in a silver-gilt plate in the Metropolitan Museum.124 Alleged to have come from Qazvin in northwestern Iran, this vessel shows a king, Peroz or Kavad I, hunting rams. Beginning with Peroz (457/459-484), only minor variations in the Sasanian crown types occurred on Sasanian coins, and duplication of the forms was frequent, but the particular type represented on this plate is, strictly speaking, identifiable only as the second crown of Peroz or the first crown of Kavad I. The key factor is the number of beaded rows at the base of the crown. On the plate, as on the coins, there is only one line of beading. Had there been two rows of beading this might be the second crown of Kavad I or the crown of a number of other late Sasanian kings.

The design of the plate is in no way unusual. No landscape elements appear in this scene, which fits easily within the circular surface in spite of the inclusion of twice the usual number of animals as the quarry. The fact that they are shown smaller in scale helps to explain the ease with which they have been employed in the design. The vertical figure of the equestrian king is balanced by the vertically arranged pair of rams fleeing before him. The horizontal line of the horse is matched by the line of dead rams beneath it.

The king is in pure profile, a nimbus with a beaded border around the head. The hair, rendered as punched circles, is gathered into a ball behind the head. The beard is short, following the line of the chin. A rippling line forms the mustache, and on the king's right temple is a small curl of hair, as on the

<sup>122.</sup> Similarly rounded ends of the ribbons appear on the newly discovered relief at Tang-i Qandil: Frye, "The Sasanian Bas-Relief at Tang-i Qandil," pl. 5b. In a fragment of a painting from the Adonis temple at Dura-Europos ribbons at the foot also have rounded ends: Rostovtzeff, Dura-Europos . . . Seventh and Eighth Seasons, pls. 19, 2; 20, 3.

<sup>123.</sup> For the dagger type, see note 178 below. The "spurred or winged spear is found in Roman mosaics showing its use in hunting boars, bears, and leopards": White, Medieval Technology and Social Change, p. 147, note 4; Aymard describes this particular weapon as effective in hunting wild animals, since the wing-shaped protrusions keep the hunter at a distance from the animal and aid him in retrieving his weapon: Aymard, Les Chasses romaines, pp. 311 ff. Bivar refers to a martiobarbulus, apparently a weighted javelin favored by the legions in Illyricum: Bivar, "Cavalry Equipment," p. 288. Iron and bronze maces with a closed fist as a terminal have appeared on the market. They are said to come from Iran and are probably Sasanian in date: The Metropolitan Museum of Art, acc. no. 66.215.

<sup>124.</sup> The Metropolitan Museum of Art, acc. no. 34.33; diam. 21.9 cm.; height with foot 4.3 cm.; weight 721 gm. For bibliography before 1936, see Erdmann, "Die sasanidischen Jagdschalen," p. 210; since 1936, see Sas. Silver, p. 93, no. 2. The main attributions have been to Peroz (Herzfeld, Erdmann, Haskins, Marshak) or Khusro I (Bivar and Dimand—Dimand later changed to Peroz). Trever, "Khudozhestvennoe znachenye sasanidskikh monet," p. 265 (Shapur II); Marshak and Krikis, "Chilekskie Chashi," p. 66; Bivar, "Cavalry Equipment," p. 285; Haskins, "Northern Origins," p. 246. Harper, Royal Hunter, pp. 40–41, pl. 7 (Peroz/Kavad I). In his introduction, Grabar makes this his "third model" in the hunting plate series, noting the increase in the number of animals. He considers this to be the only "model" actually created for the silver plates, since it enables the artist to arrange the scene easily within the circular frame: Sas. Silver, p. 90.

Sari plate (Pl. 10) and on the relief figure of Ardashir II at Taq-i Bustan. 125 The dress includes not only a halter with a double line of beading but the ribbons coming from it. Curiously, these streamers are depicted not as two separate ends but as a single cloaklike mass, a clear misunderstanding of the actual form. Both belt and sword strap illustrate a change in the design. Each is attached by a buckle of lyriform shape with a movable tongue, a type not found on the Sasanian rock reliefs dating before the rock-cut niche attributed to Khusro II at Taq-i Bustan. Marshak has noted that this buckle is known earlier in the East and that a different paired arrangement of buckles appears in the so-called Maya cave at Kutcha in Central Asia in the fifth century. 126 Paired lines and groups of triple dots appear on the surface of the drapery, but the lines are not as noticeable as those on some of the preceding plates (e.g., Pls. 14, 15, 17). As on the plate depicting Hormizd (Pl. 14), the royal bow has a pronounced ridge between the ear and the arc. The quiver has an overall zigzag design similar to that on a vessel in the Hermitage Museum (Pl. 23) and that in the Wade drawing of the Burnes plate (Pl. 11a). On the king's bowstring hand the little finger is bent rather than straight.

There are few new details in the representation of the horse. A rectangular projection with three tufts rises from the clipped mane, a large part of which falls against the horse's neck. The ear is upright and faces forward. A curb bit is shown as well as a psallion. 127 Hanging from the bands on the chest and rump are many pendent jewels or bells. Somewhat unusual is the simple treatment of the tail, which hangs almost free and is not bowed but tied midway along its length with a ribbon. Over the rump, floating from chains, are balls of hair set in leaflike cups with their rows of crescent waves minutely and carefully depicted. The saddle blanket with its beaded border is dotted with widely spaced punched circles, and small jewels hang from the corners. A saddlebow is visible as on the Freer plate (Pl. 15). On the horse's hind leg the muscles are shown with single rather than paired lines. On the chest is a tamga or a muscle pattern.

The rams' bodies are plain except for long chest hair and the horns, hooves, and tails, which are inlaid with niello. <sup>128</sup> On the two live and fleeing animals the hind-leg muscle is plainly visible. Each has the under-

belly marked off by a dotted line. The poses of the lower rams clearly indicate that they are dead. 129

As on the Cleveland plate (Pl. 14), large parts of the design are modeled in smooth, unbroken relief. The entire figure of the king, the horse, with the exception of the forelegs, and the bodies of the rams are all evenly rounded. In every case they consist of cast and hammered metal pieces fitted into slots cut into the shell of the vessel. The outside foreleg of the horse is modeled in the round. The niello is treated in almost the same fashion as the added pieces of silver. In the areas where the niello is placed, a lip is cut up from the plate, and the background is scored to aid in securing the niello to the shell.

In many instances the Sasanian monarchs following Peroz copied the crowns of their predecessors, or so it would appear from the coins. Literary sources suggest that colors may in fact have differentiated these crowns one from another. 130 Nevertheless, a

<sup>125.</sup> Fukai and Horiuchi, Taq-i-Bustan II, pl. 84.

<sup>126.</sup> Marshak and Krikis, "Chilekskie Chashi," p. 65; Grünwedel, Alt-Kutscha, pl. 49. It should be noted that the older form of bowed belt is the type worn by Ahuramazda in the rock-cut niche of Khusro II at Taq-i Bustan. This suggests that the dress of divinities is more archaic in design than that of human figures: Fukai and Horiuchi, Taq-i-Bustan II, pl. 14. See p. 80 below for vessels with pairs of buckles.

<sup>127.</sup> This type of bit and psallion appears on the relief of Ardashir I at Naqsh-i Rustam: Hinz, Altiranische Funde, pl. 66. A small terracotta horse found in a Sasanian level at Susa has a similar bit and psallion: David-Weill, "Têtes de chevaux sassanides," p. 162, fig. 6. In the seventh- and eighth-century wall paintings at Piandzhikent the same bit appears: Yakubovskii, Zhivopis, pl. 33. For earlier psallia, see the graffiti at Dura-Europos: Rostovtzeff, Dura-Europos . . . Fourth Season, pp. 215, 216, pls. 21, 1; 22, 2.

<sup>128.</sup> The presence of niello on Sasanian silver vessels is rare: Sas. Silver, p. 115, no. 28; Trésors de l'ancien Iran, figs. 77, 80, 81; Fukai, "A Study of a Silver Wine Cup Excavated in the Guilan Province," n.p. The polylobed shape of this last vessel suggests a date in the sixth or seventh century. It is unusual to find niello worked in relief. This occurs on an exceptional sixth-century Byzantine plate from Lampsacus with a "personification of India": Peirce and Tyler, L'Art byzantin I, pls. 175-177.

<sup>129.</sup> Brunner has remarked upon the fact that the ram was an explicit symbol of royal fortune and an appropriate royal game animal: Brunner, "Sasanian Seals, 3rd-7th Century A.D.," p. 85.

<sup>130.</sup> Hamzae Isphahanensis Annalium, Book X, ed. Gottwaldt; Schaeder, "Über das 'Bilderbuch der Sasaniden-Könige,'" pp. 231–232.

change in the attitude of the rulers toward the individual or unique crown is indicated by this trend toward repetition rather than originality in the crown designs. It is possible that after two centuries the dynasty had become more important than the individual king. A few standard "royal" forms of headgear were recognized, and there was no longer any need to invent new and different crowns with strikingly individual characteristics for each ruler. Whether or not this reasoning is correct, it is a fact that there was an increasing duplication in the crown types, an important break in the tradition of royal iconography.

Ufa plate (PL. 18). The most elaborate hunting plate, in terms of workmanship, that belongs to this 'generalized" crown series is an unusual vessel found at Ufa in the area west of the Urals in the Perm. 131 On it there appears a hunting scene similar to those already described but with some notable variations. An equestrian king, wearing a crown identical to that on the coins of Valash and Ardashir III, turns in his saddle to shoot backward at the quarry, two pairs of animals. Two different species, or possibly sexes, are represented, one of each kind appearing in each pair. Between the two groups of animals is a seated hunting dog, a saluki. The horse, although meant to be rearing, is shown with its body in a generally horizontal position. Before the king's head, in the field, are a crescent moon and a star. No landscape elements appear, and all parts of the design are complete within the circular frame of the plate. Although the general scheme of two verticals (the king, the animals at right) is retained, additional features (the dog, crescent moon, and star) fill in the scene so that there is a lessening of open, free space.

The king's head is in pure profile to the right. No beading is visible on the material that covers the top of the head, and the king may therefore be wearing a low cap. Resting on the top of the head is a crescent that cradles a globe. Above the double row of beading on the forehead band are three stepped crenelations. At the back of the head, below the band, there falls what seems to be a cloth, perhaps similar to that shown at the back of the head on coins of Ardashir I and Shapur I. <sup>132</sup> No ball of hair is represented. A halo around the king's head is dotted on the background of the plate. The king has a crescentic mustache and a short beard following the line of the chin. A small

curl on the right temple is similar to that on the head of the hunter on the Sari plate (Pl. 10) and on the Metropolitan Museum's plate depicting Peroz-Kavad I (Pl. 17). The jewelry consists of a necklace, an earring, and bracelets. Modeled beads decorate the surface of the halter, and punched circular beads and square plaques appear on the belt. Ribbons come from the forehead diadem but not from the halter. The upper garment, covered with paired lines and groups of triple dots, does not differ markedly from those seen on other vessels. It is held at the waist by a belt with square clasps. The leggings in this example are of a thicker material than usual, perhaps leather, and the wavy lines on this surface may be intended to represent tiger stripes. Such stripes decorate the guards worn over the leggings of figures on the Taq-i Bustan boar-hunt relief but are not otherwise known on works of certain Sasanian date and manufacture. The position of the king's bowstring hand is the same as that shown on the Cleveland Hormizd and the Metropolitan Museum Peroz-Kavad I plates (Pls. 14, 17). Only the index finger is outstretched; the rest are bent. The bow is, in comparison to those noted above (Pls. 8, 10, 14, 15, 17), extremely small and light. On each side of the sword scabbard are two loops for suspension, and a small globe surmounts the hilt as on some Asian swords. 133

The horse is depicted with the hind legs vertically placed and with the forelegs raised. This is the conventional position of a rearing horse, and the head is correctly shown checked in by the reins. Both ears are upright and turned forward. The mane is trimmed to form a single, broad, upright section, but

<sup>131.</sup> State Hermitage Museum, acc. no. S297; diam. 20.3 cm.; height with foot 4.4 cm.; weight 772.5 gm. Voshchinina, "O svîazîakh priuralîa c vostokom v VI–VII vv.n.e.," pp. 183–196. The king is identified as Khusro I or Hormizd IV. The scene is compared to that on the Strelka plate in the Hermitage Museum (Pl. 19); Fajans, "Recent Literature," pp. 64–67, pl. 7, fig. 16; Lukonin, Persia II, p. 225, fig. 201 (Hormizd IV); Thompson, "Stucco Plaque," p. 88. Thompson suggests a late Sasanian date for this vessel because of the mixture of early and late garment details: frilly drapery at the seat combined with the tailored skirt of the tunic. The crowding of the scene is also said to be a "late" feature.

<sup>132.</sup> Göbl, Sas. Num., pl. 2, nos. 19, 29, 30.

<sup>133.</sup> Trousdale, The Long Sword and Scabbard Slide in Asia, p. 92.

there are no pointed tufts. Longer hair hangs down the whole length of the neck. The forelock, drawn up in a ring, is surmounted by a crescent, and the tail of the horse is bowed. Particularly remarkable is the bridle construction. The bit and rein were originally separate freestanding parts, the latter held to the neck of the horse at certain points by solder. The saddlebow is visible, as is the saddle blanket, covered with a crisscross pattern. Jewels hang from the blanket's corners. Narrow, beaded straps across the chest and rump of the horse have circular *phalerae* hanging from them. Chains hold the hair balls, which project behind the horse. The hair on the balls is shown in wavy lines emerging from a striated rather than a leafy cup.

As there are peculiarities in the representation of the king and his mount, so are there new features in the form and arrangement of the quarry. Most significant is the fact noted above, that the animals are of different species or, possibly, different sexes. Furthermore, not only are the two shown on the right of the plate wounded (arrows protrude from their backs), but the lower of the two is certainly dead, for the fore- and hind legs are spread apart and the head is thrown back. (Generally in the vertical section of the plate the animals are alive.) Beneath the horse, the remaining pair of animals is also in the same position of death, arrows emerging from their backs. In contrast to most of the designs described above (Pls. 9, 10, 14, 15, 17), these animals face in the opposite direction from the horse above them. The animal bodies are plain except for the presence of hair whorls on the fore- and hind legs in some instances. 134

The relief design is executed in a fashion surpassing in skill that of the other hunting plates. All parts of the scene are in consistent, even relief. The design, however, was not cast but was constructed in the usual fashion from separate pieces, about twenty-one in number, almost invisibly attached to one another and to the plate. The extremities (tips of the horns, hooves, tails, etc.) are often in the round, achieved by carving the background away. Gilding covers the entire background but is also applied to certain parts of the design. A line runs just below the rim on the exterior of the vessel.

On the next two plates (Pls. 19, 20), the kings wear a crown different from that on the Ufa plate (Pl. 18).

Once again, however, the crown is of a type used by a number of Sasanian kings on their coins. From the forehead band of this royal headdress there rise stepped crenelations and a crescent that rests over the middle of the forehead. What may be a low cap is surmounted by a second crescent, which, in turn, cradles a cloth-covered globe. The forehead band is decorated with a double line of beading. This decoration is the only difference between this crown and the second crown of Peroz or the first crown of Kavad I on the coins and on the plate in The Metropolitan Museum of Art (Pl. 17). Identical crowns with a double line of beading on the forehead band appear on coins of Kavad I (488-531), Khusro I (531-579), Hormizd IV (579-540), Bahram VI (590-591), Khusro II (591-628), and Kavad II (628).

Strelka plate (PL. 19). A plate in the Hermitage Museum shows a king seated, enthroned, wearing such a crown. <sup>135</sup> The vessel comes from Strelka in the Perm and has a Hephthalite inscription on it (see Appendix I, Table IV). Although the scene of enthronement will be considered in Chapter IV, it is the form of this crown that supplies a terminus post quem

<sup>134.</sup> Somewhat similar hair whorls occur on the front haunches of lions on a plate dated to the eighth to ninth century: Orbeli and Trever, Sas. Metall, pl. 17; for the date, see Marshak, Sog. Serebro, p. 91, no. 30, fig. 9.

<sup>135.</sup> State Hermitage Museum, acc. no. S250; diam. 26.1 cm.; height with foot 5.1 cm.; weight 985.6 gm. For bibliography before 1936, see Erdmann, "Die sasanidischen Jagdschalen," p. 216. Erdmann identifies the hunting king as a predecessor or son of the enthroned king, whom he claims is Khusro I or Kavad I. Later Erdmann stated that the hunter was Shapur I or II: Erdmann, "Zur Chronologie," p. 277; idem, "Entwicklung," p. 99. Herzfeld says that both the enthroned king and the hunter are Khusro I. Since the latter wears a crown, he cannot be an heir apparent: Herzfeld, "Khusrau Parwēz," pp. 122, 126, no. 17. Wachtsmuth maintained that these are not intended to be particular kings and that this is an "ideal" picture: "Zur Datierung des Taq-i-Bustan und der Pariser Silberschale," pp. 218. Francovich, "Il concetto della regalità," p. 12. Francovich agrees with Herzfeld that the hunter cannot be an heir apparent since he wears a crown. Haskins finds a solution for this problem by identifying the enthroned king as Khusro I and the hunter as Hormizd IV, claiming that the plate was made during the reign of the latter since he is shown with a crown: Haskins, "Northern Origins," p. 342. Lukonin states that the figures enthroned and hunting are one and the same, Kavad I or Khusro I: Persia II, p. 222, fig. 149.

for the small hunting scene placed in the exergue. The crown of the small king in the scene is extremely simple. It has a row of stepped crenelations and is surmounted by a globe. Whether this simple form is to be understood as a shorthand version of a royal Sasanian crown in a small and minor part of the overall scene, or whether this is an intentional representation of an illustrious ancestor, Shapur I or II, it is impossible to tell. The identification of the royal hunter has been the subject of considerable speculation. <sup>136</sup> For our purposes, the form of the crown worn by the enthroned figure gives an indication of the general date of the plate.

The hunting king rides a horse at full gallop to the left and turns to execute a Parthian shot toward the quarry behind him. This quarry includes three rams, two shown fleeing and one placed beneath the others, dead. <sup>137</sup> Under and to the right of the rams at the rim of the vessel are three small hills enclosing floral designs. On the left of the plate, before the horse, in a small corner of open space, is a flying bird.

Since the space alloted to this scene is not the customary circle, it is hard to compare its composition to those appearing on the other plates. The extra elements—the landscape, the bird, and the third animal—are included in an apparent attempt to fill this open space, a feature already noted on the Ufa plate (Pl. 18).

The king is in pure profile to the right, his hair in a ball behind his head, and his beard bound. He wears a double pendant earring. Otherwise his jewelry and dress are the same as those on the plates described at the beginning of this group. The jeweled halter has no ribbons flying from it, although a long streamer projects from the back of the head. The king's bowstring hand has the index finger outstretched and the little finger slanting downward. The bow itself has a pronounced ridge where the upper arc joins the straight ear. An interesting feature of the sword of the royal hunter is that a "residual" slide is represented, although the scabbard is actually suspended from eyelets, one on either side. 138 This is also true of the representation of the enthroned figure above.

On the horse's head both nostrils are visible, giving the impression of a three-quarter view. The tail is bowed, and the mane, cut short, is trimmed to form three crenelations. The muscles of the hind leg are indicated by paired lines, and either a muscle pattern

or a tamga is shown on the chest. Bands across the chest and rump are decorated with circular *phalerae*. The saddlebow is only barely visible, as is the saddle blanket with an overall crisscross pattern. From the corners of the blanket hang jewels as well as ribbons, which project from the vertical back edge, the latter a detail not seen since the Sari plate (Pl. 10). The rams' bodies are plain except for the long chest hair and the paired lines on the hind legs. In the body of the dead ram an arrow can be seen.

This plate is executed in a fashion not previously described. All of the design is in even, low relief achieved by carving the background away. Although little of the gilding remains, it appears that it was applied to the raised part of the design.

Berlin plate (PL. 20). A king wearing the same type of crown as the enthroned figure on the Hermitage plate (Pl. 19) is represented on a much smaller vessel of quite different appearance now in the Museum für Islamische Kunst, in Dahlem, West Berlin. <sup>139</sup> The Berlin plate came originally from Nor Baiazet near

<sup>136.</sup> See note 135 above.

<sup>137.</sup> Francovich, "Il concetto della regalità," p. 12. Francovich believes that the uneven number of dead and live animals may be due to the desire of the artist to fill the available space.

<sup>138.</sup> Trousdale, *The Long Sword and Scabbard Slide in Asia*, p. 92. The two-loop mount is not unlike the double-button attachment illustrated by Nickel in "About the Sword of the Huns," p. 133, fig. 5.
139. Museum für Islamische Kunst, Staatliche Museen

Preussischer Kulturbesitz, Berlin, acc. no. I. 4925; diam. 19.1 cm.; height with foot 4 cm.; weight about 460 gm. For bibliography up to 1936, see Erdmann, "Die sasanidischen Jagdschalen," p. 217, fig. 12. A color illustration appears in Katalog 1971, Museum für Islamische Kunst, Berlin (Berlin-Dahlem), pl. 3, no. 100. Erdmann identifies the king as Hormizd IV or Kavad II (?); Herzfeld, "Khusrau Parwēz," p. 126, no. 16 (Kavad I—second reign). In "Zur Chronologie," p. 247, Erdmann says that the Berlin vessel must be later than the Strelka plate (Pl. 19). In Kunst, p. 96, he states that this is not an identifiable king and that the hunt is taking place in an animal park. The lion is said to be biting his own leg. In a passage added by the editors to the section by Orbeli, "Sāsānian and Early Islamic Metalwork," in SPA I, p. 728, this plate is said to be post-Sasanian. For the same opinion, see Dimand, "A Review of Sasanian and Islamic Metalwork in A Survey of Persian Art," p. 195. Both Dimand and Bachhofer ("Sas. Jagdschalen," p. 66) relate this vessel to the Klimova plate with a moon chariot (Pl. 35). Bachhofer also suggests a date in the eighth century. The same view is expressed by Francovich, "Il

Erivan in Armenia. The king, in right profile, sits astride a rearing horse. He holds a spear in his outstretched right hand, ready to hurl it at his quarry, a motif repeating that of the much earlier fragment from a hunting vessel also once in Berlin (Pl. 12). In the field before the horse is an upright bear, grasping in almost human hands<sup>140</sup> a tree growing from two small hills. At the base, turned in the opposite direction from the horse's head (as on the Ufa plate, Pl. 18), are a lion, outstretched toward the viewer's left, and an upward springing boar. The bear is presumably the animal at which the hunter aims, since the lion is dead, and the boar is in the wrong place. In the space before the king's head is a nude winged figure bearing a jeweled necklace, as distinct from a diadem or headband, toward the equestrian monarch. 141

In composition the plate is unlike those already described. No simple system of horizontal, oblique, or vertical lines prevails. The scene is related to some of the others, notably the Ufa and Strelka plates (Pls. 18, 19), in the tendency to fill and crowd the available space. No part of the design is cut off by the rim of the plate.

The globe cradled in a large crescent above the king's crown has in the center a distinctive pattern of parallel lines bordered with punched circles. A similar pattern is duplicated on the globe above the horse's head. Beneath the crown is a flap of cloth, as on the Ufa plate (Pl. 18), but on the Berlin plate hair curls also are depicted. The beard is short, following the line of the chin; the mustache has a slight wave. The king's dress is not exceptional. Paired lines and punched circles indicate the drapery decoration. The necklace with three oval beads hanging side by side, carried by the winged figure, is of a type unknown on the coins before Ardashir III (628-630). (It may be that Ahuramazda wears the same type of necklace in the large rock-cut niche at Taq-i Bustan, although the central bead, if there was one, is masked by the god's beard.)142 Behind the king's back float two ribbons, perhaps coming from the jeweled halter, perhaps from the necklace. A double row of beading and a clasp made of two square plaques decorate the belt. A curling grape and leaf design appears on the quiver. Most extraordinary is the pose of the king. While his right leg is clumsily bent upward in a fashion seen also on the Hermitage Museum plate depicting a figure wearing a ram's-horn headdress (Pl. 23), his left hand reaches forward awkwardly to grasp the reins, a detail not apparent on any of the hunting plates described so far. 143

The rearing horse, unrealistically shown in a nearly horizontal rather than in an oblique position, is more naturalistically portrayed than the rider. The mane is clipped short but some strands are left uncut and hang down against the neck. The hairs of the tail are tied in a bow. Since the head is turned slightly outward, both upright ears can be seen as well as part of the far eye. Between the ears, above the head, the crescent and globe of the king's crown are repeated. A related phenomenon occurs on one of the silks found at Antinoë in Egypt. 144 As mentioned above, the globe is divided in the same fashion as the globe above the king's crown. Straps with double rows of beading cross the chest and hindquarters of the horse, the lower having richly decorated rosette-like phalerae hanging from them. 145 A small section of the saddle blanket appears beneath the king's dress, the beaded border and crosshatched pattern just visible. Chevrons decorate the girth running under the horse's belly. Above the horse's back float elaborate hair balls, their wavy strands held in a leafy cup.

The bodies of the quarry are appropriately differentiated according to the species represented. On all three animals both ears are visible, and on the lion

concetto della regalità," p. 14. He states that this cannot be Persian Sasanian because of such oddities as the left arm position and the three single animals of different species. Françovich believes that this is the work of an Islamic artist borrowing from a number of Sasanian works.

<sup>140.</sup> This feature was first described by Bachhofer, "Sas. Jagdschalen," p. 66.

<sup>141.</sup> Erdmann, "Entwicklung," p. 118. Since beads appear as pendants from the band held by the winged figure, this must be a necklace and not a diadem for the forehead. This is a significant change in the iconography.

<sup>142.</sup> Fukai and Horiuchi, Taq-i-Bustan II, pl. 16.

<sup>143.</sup> This awkward pose occurs fairly frequently on Sasanian reliefs: Hinz, Altiranische Funde, pls. 72, 101, 105.

<sup>144.</sup> Ghirshman, Persian Art, p. 229, fig. 278.

<sup>145.</sup> The double row of decoration on harness straps is cited by Bálint as typical of Avar finds of the sixth-seventh centuries. On Pl. 22 it occurs on the neck bands. On the rock reliefs such double beaded bands appear in the large niche at Taq-i Bustan. This fashion may have been adopted by the Sasanians from the Avars: "Vestiges archéologiques de l'époque tardive des sassanides," p. 190.

both eyes are shown as well. The body of the bear is covered with punched crescents except for the inside surfaces of the fore- and hind legs, which are dotted. Paired lines mark the muscles of the hind legs of the three animals. The boar has tufts of hair spaced at intervals on the body and dots on the head. Most clumsily executed is the dead lion, with his head reversed so that he gives the appearance of biting his own leg. A tufted mane falls on the neck, the rest of the body being covered with dots. The shape of the head is particularly odd, as is the left hind paw, which is portrayed as if viewed from above.

A general effect of low relief is produced on this plate by the use of deep lines to outline the major parts of the design and by carving the background away. The background of the plate is gilded, including the rim. Spot-gilding is also applied to the design: parts of the king's crown and dress as well as the crescent on the horse's head and the four pendants hanging from the harness straps. On the exterior of the rim is a single line.

Anikovska plate (PL. 21). Somewhat more conservative in design but stranger still stylistically is a plate found at Anikovska in the Ural mountain region in the Soviet Union. 146 A king wears the same crown as on the two preceding plates (Pls. 19, 20), with the notable exception that the band has only a single line of beading. The king, astride a rearing horse, is thrusting a spear toward his quarry. In this case an invisible left hand holds two other spears on the far side of the horse's neck.147 Before the horse, and facing it, is a rearing bear that attempts to pull a spear from its own body with its paws.148 Horizontally placed beneath the horse is a dead bear transfixed by another spear. A small tree rises behind this animal, and reeds, shown schematically as a single pair rising from a spiral of water, are beneath the horse's hind legs. The scene fits within the circular plate.

The king, in pure right profile, has a halo behind his head and a simple, cloth-covered, undecorated globe. Otherwise his dress differs little from that of the Berlin hunter (Pl. 20), except for the row of crescents running down the center of his chest, the abrupt right angles of the halter straps, and the hearts decorating the quiver. The belt has rectangular clasps. The king's earring is a type seen on Eastern coins of Bahram V, on coins of Bahram VI, and on a late

Sasanian clay sealing from Qasr-i Abu Nasr. In rare instances, it occurs on coins as early as Bahram II. 149

The horse has a crenelated mane, and his head is turned, as on the Berlin plate (Pl. 20), so that the second ear is visible. The tail is bowed. Circular *phalerae* decorate the saddle bands, and the flaring lines of the blanket (unusual in shape) can be seen before and behind the rider. Hair balls of the normal type rise above the horse's back. The hind-leg muscles of the horse are shown as paired lines, and either a tamga or a muscle pattern is on the chest.

At intervals on the bodies of the bears are tufts of hair, a schema that has previously been associated with boars (Pl. 15). Reeds and water also are customarily found with boars, not bears. (This confusion of the two animals is apparent on late Sasanian seals, where it is often difficult to distinguish the heads of boars and bears.)<sup>151</sup> In the usual fashion, the inside surface of the leg is treated differently from the rest of the body. In this instance, it is covered with rows of dots. The heads of the bears have an elaborated dotted spiral pattern as well.

Nothing is known of the method of manufacture of this plate, although it would appear from photographs that none of the pieces is added. The relief must therefore have been achieved by carving away the background or through casting. It is also impossible to see in the photographs which of the areas are gilded, and this is not specified in the publication.

<sup>146.</sup> Pushkin Museum, Tcherdyne; diam. 21 cm.; weight 841 gm; found in May 1967. Lunegov, "Sasanidskoye blîudo iz Prikamıa," pp. 256–258. Lunegov identifies the king, according to his crown, as Khusro I, and the plate is dated to the middle or end of the sixth century.

<sup>147.</sup> This pose is reminiscent of that of Bahram II on a rock relief at Bishapur: Ghirshman, Bîchâpour I, pl. 16.

<sup>148.</sup> This is a conventional pose that occurs in a similar scene on a mosaic found at Carthage dating from the fourth century A.D.: Poinssot and Quoniam, "Bêtes d'amphithéâtre sur trois mosaïques du Bardo," p. 146, fig. 8.

<sup>149.</sup> The Bahram V coin with this feature is in the American Numismatic Society; Frye, Qasr-i Abu Nasr, p. 67. Göbl, Sas. Num., pl. 4, no. 62 (Bahram II coin).

<sup>150.</sup> This feature appears on a Hephthalite bowl in the British Museum dated around 450–460 by Marshak and Krikis: Dalton, Oxus, pls. 29–31, no. 201; Marshak and Krikis, "Chilekskie Chashi," p. 71. It also occurs on silver hunting vessels generally attributed to a period after the fall of the Sasanian dynasty: Orbeli and Trever, Sas. Metall, pls. 3, 12, 15.

<sup>151.</sup> See Harper in Frye, Qasr-i Abu Nasr, p. 75.

Bibliothèque Nationale plate (PL. 22). Before concluding this survey of hunting plates showing kings wearing crowns known from Sasanian coins, one further plate must be considered. This is a vessel in the Bibliothèque Nationale, believed to have been in the possession of the Emir of Badakhshan and later certainly in that of the duc de Luynes. 152 The plate is included here because the crown worn by the king portrayed upon it is the same as that worn by the king in the great rock-cut niche at Taq-i Bustan (Fig. 18), a Sasanian dynastic monument. The appearance on the back of this niche of a king wearing a crown which is a composite late type, incorporating many characteristic elements (wings, stepped crenelations, crescent) but not exactly identifiable on Sasanian coins, has led to varying opinions on the date of the monument. 153 This problem remains unsolved, although most scholars attribute the sculptures to the period of Khusro II. The numerous idiosyncrasies in the design of the plate in the Bibliothèque Nationale have been noted by Erdmann and others. Since its very elaborateness defies exact and minute description, attention here will be drawn primarily to the relationship of the design to those on the vessels already described.

The scene appearing on the Bibliothèque Nationale plate is so complex that it is hard to detect any deliberate arrangement of the many elements of the design. The vertical line of the king's figure is crossed by the horizontal form of the horse's body, but the vertical arrangement of the different species of animals on one side and the horizontal placement of the dead animals at the base are almost obscured in the overall crowding of the scene. <sup>154</sup> One group runs into the other in a continuous fashion. The hind legs of the horse are cut off by the rim of the plate.

The composition of the scene includes an upright archer king, profile to the right, astride a horse shown in a flying gallop. Before and below the horse are numbers of animals crowded together so that they fall into no particular grouping. The only land-scape elements are four reeds placed behind the uppermost animal, a boar.

The upper garment and leggings of the king are close in form and decoration to those on the Ufa plate (Pl. 18), although in the present instance no sign of paired lines exists, and only triple dots or beads remain. Tiger stripes decorate the leggings. The king's jewelry is elaborate, as are his weapons and equip-

ment. 155 Notable among the weapons is the huge bow with pronounced ridges between the arc and the ear. The precise way in which this weapon is ren-

152. Bibliothèque Nationale, Paris, acc. no. CH 2881; diam. 30.6 cm.; height with foot 4.4 cm.; weight 2070 gm. For bibliography before 1936, see Erdmann, "Die sasanidischen Jagdschalen," p. 212. Erdmann identifies the king as Peroz, although it is suggested that the plate may have been manufactured by foreigners and given to Peroz as a gift. See also Erdmann, "Entwicklung," pp. 259-260, 262. Erdmann was criticized for his attribution of this plate to the reign of Peroz by a number of scholars: Herzfeld, "Khusrau Parwēz," pp. 126, no. 20, 129 ("This is a crown known from the Isfahan capitals and this is therefore one of the latest true Sasanian works"); Wachtsmuth, "Zur Datierung des Taq-i-Bustan und der Pariser Silberschale,' pp. 213 ff. (no particular king, an "ideal" crown); Sarre, Die Kunst des alten Persien, p. 49 (Khusro II); Cottevieille-Giraudet, "Coupes et camées sassanides du Cabinet de France," p. 64 (Yazdgard III); Haskins, "Northern Origins," p. 343 (Khusro II); Dimand, "A Review of Sasanian and Islamic Metalwork in A Survey of Persian Art," p. 193 (Khusro II). Erdmann changed his identification of the king to Yazdgard III in "Entwicklung," p. 109, note 81. He still maintained, however, that the vessel was made outside Iran. Maenchen-Helfen remarked on the fact that the atrocious coins of Yazdgard III precluded, in his opinion, the possibility that the plate should be attributed to that king. The date, he believed, must be after 600: Maenchen-Helfen, "Crenelated Mane," p. 114, note 108; Marshak and Krikis, "Chilekskie Chashi," p. 65 (one of the six kings ruling between 628-633 whose crowns are unknown.)

153. The different viewpoints were presented first by Erdmann and Herzfeld. For a useful summary and a bibliography, see Peck, "Taq-i-Bustan," pp. 102-103. Marshak and Krikis state that the crown worn by the king on this plate is a variation of that worn by Khusro II at Taq-i Bustan (Fig. 18): "Chilekskie Chashi," p. 65. It appears to me to be identical.

154. Trever commented that the variety of animals might suggest that the artist intended to represent a Mithraic hunt: "Otrazhenye c iskusstve dualisticheskoĭ kontseptsiĭ Zoroastrizma," p. 248. Trever also compared the crowding of the design on this plate to that of late Sasanian coins and the Taq-i Bustan hunts: "Khudozhestvennoe znachenye sasanidskikh monet," p. 283. Comments on the water buffaloes appearing on the plate appear in Boehmer, "Das Auftreten des Wasserbüffels in Mesopotamien in historischer Zeit und seine sumerische Bezeichnung," pp. 14–19.

155. Haskins accurately describes the hilt of the sword as being surmounted by a ring. He states that this is the type represented at Qyzil in the seventh century and in China somewhat earlier. He also describes the sword as having a long two-handed grip: "Northern Origins," p. 343. For Far Eastern swords with circular forms at the end of the hilt, see: Bálint, "Vestiges archéologiques de l'époque tardive des sassanides," pp. 205–206. In the same article Bálint mentions the double row of decoration on the harness straps: p. 190. See note 145 above.

dered indicates a care for minute detail that is apparent on the other weapons too. The P-shaped attachments of the dagger are features linking this representation to Taq-i Bustan, where on the side walls of the monument attributed to Khusro II this form of suspension appears for the first time in Sasanian art. 156 On the quiver, divided into five registers, are plant and geometric motifs as well as an animal head in profile at the top. Ribbons come from the crown and the halter, and a third cloth or ribbon is visible beneath the king's right arm, coming perhaps from the back of the necklace. On the belt, lyriform buckles with tongues are represented, more stylized than those on the Tcherdyne plate (Pl. 27), to be described in Group III. One such buckle has been noted on the Peroz-Kavad I plate in the Metropolitan Museum (Pl. 17).

The horse is lavishly caparisoned. The mane is decoratively clipped in an original fashion and part of the hair hangs down on the neck. Atop the head is an upright palmette. The tail is simply tied at midpoint, the end hanging free as on the Peroz–Kavad I plate in the Metropolitan Museum (Pl. 17). The jeweled band around the horse's neck is a feature that also occurs on representations of the royal horses on the side walls of Taq-i Bustan. 157

Bands across the horse's chest and hindquarters run over the saddle blanket. Suspended at the shoulder from the chest band is what appears to be an animal-headed bell. On the band across the rump is a palmette reminiscent of those on the Burnes and Freer plates (Pls. 11, 15). In place of the usual hair balls, animal-headed objects of the type hanging from the chest band project from chains that cross the horse's rump. The saddle blanket has a beaded border, and the surface is covered with widely spaced groups of punched circles. On the horse's chest is what must, in this instance, be a muscle pattern.

The representations of the coats of the animals varies to some extent according to the species. On the bodies of the boars, two adults and a single young, are patterns of wavy tufts; on those of the deer, a stag and a hind, dots. This same dot pattern is visible on the one buffalo. All these animals, with the exception of the young boar, are duplicated in the appropriate dead and contorted poses beneath the horse. <sup>158</sup>

The rim and background of the plate are gilded. The plate itself is almost certainly hammered, although it is heavier than other examples of Sasanian silver plate.<sup>159</sup> There is a line on the exterior below the rim.

Summary. With this height of elaboration, Group II is completed. The vessels in this group range in composition from a design that includes a single horse and rider and a pair of animals (Pls. 14, 15) to one in which not only the number of animals, but also the species represented are greatly increased (Pls. 20, 22). With the Peroz–Kavad I plate in the Metropolitan Museum (Pl. 17) more than a single pair of animals appear for the first time in Group II, but this change is not significant since the animals continue to be of a single species, and in their arrangement they adhere to the vertical and horizontal scheme used for a single pair. Moreover, they are still shown in matching pairs, alive and dead.

The real changes, the inclusion of more than one species, of odd numbers of animals or of unequal numbers shown alive and dead, comes only after Peroz, with the group of plates depicting kings who could be one of many but who are all certainly as late as Kavad I (488–531).

GROUP III. Hunting plates with scenes of figures wearing crowns, having typically Sasanian elements (globe surmounting crown base) but unlike those found on Sasanian coins; no evidence of an Iranian provenance, but an iconographic relationship to vessels with identifiable Sasanian kings.

Hermitage plate with king wearing a ram's-horn headdress (PL. 23). On the first plate in Group III, a figure is shown wearing a headdress adorned with ram's

<sup>156.</sup> Ghirshman, "Notes iraniennes XIII: Trois épées sassanides," pp. 293-311; Nickel, "About the Sword of the Huns," pp. 131 ff.

<sup>157.</sup> Fukai and Horiuchi, Taq-i-Bustan I, pl. 87.

<sup>158.</sup> Francovich comments on the presence of an extra live animal, the young boar, not matched by a dead animal in "Il concetto della regalità," p. 11.

<sup>159.</sup> See note 152 above. A view of the reverse of this plate appears in Shepherd, "Some Problems of Sasanian Silver," p. 333, fig. 15. The correct caption is mistakenly printed under figure 16.

horns. 160 This headdress is of a type that differs markedly from any crown appearing on Sasanian coins. On the early hunting plates described above in Group I, the persons represented also had headdresses that were clearly distinct from the royal Sasanian crowns, but the vessels had some definite connection with Iran either because of the presence of Middle Persian inscriptions or because they were found on Iranian soil. In this instance there is no such tie to Iran. The present plate, now in the Hermitage Museum, was found in the Perm. On it there is a Sogdian inscription, probably of the fifth century. 161 In Chapter II, where the vessel was briefly described (p. 36), it was apparent that the head of the hunter and the stylization of his drapery were related to the representations on the medallion bowls, works that could be attributed to Sasanian Iran. To what degree is the scene on the vessel related to those in Group II depicting kings wearing Sasanian crowns?

The Hermitage plate is often reproduced turned slightly off center in a counterclockwise direction. The reason for this is that the scene itself is not composed of horizontal and vertical lines but is, as Erdmann noted, triangular. 162 It is therefore possible to make the plate revolve to a considerable degree without necessarily causing the scene to appear to be out of line. Only the wavy lines beneath the reeds provide a horizontal base line. If this area of ground or water is placed in a generally horizontal position, then the hunter and horse rise in an oblique line on one side balanced by the reeds around the figure of the rearing boar on the other. This triangular composition is much more exaggerated than on the Burnes plate (Pl. 11) or on the British Museum plate depicting Shapur (Pl. 13). On the present plate the two boars emerge from a field of reeds to confront the hunter. The reeds are cleverly used to mask the hindquarters of the second boar, for which there is, in actuality, no room on the plate. 163 The reeds are immense in size, reaching from the bottom to the top

The figure of the hunter is in pure profile to the right. The ram's horns rising from the headdress are turned full-front so that they form balanced arches. Above and between them is a finely striated globe. In Chapter II of this study the hunter's curled hair, balled up at the nape, his pointed beard, and his crescentic mustache were noted, and a comparison was

made with other Sasanian works of art. 164 Earring, necklace, and bracelets are worn by the hunter, whose soft and light garment has a decorative patch on the shoulder. The bowed belt and beaded sword band resemble those on a number of vessels depicting either nonroyal hunters or kings before Peroz. A quiver full of arrows is slung from the waist and decorated with a fine design of chevrons. The hunter, like Shapur on the British Museum plate (Pl. 13), grasps the hilt of his sword, with his forefinger passing over the guard onto the unsharpened upper section of the blade. 165 The most noticeable difference between the representations of this hunter and of those in Group II is the rippling linear form of the drapery. A related type of drapery appears on the male figure on the Cincinnati Museum bowl (Pl. 3) and on the representation of Shapur on the British Museum plate. Since the rendition of the drapery is a stylistic device, it will be considered later in the present chapter in the section on style. Also unusual is the position of the hunter's right leg. Bent sharply up at the knee, it crosses the quiver. 166 The intention of the

73

<sup>160.</sup> See Chapter II, note 45, for bibliography. State Hermitage Museum, acc. no. S24; diam. 28 cm.; height without foot 4 cm.; weight 636 gm.

<sup>161.</sup> This dating of the inscription is given by Lukonin in Persia II, p. 222, no. 147. Bivar relates the inscription on this vessel to that on a Kushano-Sasanian seal in the British Museum: Bivar, "Kushano-Sas. Coins," CII, p. 1, pl. 4, no. 5; Livshits and Lukonin, "Nadpisi," no. 3, p. 170, no. 18. The tamga is said to be related to those on Khoresmian and Sogdian coins. The authors suggest that the unclear first part of the inscription may give the name of the owner and the region. The letters are said to be Sogdian, early fourth century, an opinion revised later.

<sup>162.</sup> Erdmann, "Die sasanidischen Jagdschalen," p. 198. The triangular form of the composition had already been commented upon by Bachhofer in "Sas. Jagdschalen," p. 62. Levi has remarked on the fact that this compositional form is characteristic of many hunting scenes in Greek and Roman art: Antioch Mosaic Pavements I, p. 337.

<sup>163.</sup> The method of depicting the boars so that they emerge halfway from a thicket of reeds is widespread and ancient: Weber, Altorientalische Siegelbilder, no. 523; Levi, Antioch Mosaic Pavements I, p. 338, fig. 136; Rostovtzeff, Dura-Europos . . . Fifth Season, p. 157, pl. 35, no. 4; Belenitskii, "Raboty Pendzhikentskogo Otrîada v 1961 g," p. 68, fig. 9.

<sup>164.</sup> See Chapter II, p. 36.

<sup>165.</sup> This is noted by Haskins in "Northern Origins," p. 262.

<sup>166.</sup> The leg also crosses the quiver on the Sari plate (Pl. 10). See note 76 above; Haskins, "Northern Origins,"

artist may have been to raise this part of the body out of the reach of the charging boar, but, however practical the idea, the execution is extremely naïve. Apparently the motif persisted, since it appears on one of the latest plates in Group II, the hunting vessel in Berlin (Pl. 20).

The pose of the horse is as unusual as that of the rider. Rearing sharply upward away from the attack of the boars, the horse is foreshortened at the front in a clumsy and inexpert way. 167 The bent forelegs seem to grow out of the belly. The head is deliberately rendered in a slightly turned three-quarter position, both ears and eyes being at least partly visible. Three crenelations are cut into the horse's mane, 168 and the tail is bowed. Double reins come from a circular boss attached to a snaffle rather than a curb bit. 169 As on the Sari and Burnes plates (Pls. 10, 11), small pendants hang from the reins. A row of bells dangles from a strap that passes across the rump. The saddle blanket placed over this strap has a narrow border, and the surface is covered with a spaced pattern of triple dots. Above the horse's back rise two oval hair balls with wavy strands of hair divided by the pronounced horizontal lines already noted on the Krasnaya Polyana, Sari, and Burnes plates (Pls. 9, 10, 11). Two ribbons fly from the vertical back edge of the saddle blanket.

Both boars are alive, although one has received a mortal wound across the back. <sup>170</sup> The bodies are covered with rows of punched crescents, except on the underbellies, the surface of the inside front legs, and, surprisingly, the lower parts of the legs. <sup>171</sup>

This vessel is large (diam. 27.6 cm.) compared to those described in Group II. In profile the form is that of a bowl, similar to the smaller British Museum Shapur vessel (Pl. 13). Only the Shemakha, Krasnaya Polyana, and Sari plates (Pls. 8, 9, 10) described in Group I match the dimensions of this piece, but they lack the deep, curving profile. The design is partly composed of small added pieces, which produce uneven rather than smoothly modeled surfaces, and only certain areas are gilded in the fashion described above as spot-gilding.

Klimova plate with hunting scene (PL. 24). The next vessel, in the Hermitage Museum, comes from Klimova in the Perm and shows a figure who wears a crown closely similar to that of Shapur III, stabbing a

leopard. <sup>172</sup> On the reverse this plate bears a Sogdian cursive inscription of the seventh or eighth century.

The scene has a fairly simple composition. The king, standing, slays with a sword a leopard rearing upright on its hind legs. <sup>173</sup> A small landscape element in the form of three small hills bearing flowers is placed at the base. The scene in its entirety fits into the circular frame.

The king's crown is topped by the customary

p. 252. The pose is compared to that on a Graeco-Bactrian bowl. I cannot see this in illustrations of that piece, which is, in any event, of a much later date: Marshak and Krikis, "Chilekskie Chashi," p. 70, fig. 11, no. 3. The legs of the hunters on the British Museum Hephthalite bowl cut into the scabbard, and on another "Graeco-Bactrian" bowl the riders' legs cross over the end of the bow case: Dalton, Oxus, pls. 29-31; Trever, Greko-Baktr. Isk., pl. 24.

167. Bachhofer, Erdmann, and Haskins compare the odd perspective of the chest to Greek representations of the fifth century B.C.: Bachhofer, "Sas. Jagdschalen," p. 62; Erdmann, "Die sasanidischen Jagdschalen," p. 199; Haskins, "Northern Origins." p. 252.

"Northern Origins," p. 252.

168. Maenchen-Helfen, "Crenelated Mane," pp. 112,
138. The crenelated mane is said to be an Inner Asiatic feature brought, with the scabbard slide, by the Sarmatians when they moved westward from the Ural Mountains to the Black Sea region in the third and second centuries B.C.

169. This feature also occurs on the Tehran Museum Sari plate (Pl. 10), as noted by Ghirshman, "Notes iraniennes VI," p. 15. See note 77 above.

170. Francovich, "Il concetto della regalità," p. 11. The author states that the hunter must be a king but not a Sasanian king because both animals are shown alive.

171. For a discussion of the significance of the boar and the use of "Varaz" (boar) as a name in Iran and the lands east of Iran, see Frye, "Some Early Iranian Titles," p. 358; Christensen, L'Iran, pp. 40, 501; Herzfeld, "Khusrau Parwēz," p. 120. See note 116 above.

172. State Hermitage Museum, acc. no. S42; diam. 21.5 cm.; height with foot 4.5 cm.; weight 644.5 gm. For bibliography before 1936, see Erdmann, "Die sasanidischen Jagdschalen," p. 205; Herzfeld, "Khusrau Parwēz," p. 126, no. 5; Bachhofer, "Sas. Jagdschalen," p. 64. Lukonin, *Persia* II, pl. 148, p. 222 (trans. of Sogdian inscription of the seventh to eighth century): "Myarshan [proper name?] of Shash [in present-day region of Tashkent]. Weight 39 staters"; Livshits and Lukonin, "Nadpisi," p. 173, no. 23-monogram not shown in Smirnov; weight "37 staters." Haskins considered this piece a forgery because the forefinger seems to pierce the guard rather than pass over it. He also noted that the attachment holding the scabbard was odd and stated that it was not known until the sixth or seventh century: Haskins, "Northern Origins," p. 336. For a description of the objects found together at Klimova, see Darkevich, Metall Vostoka, p. 23.

173. Erdmann, "Die sasanidischen Jagdschalen," p. 206. Erdmann compares the scene to those at Persepolis and at Sar Meshed.

cloth-covered globe, but, if Shapur III is represented here, there is a feature that distinguishes this crown from those of Shapur III as they appear on Sasanian coins. On the coins the triangular divisions of the brim enclose upright palmettes; on the plate these areas are filled with three triangularly arranged dots, alternately pointing upward and downward. On certain coins with bilingual Sogdian and Bactrian inscriptions (Fig. 16) there is a related version of the crown of Shapur III. 174 On these coins the triangular outlines enclose a pair of punched circles placed side by side. Although the triangular arrangement of the three punched circles on the crown represented on the silver plate is closer in design to the Sasanian palmettes, the use of the circle or pearl rather than the plant form may indicate a relationship with these coins of unknown Eastern rulers. Less close are some Kushano-Sasanian coins on which the crown has a flaring rim decorated with meshing pointed teeth and beads between or above these points. 175

The king wears the same dress, the skirt with downward-curving front hem, as that on the Yazdgard I plate in the Metropolitan Museum (Pl. 16). 176 On the king's right shoulder is an elaborate, starshaped roundel. 177 Parts of the royal halter can be seen on the chest, although no ribbons are attached to it. The belt has two circular clasps from which a broad ribbon falls. There are a few other unusual details on this upper garment, which is otherwise in the standard paired-line drapery style. A horizontal, wavy, tongue-shaped pattern appears just above the belt and at the base of the skirt. These designs seem to be neither decorative nor functional in purpose. More understandable are the small undulating lines that depict the folds of the upper garment where it falls free of the body. Considerably deeper and longer lines spread out from the leggings. The dagger is of a type known both from the early Sasanian rock reliefs and from works of art of earlier periods. 178 The ends of a ribbon flutter off from the lower part of the dagger sheath. The sword hilt is topped by a circular ball. 179 In contrast to the preceding plate (Pl. 23) in the Hermitage and to the plate depicting Shapur (Pl. 13), the sword is held with all the fingers on the hilt (none passes over the guard), and the blade lacks the demarcation line between sharpened and unsharpened areas.

The head of the king, turned outward in a three-

quarter position, has the hair arranged in a bunch on either side. The surface is rendered as punched circles. The hair of the short beard, closely following the line of the chin, is similarly depicted. This schema is the same as that used for hair on the plate in the Freer Gallery (Pl. 15) but is more linear and simplified. The mustache forms an undulating line. The king wears the customary earring, necklace, and bracelets.

The leopard has circles spaced at intervals on his body except where hatched lines mark off the underbelly, and paired lines the muscles of the leg. The inside surfaces of the legs are treated differently than is the rest of the body. In this case they are left plain. The animal appears to be dying rather than dead, as evidenced by the upward curl of the tail, suggesting life, while the protruding tongue indicates approaching death.

<sup>174.</sup> Göbl, Dokumente I, p. 48; III, pl. 13, no. 19. These coins are undated.

<sup>175.</sup> Lukonin, "Kush.-Sas. monety," pls. 1b, 2. The same zigzag brim decorates the caps of warriors on the Piandzhikent paintings: Belenitskii, Monumental'noye iskusstvo Piandzhikenta, p. 11.

<sup>176.</sup> See p. 63 above.

<sup>177.</sup> Erdmann claims that the king wears a jacket and that the roundel of the undergarment is visible because the jacket goes under that shoulder. He considers that the artist who designed this plate was copying a third-century model and that this explains the inclusion of the shoulder roundel: Erdmann, "Die sasanidischen Jagdschalen," p. 205. Reference is made to the royal significance of the rosette, as evidenced by its appearance on this figure, on the tomb of Cyrus at Pasargadae, on the felt carpet found at Pazyryk, and the throne apse at Khirbet al-Mafjar: Ettinghausen in From Byzantium to Sasanian Iran and the Islamic World, p. 39.

lamic World, p. 39.
178. Seyrig, "Antiquités syriennes 20," p. 29. For Sasanian reliefs, see, for example, Hinz, Altiranische Funde, pls. 73, 77.

<sup>179.</sup> The pointed triangular form at the base of the scabbard is a detail that appears on many of the silver plates (Pls. 16, 18, 19, 29). A scabbard of this type was a chance find at Ufa in Bashkiria and is dated to the seventh or early eighth century: Akhmerov, "Arkheologicheskie nakhodki v Bashkiriĭ," pp. 240 ff., fig. 1. On the silver plates the tip of the scabbard is generally decorated with a ball. This detail also appears on the sword of Khusro II on the back wall of the niched monument at Taq-i Bustan, while on the two smaller reliefs of Shapur II/III and Ardashir II at the same site the end of the scabbard is flat: Fukai and Horiuchi, Taq-i-Bustan II, pls. 13, 66, 81. The difficulty of establishing a chronology, however, is illustrated by the shape of the scabbard on a Sasanian graffito at Persepolis showing Papak. There, the end is triangular, as on the silver plates and on the Ufa scabbard: E. F. Schmidt, Persepolis I, pl. 199.

In technique the plate is close to that in the Freer Gallery (Pl. 15) and to that in the Metropolitan Museum depicting Yazdgard I (Pl. 16). Highly modeled surfaces predominate, and the transition between modeled and flat areas is abrupt. In contrast to the scene on the Freer Gallery and the Metropolitan Museum vessels, the design on this piece is spot-gilded. There are, moreover, two lines just beneath the rim on the exterior.

British Museum lion-hunt plate (PL. 25). The next plate belonging in Group III is a large vessel (diam. 27.4 cm.) in the British Museum. 180 The provenance is unknown, but the plate was once in the collection of General Sir Alexander Cunningham, viceroy of India. The royal figure wears a variation of a Sasanian crown, mistakenly identified as that of Bahram V. Certain elements in the design of the crown make this attribution impossible. One is the row of hair curls or volutes above the forehead band; another is the presence, between the stepped crenelations and the globe, of a pair of horns, not in this instance those of a ram but rather a bull. 181 They are arranged so that they form an almost perfect crescent, and this placement explains the confusion with the crown of the Sasanian king Bahram V. Finally, the band around the crown base is decorated with chevrons and two beads rather than with a continuous line of beads, as on the coins.

Once again there is some difficulty in finding the correct position from which to view the plate. If the landscape elements are placed at the center of the base, the horse appears to plunge downward in an impossible fashion. If, however, the hooves of the horse are arranged in a horizontal line, the hillocks appear disturbingly off center. 182 The proper solution must nevertheless be the latter one. From this viewpoint the king's body is bent slightly forward toward the right and is balanced by the stronger lines of two lions rising toward the left. The king's sword arm, slashing downward, meets the line of the lower lion's body, while his outstretched and upheld left hand, grasping a lion cub, forms the apex of the line drawn through the other lion. Although less striking than the design on the Hermitage plate with a hunter in a ram's-horn headdress (Pl. 23), the triangular arrangement of the scene is evident. In spite of the fact that the hind legs of both lions are cut off by the rim of the bowl, seemingly no attempt was made either to mask this feature or to fit the scene into the circle of the vessel's shape.

The wavy lines of the royal garment and the circular pattern at the elbow and shoulder contribute to the richness of the surface design. Almost every part is enlivened with patterns of some sort. Within the stepped crenelations of the crown are minute dots. The globe above the crown also is evenly covered by circles and dots. The hair, shown as a mass of spirally curling lines, is bunched behind the king's head, and the long, tied beard is rendered by punched circles. <sup>183</sup> A smooth crescentic mustache and a tiny curl on the right temple are clearly depicted, the latter having parallels on a number of plates, the earliest of which is the vessel from Sari (Pl. 10). Earring, necklace, and

180. British Museum, acc. no. 124092; diam. 27.4 cm.; height without foot 4.8 cm; weight 936 gm. For bibliography before 1936, see Erdmann, "Die sasanidischen Jagdschalen," p. 223. Erdmann considered this plate to be a seventh-century copy of a third-century original. Herzfeld identified the king as Bahram V and cited other monuments on which hair curls appear between the forehead band and the stepped crenelations of the crown. He considered the crown to be more correctly rendered on this plate than on the coins: Herzfeld, "Khusrau Parwez," pp. 117 ff. Erdmann noted the existence of two replicas of this piece, one in the Hermitage Museum (Orbeli and Trever, Sas. Metall, pl. 10) and the other in the Kevorkian collection (Art News, Feb. 20, 1937, p. 10): Erdmann, "Zur Chronologie," pp. 268-269. Dimand, Marshak, and Krikis date the plate in the reign of Bahram V: Dimand, "A Review of Sasanian and Islamic Metalwork in A Survey of Persian Art," p. 195; Marshak and Krikis, "Chilekskie Chashi," p. 63. Haskins states that this plate cannot be post-Sasanian because the sword is not so late a type, and any artist would faithfully represent the weapon of his own time: Haskins, "Northern Origins," pp. 333-334.

181. There are various reasons why a bull's horns might be represented rather than a plain crescent. The bull Nandi appears with the god Siva on the reverse of many Kushano-Sasanian coins: Göbl, *Dokumente* III, pls. 2–4. Hinnells mentions that bull-slaying may have been part of an ancient ritual preserved in the Zoroastrian Yasna ritual and that the mace of Mithra has at the end the head of a bull: Hinnells, "The Iranian Background of Mithraic Iconography," pp. 247–248. The most obvious connection between the bull and the crescent is that the bull was the main animal associated with Mah, the moon god.

182. Erdmann thought that this strange landscape pattern was connected with the fire cult because of the "flame" pattern projecting from two of the hills: Erdmann, *Kunst*, p. 91.

183. A small section of the ball of hair beneath the ribbon binding the beard is left undotted.

bracelet are of standard form, as are the bowed belt and beaded sword strap. The remains of a small circular shoulder patch are just visible on the upper garment beside the necklace. A section of the halter is shown on the chest. Large ribbons fly from the forehead band, and lighter rippling ones with pairs of bells at their ends (as on the Shapur plate [Pl. 13] in the British Museum) come from the halter. The full quiver is divided into two unequal zones, both filled with abstract plantlike forms.

The horse is shown with forelegs placed on the ground and rigidly extended before the body, starting backward from the mauling attack of the lions. Four crenelations have been cut in the mane, while three locks of long hair fall at intervals against the neck. The hairs of the tail are gathered in the form of a bow. Although the head of the horse is scarcely turned toward the viewer, the second ear, eye, and nostril are visible, as on the first plate in this group (Pl. 23). A ring-shaped snaffle bit is carefully depicted, as are the divided reins, decorated with pendent beads. Across the chest and rump are straps with a compact row of suspended bells. There is nothing in the design of the saddle blanket to distinguish it from that on the Hermitage plate with a hunter wearing ram's horns (Pl. 23). Ribbons project from the back corner. A portion of the beaded girth appears under the belly, and the saddlebow is suggested by a stylized pair of curling lines. Rising above the horse's back are chains and hair balls, the latter shown as simple wavy lines uninterrupted by horizontal divisions. Half the surface of the balls is covered with what appears to be a cloth, a new feature, but these spheres are still gathered into leafy bases. The muscles of the horse's hind leg are indicated by single lines forming ovoid shapes, as on the Shapur plate in the British Museum (Pl. 13).

The lions' bodies are covered by long rows of hatched lines, and both have tufted manes in spite of the fact that the presence of nipples on the belly of the upper animal indicates that this is a lioness. <sup>184</sup> Half of the body of the cub is missing. Both adults are wounded, spurts of blood coming from their bodies. This is shown in a fashion related to that on the Shapur plate in the British Museum (Pl. 13). Neither animal is obviously dead, but blood comes from the mouth of the lower lion whose head has been almost severed.

The narrative elements in the present scene have been emphasized partly because the king has been mistakenly identified as Bahram V (Gur), the legendary hunter-king of Sasanian Iran. <sup>185</sup> In fact, the capture of the young as a method of drawing forth the adults was a common practice in Roman hunts, and a near-replica of this scene appears on one of the mosaic pavements found in a villa at Antioch (Fig. 20). <sup>186</sup> It is probable, therefore, that this composition was never intended to represent any particular heroic feat but is rather a variation of a standard hunting scene. <sup>187</sup>

The vessel's method of fabrication is simple. No parts are added, the entire scene being chased and incised on the surface of the plate. Dotted outlines or guide points are visible in many places; this suggests that some model, perhaps of leather, was laid over the plate and the pattern pricked onto the metal surface. 188 A centering mark appears on the inside, obverse surface just to the left of the sword guard. The gilding is spotted over the surface of the scene. There is no line beneath the rim on the exterior, a detail that is present on most of the plates in the preceding group and on the first two vessels in this group.

Fabricius plate (PL. 26). Another hunt with a number of unrealistic or unusual details appears on a more crudely executed vessel, clearly related in design to the so-called Bahram Gur plate (Pl. 25). 189 There is a

<sup>184.</sup> Erdmann noted that the artist forgot to omit the mane on the lioness: Kunst, p. 91.

<sup>185.</sup> Francovich believed this to be a specific legendary event and that this explained the variations from the standard Sasanian hunt: "Il concetto della regalità," p. 13. Marshak and Krikis also stressed the narrative nature of this scene: "Chilekskie Chashi," p. 63.

<sup>186.</sup> Levi, Antioch Mosaic Pavements I, p. 365, fig. 151 (mosaic of the Worcester Hunt). Levi gives the reference to a passage in Pliny (Natural History, Book VIII, 18, 25) describing this method of hunting the tigris Hyrcana.

<sup>187.</sup> Sidonius describes precisely this method of hunting a tigress in a simile between himself and a Parthian: Sidonius, Book IX, Letter IX, p. 190. The letter was written in A.D. 475.

<sup>188.</sup> This method of manufacture is suggested by Marshak and Krikis for the Chilek plate (Pl. 30): Marshak and Krikis, "Chilekskie Chashi," p. 59. Preliminary dotted sketches were also used on some of the Sasanian graffiti at Persepolis: E. F. Schmidt, *Persepolis* I, pl. 199B.

<sup>189.</sup> Now in a New York private collection; diam. 23.3 cm.; height without foot 4.2 cm.; weight 432 gm. The



FIG. 20 Detail, Worcester hunt mosaic
Worcester Art Museum

Middle Persian inscription on the reverse. The king's crown on the present work, once in the Fabricius collection, is closer to those appearing on coins of Yazdgard II (439-457), Valash (484-488), and Ardashir III (628–630) than to those of other Sasanian kings, but there are the same important differences in the form of the crown as on the so-called Bahram Gur vessel. The forehead band is decorated with two beads, one at the front and one at the back of the head. It is topped by volutes or hair curls and a crescent formed by a pair of bull's horns. There are dots within the stepped crenelations of the crown. The cap or cloth over the crown of the head likewise has a dotted border, and the globe rising above the bull'shorn crescent is divided almost in half by a pair of vertical lines enclosing dots, as on the Berlin plate described in Group II (Pl. 20). This appears to be a stylization of the rippling lines naturally dividing the cloth on the British Museum plate (Pl. 25).

The king sits in right profile astride a standing horse with one foreleg raised and head turned back across the chest. Emerging from the right side of the plate is a humped bull, grasped by the king with his left hand. The lower half of the king's body is inexplicably reversed, almost as if the artist had misunderstood some model such as the Sari plate (Pl. 10)

only source known for the plate is that it was originally in the collection of Dr. Fabricius in Bucharest. The Middle Persian inscription gives the weight as 33 staters and 3 drahm. Brunner suggests a date from the time of Peroz or later, but not as late as the Islamic period: "Middle Persian Inscriptions on Sasanian Silverware," p. 115. See also: Erdmann, "Eine unbekannte sasanidische Jagdschale," pp. 209–217; idem, "Zur Chronologie," pp. 271 ff. Erdmann notes the relationship between this plate and the preceding plate in the British Museum (Pl. 25). He states that the artist who made the Fabricius plate must have known of the third-century original type only through such later copies as the British Museum plate. Erdmann calls this a post-Sasanian representation of Bahram V in "Entwicklung," p. 104, note 64, fig. 13. Marshak and Krikis place this vessel in their sixth stage and identify the king as Yazdgard II; "Chilekskie Chashi," p. 63. See Harper, Royal Hunter, pp. 58–59, no. 17.

where the whole figure is turned backward on the horse. This detail, along with the backward twist of the horse's head, introduces some confusion into the scene. Two groups of hills are depicted at the rim of the vessel in the lower quadrant. <sup>190</sup> All the different parts of the design do not fit within the circular frame. The body of the attacking bull and a small area on the hair balls floating on chains behind the horse are cut off by the rim of the vessel.

The royal hunter's head is in pure profile to the right. His hair, beard, and mustache, although far more crudely portrayed, are similar to those on the so-called Bahram Gur plate in the British Museum (Pl. 25). 191 Because of the hunter's pose with sword arm raised, more of the chest halter can be seen here than on the British Museum plate. Ribbons project from the crown and from the halter. On this vessel, as on the last (Pl. 25), the surfaces of the royal garment are covered with linear and dotted patterns.

The horse's head is sufficiently turned toward the front so that both eyes and nostrils are visible. The trimmed mane has an odd and unrealistic series of rounded knobs, presumably an inexpert rendering of the crenelated cut. 192 The tail is bound and hangs down as on the Peroz plate in the Metropolitan Museum (Pl. 17). As on the human body, linear and dotted patterns are to be seen on the horse and on the quarry. Beaded double reins and a bow-shaped snaffle bit, rather similar to that on the Sari plate (Pl. 10), are carefully shown. Bells hang from the straps crossing the chest and hindquarters of the horse. The saddle blanket has a beaded edge and punched circles on the surface. Hair balls floating behind the horse are hatched in a fashion that makes them unrecognizable as balls of hair, and again half of the surface is covered with what seems to be cloth, as on the preceding plate in the British Museum (Pl. 25).

The bull, head down, is wounded, blood spurting from the back, and forelegs crumbling beneath the body. This species of quarry is unique on the hunting plates. <sup>193</sup> Curving lines of hatching cover the body forming a spiral on the hump. The underbelly is covered with dots that differentiate this part from the rest of the body.

The Fabricius vessel is made in the same fashion as the so-called Bahram Gur plate but with considerably less skill. The dotted lines from the original tracing are still apparent in many areas and were not closely followed in the final execution of the design. <sup>194</sup> The surface was spot-gilded, but little evidence of this enhancement remains. There is no line on the exterior beneath the rim.

Tcherdyne plate (PL. 27). Quite different in appearance from these two plates is one from Tcherdyne, west of the Ural mountains. <sup>195</sup> On it is depicted a figure wearing a crown more closely related to

<sup>190.</sup> Although no "flames" come from the hills, they have an outside hatched outline as on the British Museum "Bahram V" plate (Pl. 25).

<sup>191.</sup> This is true even of the small detail, the omission of the dotting on a portion of the tied ball at the base of the beard.

<sup>192.</sup> Maenchen-Helfen noted this totally unreal treatment of the mane and dated the vessel in the post-Sasanian era: "Crenelated Mane," p. 112.

<sup>193.</sup> Minorsky states that zebus are found in Persia principally in the Caspian provinces: Minorsky, "Geographical Factors in Persian Art," p. 621. For a sardonyx gem in the Bibliothèque Nationale with a bull-slaying scene and reference to the Yasna ceremony, as originally including a bull sacrifice, see note 100 above; Islamic representations of bull hunts and comments on the source of these representations in Turkish art are given by Roux in "Le Taureau sauvage maîtrisé," pp. 187–201. See also Harper, Royal Hunter, p. 59. Ettinghausen proposes that the scene may be interpreted as the slaying of Birmayeh, the cow-nurse of the future King Faridun by the mythological ruler of Iran, Zahhak: "The Arts of the Sasanian Empire," pp. 107–108.

<sup>194.</sup> The double sets of dotted lines can be seen on the king's halter, on the bow of his belt, and on the straps across the horse's fore- and hindquarters.

<sup>195.</sup> State Hermitage Museum, acc. no. S216; diam. 24.5 cm.; height without foot 2.3 cm.; weight 1011 gm. Trever, Novye sasanidskie bliuda Ermitazha, pp. 6-7, 26-28. The king is identified as Peroz. Herzfeld identifies the figure as Khusro II, noting that this form of dress appears no earlier than on the rock-crystal medallion in the Bibliothèque Nationale (Pl. 33) and on the Strelka plate (Pl. 19). He also states that the presence of a cap on the head proves that this cannot be Peroz and that the odd form of globe is not seen on coins before Kavad II: Herzfeld, "Khusrau Parwez," pp. 126, no. 19; 129. The oval shape of the globe above the head may simply reflect the artist's carelessness, as this shape occurs on some poor coins of Shapur II found at Marandjan: Curiel, "Le Trésor," pl. 10. Dimand agrees with Herzfeld in attributing the plate to Khusro II: "A Review of Sasanian and Islamic Metalwork in A Survey of Persian Art," p. 194, fig. 2. Erdmann identifies the king as Peroz in "Zur Chronologie," p. 282, fig. 11, and in "Entwicklung," pp. 105, note 69; 106, note 72. In the latter article, he notes the odd shape of the ball over the head of the king and compares it to that on a plate with a banqueting scene in the Walters Art Gallery, Baltimore. He admits that on the coins he knows of this type of globe only on

Sasanian models. Except for the absence of a stepped crenelation at the back, this might be the crown of Khusro II as it appears in the rock relief at Taq-i Bustan (Fig. 18). The missing stepped crenelation and the double band of beading above the forehead also distinguish this royal headdress from that of Peroz, the king to whom Trever and Marshak have attributed this plate.

A striking innovation in the design is the broad scalloped area around the rim formed by a hunting net behind which the profile heads of beaters and dogs (salukis) appear in confronting pairs. <sup>196</sup> Dominating the entire scene is the immense figure of the standing king with his towering crown. The vertical line of his body is matched by the vertical arrangement of the four hunted animals, all of the same species (rams), evenly divided between those alive and those dead. No landscape elements appear, and the scene fits within the plate, although the crown and the bow in part project onto the surface of the hunting net. In all these details the scene is conservative, close to the vessels with representations of identifiable Sasanian monarchs (Pls. 14–20).

The king stands with head in profile to the right, body full-front and both legs turned outward. Behind the king's head is a large nimbus. A small ball of hair is visible, the chin is smooth (perhaps worn), and the mustache ripples slightly. A tiny curl rests against the king's right temple. The earrings consist of two oval pendants hanging side by side. 197 The long necklace is made up of a double strand of beads. Projecting from the beaded halter are two separate ribbons. The belt worn at the waist meets in tongued buckles as does the belt holding the sword. 198 Both are similar in this respect to those represented on the plate in the Bibliothèque Nationale (Pl. 22). The elaborate garment worn by the royal figure has wide hems and cuffs decorated with a curling grape and leaf vine reminiscent of the more elaborate vine on the borders of the garments of the women in the spandrels of the large arch at Taq-i Bustan. The skirt curves upward at the front and downward at the sides where the cloth is slit open. The closest parallels, among those works already described, for this form of dress are to be found on the enthronement plate from Strelka in the Hermitage Museum (Pl. 19), and on the side walls of the arched niche at Taq-i Bustan. 199 In both instances this costume is worn by nobles or high officials, not by the king himself. Hiding the leggings are guards of a stiff material, perhaps leather.<sup>200</sup> The huge compound bow with which the figure shoots at his quarry is accurately shown, the upper arc larger than the lower one and with pronounced ridges separating the ears from these arcs. The pommel that tops the sword hanging at the king's left side is in the form of a ball.<sup>201</sup>

The rams' bodies are covered with fine lines representing wool. Longer strands are depicted on the neck and chest. All four animals are pierced by arrows, but only the lower two are in positions suggesting that they are actually dead. The human heads and the dogs' heads behind the crisscross pattern of the hunting net have already been mentioned. <sup>202</sup>

This plate appears to have been fabricated by a method similar to that used on the plate from Strelka in the Hermitage Museum (Pl. 19) and the plate from Berlin (Pl. 20). The background was cut away, leav-

those of the last rulers and states that if this is Peroz, it is the fourth variation of his crown. Marshak and Krikis acknowledge that the crown is not documented on the coins and state that it stands between the first and third crowns of Peroz: "Chilekskie Chashi," p. 65. Lukonin also attributes the plate to Peroz: Persia II, p. 222, pl. 143.

196. Trever compares the scene with nets to that on the side wall of the niche of Khusro II at Taq-i Bustan: Novye sasanidskie blûuda Ermitazha, p. 27. For the use of nets in Roman hunts, see Aymard, Les Chasses romaines, pp. 207-218, pls. 3-6, 32.

197. This feature has already been noted on the plate in the Bibliothèque Nationale (Pl. 22). On the coins it occurs first in the reign of Peroz.

198. See note 126 above.

199. Peck mentioned the difference between the pointed corners at the hem of this garment and rounded corners on the skirt of the figure on the Strelka plate and at Taq-i Bustan: Peck, "Taq-i-Bustan," pp. 111-112.

200. The different types of leggings appearing on Parthian and Sasanian monuments are discussed by Widengren, "Riding Costume," p. 254.

201. Boris Marshak in a private communication stated that a sword with a similar type of hilt (surmounted by a ball) appears on a fifth-century wall painting recently discovered at Piandzhikent. A related sword hilt is represented on a fifth-century Hephthalite bowl in the British Museum: Dalton, Oxus, pls. 29–31; Marshak and Krikis, "Chilekskie Chashi," pp. 68 ff., for the date of the British Museum bowl

202. The plate is damaged at the rim where a portion with the heads of beaters and dogs has been hammered down

ing the design evenly raised in relief. The design itself, with the usual exception of the human face and hands, is gilded. On the exterior there is no line beneath the rim. A dotted monogram is within the foot on the reverse.

Summary. The five plates just described constitute Group III. The so-called Bahram Gur plate in the British Museum (Pl. 25) and the Fabricius plate (Pl. 26) are closely related in design and detail, and both share a number of features with the Hermitage Museum plate depicting a hunter wearing a ram's-horn headdress (Pl. 23). This relationship will be more closely analyzed in the section devoted to the overall parallel-line drapery style. Obviously different in form and composition as well as in style are the Hermitage plate with the king killing a leopard (Pl. 24), and the plate from Tcherdyne (Pl. 27). The representations on these vessels are related to some of those in Group II, showing kings wearing identifiable Sasanian crowns.

GROUP IV. Hunting plates in damaged condition and unfinished works. On most of the vessels in this group the area around the crown is damaged, so that an identification of the king based on the appearance of this detail is impossible. In one example, the plate from Nizhne Shakharovka (Pl. 32), the work appears to be unfinished, and this may explain the peculiarities in the crown type.

Pereshchepina plate (PL. 28). The first example is from a treasure found at Pereshchepina. 203 The king is usually identified as Shapur II, but the part of the crown that should rise above the top of the king's head is broken away. What remains is a low row of stepped crenelations and below them a row of curls. If this is a Sasanian crown, the curls would indicate that the king must be Hormizd I or Shapur II. Only the latter, however, has crenelations on his crown. The possibility remains, nevertheless, that the missing part included elements that would have differentiated this headdress from the royal Sasanian types.

For this reason the plate is placed in the present group.

In composition the scene is similar to those on plates belonging to Group II. An upright equestrian figure is balanced by two vertically arranged rams fleeing before the horse, while the horizontal line of the horse's body is matched by that of one of the two dead rams below. No landscape elements appear on the plate, although it should be noted that large sections are broken away. If the remaining portions of the rim are continued around in an imaginary line, there appears to be sufficient room for the whole design to fit within the circular frame.

The king is in three-quarter profile. The head is modeled in high relief as on the Berlin fragment (Pl. 12), the Shapur II plate in the Freer Gallery (Pl. 15), the Hermitage Museum plate with Shapur III stabbing a leopard (Pl. 24), the Hormizd plate in the Cleveland Museum (Pl. 14), and the Yazdgard I and Peroz-Kavad I plates in the Metropolitan Museum (Pls. 16, 17). Behind the king's head on the present plate is a halo not seen on vessels with identifiable Sasanian kings before the time of Yazdgard I.<sup>204</sup> The hair falls back behind the head in long spiral locks, a detail found only on the nonroyal hunting plates (Pls. 8, 9) unless one includes the Berlin fragment (Pl. 12), where the figure may be a king, Narseh.<sup>205</sup> On coins this hair style occurred through the reign of Narseh and not thereafter. On gems it continued to be used by officials throughout the Sasanian period. The

<sup>203.</sup> State Hermitage Museum, acc. no. S272; diam. 23 cm.; height with foot 4.2 cm.; weight 628 gm. For bibliography before 1936, see Erdmann, "Die sasanidischen Jagdschalen," pp. 208–209, fig. 7. Erdmann identifies the king as Yazdgard II in this article but changes to Shapur II in "Zur Chronologie," p. 281. Herzfeld states that if this is a king then the choice is between Yazdgard II and Shapur II, and of these two he finds the latter the more likely: Herzfeld, "Khusrau Parwēz," pp. 129 ff. Marshak, who identifies the king as Shapur II, mentions that there are Sogdian markings on the base. The latest Byzantine coin in this find is from the time of Constans II (d. 668): Marshak and Skalon, *Pereshchepinskii Klad*, pp. 3–19. Lukonin identifies the king as Shapur II: *Persia* II, p. 221, figs. 135, 139.

<sup>204.</sup> The only possible exception would be the Cleveland Hormizd plate (Pl. 14), if that could be dated to the reign of Hormizd II.

<sup>205.</sup> Erdmann mentions this in "Die sasanidischen Jagdschalen," pp. 209–210. See Chapter II, p. 32.

beard is tied and covered with punched circles. A small area beneath the lower lip is distinguished by a row of hatched lines.<sup>206</sup> The mustache is a wavy line. The king wears an earring, a necklace, and a bracelet. Soft garments cover the upper and lower parts of the body, as on such plates as the Freer Gallery's Shapur II, the Cleveland Museum's Hormizd, and the Metropolitan Museum's Peroz-Kavad I, with one important exception. The figure on the Pereshchepina plate does not wear the beaded halter that became a conventional part of the royal dress on all representations of Sasanian rulers from the time of Shapur II onward. Rather, this king has, clasped across the chest, the same type of cloak seen on the Krasnaya Polyana plate (Pl. 9) and on early Sasanian reliefs. The end of the cloak is correctly shown flying out behind the figure in a single fluttering mass.<sup>207</sup> Although the upper garment is covered with paired lines, it has in addition two small spirals, one on each of the king's breasts, an idiosyncrasy unparalleled on other hunting plates. The bowed belt is beaded, as is the sword strap. Fine zigzag lines cover the surface of the quiver, in this respect perhaps identical to the Burnes plate (Pl. 11) and certainly to that on the Hermitage Museum plate showing a figure wearing a cap adorned with ram's horns (Pl. 23). Strapped against the king's right thigh is a dagger with four bosses, two on each side, a type that appears on other plates (Pls. 16, 24), and on a few of the early Sasanian rock reliefs.208 The bow is missing, but the king's bowstring arm is shown as a straight line slanting slightly downward toward the hand. Both fore- and little fingers are outstretched.

The horse is shown in a flying gallop to the right. The forelegs, one of which was modeled in the round, are missing, as is the background behind the horse's head.<sup>209</sup> The mane is evenly clipped with one narrow, long tuft of hair left lying against the neck. Gathered in a ball above the head is the forelock. If something originally rose above this hair, it is now broken away. The tail is bowed. Across the chest and rump are straps from which *phalerae* are suspended. These straps pass under the saddle blanket, which has a narrow border and a crosshatched surface pattern. At the corners are pendants having a floral form, and high on the vertical edge at the back are two ribbons. Beading in the form of punched circles decorates the

girth. A chain, the outline of a single hair ball, and the bead at the base of the second hair ball remain. On the horse's chest is either a tamga or a muscle pattern.

As on the Peroz-Kavad I plate in the Metropolitan Museum (Pl. 17), the rams are fleeing, two before the horse (of these only one body is preserved) and two beneath the horse's belly in the contracted positions of death. Long wavy hair is shown on their chests, and a dotted line marks off the underbelly. In the instances where the body remains, an arrow can be seen piercing it. Other broken arrows are chased on the background shell of the vessel.

The plate is manufactured in a fashion producing uniformly high relief through the attachment of a number of separate pieces. In this respect the work is close to that of the Cleveland Museum Hormizd, the Metropolitan Museum Peroz–Kavad I, and the Ufa plates (Pls. 14, 17, 18). The horse's right foreleg, now missing, was originally freestanding. With the exception of the king's head and hands, the entire design is gilded. The background is plain. On the exterior surface there is a line directly beneath the rim.

Nizhni Novgorod plate (PL. 29). Finished work-manship and almost mannerist precision characterize the plate from Pereshchepina. In contrast, a damaged plate in the Hermitage Museum is poorly executed.<sup>210</sup> Purchased at a fair in Nizhni Novgorod, it has a Mid-

<sup>206.</sup> It is hard to detect this feature on coins or gems, but it is represented, I believe, on a few Kushano-Sasanian gems: Bivar, *Kushano-Sas. Coins, CII*, pl. 2, nos. 2, 5; pl. 4, no. 5. For a similar detail, see Pls. 10, 19.

<sup>207.</sup> Erdmann interprets this cloak as four fillets and says that they are reminiscent of the cloak appearing on Sasanian rock reliefs: "Die sasanidischen Jagdschalen," p. 208. It is more likely, however, that this is simply a cloak.

<sup>208.</sup> See note 178 above.

<sup>209.</sup> Erdmann considers the small size of the horse's head, in proportion to the body, as a mannerist detail characteristic of the style in which the plate is executed: "Die sasanidischen Jagdschalen," p. 209.

<sup>210.</sup> State Hermitage Museum, acc. no. S5; diam. 22.3 cm.; height with foot 4.7 cm.; weight 527.5 gm. For bibliography before 1936, see Erdmann, "Die sasanidischen Jagdschalen," p. 208, fig. 6 (king unknown). In "Zur Chronologie," p. 282, Erdmann identifies the king as Shapur III. He makes a similar identification in "Entwicklung," p. 100. See also: Erdmann, Kunst, p. 94 (time of Shapur III); Herzfeld, "Khusrau Parwēz," p. 126, no. 6 (Shapur III); SPA I, p. 725 (Shapur III).

dle Persian inscription giving the name of its owner.<sup>211</sup> Many of the applied pieces, including the head and crown of the king, are missing, and the surface is extremely worn.

In composition the plate resembles the vessel in the Hermitage Museum showing Shapur III stabbing a leopard (Pl. 24) and another in the Metropolitan Museum with Yazdgard I (Pl. 16). In the present work, a standing king lassos an upright fleeing onager. Beneath the onager are reeds, and beneath the king, a series of hills. The rim of the vessel is complete, and the scene is clearly arranged so that it fits within the available space.

The king's head may have been shown in threequarter view, but this is by no means certain, as the outline of the missing piece would have been smooth and undifferentiated even if the head had been in pure profile. (In the latter case the outline of the piece upon which the head appeared would not have followed the head's exact profile but would have been cut in an even curve beyond it.) The absence of crescent or wings beneath the globe above the head indicates that the crown, if it were Sasanian, would have to have been one of those dating before the reign of Bahram V (421-439). After this time one of these two elements, crescent or wings, regularly cradled the globe. As on the plate from Pereshchepina (Pl. 28), a halo is represented behind the head. The ribbons shown rising from either side of the shoulders are of a type that customarily come from a crown rather than a halter or a royal necklace. The drapery on the lower half of the body is preserved in some detail, and it is in this area that the clumsiness and sketchiness of the execution is particularly noticeable. The king wears leggings and the rounded type of skirt.<sup>212</sup> The latter detail, combined with the standing pose of the figure, has led to a comparison between this plate and that in the Hermitage Museum showing Shapur III stabbing a leopard (Pl. 24). On the basis of these similarities in the design, it has been suggested that the king on the plate from Nizhni Novgorod may also be Shapur III. The broad, pointed lappet of cloth hanging vertically in the center of the skirt is probably the lower part of the ribbon coming from the belt. It has parallels on the plate in the Hermitage Museum with Shapur III mentioned above and with the Yazdgard I plate in the Metropolitan Museum (Pl. 16). Although the king hunts with a lasso, he wears both sword and dagger. <sup>213</sup> A punched-dot pattern of circular form decorates the heel of the soft shoe.

The animal body is for the most part worn away or missing. No skin or hair pattern exists except for the dotted line marking off the underbelly.

Further comments on this vessel will be made in Chapter V. The execution of the drapery is so summary, and the present condition of the plate so poor, that it is difficult to compare it to other hunting plates. The method of fabrication is obvious, although most of the original gilding is worn away. As on some of the plates in Group III there is no exterior rim line.

Chilek hunting plate (PL. 30). The king on the next plate, from Chilek, has been identified as Peroz, but a crucial part of the crown is in fact missing, and there is no continuously beaded forehead band. <sup>214</sup> The vessel was found accidentally in the region of Samarkand at Chilek in 1961. The circumstances of the find provide a terminus post quem for the plate in the sixth century and a terminus ante quem in the early seventh century.

In composition the plate shows the now familiar hunter-king astride a horse depicted in flying gallop

<sup>211.</sup> Livshits and Lukonin, "Nadpisi," p. 165, no. 12. The authors give the same reading as that proposed originally by Herzfeld, "Postsasanidische Inschriften," p. 149: "Property of Spandarmat, advocate."

<sup>212.</sup> The folds of the drapery on the leg are cited by Erdmann as a major difference between this representation and that on the Hermitage plate with Shapur III killing a leopard: "Die sasanidischen Jagdschalen," p. 208.

<sup>213.</sup> The use of the lasso in both the hunt and war is discussed by Aymard, Les Chasses romaines, pp. 459-463. Reference is made to the Assyrian reliefs at Nineveh where onagers are hunted in this fashion. Harmatta mentions the lasso as a weapon of war in "The Golden Bow of the Huns," p. 134. He refers to a passage in Ammianus Marcellinus, XXXI, 2, 9, in which the Huns are said to use the lasso.

<sup>214.</sup> Republican Museum of History and Culture of Uzbekistan, Samarkand; diam. 24.3 cm.; height with foot 5 cm.; weight 543 gm. Marshak and Krikis, "Chilekskie Chashi," pp. 61–66. The authors claim that the hunter wears the third crown of Peroz and therefore place the vessel in their seventh stage. They believe that it should be dated in the seventies or eighties of the fifth century.

to the right. As for the quarry, a lion is placed vertically before the horse; a leopard lies horizontally outstretched beneath. As on the plate in the British Museum allegedly showing Bahram Gur (Pl. 25), and on the vessel in the Fabricius collection (Pl. 26), it is not immediately apparent from which angle this plate is to be viewed. In the original publication by Marshak, the vessel is probably turned slightly too far in a counterclockwise direction, so that the horse appears to be rearing. A more reasonable viewpoint would place the king's crown at the top center of the plate and leave the outstretched feline at the base in a horizontal line. Essentially, therefore, this composition is the well-known balanced scheme of two horizontal and two vertical lines. No landscape elements are included, and the hind legs of the horse are cut off by the rim of the plate.

Marshak has described this plate in great detail, grouping it with a number of others which, he believed, represented a single workshop tradition covering a period of several hundred years. As this theory involves a discussion of style as well as composition and details of the representation, Marshak's arguments will be analyzed not here but rather at the end of the present chapter in the summary following the section on the drapery styles.

The fact that a portion at the back of the king's crown is broken away prevents its identification: it cannot be determined whether or not the crown included the stepped crenelation necessary for it to resemble the third crown of Peroz. Without this element the crown would be the same (except for the plain band with only two beads, one over the forehead, one at the back) as that seen on the Tcherdyne plate (Pl. 27), and not exactly attributable to any Sasanian king. The remaining parts of the crown include a single stepped crenelation with a dotted or beaded surface, a forehead crescent, wings of curvilinear shape as on the Tcherdyne plate, and a crescent cradling a globe. The globe is divided by a pair of parallel lines similar to those on the Fabricius and Berlin plates (Pls. 26, 20). The king's hair curls out behind the head; the dotted beard follows the outline of the chin; the mustache is a crescentic curve. A small curl is placed against the right temple. Directly behind this is the stylized ear and part of a ribbon that probably passed around the hair. Ribbons fly from the forehead band and presumably from the halter,

which is itself not visible. In a much stylized and exaggerated gesture the king holds his right arm out behind him, grasping in his hand a sword with which he has wounded or slain the quarry. <sup>215</sup> His left arm, in an equally unrealistic position (close to that on the Berlin plate, Pl. 20), comes from behind the body to grasp the reins. The sword apparently has an unsharpened area marked off by a line at the top of the blade, but unlike some other examples with this detail (Pls. 13, 23, 25), all the fingers grasp the hilt. The quiver has three uneven zones of decoration, the middle one having a circular punched design and the upper, two quatrefoils.

Although the horse is galloping to the right, his head is slightly turned, as on the so-called Bahram Gur plate in the British Museum (Pl. 25) and the Fabricius plate (Pl. 26), so that both upright ears and both eyes are visible. The clipped mane has three crenelations. A snaffle bit is depicted in the same fashion as on the Bahram Gur plate in the British Museum. From the chest and rump straps passing under the saddle blanket hangs a tight row of pendants. The blanket itself is decorated with dots enclosed within punched circles. Jewels hang from the corners, and ribbons project from the vertical edge.

Both hunted animals may be dead, although it is possible that the lion before the horse is only wounded. Dotted spurts of blood come from a chest injury. The leopard below is more certainly dead, since the head is almost severed, and blood flows from the wound. As on a few vessels in Groups II and IV (Pls. 18, 20, 22, 28), the dead animal is facing in the opposite direction from that of the horse. An unusual design of crossed lines appears on the head of the dead beast, and hatched lines cover the body.

The vessel is simply made, the entire design being chased and incised on the surface. The beveled angle of some of the incised outlines, in particular, is pronounced. The centering mark is apparent on the obverse. None of the parts is added. Marshak has described the way in which the design on this vessel

<sup>215.</sup> This same exaggerated and unrealistic position of the sword arm is repeated on one of the seventh- to eighth-century wall paintings at Piandzhikent: Belenitskiĭ, Monumental'noye iskusstvo Piandzhikenta, p. 31; Belenitski and Marshak, "L'Art de Piandjikent," p. 34. fig. 12.

was first transferred to the surface of the plate from a pricked model, perhaps of leather. This pattern was then completed and elaborated upon, as on the British Museum and Fabricius hunting plates (Pls. 25, 26). Different parts of the design are spot-gilded. There is no line on the exterior beneath the rim.

Kutais plate (PL. 31). Another damaged vessel, in the Hermitage Museum, found in the environs of Kutais,217 west rather than east of Iran, is related in some ways to the Chilek plate (Pl. 30). The scenes on both vessels are essentially the same. The horse is galloping. Although here tigers are the quarry, one animal is placed vertically before the horse; the other is placed horizontally beneath it. The king is upright and astride the horse; his weapon is a bow. Covering a considerable area around the edge are simple landscape elements in the shape of hills. These have hatched contours somewhat resembling the hills on the British Museum's so-called Bahram Gur plate (Pl. 25) and on the Fabricius plate (Pl. 26). This stylization is already apparent on the Sari plate (Pl. 10). The design fits the plate largely because the artist has inexpertly forced it to do so. The horse's hind legs and tail are unrealistically depicted at right angles to the body. In their proportions the bodies of man and horse are strikingly inaccurate.

There are few remarkable features in the king's dress, which adheres on the whole to that seen on a number of other plates in Group II (Pls. 13, 14, 15, 17, 19, 20). Only the front portion of the crown and the circular outline of the globe are visible. If the circular element, now missing, originally incorporated both a crescent and a globe, and if there was a counterpart to the front element on the now missing back portion of the headdress, the crown might have been that of Bahram V. It is evident that there were never wings on the crown, as they would still be visible. The end of a fillet coming from the crown appears below the right arm. The king has a long, pointed beard but no mustache, an original feature not previously noted. His necklace has two oval pendants, unlike representations on coins, where the beads shown were circular until the time of Ardashir III (628-630); they then became oval but appeared in groups of three. Apparently no ribbons come from the chest halter, although a broad band similar to that worn by the king on the Bibliothèque Nationale plate (Pl. 22)

falls down behind the neck and shoulders and is visible under the right arm. The short ribbons beside the foot are unique in that they project forward rather than being on either side of or behind the foot. The belt is joined by circular clasps, and the ribbon ends are visible beneath them. The quiver, filled with arrows, is covered with an overall crisscross design.

The horse is shown in profile to the right, with the exception of raised ridges that are intended to represent the far eye and nostril. The mane is evenly clipped, and the forelock forms a loop. The tail is tied part way down and then hangs free, as on the Peroz-Kavad I plate in the Metropolitan Museum (Pl. 17) and the Fabricius plate (Pl. 26). The side pieces of the bit may be of the bow-shaped type appearing on the Sari and Fabricius plates (Pls. 10, 26), although this is by no means clear in the representation. Elaborate pendants, probably bells, hang from the reins and the chest and rump bands. The blanket has a narrow border and a dotted circle pattern. Ribbons project from the vertical back edge of the blanket, but jewels are not shown on the corner. Chains crossing the horse's back indicate that hair balls must once have been delineated, although this part of the plate is missing.

The two tigers are wounded, and both may be

<sup>216.</sup> Marshak and Krikis, "Chilekskie Chashi, p. 59. 217. State Hermitage Museum, acc. no. \$58; diam. 19 cm.; height without foot 3.8 cm.; weight 204 gm. For bibliography up to 1936, see Erdmann, "Die sasanidischen Jagdschalen," pp. 222-223, fig. 18. Erdmann considers this plate a seventh- to eighth-century copy of a fourth-century original. He repeated this opinion in "Zur Chronologie," p. 283. Smirnov identified the king as Bahram VI (Chobin) in Serebro (see the review of this volume in BZ, 18 [1909], p. 678). Bachhofer questions this identification in "Sas. Jagdschalen," p. 66. Herzfeld states that the king is Bahram V in "Khusrau Parwēz," p. 126, no. 11. This plate belongs to the ninth stage of Marshak and Krikis. They note the poor composition and various misunderstood details. The necklace with two pendants is a type that does not appear on coins before Kavad I, while the crown of the king is that of Bahram V. This mixture of details of different date is an indication to them that the vessel was manufactured late in the Sasanian period: Marshak and Krikis, "Chilekskie Chashi," p. 64. The pendants on the necklace of Kavad I are, however, circular and not oval. Lukonin, Persia II, p. 225, fig. 199 (Bahram VI?). The provenance of this plate is uncertain. Smirnov says that it was found in the environs of Kutais (Serebro, no. 287) while Orbeli and Trever state that it was bought in Tbilisi (Sas. Metall, p. XXXII, no. 14).

dead. There is no real difference in the way each is depicted. Spurts of blood come from their arrow-pierced backs. The bodies are covered with dots indiscriminately arranged and omitted only where there are tiger stripes. There is no line marking off the underbelly. The head of the lower animal, as on the Ufa and Chilek plates (Pls. 18, 30), faces in the opposite direction from the head of the horse.

The scene on the Kutais plate is chased and incised on the vessel's surface. The beveled appearance of the major outlines indicates that they are incised. It is probable that the design was indicated in dots, for these appear in areas where they are inexplicable except as part of the original sketch.<sup>218</sup> No trace of gilding remains. A line runs beneath the rim on the exterior.

Nizhne Shakharovka plate (PL. 32). The fourth vessel in Group IV is also crude and almost certainly unfinished.<sup>219</sup> It has both a Middle Persian and a Sogdian inscription. The piece itself is in the Hermitage Museum and comes from Nizhne Shakharovka in the Perm. In contrast to that of the Kutais plate (Pl. 31), the design on this vessel, an equestrian king shooting at a pair of boars, fits easily within the circular frame. The crown is essentially that depicted on the Klimova plate in the Hermitage Museum (Pl. 24), imitating but not identical to that of Shapur III. The brim has a pattern of dots arranged in triangles. The composition and the design of the scene are identical to those of the Freer Gallery plate showing Shapur II (Pl. 15), except that the king is here shown in pure profile, and a single reed and curling water pattern introduce landscape elements into the scene.

As the work is sketchy, only unusual features will be noted. As on the Kutais plate (Pl. 31), the king has no mustache; a short ribbon under the right arm also appears on both vessels. Paired and single lines are disposed on the surface of the drapery. On the bow there is a pronounced ridge between the upper arc and the ear. The quiver is divided into large lozenge-shaped compartments. The horse's mane is clipped along the ridge, but long hairs fall against the neck as well. The tail is bound and then hangs downward, as on the Peroz–Kavad I plate in the Metropolitan Museum (Pl. 17) and on the Fabricius and Kutais vessels (Pls. 26, 31). Paired dotted lines mark the muscles of the horse's hind leg, and either a

tamga or a muscle pattern is dotted on the chest. The reins come from a curb bit and have pendent beads. Circular disks hang below the chest and rump straps. A saddlebow projects upward before the rider. The blanket has a narrow border and a spaced dotted design on the surface. At the corners are jewels, and hair balls, floating from chains, rise behind the horse.

Both boars may well be dead, for there is nothing to distinguish them from each other. The bodies of both are covered with dotted tufts of hair.

The design on this vessel is executed in the simplest fashion. Major outlines consist of incised, beveled lines. The rest of the scene, either because it was never completed or because this is an inferior work, is simply a dotted design. The fact that the scene is gilded in certain parts does not necessarily mean that the design itself was finished, since the work may, for some reason, have been left incomplete and the gilding nevertheless applied. There is no line on the exterior of the vessel beneath the rim.

## Elements Having a Chronological Significance

The catalogue of the silver vessels showing hunting scenes is now complete. The stylistic groups into which these vessels can be placed will be discussed below following some comments on what

<sup>218.</sup> These dots are visible on the horse's head, around the muzzle and the mouth.

<sup>219.</sup> State Hermitage Museum, acc. no. S16; diam. 23.1 cm.; height with foot 5.1 cm.; weight 532.8 gm. For bibliography before 1936, see Erdmann, "Die sasanidischen Jagdschalen," p. 222, fig. 17. Erdmann states that the vessel is a later copy of a fourth-century piece, an opinion he expresses again in "Zur Chronologie," p. 281. Smirnov states that the crown of the king on this vessel is copied from that of Shapur III. He refers to the plate in the Hermitage Museum with Shapur III stabbing a leopard (Pl. 24) and the vessel in the same museum with a king lassoing an onager (Pl. 29): review of Serebro, in BZ, 18 (1909), p. 678. Livshits and Lukonin, "Nadpisi," p. 164, no. 10 (Middle Persian inscription: "weight 230 drahms"), no. 21 (Sogdian inscription: seventh-eighth century, the name and title of one of the owners, "custodian of the seals, Vaysh"). Herzfeld calls this a Sogdian plate showing Shapur III on horseback in "Khusrau Parwez," p. 212, note 1. He contrasts this flat linear style with the high relief style of the Metropolitan Museum Peroz-Kavad I plate.

appear to be variations in the design due to chronological rather than stylistic or geographical factors. The chronology is suggested by the crown type portrayed, which supplies a *terminus post quem* for the appearance of new features in the designs.

It is evident that a saddlebow is first represented on plates depicting a Sasanian king wearing the crown of Shapur II (Pl. 15). The leg guard seen on the plates from Shemakha and Krasnaya Polyana (Pls. 8, 9), as well as on early Sasanian rock reliefs, never recurs on other Sasanian vessels. Its appearance on a vessel serves therefore as an indication of a date in the third century.

Although the belt with a simple bow persists on some examples throughout the whole sequence of vessels and has been noted on the sculpture of Ahuramazda in the relief attributed to Khusro II at Taq-i Bustan, the belt with a lyriform buckle is not represented on any vessel earlier than the Peroz-Kavad I plate in the Metropolitan Museum (Pl. 17). 220 It then recurs on the Bibliothèque Nationale and Tcherdyne vessels (Pls. 22, 27). In all probability, this buckle type belongs to a period no earlier than the second half of the fifth century. On the Sasanian rock reliefs there is no evidence for it before the reliefs on the side wall of the great rock-cut niche at Taq-i Bustan generally dated to the reign of Khusro II. A similarly late type of buckle made up of square or rectangular plaques occurs on the Ufa, Berlin Museum, and Anikovska plates (Pls. 18, 20, 21). The terminus post quem for the crowns of the kings on these vessels and therefore for this type of buckle is the reign of Valash (484-488).

A related development is to be noted in the form of the bow. Beginning with the Hormizd plate in the Cleveland Museum (Pl. 14), a pronounced ridge separates the upper ear from the curved section of the bow. Otherwise, this feature does not appear on any hunting plate illustrating a crown earlier than that of Peroz or Kavad I: the Peroz–Kavad I plate in the Metropolitan Museum (Pl. 17), the Bibliothèque Nationale and the Tcherdyne plates (Pls. 22, 27). Since this particular type of ridge is occasionally omitted in the representations, its importance lies in the fact that when it occurs on a plate the work is probably not to be dated before the fifth century.

Related to the appearance of the bow is the position of the bowstring hand. Once again the

Hormizd plate in the Cleveland Museum (Pl. 14) illustrates the change. The outstretched little finger is, in this example, curved downward and back. On other plates this detail appears only when the kings wear crowns identifiable as those of Peroz or later kings: the Peroz–Kavad I plate in the Metropolitan Museum (Pl. 17), the Ufa and Bibliothèque Nationale plates (Pls. 18, 22). On Bactrian and Hephthalite hunting bowls (Fig. 44) of the fourth and fifth centuries both fore- and little fingers are shown folded in a similar fashion. <sup>221</sup>

Since these small changes occur, with one exception (the Cleveland Museum's Hormizd plate [Pl. 14]), on vessels with representations of Peroz (459-484) or his successors, they are important to note as possible indications of date. The appearance on the Cleveland Museum plate of some of these features is exceptional if the vessel is dated to the reign of Hormizd II (303-309). It has been pointed out in the preceding catalogue, however, that the king on the Cleveland Museum vessel varies from standard royal representations in the presence of a dot on the center of the forehead. In style, the vessel is quite unlike the medallion bowls and the hunting plates of the late third and early fourth centuries. Details in the design are related to those on works of the fifth century or later. Therefore, the most probable solution is that this is not a contemporary image of a living king but rather an illustration of a ruler long deceased.

The absence of the details noted above (saddlebow, belt type, bow ridge, bow-hand position) cannot be interpreted as proof of a date earlier than the mid-fifth century for a particular vessel. Older methods of depicting elements of the designs remained in use, as archaisms it would seem, right to the end of the period.

One element in the composition of the designs on the hunting plates may also have a chronological significance. This is the arrangement of the animal quarry. On vessels illustrating kings later than Kavad I (Pls. 18, 20, 22) the body of the quarry is generally turned in the opposite direction from that of the horse, while on earlier plates (Pls. 13, 14, 15,

<sup>220.</sup> See note 126 above.

<sup>221.</sup> Dalton, Oxus, pl. 31, no. 201; Trever, Greko-Baktr. Isk., pl. 23.

17) the quarry and horse face in the same direction. On the Pereshchepina Shapur plate (Pl. 28) there is a variation. One dead animal is almost vertical in position. The head is, however, bent forward toward that of the horse. The body of the other dead quarry faces in the opposite direction from that of the horse, but the head and chest are twisted back at a right angle toward the horse's head. The head of the quarry is portrayed full-face. The arrangement of the quarry beneath the horse so that the head is not aligned with that of the horse may be an indication of a late date. It should be noted, however, that the typical early form, with all animal heads facing the same way, does persist on at least one late plate, the Anikovska bear hunt (Pl. 21), as well as on one plate that is of early Islamic date (Fig. 46).

Different species of animals are included on the hunting plates described above only on those showing kings wearing the crowns of Kavad I or later rulers (Pls. 20, 22). This feature appears therefore to have chronological significance, as Erdmann originally proposed.

There is also a technical feature that may be significant as far as the date of a vessel is concerned. This is the choice of the parts of the design to be formed in high relief. The vessels from Shemakha, Krasnaya Polyana, and Sari (Pls. 8, 9, 10), the Shapur II plate in the Freer Gallery (Pl. 15), the Hermitage Museum plate from Klimova showing a king stabbing a leopard (Pl. 24), and the Metropolitan Museum plate representing Yazdgard I (Pl. 16) all have small areas of the human and animal bodies in relief, produced by the addition of cast and hammered pieces. Because only parts of the bodies are in relief, the effect is uneven, and the transition of the modeling from the background shell to the relief area is often abrupt. A similar effect is apparent on a fourth- to fifth-century Bactrian hunting bowl in the Hermitage Museum.<sup>222</sup> This relief style contrasts with a more sophisticated style illustrated by a number of plates. On the Pereshchepina plate (Pl. 28), the Hormizd plate in the Cleveland Museum (Pl. 14), the Metropolitan Museum Peroz-Kavad I plate (Pl. 17), and the Ufa plate (Pl. 18), the human and animal bodies depicted are entirely made up of added relief parts with the exception of the inside legs, arms, and other background details, which are carved in low relief or chased on the shell. This treatment results in an evenly modeled surface for the bodies and a more naturalistic appearance than that of the earlier silver plates. This technical feature, the application of separate pieces of metal to certain areas of the design in order to achieve high relief, appears, therefore, to have developed and changed during the period. A series of plates with images of kings wearing crowns earlier than or from the time of the reign of Yazdgard I illustrates one rather clumsy technique, while those plates portraying kings wearing crowns later than that monarch are, technically, far more accomplished. If the king on the Pereshchepina plate is indeed Shapur II, there may have been workshops producing vessels in the more skillful fashion as early as the second half of the fourth century.

## Definition of the Different Stylistic Groups

In the following section the vessels described above are reconsidered in terms of style. The definition of stylistic groups, and the attribution of certain vessels to them, is based in part on the representation of the drapery. In the art of the Greek and Roman West, from the archaic period through that of the Roman empire, the way in which drapery was portrayed by an artist constitutes one of the chief criteria for tracing chronological developments and for locating regions of production. Although the influence of Western art and craftsmanship increased in the Near East after the conquests of Alexander the Great, remains dating from the Seleucid and Parthian periods (late fourth century B.C. through early third century A.D.) are either few and insignificant or, if major and monumental, they are scattered and isolated works for which no sequence or development has been established. Only with the Sasanian rock reliefs, and even more with the silver vessels, which cover a considerable period of time, is there a body of material of comparable provenance, form, and design.

If the Sasanian silver plates considered in the present chapter are regrouped according to drapery styles, it becomes obvious that the arrangement of

<sup>222.</sup> Ibid., pl. 23. For the date, see Marshak and Krikis, "Chilekskie Chashi," p. 71.

the elements of the subject matter, and the occurrence of certain iconographic details noted in the descriptions above, are associated with one drapery style or another but, by and large, are not characteristic of both. The presence of distinctive traditions of workmanship is therefore suggested not only by the appearance of the drapery but also by the treatment of the composition and the inclusion of specific details.

Naturalistic drapery style. In Chapter II, devoted to the medallion bowls, the representations provide illustrations of two drapery styles, one naturalistic and one utilizing overall parallel lines.<sup>223</sup> Also linked with each of these styles is a characteristic rendering of certain details of the human head and bust. On vessels of the third and early fourth centuries the drapery style that is essentially naturalistic is shown covering the body with a few rippling lines that reflect the surface underneath. Examples datable in the 270s and 280s of the present era are the plate from Mtskheta depicting the bust of Papak (Pl. 1) and one hunting vessel from Krasnaya Polyana (Pl. 9). Slightly later in date, ranging from the 280s to the end of the third century, are other works with the same drapery style: the Sargveshi cup showing Bahram II (Pl. 2), the Freer Gallery male medallion bowl (Pl. 4), the bowl in the Metropolitan Museum depicting five females (Pl. 5), and the Berlin fragment (Pl. 12). Besides sharing a common treatment of the drapery, all these pieces share some resemblances in the methods chosen for depicting parts of the human body. The profile heads are in partial relief, raised from the surface of the vessel (Pls. 4, 5, 12); the beard is rounded or cut square (Pls. 1, 4, 9, 12); the mustache is rippling, and the hair is depicted as a series of twisted locks (Pls. 1, 4, 9, 12). In these details the Sargveshi cup is somewhat different. Although the king's mustache ripples outward above the lip, the beard is tied, and the hair is in whorls. Only the hair of the king's son is in the appropriate spiral locks.

There is no evidence that this naturalistic drapery style continued beyond the early fourth century. All the remaining hunting plates with the exception of the unique Sari plate (Pl. 10) belong either to the second drapery style noted in Chapter II, the overall parallel-line style, or to a third style known no earlier than the late fourth century, in which the folds of the drapery are depicted with short paired lines. Characteristics of both styles will be given below and can be found in Tables I and II, Appendix I. Certain features of the composition and some details on vessels in the earliest naturalistic style and on the unique Sari plate link these early works to either the overall parallelline or the paired-line stylistic traditions. These two traditions, to one or the other of which most of the hunting plates belong, are, therefore, prefigured in the first Sasanian silver hunting plates.

Overall parallel-line drapery style. Because the overall parallel-line drapery style has already been described in Chapter II and continues on hunting vessels of later periods, the distinctive features of this stylistic group will be considered first. This is the style which Marshak has defined and to which he has ascribed a number of vessels.<sup>224</sup> The four vessels described in Chapter II as belonging to this group were two medallion bowls decorated with male busts, one in the Cincinnati Museum and the other in the Metropolitan Museum (Pls. 3, 6), and two hunting plates, one in the British Museum depicting Shapur (Pl. 13), the other in the Hermitage Museum showing a hunter wearing a ram's-horn headdress (Pl. 23). The two plates, but not the two bowls, were placed in this group by Marshak. In all these works a series of fine parallel lines describe the drapery surface. On the earliest example, the Cincinnati bowl, for which a date around 300 was suggested, the parallel lines reflect the form of the body beneath. On the slightly later Metropolitan Museum medallion bowl the lines no longer contribute to the modeling of the body and are more abstract, changing direction without reference to the underlying form. This bowl and the Shapur plate in the British Museum show the drapery as concentric curving lines. Because the vessel in the Hermitage Museum showing a hunter wearing a ram's-horn headdress illustrates a stage in which the

<sup>223.</sup> See Chapter II, pp. 37 ff.

<sup>224.</sup> Marshak and Krikis, "Chilekskie Chashi,"pp. 61-66. As characteristics of this style the authors list the following features: overall hair pattern on the animals, visible second nostril on the horse, snaffle bit, folds of the garment on the saddle, curl of hair on the temple of the king, curved-line mustache, pendent harness bells, garment with shoulder roundels, open-whorl curls of hair on the king's head, representation overlapping the frame of the plate, ''spot-gilding.''

lines still preserve some sense of the body beneath, it was suggested in Chapter II (p. 36) that this work might be earlier than the British Museum Shapur plate or a provincial product reflecting a somewhat archaic style. The analysis of the composition and the method of representing the details would seem to support the theory that the work may have been planned and executed in a region peripheral to the Sasanian homeland.

The works belonging to the overall parallel-line drapery style differ somewhat in execution, although they are closely related. In fact, the stylization of the drapery itself varies slightly between two types. One is represented by the medallion bowl decorated with a male bust in the Metropolitan Museum (Pl. 6), the Shapur plate in the British Museum (Pl. 13), the Chilek plate (Pl. 30), and the damaged Kutais plate (Pl. 31). On these the drapery is comprised of a series of close-spaced lines with only very slight curves or waviness. The other variation appears on the Cincinnati Museum bowl (Pl. 3), the Hermitage Museum plate showing a hunter wearing ram's horns (Pl. 23), the so-called Bahram Gur plate in the British Museum (Pl. 25), and the Fabricius plate (Pl. 26). The waves in the lines of the drapery on these three examples are quite pronounced, and on most examples these lines run in a generally vertical direction from the top to the bottom of the body.

As with the works in the naturalistic drapery style (Pls. 1, 2, 4, 5, 9, 12), examples of the overall parallel-line drapery style share a distinctive set of details aside from the drapery. In Chapter II such elements as the treatment of the hair in a bunch of spiral curls and the elongated, crescentic mustache were mentioned. 225 Other features apparent on the earliest hunting vessels in this style, namely the British Museum Shapur plate (Pl. 13) and the Hermitage Museum plate showing a hunter wearing a ram's-horn headdress (Pl. 23), include a composition in which parts of the design are cut off by the circular frame, and a distinctive type of weapon, a sword with an unsharpened area beneath the guard. On the Hermitage Museum vessel just mentioned, the horse has the head turned so that the far nostril is barely visible as a ridge. The bodies of the quarry on these two plates are entirely covered with a pattern representing the animals' coats of hair. Blood is shown spurting from their wounds. Punched circles or dots are frequently

added to parts of the design. For instance, they decorate the inside surface of the stepped crenelations of the crown on the British Museum's Shapur plate, and on both this vessel and the Hermitage Museum hunting plate mentioned above there are dotted outlines on the shoulder roundels. This is true also of the shoulder patches on the drapery worn by the figures in the overall parallel-line drapery style on the medallion bowls in Cincinnati and in the Metropolitan Museum (Pls. 3, 6). A number of details in the representation of the horse on the Hermitage Museum's above-mentioned plate are worthy of note, since they recur on later vessels in this same style. A row of bells hangs from the harness straps; crenelations are cut into the mane; the bit is a snaffle; the reins have pendants; beading covers the saddle blanket; there is no saddlebow.

The same method of fabrication is used on both the British Museum's Shapur plate (Pl. 13) and the Hermitage Museum plate discussed above (Pl. 23). For a few parts of the design, added pieces are used, producing on the human and animal bodies distinct areas of relief that rise abruptly from the background shell. This method was also used on some of the earlier naturalistic drapery style vessels and is characteristic of many of the paired-line drapery style plates. The remaining works in the overall parallel-line style are, however, executed in a different fashion. The patterns on the British Museum and Hermitage vessels are spot-gilded.

The two earliest hunting vessels in the overall parallel-line drapery style, those in the British Museum and the Hermitage (Pls. 13, 23), were probably made close to the middle of the fourth century. They are followed by four vessels in the same style, which are much more difficult to date. A considerable gap in time—very likely almost a century—separates the two groups. None of the figures on these four plates (Pls. 25, 26, 30, 31) wears a recognizable Sasanian crown, and none of the plates comes from Iran, although one has a Middle Persian inscription on it (Pl. 26). The most summary examination of the treatment of the drapery on all these examples indicates, however, that they belong to the same stylistic group as the Shapur plate in the British Museum (Pl. 13)

<sup>225.</sup> See Chapter II, p. 36.

and the Hermitage Museum's plate showing a hunter in a ram's-horn headdress (Pl. 23). Moreover, the details of the composition noted above on the earlier examples recur on these later plates, providing further connections between all six vessels.

The most finished and sophisticated of these later works is the plate in the British Museum usually attributed to Bahram V (Gur), even though the figure wears a crown decorated with bull's horns (Pl. 25). Marshak includes this vessel among those in the stylistic group he analyzes.226 The drapery of the crowned figure differs admittedly in some respects from that on the two earlier vessels. Although the waviness of the lines covering the surface of the garments has a stereotyped quality closer to that of the Hermitage Museum vessel showing a hunter wearing a ram's-horn headdress (Pl. 23) than to that of the British Museum's Shapur plate (Pl. 13), the lines are more abstract and decorative than on either of these works. A good illustration of this distinction is the circular design placed at the shoulder and the elbow (Pls. 25, 26, 30). There are, however, many features that are the same as those on the earlier plates in the overall parallel-line drapery style. The drapery on the chest has a vertical row of crescents running down its surface, while that falling on the back of the horse is spread in broad folds. The composition is triangular. Parts of the leonine bodies are cut by the circular frame. On the king's profile head the hair is shown as a bunch of spiral curls more open in design and decorative in effect than the hair of Shapur on the British Museum plate or that of the hunter wearing a ram'shorn headdress on the Hermitage Museum plate. The beard is tied, and the mustache is crescentic in form. An innovation is the slash running behind the nose intended to give some relief to this part of the face, actually producing a rather unrealistic effect. The weapon is a sword with an unsharpened area beneath the guard. Both the far eye and the far nostril of the horse are visible. Crenelations are cut into the mane. Single curved lines represent the muscles of the hind leg, as on the Shapur plate in the British Museum. A snaffle bit is in the horse's mouth; the reins coming from it are decorated with pendent bells. The bodies of the quarry are covered with hatched lines. Both animals, still alive, appear to be attacking, blood spurting from their wounds. Although differing in sex, they are of the same species. A preference for dotted decoration is apparent in the treatment of the stepped crenelations of the crown and in the design of the saddle blanket, from which a ribbon hangs. A linear design appears in the place where a saddlebow might be expected.

In technique the so-called Bahram Gur plate (Pl. 25) differs from those already described in the overall parallel-line style, as there are no added pieces. The design is completely two-dimensional. Pronounced beveled contour lines give an effect of relief to the scene, which is, characteristically, spot-gilded.

Similar but cruder in execution is the vessel once in the Fabricius collection (Pl. 26). Marshak places this work in his sixth stage immediately following the so-called Bahram Gur plate in the British Museum (Pl. 25).227 A pattern of wavy lines that indicates the drapery of the hunter depicted here is interrupted by the vertical row of crescents running down the chest and by the circular pattern at the elbow. The composition is not so markedly triangular in form as on the other plates in this style, but, typically, the rim of the vessel cuts off the rear half of the humped bull as well as the ends of the hair balls floating on chains behind the horse. The hair, beard, and mustache are depicted as on the so-called Bahram Gur plate, and there is a slash line behind the nose. A portion of the king's sword blade is unsharpened. In addition there are other details characteristic of the overall parallel-line drapery style: the horse's head is in a three-quarter position; the harness has pendent bells hanging from the straps; the bit is a snaffle; and the reins are beaded. An overall hair pattern covers the animal body, and blood spurts from the wound. Circles and dots decorate the crown, the globe, and the saddle blanket from which ribbons project. All are features generally seen in connection with the overall parallel-line drapery style. As on the preceding plate, no part of the design is in relief.

The plate found at Chilek (Pl. 30), with which Marshak is chiefly concerned, is of higher quality than the Fabricius plate (Pl. 26), but its execution is still considerably less expert than that of the British Museum's so-called Bahram Gur plate (Pl. 25). On the Chilek plate there is, in contrast to the last two

<sup>226.</sup> Marshak and Krikis, "Chilekskie Chashi," p. 63. 227. Ibid., pp. 63-64.

examples, less emphasis on the waviness of the parallel lines of the drapery, and the design itself is more conservative. The crown lacks the row of hair curls, and the quarry, admittedly of different species, does not attack the hunter but is shown alive before the horse and dead beneath it. In this respect, the Chilek plate is closest to the British Museum's Shapur plate (Pl. 13). It shares with the Bahram Gur and Fabricius plates, however, the slash beside the nose, the decorative elbow circle, and the open curvilinear lines of the king's hair. Another feature typical of vessels in the overall parallel-line drapery style is the full-front view of the eye combined with the placement of the pupil in a position toward the front as if the eye were correctly in profile. This gives a distinctive and odd effect. Only on the Fabricius vessel (Pl. 26) does the full-front eye have the pupil correspondingly in a full-front position, in the center. The Chilek plate includes many other features found on vessels in the overall parallel-line drapery style: the sword with part of the blade unsharpened (as in Pl. 13; see also Pls. 25, 26), the turned position of the horse's head, the plain, clipped mane, and the chest and rump straps, snaffle bit, and reins. Hair patterns cover the bodies of the quarry, and the wounds spurt blood. Dotted designs are placed on the stepped crenelations of the crown and on the saddle blanket. Again, there are no added relief parts. The composition is two-dimensional and spot-gilded.

In review, it is apparent that, from the start, two variations can be detected in the overall parallel-line drapery style. On the British Museum's Shapur plate (Pl. 13) the parallel drapery folds are straight or smoothly curving; on the Hermitage Museum's plate showing a hunter wearing a ram's-horn headdress (Pl. 23) the drapery falls in parallel, unnaturally undulating ripples. After the fourth century, the period of these plates, no examples of the overall parallel-line drapery style occur on vessels depicting identifiable Sasanian kings. When the style reappears, the two variations still persist. The only archaeological evidence for the date of the second stage is that supplied by the find at Chilek (Pl. 30), not later than the late sixth or early seventh century. The inscription on the Fabricius vessel (Pl. 26) points to a similar date, some time from the reign of Peroz up to the Islamic era. The stylization of the cloth-covered hair ball, including an unrealistic vertical row of dots, and the central

placement of the iris within the eye may indicate a date for this plate later than for the British Museum (Pl. 25) and Chilek (Pl. 30) plates.

A sixth plate belonging to the overall parallel-line drapery style, the vessel in the Hermitage Museum found at Kutais (Pl. 31), displays some important innovations in design. This hunting plate belongs to Marshak's ninth and last stage. 228 Although the drapery is rendered by parallel lines, this work follows even more closely than the vessel from Chilek (Pl. 30) the straight-line variation of the British Museum's Shapur plate (Pl. 13). The lines change directions naturalistically at various points on the body, and unrealistic stylizations such as the circle at the elbow (Pls. 25, 26, 30) do not appear. Similarities between this work and others classified in the overall parallel-line drapery style are the appearance of the far nostril on the horse's head (Pls. 13, 23, 25, 26, 30), the pendants falling in a tight row from the chest and rump straps, the snaffle bit, and the decorated reins. An ambiguous design appears before the rider's leg, as on the British Museum's Bahram Gur plate, instead of a clearly represented saddlebow. Arched patterns are used to depict the muscle of the horse's rear leg. The bodies of the tigers are covered with a pattern of dots and stripes. A dotted pattern can also be seen on the saddle blanket, from which ribbons project at the back. In technique the plate is crude; the design is two-dimensional and spot-gilded.

There are a number of important differences between this piece from Kutais and the others placed in the overall parallel-line category. These discrepancies include the composition of the scene, which fits within its frame; the use of a bow, not a sword; the pair of animals of the same species and sex as quarry, one possibly alive and the other dead. As will be seen, these are features consistently found in plates belonging to the paired-line drapery style. Although the crown may be that of Bahram V, it is most likely that the plate was made long after the death of that king. Since the area around the crown is damaged, it is impossible to know whether this is a deliberate representation of the crown of an earlier king.

<sup>228.</sup> Marshak and Krikis state that this is the first instance of a representation on Sasanian silver plate of a king who reigned at a date earlier than is possible for the period of manufacture: "Chilekskie Chashi," p. 64.

Paired-line drapery style. The paired-line stylization of the drapery is depicted on a greater number of vessels than is the style discussed immediately above. The noteworthy feature is, as the name implies, the presence of pairs of short lines arranged at intervals on the surface of the drapery represented (e.g., Pl. 15). The lines are placed so that they give contour, in a schematic fashion, to the body beneath. A vertical row of crescents similar to those in the overall parallel-line drapery style (Pl. 16), or a combination of such crescents and rippling V-shaped forms (Pl. 15), is shown on the center of the hunter's chest. On many plates only the V-shaped forms are used (e.g., Pls. 14, 20, 24). Where the drapery falls free of the body, on the saddle or behind the leg and beneath the arms, it is often depicted as a series of short, deep, wavy depressions (e.g., Pls. 15, 17, 19). The impression given is one of close ripples in the drapery surface rather than of broad folds such as were characteristic of the overall parallel-line drapery style (e.g., Pls. 13, 25).

Certain compositional features and details of the design are characteristic of a number of vessels illustrating the paired-line drapery stylization and help to define the group.<sup>229</sup>

The composition of the scenes on vessels typical of this style is arranged so that all parts fit within the circular frames of the plates. No part is incomplete or cut off by the rim. The usual subject is an equestrian archer-king shooting toward one or two pairs of male animals of identical species, shown equally divided between those alive and those dead (e.g., Pls. 14, 15, 17). Variations of this scheme include the pose known as the Parthian shot (Pl. 14) and the standing, rather than mounted, hunter who may have as a weapon a spear or lasso rather than a bow (Pls. 16, 29). Neither of these types of scene appears on plates in the overall parallel-line drapery style. The head of the king is often depicted in threequarter view (e.g., Pls. 14, 15), and his hair is shown behind the head in a round bunch of curls represented as punched circles (e.g., Pls. 14, 16). The beard, with the exception of those on the Strelka and the Pereshchepina plates in the Hermitage Museum (Pls. 19, 28), is rounded and short. The mustache in the majority of the examples forms a wavy line (e.g., Pls. 16, 17, 28). Behind the king's head is a nimbus (e.g., Pls. 14, 16), a feature that never appears on vessels in the overall parallel-line drapery style. Neither the stepped crenelations of the crown nor the clothcovered globe rising above the head is decorated with dotting, although in two instances the globe is striated (Pls. 15, 16). Frequently the crenelation is shown with an inner tooth (Pls. 15, 16, 17).

Other characteristic features include the treatment of the body of the horse and the trappings. Notable is the curb (e.g., Pls. 15, 17) rather than the snaffle bit (e.g., Pls. 25, 30). From the bands across the chest and rump hang spaced circular or palmette-shaped pendants (e.g., Pls. 14, 15, 18) rather than a close row of smaller elements such as bells. A few exceptions include the plate depicting Peroz-Kavad I in the Metropolitan Museum (Pl. 17). On the saddle blanket, generally there is a linear crisscross pattern (e.g., Pls. 14, 18) rather than dotting, and with one exception (Pl. 19) no ribbons hang from its back edge. The saddlebow is clearly depicted before the rider's leg (e.g., Pls. 15, 17). The horse's mane is trimmed in a fashion that leaves a single upright projection (e.g., Pls. 14, 17). In some instances (e.g., Pls. 17, 18) some of the hair hangs long against the neck. The muscles of the back leg are regularly depicted as paired lines, and on the chest of the horse is either another muscle pattern or a tamga (e.g., Pl. 17). On the bodies of the quarry the hair is seldom rendered by overall patterns but rather by spaced tufts (e.g., Pl. 15) or other designs (e.g., Pl. 16). Sometimes there is no indication of the hair at all (e.g., Pl. 17). Blood is never shown spurting from the wounds.

Generally the plates in the paired-line drapery style are made with large areas in relief, formed by the addition of separate parts (e.g., Pl. 15). On the finest examples the joining of these pieces is invisible (Pls. 14, 17), and the rise and fall from the background of the plate is smooth and natural. The gilding covers the entire design (with the exception of

<sup>229.</sup> Some of the plates in this style and a few features characteristic of it were mentioned by Shepherd, "Sasanian Art in Cleveland," pp. 76–79. The features she noted as common to all are: "almost all the figures of the design are applied relief," "consistent" treatment of the hair, beard, folds of different parts of the garments, leather straps, jewelry, etc., curious treatment of the horses' manes, the chest device, sketchy drawing of the arrow and bowstring. Shepherd postulates the existence of a single, important metalworking center with a long tradition (p. 79).

areas representing human skin) or, alternatively, only the background of the plate is gilded.

Minor variations from this standard form occur on plates in this series and are listed in the tabulation of compositional details according to stylistic groups in Appendix I. Some of the unusual features in the representations are characteristic of the overall parallel-line drapery style and the nonroyal hunting plates of the third century. These include the pendants hanging from the chest and rump straps and the dotted saddle blanket on the Metropolitan Museum Peroz–Kavad I plate (Pl. 17) as well as the snaffle bit on the Hormizd plate in the Cleveland Museum (Pl. 14). Such variations from the norm are always few in number on any single example.

Although obviously related to the core group, some vessels illustrating this stylization of the drapery differ sufficiently in important compositional and technical details to suggest that their production is a separate phenomenon (Pls. 20, 24, 27, 32). They will be discussed in the concluding chapter. The plate in the Bibliothèque Nationale (Pl. 22) shares with works in the paired-line drapery style many details. However, the folds of the drapery are not, in fact, composed of paired lines, the characteristic schema. The vessel in the Bibliothèque Nationale will also be considered in the conclusion.

The paired-line drapery style on Sasanian silver plates apparently begins at some time in the midfourth century or later. The earliest crown portrayed is that of Shapur II (309–379). Initially, aside from the distinctive rendition of the drapery, there is also a set of details that are hallmarks of the style. Some are features already apparent on the hunting plates from Shemakha and Krasnaya Polyana (Pls. 8, 9). A link exists therefore between the earliest hunting plates and vessels in the new paired-line drapery style. Vessels illustrating crowns of the time of Peroz and later kings occasionally incorporate a few unusual details, some of which are typical of the overall parallel-line tradition.

## Relationship of the Plates in Group I to Those in the Overall Parallel-Line and the Paired-Line Drapery Styles

Having outlined the characteristics of the two drapery styles—the overall parallel-line and the paired-line—it is possible to return to the four early hunting plates in Group I (Shemakha, Krasnaya Polyana, Sari, and Burnes; Pls. 8–11) to determine whether they are more closely related to one or the other of these clearly defined styles. The rendition of the drapery on the four plates differs from the two standard types. For easy reference, information on the first three vessels is presented in Table III of Appendix I.

The plates from Shemakha and Krasnaya Polyana (Pls. 8, 9) have some important features that relate them to works in the paired-line drapery style. These include the vertical-horizontal form of the composition and the fact that the scene fits within the circular frame. Both vessels also illustrate the Parthian shot. On the Krasnaya Polyana plate there are two animals of the same species, one dead and one alive. On neither plate is the weapon a sword but rather a bow and a lasso. A smaller detail present on both examples and characteristic of the paired-line drapery style is the wavy mustache (e.g., Pls. 15, 17). Other features of the designs on these vessels, however, belong to the overall parallel-line style. These include the overall hair pattern on the animal quarry and, on the Shemakha plate, the bells hanging from the chest and rump straps as well as the dotted decoration of the shoulder roundel. A clear pattern of overall parallel lines is visible on the drapery covering the leg of the Shemakha hunter. On both the Shemakha and the Krasnaya Polyana plates the broad folds of the garment as it falls on the back of the horse, the ribbons projecting from the saddle blanket, and the pure profile head are features typical of the overall parallel-line drapery style. Since they are also details commonly found in all Sasanian art of this early period, they cannot, on these vessels of the third century, be considered characteristics of a particular style.

In summary, the two hunting plates from Shemakha and Krasnaya Polyana (Pls. 8, 9), both in

composition and in a few details of the design, resemble later vessels in the paired-line drapery style. It is also evident, however, that they have many stylistic and iconographic elements characteristic of the overall parallel-line style. This is true even if one excludes from consideration those elements recurring on overall parallel-line plates but generally typical of early Sasanian works of art. In view of these facts it is impossible to state that they are more closely related to one or the other of the two styles.

An analysis of the Sari plate (Pl. 10) indicates that in the delineation of the drapery and in the method of representing details, this piece is slightly closer to the overall parallel-line than to the paired-line style. However, three important features relate this vessel to the paired-line drapery style: the scene fits within the frame; the hunter uses a bow in a Parthian shot; and the elements of the design are arranged in a scheme of vertical and horizontal lines. The details that link this vessel to the overall parallel-line mode are more numerous than those observed on the Shemakha and Krasnaya Polyana plates. These include the treatment of the hunter's hair and mustache; his tied beard; the sword slung from the waist with a line marking the unsharpened part of the blade; and the snaffle rather than curb bit. The nostrils of the horse are pronounced, the ridge of the far one appearing above the bridge of the nose. The drapery worn by the hunter on the Sari plate belongs to none of the styles described, but it resembles the overall parallel-line style more than the paired-line style. Further similarities to the overall parallel-line style are listed in Appendix I.

Since the Burnes plate is known only from the Wade (Pl. 11a) and Archer (Pl. 11b) drawings, it is impossible to relate it with exactness to works in a particular style. However, a review of the details apparent in the drawings illustrates a closer connection with works in the overall parallel-line style than with those in the paired-line tradition. These include the triangular arrangement of the scene, part of which is cut off by the rim of the plate; the visible ridge of the horse's second eye socket and nostril; and the three-quarter view of the head of the lion quarry. Other characteristics found on works in the overall parallel-line drapery style but also generally seen in early Sasanian art are the pure profile head of the hunter, the broad folds of his garment on the back of the

horse, the ribbons projecting from the lower corner of the saddle blanket, and the bowed belt. A date in the third or early fourth century is also indicated by the horizontal divisions of the balls of hair flying from the horse's rump strap and the presence of roundels on the shoulders of the hunter's garment. The compartmental pattern on the saddle blanket is not seen on any work after the Krasnaya Polyana plate (Pl. 9). In Chapter V the question of whether this vessel is a provincial work will be raised.

It is clear that the earliest complete examples of hunting vessels, namely the plates from Shemakha, Krasnaya Polyana, and Sari and in the Burnes collection (Pls. 8–11) do not fall into a single class. At this early period in the third and early fourth centuries, the overall parallel-line and the paired-line drapery styles are not yet precisely definable nor distinctive on the hunting plates. The naturalistic rendering of the garment folds on the Krasnaya Polyana plate is not found again after the early fourth century. This is also true of the unique and more stylized treatment of the drapery on the Sari plate.

Since features of the paired-line and the overall parallel-line drapery styles are to be found on the Shemakha, Krasnaya Polyana, Sari, and Burnes plates, it is apparent that both these stylistic traditions developed out of Iranian styles current in the third century. It is not surprising, therefore, that all the works in this catalogue were, at one time, thought to be official Sasanian products. The crown types indicate, however, that a Sasanian king is recognizable on only one vessel in the overall parallel-line drapery style, early in the fourth century, whereas the kings on the typical vessels in the paired-line drapery style are always represented with iconographically correct Sasanian crowns.

No certain examples of figures wearing known Sasanian crowns occur on hunting plates in the naturalistic drapery style (Pls. 9, 12) or in the unique style of the Sari plate (Pl. 10). These vessels are, however, so closely related to early Sasanian rock reliefs and gems that their identification as Sasanian works is assured.

Before passing on to the vessels with enthronement scenes in Chapter IV, it is necessary to determine whether the sources of the two predominant drapery stylizations, the overall parallel-line and the paired-line forms, can be identified.



FIG. 21 Bronze handle in the form of a male figure Museum für Islamische Kunst, Staatliche Museen Preussischer Kulturbesitz, Berlin, acc. no. I. 3643

### Sources of the Overall Parallel-Line and the Paired-Line Drapery Styles

Depiction of the hunter's garments in a series of parallel lines running over the whole body surface and to a greater or lesser degree reflecting the form underneath was a common feature widespread in the art of the late antique world. It is not associated exclusively with a particular part of the Near East. 230 In spite of the undeniable occurrence of this stylization of drapery over a wide area, the drapery, as it is represented on the silver plates, is perhaps more narrowly definable. The close juxtaposition of the lines themselves and the fact that they reflect the body underneath in only a minor way are features that relate this style specifically to the drapery style represented on some late Parthian rock reliefs in the region of Khuzistan, ancient Elymais. At Tang-i Butan, Bid Zard, and Bard-i Nishandeh, possible prototypes for the images on the silver plates may be found. 231 In the minor arts of the Parthian period a few terracottas<sup>232</sup> and a small bronze figurine in Berlin (Fig. 21)233 unmistakably reveal the same style.

By contrast, the monumental rock reliefs of the first Sasanian ruler, Ardashir, lack this characteristic form of drapery, and it is only under Shapur I (241-272) that a modified overall parallel-line drapery style becomes apparent. On the reliefs at Darab, Naqsh-i Rustam, and Naqsh-i Radjab the drapery falls rippling in parallel waves over the whole body surface. 234 To search beyond the borders of Iran for the origin of this stylistic feature would therefore appear to be unnecessary. Elymais, in southeastern Iran, was close to the original homeland of the Sasanians in Fars. Although the rock reliefs in Elymais are minor works, inferior to the monumental sculpture of the early Sasanians, they cannot be ignored as the most probable source for the early Sasanian artisans, who used what appears to be a modification of the Parthian overall parallel-line drapery style on their rock reliefs and silver plates.

Although the craftsmen who created the later provincial silver vessels (Pls. 25, 26, 30, 31) may have been primarily influenced by the early Sasanian form of the overall parallel-line drapery stylization, a similar rendition of the garments appears further east in Chinese East Turkistan, in Khotan, on stucco figures. <sup>235</sup> Examples at Rawak are dated by Gropp to the sixth century, and are, therefore, contemporary with some of the provincial silver (Pls. 25, 26, 30, 31). They illustrate particularly vividly a related stylization of the

<sup>230.</sup> Schlumberger, "Descendants non-méditerranéens," p. 255. Erdmann called this a wavy-line style and stated that it was not to be seen on reliefs or coins: "Die sasanidischen Jagdschalen," p. 200, note 5. Bachhofer noted the existence of the wavy-line style in Parthian and Kushan art. He stated that the most obvious source of the style for the Sasanians was their predecessors, the Parthians: Bachhofer, "Sas. Jagdschalen," p. 62.

<sup>231.</sup> Tang-i Butan: Bivar and Shaked, "The Inscriptions at Shīmbār," pp. 265–290; Bid Zard: Vanden Berghe, "Le Relief parthe de Hung-i Nauruzī," pp. 155–168, pl. 56, fig. 2; Bard-i Nishandeh: Ghirshman, Terrasses sacrées de Bard-è Néchandeh et Masjid-i Solaiman II, pls. LXXXIII–LXXXV. Henning discusses Ardashir's route into Elymais and his defeat of the king of Ahwaz in "The Monuments and Inscriptions of Tang-i Sarvak," p. 177.

<sup>232.</sup> Ghirshman, Persian Art, fig. 123; Sarre, Die Kunst des alten Persien, pl. 65.

<sup>233.</sup> Ibid., fig. 15; Gallois, "Une Statuette sassanide au musée du Louvre," pp. 22–27. Harper, Royal Hunter, fig. 30a.

<sup>234.</sup> Hinz, Altiranische Funde, pls. 73, 91, 106.

<sup>235.</sup> Gropp, Archäologische Funde aus Khotan, Chinesisch-Ostturkestan, pp. 40, 222, 223, figs. 93-98.



drapery in a series of overall parallel lines. It is difficult to know precisely what connection there is between the stucco sculptures and the provincial silver plates, but it is clear that they reflect a common taste for an extremely stylized, linear rendition of the drapery.

The source of the paired-line drapery style is less easy to locate with certainty than that of the overall parallel-line style, and some question must remain as to whether it came from outside Iran or whether Sasanian artists developed this stylization independently. The paired-line style is, in a sense, a shorthand method of rendering drapery, and with the expanded

FIG. 22 Gandharan relief, Peshawar
Ingholt, Gandhāran Art in Pakistan, fig. 244



FIG. 23 Carved ivory plaque from Begram Musée Guimet, Paris

official production it may be that this scheme was developed by the artists to speed them in their work.

If one turns to the rock reliefs, it is apparent that the parallel-line, rippling drapery of Shapur I (241–272) disappears under Bahram II (276–293), and the drapery folds on the body are depicted in a new fashion as short waves. The outlines of these waves might easily be drawn, in another medium, as short paired lines. In this respect the closest in style to the silver is the rock relief of Narseh (293–302) at Naqsh-i Rustam. <sup>236</sup> None of the Sasanian sculptures, however, illustrate the paired-line drapery style as it appears on the silver plates.

The best illustration of a paired-line drapery style, other than that on Sasanian silver, is, as Ingholt has noted, on Gandharan stone sculptures from northern India (Fig. 22). <sup>237</sup> On these works the pairs of lines run continuously over the body surface, and in this respect they differ from Sasanian representations, where the lines are always abbreviated in length. Ivory carvings from Begram in Afghanistan (Fig. 23) illustrate the same drapery style as the Gandharan

<sup>236.</sup> This is not always apparent in photographs. The best illustration is in E. F. Schmidt, *Persepolis III*, pl. 90. 237. Ingholt, *Gandhāran Art in Pakistan*, p. 39.

reliefs.<sup>238</sup> Unfortunately, the exact dating of the Gandharan sculptures and the Begram ivories is open to question.<sup>239</sup> Whether it is correct to assume that the Sasanians were influenced in this particular by their eastern neighbors is difficult to decide. The early expeditions of Ardashir I and Shapur I to the East were followed by the actual conquest of the Kushan lands no later than the reign of Shapur II (309–379). Since the drapery style under discussion here appears first on a plate with a representation of Shapur II, it is tempting to conclude that the inspiration for it is to be found in the East. So far as I know

there is only a single Parthian work, a mother-ofpearl plaque found at Shami in southwestern Iran, to offer as a prototype for this style on Iranian soil.<sup>240</sup> In contrast, the many works of art from Begram and Gandhara suggest that a closely related style was widely used in the East.<sup>241</sup> On the Sasanian plates the appearance of the paired-line style is accompanied by the representation of the nimbus around the royal head (e.g., Pls. 15, 17), another detail common in the art of the eastern lands bordering on Iran.<sup>242</sup> It is possible therefore that both features reflect the closer ties with this region that began in the reign on Shapur II.

<sup>238.</sup> Some clear examples are in Hackin, Recherches archéologiques à Begram, pls. 45, 51, 64, 67.

<sup>239.</sup> For a recent dating of the Begram ivories to the late third or early fourth century A.D., see Rosen, "The Begram Ivories," pp. 39-48.

<sup>240.</sup> Ghirshman, Persian Art, fig. 124; Godard, L'Art de l'Iran, pl. 92.

<sup>241.</sup> The find of a Gandharan stone sculpture fragment in a late fourth-century level at Choche (Ctesiphon) serves to emphasize the existence of commercial and artistic contacts between the two areas: Invernizzi, "A Relief in the Style of the Gandhāra School from Choche," pp. 145–158.

<sup>242.</sup> The nimbus also comes into use in the West with Shapur's contemporary, Constantine, and is known earlier at Dura and Palmyra: Perkins, *The Art of Dura-Europos*, figs. 13, 14; Colledge, *The Parthians*, figs. 36, 39. See note 103 above.

# Chapter IV Thrones and Enthronement Scenes

The preceding category of royal Sasanian silver vessels, those with hunting scenes, differs from the present one, plates with representations of the king enthroned, in certain respects. In the hunting series, the number of examples is considerable, and some works are clearly related to others in iconography and style. This makes possible the arrangement of a sequence of objects. In this chapter, the number of objects to be considered is small, and the works vary considerably from one another. The problems posed by this class of vessel and the manner of approaching these problems is, therefore, of necessity quite different.

The production of the royal hunting plates extends, as we have seen, from the first century of Sasanian rule to the end of the dynasty. Because scenes of hunts are rare in Sasanian art, other than on the silver vessels, the development traced in the preceding chapter was, to a large degree, an internal one with few links to certainly datable monuments in other media.

None of the "Sasanian" vessels with scenes of the enthroned monarch belongs to the beginning of the Sasanian period, nor do the individual pieces, with one exception, show any close connection to the stylistic traditions established for the hunting plates. Certain details of the designs are naturally comparable, and these aid in establishing the date and place of manufacture of the vessels with enthronement scenes. It is, however, also important to examine the

representations of the throne and the enthroned ruler as they appear elsewhere in Sasanian art, on early coins (Figs. 3, 24) and on rock reliefs (Figs. 25, 26, 27) in order to determine whether silver plates with this motif may be called Sasanian. Although Sasanian illustrations of this subject in other media are not contemporary with those on the silver, they are valuable as indications of the form and iconography of this motif in the Sasanian period. From these different viewpoints the plates with scenes of enthroned rulers will be examined.

There are a number of primary questions concerning this class of silver plate. Why are there so few examples of the enthroned monarch on Sasanian luxury vessels? Why do all the works illustrating this subject date from the end of the period? Why did certain changes in the iconography, notably in the shape of the throne, occur on Sasanian monuments?

Since the representation of the ruler enthroned was an official, dynastic theme, the factors controlling its





FIG. 24 Silver coin of Bahram IV
American Numismatic Society



FIG. 25 Relief of Bahram II enthroned, Naqsh-i Bahram Photo: W. Hinz

appearance were, in all probability, political and historical. Variations in the throne type and in the motif of the king seated in majesty may indicate changes in the nature of the monarchy during the four centuries of Sasanian rule in Iran. These plates with scenes of enthronement, although they are few in number, are therefore a potential source for an understanding not only of the art and culture of Sasanian Iran but also of the history of the monarchy.

Studies of the Sasanian throne in the past have been confined chiefly to four silver plates (Pls. 19, 34, 35, 36) and a glass, rock-crystal, and gold bowl (Pl. 33).<sup>1</sup> On these works there appears a specific type of throne, a banqueting couch. Two of the objects illustrating this throne are no earlier than the fifth or sixth century in date. The first is a silver plate in the Hermitage Museum found at Strelka in the Perm

(Pl. 19).2 As described in the preceding chapter, the plate has a Hephthalite inscription, and the king represented wears a Sasanian crown of the type occurring on some coins of Kavad I (488-531), Khusro I (531-579), Hormizd IV (579-590), Bahram VI (590-591), Khusro II (591-628), and Kavad II (628). The second vessel is a gold plate with glass and rock-crystal insets, at present in the Bibliothèque Nationale (Pl. 33). A Middle Persian inscription giving the weight (307 [denar] by weight) appears on the rim of this vessel.3 The king, carved in relief on the central rock-crystal medallion, wears a crown similar to that appearing on the Strelka plate, but on the crystal roundel the band at the crown base has a simple line of hatching rather than a double row of beads. On certain coins of Peroz (457-484) and Kavad I there is a crown comparable to that on the



FIG. 26 Drawing of Bahram II relief, Naqsh-i Bahram Hinz, Altiranische Funde, pl. 129 (by A. Koh)

#### FIG. 27 Enthroned king in relief IV, Bishapur Photo: Georgina Herrmann



1. The most recent study of this subject with complete bibliography is by Gall, "Entwicklung des Thrones," pp. 207–35. Comments on this article appear in my review in BibOr 30 (1973), pp. 472–474. See also Upton and Ackerman, "Furniture," pp. 2628–2658; Herzfeld, "Der Thron," pp. 6–24, 103–147; L'Orange, Cosmic Kingship; Dentzer, "L'Iconographie iranienne du souverain couché et le motif du banquet," pp. 10–21; idem, "Aux Origines de l'iconographie du banquet couché," pp. 241 ff.; Fehr, Orientalische und griechische Gelage. Fehr's survey contains much of the same material as Dentzer's. A study of Near Eastern thrones of pre-Sasanian date containing useful information is Kyrieleis, Throne und Klinen, pp. 6–23. See also A. Grabar, "Trônes," pp. 24 ff. The frontal pose of

enthroned kings on Sasanian monuments is discussed by Schlumberger, "La Représentation frontale dans l'art des sassanides," pp. 383-392.

2. State Hermitage Museum, acc. no. S250; diam. 26 cm.; height with foot 5.1 cm.; weight 985.6 gm. For bibliography, see Chapter III, note 135.

3. Bibliothèque Nationale, acc. no. 379; diam. plate 28 cm.; diam. crystal disk 7.5 cm. Babelon, Catalogue des camées antiques et modernes de la Bibliothèque Nationale, pp. 213–219. A copy of the inscription is given but no transliteration or translation. Sarre, Die Kunst des alten Persien, pl. 144. Brunner, "Middle Persian Inscriptions on Sasanian Silverware," p. 121. See also note 56 below.

Bibliothèque Nationale plate. A single rather than a double row of beads encircles the base. The three remaining silver vessels with "Sasanian" scenes of enthronement are, as will be explained below, almost certainly Islamic in date. One, from Klimova in the Perm, has an illustration of a banqueting couch throne (Pl. 35).4 The figure seated upon it wears no form of royal headdress at all. The two other vessels, in the Tehran Museum (Pl. 34)<sup>5</sup> and in the Walters Art Gallery (Pl. 36),6 show persons whose crowns resemble but do not closely imitate Sasanian royal headdresses. On the evidence of these five vessels, all of which have figures seated upright on banqueting couches, it has been assumed that this was the standard Sasanian throne type. No examination has been made of the early Sasanian rock reliefs (Figs. 25, 27) with enthroned kings nor of the Sasanian coins (Fig. 3), where an entirely different throne appears. It is with this first type that a discussion of the Sasanian throne must begin.

In southern Iran, not far from the palace of Shapur I at Bishapur and the river gorge with its celebrated rock reliefs, is the site of Nagsh-i Bahram. On a vertical rock face, rising above a spring of water, there is carved a scene with an enthroned king and four standing figures, arranged in pairs on either side (Fig. 25).7 The king is identifiable by his crown as Bahram II (276-293). In spite of the significance of the royal seat on this relief and the unusual nature of the enthronement scene, little attention has been paid to the precise form of the throne. Described simply as a throne or a "low wide chair or bed," 8 the particular details of its design are ignored in the publications. This is not surprising, since the parts of the relief including the throne are in an extremely poor state of preservation. The following description of this earliest Sasanian throne is, therefore, as detailed as possible.

The king, seated full-face with his sword held vertically between his legs, almost obscures the flat upper surface of the seat (Fig. 26). His legs, arranged symmetrically, in profile, are bent outward at the knees, forming a sharp angle, in an unnatural pose. The feet are close together, also in profile, one turned to the right and the other to the left, toes pointing downward and resting on the ground. (This position of the foot, with the heel raised, appears on an Arsacid relief of Artabanus V [213-224] at Susa [Fig. 28]9 and commonly in the paintings in a number of buildings at Dura-Europos. 10 It is an attempt at perspective, as a comparison with Roman and Byzantine works of art clearly indicates.) There is no footstool underneath the feet. The legs of the royal, benchlike throne are visible just below the king's knees. The best-preserved one is on the right side of the relief. Starting at a point beneath the knee and following the outside profile of the throne leg, there is a horizontal line that turns vertically downward and then obliquely inward toward the king's leg before curving outward again at a sharp angle. From this point curvilinear lines extend downward toward a cushion-shaped element. This, in turn, rests on three narrow moldings that increase in size as they reach the ground line. A matching throne leg, badly worn, is still just visible on the left side of the relief. The two other Sasanian reliefs with enthroned kings, at Bishapur (Fig. 27) and Nagsh-i Rustam<sup>11</sup> are unfin-

<sup>4.</sup> State Hermitage Museum, acc. no. S43; diam. 21.4 cm.; height with foot 4.4 cm.; weight 985 gm. Lukonin, Persia II, fig. 208 (throne of Khusro II); SPA IV, pl. 207B. See note 88 below.

<sup>5.</sup> Iran Bastan Museum, Tehran, acc. no. 904; diam. 21.5 cm., height with foot 4 cm. Bahrami, "Some Objects Recently Discovered in Iran," p. 74, figs. 5, 6; Godard, "Plat d'argent découvert près de Kazwin," pp. 300–302, figs. 204, 205 (post-Sasanian). Vanden Berghe, *L'Archéologie*, p. 124, pl. 159b (late Sasanian or early Islamic). See note 77

<sup>6.</sup> Walters Art Gallery, Baltimore, acc. no. 57.625; height with foot 7 cm.; length 26.5 cm.; weight 758.6 gm. Ghirshman, "Notes iraniennes V," pp. 51-71; Sas. Silver, fig. 16. See note 104 below.

<sup>7.</sup> The clearest photographs are in Hinz, Altiranische

Funde, pls. 127–130. 8. Herrmann, "The Sculptures of Bahram II," p. 170. Herrmann dates the relief in the 280s. Upton and Ackerman note that the throne of Bahram II "is an exception . . . for it seems to rest on baluster supports instead of on animal figures": SPA III, p. 2635.

<sup>9.</sup> Ghirshman, Persian Art, p. 56, fig. 70.

<sup>10.</sup> Rostovtzeff, "Dura and the Problem of Parthian Art," figs. 57, 76, 77.

<sup>11.</sup> Ghirshman, Bîchâpour I, pl. 19; E. F. Schmidt, Persepolis III, p. 136, pl. 94. Since the carving of this relief damaged that of Hormizd II directly beneath, this must belong to some king after Hormizd II. Schmidt identifies the figure tentatively as Adhurnarseh (309). A recent description of the relief and various identifications of the king (Shapur II, Shapur III) appear in Waele, "Nouvelles miettes de sculpture rupestre sassanide à Naqš-e Rostam," pp.

ished and extremely weathered. The precise details of the thrones cannot be determined from the existing photographs and are no longer visible on the reliefs themselves. At Bishapur, where the king must have been some ruler before Shapur II (309–379), the throne appears to be wider than the bench throne at Naqsh-i Bahram, but it is too narrow to be a banqueting couch and lacks any indication of a pile of cushions on one side. <sup>12</sup>

In order to understand the form of the throne legs on the Naqsh-i Bahram relief (Fig. 25), it is necessary to examine certain early Sasanian coins, where there is, in my opinion, a comparable image (Fig. 3). The altar supporting the sacred fire on the reverse of these coins has been described by Duchesne-Guillemin as incorporating such elements as lion legs and fillets in order to give it the appearance of a throne. 13 He interprets representations of this type of altar as illustrations of the "Bahram fire," in Pahlavi texts the "king of fires." Lukonin describes these same coin reverses as portraying the coronation temple.<sup>14</sup> He notes that the legends on all the coins with this altar (appearing as late as the reign of Yazdgard I) describe the fire as that of the king upon whose coins it appears. Both authors therefore recognize that this particular altar with lion legs is to be associated with the concept of royalty, although neither has noted a relationship to the royal throne on the Naqsh-i Bahram relief (Fig. 25). In fact, the altar appearing on these coins incorporates, I believe, two separate elements: a complete throne and a fire altar combined to form a single image. In order to "see" this throne (Figs. 3, 24), one has only to remove the altar pillar, the two steps of the base and top, and the throne, with flames rising from a plate resting upon it, remains. The curving lion legs surmounted by cushion moldings are placed so that they support the widest horizontal section, which is the jeweled throne seat. Beneath the lion paws are elements with a convex upper surface said to be censers. 15 On the earliest coins, vertical striations decorate the convex surface of this element (Fig. 3). The stem beneath often ends in two or more thin, cushion-like forms. The resemblance to the throne at Nagsh-i Bahram is evident. In the drawing of the relief (Fig. 26) the leg is reconstructed according to this interpretation of existing photographs: a short lion leg and paw surmount an ovoid element that rests on three moldings.



FIG. 28 Relief of Artabanus V, Susa Iran Bastan Museum, Tehran

The influence of this early Sasanian coin motif, throne and altar combined, can be detected on a

<sup>12.</sup> Ghirshman, Bîchâpour I, pp. 79 ff. (Shapur II). Lukonin claims that the king is Bahram II on the basis of wings which he says are clearly visible: Lukonin, Kul'tura, p. 193. It is not evident to me that there are wings on this relief, but the presence of a cloak held by a fibula rather than by a royal halter, is, as Lukonin notes elsewhere, characteristic of Sasanian royal dress before Shapur II: Borisov and Lukonin, Sas. Gemmy, pp. 14–15. Lukonin, "Historical Aspects in the Study of the Monuments of Sassanian Art," pp. 293–294.

<sup>13.</sup> Duchesne-Guillemin, Symbols and Values in Zoro-astrianism, p. 66.

<sup>14.</sup> Lukonin, Kul'tura, pp. 165-166.

<sup>15.</sup> Trever, "Khudozhestvennoe znachenye sasanidskikh monet," p. 266. The idea that the early Sasanian coin reverses illustrate a throne and altar combined was published in my review of Gall, "Entwicklung des Thrones," p. 474. Independently Pfeiler came to the same conclusion, comparing the Sasanian throne to the Achaemenid thrones on the Persepolis reliefs: "Der Thron der achaemeniden als Herrschaftssymbol auf sasanidischen Münzen," pp. 107–111. I am grateful to Carol M. Bier for bringing this reference to my attention.





FIG. 29 Copper coin of Arda-mitra American Numismatic Society

rather rare class of Indo-Parthian coins found in Afghanistan and Turkistan. On the reverse of these coins, minted by Arda-mitra, a contemporary of Ardashir I, there is a throne-altar (Fig. 29). <sup>16</sup> Superimposed upon the pillar altar is a bench with what appear to be cylindrical, turned legs. Arda-mitra was, in all probability, a vassal of Ardashir I, ruling in the south of Afghanistan. It is not surprising therefore that his coins were modeled on those of Ardashir. Arda-mitra presumably understood this dual image of throne and altar, since he did not combine the fire altar with the Sasanian lion-legged bench throne, but represented a bench with turned legs similar to the thrones on the Arsacid coins and presumably his own throne type. <sup>17</sup>

The Sasanian throne-altar occurs on almost all the coins of Ardashir I, the founder of the Sasanian dynasty, and then, after a break, on certain special issues dating from the reign of Shapur II, Shapur III, and Bahram IV, in the fourth century and on that of Yazdgard I in the early fifth. After that it is not found again. On monuments other than coins, the throne-altar cannot be identified with certainty, al-

though it is possible that on the rock relief at Barm-i Dilak there was originally a representation of this cult object. <sup>19</sup>

The appearance on the coins (Figs. 3, 24) of a throne as a symbol in itself without the seated ruler is neither novel nor unique. In the regions where Buddhism flourished, the early prohibitions against the portrayal of the Buddha resulted in the depiction of the "empty" throne, both as an altar and a throne, with relics resting upon it or symbols decorating it. <sup>20</sup> An "empty" throne, having a diadem upon it and a fire altar before it, was placed within the tent of the deceased emperor in a cult of Alexander the Great, started by Eumenes of Cardia at Cyinda. <sup>21</sup> The widespread use of this "emblem of sovereignty" under the Roman empire is well documented, and it is one of many motifs that passed from pagan into Christian art. <sup>22</sup>

An exact prototype for this first type of Sasanian throne, a bench with lion legs, is not to be found among the thrones upon which major royalty are seated in the art of the preceding Arsacid and Achaemenid periods.

The immediate predecessors of the Sasanians, the Arsacid rulers of Iran, depicted the royal figure, enthroned, on the reverse of their coins.<sup>23</sup> An armless chair with a high back is the standard form from the time of Mithradates II onward. Generally there is no footstool. The stone relief of Artabanus V from Susa (Fig. 28) illustrates an elaborate version of this royal

<sup>16.</sup> Mitchiner, "A Small Hoard Containing Coins of Arda-mitra," pp. 301-304.

<sup>17.</sup> In this context it is also interesting to note that on the coins minted by Narseh in Armenia before he became king of kings in Iran the fire altar is not superimposed upon a throne in true royal fashion: Lukonin, *Kul'tura*, pl. 9, 1033–1036. The same coins are incorrectly illustrated under the heading "Modern Forgeries" in Göbl, *Sas. Num.*, pl. 16, nos. 251, 252.

<sup>18.</sup> Göbl, Sas. Num., tables 1-8.

<sup>19.</sup> Erdmann, "Die sasanidischen Felsreliefs von Barm i Dilak," pp. 55–57; Hinz, Altiranische Funde, p. 225, fig. 137.

<sup>20.</sup> Auboyer, Le Trône et son symbolisme dans L'Inde ancienne.

<sup>21.</sup> Picard, "Le Trône vide d'Alexandre," pp. 1-17.

<sup>22.</sup> Alföldi, "Insignien und Tracht der römischen Kaiser," pp. 134 ff.; Salomonson, Chair, Scepter and Wreath, p. 10.

<sup>23.</sup> Wroth, Catalogue of the Coins of Parthia. The earliest coins show the royal "ancestor" seated on an omphalos.

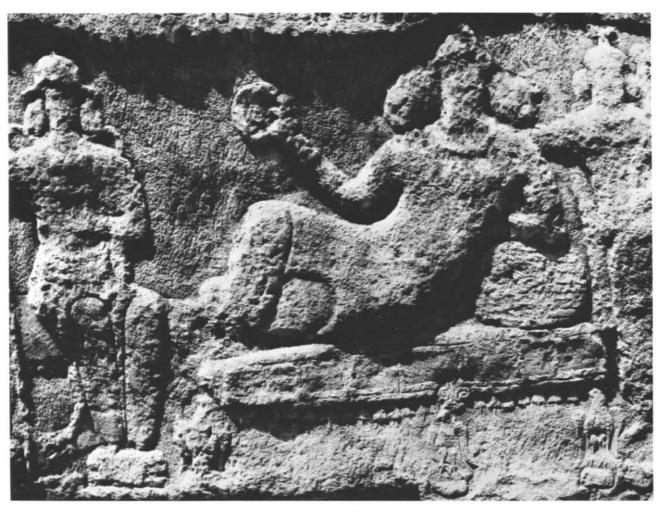


FIG. 30 Relief at Tang-i Sarwak, Iran Photo provided by German Archaeological Institute, Tehran

seat.24 The feet of the throne are in the form of sphinxes, and the upper edge of the tall back is decorated with a row of stepped crenelations, a royal symbol.

Another Arsacid royal throne, represented on the reverse of an unusual class of coins of the third century B.C. and from then on at rare intervals on the coinage, is a stool or bench with cylindrical, decorative legs. 25 The reference by Cassius Dio in his Roman History to the golden diphros upon which the Arsacid king Phraates IV (36 B.C.) was seated when he received the envoy of Marc Antony must refer to this throne type, and indicates that in the West it was the form associated with the Arsacid rulers. 26 This bench or backless throne is the seat of two divinities on the second-century rock relief at Tang-i Sarwak in Elymais as well as of a number of other persons on that relief who are less certainly identifiable.27 In all instances there are, rather unexpectedly, footstools beneath the feet. The couch upon which the chief personage reclines on the Tang-i Sarwak relief (Fig. 30) was a familiar piece of furniture in the Near

<sup>24.</sup> Ghirshman, *Persian Art*, p. 56, fig. 70.25. Abgarians and Sellwood, "A Hoard of Early Parthian Drachms," p. 103.

<sup>26.</sup> For this reference and a discussion of the throne type, see Gall, "Entwicklung des Thrones," p. 208.

<sup>27.</sup> Ghirshman, Persian Art, p. 54, fig. 67; Henning, "The Monuments and Inscriptions of Tang-i Sarvak," pp. 151-178, pls. 2, 3; Seyrig, "Sur un Bas Relief de Tang-i Sarvak," pp. 113 ff.



FIG. 31 Silver missorium of Theodosius the Great Real Academia de la Historia, Madrid

East, but it never served as the throne of the highest Parthian kings, those of the ruling Arsacid branch. In this instance, it may be an indication of the lower rank of the ruler of Elymais, Orodes, <sup>28</sup> who is outstretched upon it, a theory supported by the fact that the figure holds a diadem without ribbons. <sup>29</sup>

In the late antique art of the West, scenes of enthronement most closely comparable to those of the Sasanians occur on works dating from the time of Constantine I (317-337) or later. On earlier monuments, Roman rulers were seated on a variety of royal chairs, taking part in specific events, the mean-

<sup>28.</sup> Henning, "The Monuments and Inscriptions of Tang-i Sarvak," pls. 2, 3.

<sup>29.</sup> Gall, "Entwicklung des Thrones," p. 213.

ing of which often dictated the form of the seat. With Constantine, the fully frontal image was first adopted to portray the emperor, set apart from all other persons and events, enthroned in majesty.30 The throne seat of Constantine and his successors on coins, medallions, silver plate, and relief sculptures was sometimes a high-backed chair and sometimes a bench with decoratively turned legs. The latter type occurs on the late fourth-century silver missorium of Theodosius (Fig. 31), where it is placed within an architectural setting, beneath an arch. 31 On another missorium made in Rome in 434 the throne upon which the consul Aspar sits is a bench supported by the foreparts of lions.<sup>32</sup> This lion throne, originating in the art of western Asia almost three millennia earlier, was, by the time of Christ, a universal type occurring not only in the West, but, as will be noted below, in the Kushan East.<sup>33</sup> It is represented on a number of ivory consular diptychs of the fifth and sixth centuries, which were carved both in the Eastern Roman empire and in the West.34 Clearly revered as a throne type in Early Christian art, it is the seat of Christ on the fourth-century sarcophagus of Junius Bassus, where the head, chest, and leg of the lion supporting the throne are visible.35 On all the Roman and Christian monuments noted above where the complete figure is portrayed, there is a footstool.

In a few rare instances the Kushans, ruling in ancient Bactria during the first three centuries A.D., showed their kings in an enthroned pose on the coinage. Kujula Kadphises and Vima Kadphises, on coins of the first and second centuries, are represented seated, the former in a three-quarter view on a cross-legged sella curulis (Fig. 32), <sup>36</sup> and the latter, body full-front, only the head in profile, on a low bench throne (Fig. 33) with decorative, cylindrical legs. <sup>37</sup> On the coins of Vima Kadphises a footstool is prominently portrayed. The monumental stone sculpture of this same king shows him seated on another throne, a high-backed seat supported by foreparts of lions. <sup>38</sup> As on the Western monuments, the king's feet rest on a footstool.

It is evident from this brief survey that an exact prototype for the first Sasanian throne is not to be found among the thrones upon which major royalty are seated in the preceding Arsacid period, nor among those of their contemporaries to the East or West. Closest to the Sasanian lion-legged bench



FIG. 32 Copper coin of Kujula Kadphises
British Museum

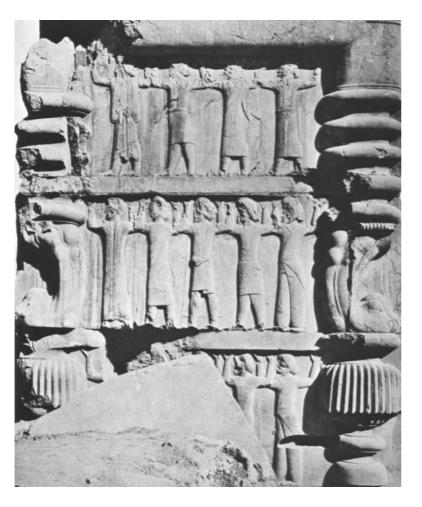
FIG. 33 Gold coin of Vima Kadphises
British Museum



- 30. The "fixed frontal image of the seated monarch" is common in the West only after the mid-third century A.D., although Brilliant notes a "tentative beginning in a dynastic issue of Caracalla, struck in 208 A.D.": Brilliant, Gesture and Rank, pp. 204 ff.
- 31. Delbrueck, Consulardiptychen, pl. 62; Brilliant, Gesture and Rank, p. 206, note 48.
  - 32. Delbrueck, Consulardiptychen, pl. 35.
- 33. The history of this throne type is discussed by Rosenfield, *Kushans*, pp. 183-186.
  - 34. Delbrueck, Consulardiptychen, pls. 22, 24, 25, 32, etc.
- 35. Hanfmann, Roman Art, p. 122, pl. 139; Morey, Early Christian Art, pp. 134-135, fig. 141.
  - 36. Rosenfield, Kushans, pl. I, coins 4, 5.
  - 37. Ibid., pl. II, coin 19.
- 38. Ibid., pp. 144, 183 ff., fig. 1. Soper raises the question of the identification of this enthroned figure as Vima Kadphises in "Recent Studies Involving the Date of Kanishka II," p. 109.

throne, and presumably the piece of furniture from which it is derived, is the podium upon which the thrones of the Achaemenid kings rest on fifth- and fourth-century B.C. reliefs at Persepolis (Fig. 34) and upon which the king stands on tomb façades at Persepolis and Naqsh-i Rustam.<sup>39</sup> These podiums are benches without backs, with legs similar to those of the Achaemenid high-backed throne.<sup>40</sup> Three moldings surmount the lion leg, which rests in turn upon a corolla of leaves. Beneath this are three additional moldings or low cushions. The resemblance to the early Sasanian throne leg as seen on the coins is striking. Only the corolla of leaves has undergone a significant transformation in the Sasanian examples. The latter are closer in form to the flaring bell-shaped

FIG. 34 Detail of Achaemenid throne platform, Persepolis Schmidt, Persepolis I, pl. 107



element that is the lowest part of the legs of thrones or couches of the third and second centuries B.C. found at Nysa in Turkistan and Ai Khanoum in Afghanistan.<sup>41</sup> The vertical striations on the earliest Sasanian coins suggest that in spite of the abstract stylization of this part of the leg, it was still understood to be a corolla of leaves. In view of these facts, the interpretation of this element as a censer is not convincing.

The existence of an early Sasanian bench throne with lion legs is indicated by these representations on the coins and on the Nagsh-i Bahram relief. After the reign of Yazdgard I (399-421), this first throne type disappeared from the coins, and the later rock reliefs do not illustrate Sasanian thrones. The Sasanian bench throne is typologically related to a throne appearing on a plate in the British Museum, originally acquired in Rawalpindi, Pakistan (Fig. 35). 42 Although this vessel has been called Sasanian, Lukonin has persuasively argued that it is a Kushano-Sasanian work of the fourth century A.D.43 This thesis is supported by the arrangement of the design, which is completely unlike that on Sasanian vessels. A central roundel containing scenes of enthronement in two registers is surrounded by a broad band with banqueting figures and musicians. The dress and appear-

<sup>39.</sup> Gall, "Entwicklung des Thrones," pp. 229 ff.; Calmeyer, "Zur Genese altiranischer Motive," p. 147.

<sup>40.</sup> É. F. Schmidt, *Persepolis* I, pls. 103, 107–109; III, pls. 19, 43, 71. For some actual Achaemenid bronze legs of this type, see Tadmor, "Fragments of an Achaemenid Throne from Samaria." pp. 37–43.

from Samaria," pp. 37-43.

41. Bernard, "Sièges et lits en ivoire d'époque hellénistique en Asie Centrale," pp. 327 ff., figs. 1, 2, pl. 20.

<sup>42.</sup> Dalton, Oxus, pp. 62 ff., no. 208 (sixth- to seventh-century A.D.); SPA I, p. 718; IV, pl. 239B; Smirnov, Serebro, pl. 16, no. 39; Trever, "Khudozhestvennoe znachenye sasanidskikh monet," p. 265. A comparison with Kushano-Sasanian coins makes Trever doubt Dalton's late dating of the plate. Herzfeld originally questioned the authenticity of this vessel: Herzfeld, Iranische Felsreliefs, p. 218. For other references, see Ghirshman, "Notes iraniennes V," pp. 66 ff.; Carter, "Royal Festal Themes in Sasanian Silverwork and Their Central Asian Parallels," pp. 171 ff. The festal scenes on the British Museum plate resemble those on a series of "Bactrian" silver hemispherical bowls. See Weitzmann, "Three 'Bactrian' Silver Vessels with Illustrations from Euripides," pp. 289–324; Rostovtzeff, "Some New Aspects of Iranian Art," pp. 161 ff., pls. 12, 13.

<sup>43.</sup> Lukonin, Kul'tura, pp. 148 ff.; idem, "Kush.-Sas. monety," pp. 27 ff.



ance of the figures is close to that on Sasanian works of the fourth century and later, but the plants are more naturalistic than the stylized and stereotyped vegetal motifs in Sasanian art. <sup>44</sup> The throne in the upper register of the central roundel is a wide bench having supports in the form of griffins. The enthroned figure is seated upright, with profile legs

44. The type of plant represented is a variation of the laurel tree. This plant commonly appears in Western art, but is never illustrated on Sasanian silver plates: Strong, Silver Plate, p. 198, pl. 61 (a fourth-century silver dish found in Britain); Wander, "The Cyprus Plates: The Story of David and Goliath," figs. 7, 8; Volbach, Early Christian Art, pl. 107 (fourth-century silver plate from Italy). The chemical composition of the silver of Fig. 35 differs from that of central Sasanian works, according to analyses made by Pieter Meyers.

bent out to the right and to the left as on the Sasanian reliefs. His feet rest on a footstool, a detail that links this piece to other Kushan monuments described above but is in contrast to the early Sasanian representations of the king enthroned. Around the circumference of the plate are figures outstretched on banqueting couches holding plants and vessels. Only one of these figures can be seen in his entirety, but the cushions of a second couch and the feet of the personage resting upon it are just visible in the lower left quadrant. It is clear that in both appearance and function the two pieces of furniture, the wide bench in the upper register of the central roundel and the couch in the surrounding zone, are not the same. The low couch consists chiefly of a pile of cushions placed on one side. It is the seat of a half-reclining noble or princely figure with a branch and cup. The throne, higher and narrower than the couch, has a seat that rests on theriomorphic supports. Upon this seat, entirely upright, is a king or god with his hand resting on his sword.

With the disappearance of the throne-altar from the reverse of the Sasanian coins after Yazdgard I, the theme of the "empty" throne and that of the enthroned ruler vanished from the repertory of motifs on official monuments, whether rock reliefs, coins, or vessels, for a period of time. As mentioned above, there are only two other illustrations of the enthroned ruler that may be Sasanian. One is the silver-gilt plate found at Strelka in the Perm, now in the Hermitage Museum (Pl. 19), and the other is the rock-crystal medallion set into a gold bowl, allegedly placed in the Treasury of St. Denis in the ninth century and now in the Bibliothèque Nationale (Pl. 33). Both have representations of a king wearing a crown known from Sasanian coins. Seated upright on a banqueting couch with cushions piled up on his left, the king holds a sword vertically between his sharply bent profile legs. Although there has been a change from a bench to a couch throne, the pose of the enthroned king is almost identical to that of his predecessor on the Nagsh-i Bahram relief (Fig. 25). The angle of the legs is less pronounced, and the feet rest in a horizontal position, but these are the only changes in the design. On the Strelka plate (Pl. 19)45 the king holds a sword with a long hilt. 46 His appearance is unusual only in the presence of a tuft of hair

beneath the lower lip.47 The four attendant figures stand in pairs on either side of the throne as on the rock relief, their heads turned in profile toward the ruler. 48 They do not, however, carry swords, nor can they be distinguished, one from the other, by any special insignia. All four figures have one arm laid over the other at the height of the breast, their hands hidden in their sleeves. None makes the gesture of respect (raised right hand with upright forefinger) seen on the Nagsh-i Bahram relief. The practice of covering the hands with the sleeves of the garments was a common Sasanian convention<sup>49</sup> on the early rock reliefs. A variety of persons (male, female, human, divine, noble, and captive) appear with hands hidden making different gestures, appropriate to the event portrayed.<sup>50</sup> There are no parallels, however,

<sup>45.</sup> See note 2 above; for bibliography, see Chapter III, note 135.

<sup>46.</sup> See Chapter III, note 138. Haskins comments on the sword and on the fact that the long hilt indicates that this is a heavy two-handed sword of the type seen in Qumtura cave 19 (mid-seventh century): "Northern Origins," pp. 342 ff. Seyrig states that the most characteristic feature of the Palmyrene sword is the length of its hilt and notes that it can be managed best if the forefinger is placed over the guard: "Antiquités syriennes 20," pp. 28–29.

<sup>47.</sup> The tuft of hair beneath the lower lip is a feature to be seen in Central Asian and Chinese works of art: Yakubovskiĭ, Zhivopis, pl. 39; Belenitski and Marshak, "L'Art de Piandjikent," fig. 9. This hair is more obvious on the face of a figure appearing on a post-Sasanian plate: Orbeli and Trever, Sas. Metall, pl. 15. In Chapter III, note 206, the short hair beneath the king's lower lip was noted on the Pereshchepina plate and on Kushano-Sasanian gems: Bivar, Kushano-Sas. Coins, CII, pl. IV, 5. This style of trimming the hair beneath the lip has a long history in the Near East: An example dating from the third millennium B.C. is an Akkadian bronze head from Nineveh: Strommenger, 5000 Years of the Art of Mesopotamia, pls. XXII–XXIII.

<sup>48.</sup> A. Grabar compares the arrangement of the scene on this plate to that of the Virgin and Magi on an Armenian miniature from Etchmiadzin: "Rayonnement," p. 690, pl. 12. In this miniature, the Magi wear skirts with a downward-curving hem at the front similar to that of the king on the Strelka plate. Ackerman, in the section written for SPA I by Orbeli, notes the similarity of the scene to the Naqsh-i Bahram relief: SPA I, pp. 718–719; IV, pl. 239.

49. Herzfeld, Archaeological History of Iran, p. 56. Herz-

<sup>49.</sup> Herzfeld, Archaeological History of Iran, p. 56. Herzfeld mentions the existence of this "attitude of the hands" on the relief of "Mithradates II" at Bisitun.

<sup>50.</sup> Hinz, Altiranische Funde, pls. 57, 100, 105, 106, 136; Ghirshman, Bîchâpour I, pl. 13; E. F. Schmidt, Persepolis III, pls. 90, 101B; Hinz, "Das sasanidische Felsrelief von Tang-e Qandīl," pp. 201, 204, pls. 46, 48.

for the exact arrangement of the arms on the silver plate.<sup>51</sup> The king on the Strelka plate wears a skirt with a hem curving upward at the sides similar to those worn by Shapur II, Shapur III, and Ardashir II on the reliefs at Taq-i Bustan as well as by Kavad I on the reverse of the gold coins marking the commencement of his reign in 488 (Fig. 37).52 The attendants have another form of dress, unknown in Sasanian art except on the side walls of the niche attributed to Khusro II at Taq-i Bustan (Fig. 36).53 The skirt, with an embroidered hem, curves downward from the center to form rounded corners at the sides. At Taq-i Bustan this garment is worn by courtiers but never by the king himself. The attendants on the silver plate also wear high boots over their leggings. Similar boots are worn by servants in the Taq-i Bustan hunt, while the nobles and the king wear shin guards which resemble the boots in having a peak at the front but which do not cover the feet. Elsie Peck refers to the boot as Central Asian, noting its appearance at Fondukistan (sixth to seventh century) and Bezeklik (eighth century). On a Northern Ch'i sculpture in the Freer Gallery in Washington, D.C., guardian figures and musicians wear the same footgear.<sup>54</sup> There is some variety in the way the boots are depicted on the Strelka plate, those of the extreme left-hand figure being more elaborately decorated than the others. Moreover, the youth on the extreme right has a boot on his right foot the top of which is shown full-front and a boot on his left foot shown in pure right profile. The head of the figure should then, according to Sasanian artistic conventions, be in profile to the right, but his head is turned to the left so that he faces the king. Beneath the feet of the king is a low base resembling in shape and design the platforms upon which the king and divinities stand on the back wall of the niche of Khusro II at Taq-i Bustan. 55 This base is also placed beneath the hooves of the winged horses supporting the throne on the Strelka plate. It may therefore be considered a formal device rather than a deliberate representation of a footstool.

The rock-crystal medallion set into the gold plate in the Bibliothèque Nationale shows the king enthroned alone (Pl. 33).<sup>56</sup> His pose is standard with the exception of the upright extended last finger of the hand resting on the sword pommel. This is a feature unparalleled on Sasanian monuments. The garment of the king is similar to those of the attendants on the

Strelka plate except that the corners are pointed rather than rounded. The closest parallel for this form of dress is that worn by the royal figure on the plate in the Hermitage Museum found at Tcherdyne (Pl. 27).<sup>57</sup> A dress cut in the same style supposedly occurs on a wall painting from Dukhtar-i Noshirwan

<sup>51.</sup> Esin, "Oldruğ—Turuğ, The Hierarchy of Sedent Postures in Turkish Iconography," p. 26. In describing postures of homage in Turkish iconography, the author states that "while standing in attendance... the hands are folded on the breast. Since the Gök-Türk petroglyphs (5th-6th centuries) and the Uygur murals, down to the Ottoman period, the attendant took care to hide his hands in long sleeves" (p. 15). Unvala translates a term in *The Pahlevi Text "King Husrav and His Boy,"* p. 11, as "hands under his shoulders (with crossed hands); Lit.: the hands under the armpit."

<sup>52.</sup> This new form of dress is remarked upon by Herzfeld, Am Tor, p. 63. See also Widengren, "Riding Costume," p. 257. Widengren comments on the appearance of a similar type of dress in the Ravenna mosaics. A rounded border of the skirt is visible on the reverse of some coins attributed to rulers in the lands directly east of Iran by Göbl, Dokumente III, pls. 9, Em. 1–4; 12, Em. 16, 17; 20, Em. 57. All these coins are dated to the late fourth or early fifth century A.D.

<sup>53.</sup> This type of dress, its antecedents, and parallels for it in Central Asia, are discussed by Peck, "Taq-i-Bustan," pp. 110 ff.

<sup>54.</sup> Ibid., pp. 113 ff.

<sup>55.</sup> Fukai and Horiuchi, Taq-i-Bustan II, pl. 2.

<sup>56.</sup> See note 3. Also see Babelon, Catalogue des camées antiques et modernes de la Bibliothèque Nationale, pp. 213-219, no. 379. Babelon gives bibliography and a copy of the inscription. The king is identified as Khusro II. He also gives references concerning the origin of the vessel. Babelon says that a passage in the Chroniques de Saint Denis, which concerns the death and testamentary disposition of Charles the Bald, clearly indicates that he gave the cup in 887 to the abbey, but the oldest versions of the Chroniques de Saint Denis date to the thirteenth century, and this may therefore simply be a legend. Babelon quotes Mongez (1792) as saying that the cup came to France in the Crusades and describes the pile of cushions on the right as a false perspective view of the back of the throne. Smirnov, Serebro, pl. 24, no. 51; Herzfeld, Paikuli I, p. 76, no. 5 (Khusro I); Sarre, Die Kunst des alten Persien, p. 53, pl. 144 (Khusro II); Erdmann, "Entwicklung," p. 110 (Khusro I); Herzfeld, "Khusrau Parwez," no. 18 (Khusro I); Haskins, "Northern Origins," pp. 342 ff. (Khusro I). Haskins notes that the sword, with a short hilt and almost no guard, is different from that on the Strelka plate (Pl. 19) but related to that on the Tcherdyne plate (Pl. 27). He also states that both types occur at Taq-i Bustan. Cottevieille-Giraudet identifies the king as Kavad I, who, he states, defeated the Khazars: "Coupes et camées sassanides du Cabinet de France," p. 58.

<sup>57.</sup> Lukonin, *Persia* II, fig. 143; Erdmann, "Zur Chronologie," fig. 11, p. 282. See Chapter III, note 195.



FIG. 36 Courtier riding an elephant, Taq-i Bustan
Photo: Tokyo University, the Institute of Oriental Culture

FIG. 37
Drawing of reverse of a gold coin of Kavad I
Göbl, Sas. Num., Table 10
FIG. 38
Reverse of a gold coin of Khusro I
British Museum
FIG. 39
Drawing of reverse of a gold coin of Khusro II

Göbl, Sas. Num., Table 12







in Afghanistan. However, no illustration of the original painted surface exists, and from the written description of the painting it appears that the drawing of this wall painting published in Godard is, in this detail, largely an imaginary reconstruction.<sup>58</sup> A variation of the dress represented on the rock-crystal medallion occurs on many Central Asian works of art, 59 but in no instance is the king portrayed wearing this costume on a monument of unquestioned Sasanian workmanship. The hunting plate from Tcherdyne, mentioned above, is not typically Sasanian in shape, iconography, or stylistic detail, as has been noted in Chapter III. The crown is not the same as that appearing on any Sasanian coin, and it is probable that the vessel is a provincial Eastern imitation of a Sasanian royal plate. In late Sasanian art, both at Taq-i Bustan and on the reverses of special coin issues of Kavad I, Khusro I, and Khusro II, the king is depicted in a frontal position wearing a skirt curving downward at the front or having a straight hem (Figs. 37, 38, 39, 43).60

Another feature provides a link between the rock-crystal medallion and works of Central Asiatic origin. This is the profile rather than full-face rendering of the winged horses that serve as the supports for the royal throne. On the Dukhtar-i Noshirwan painting mentioned above, supports for the throne in the form of horses are also shown in profile, <sup>61</sup> and on wall paintings and wood carvings from Piandzhikent and Kalaĭ Kakhkakha I a variety of animal supports are regularly depicted in profile rather than as fully frontal figures. <sup>62</sup> The griffins on the earlier Kushano-Sasanian plate in the British Museum (Fig. 35) are also in profile.

On both the Strelka and Bibliothèque Nationale plates (Pls. 19, 33) the banqueting couch throne con-

sists of a long bench upon which a number of cushions are piled to the left of the king. 63 In neither work does the king lean on these cushions, as in a description of Khusro II appearing in the *Annals* of the ninth- to tenth-century historian Tabari. 64 The king in this passage is said to hold a round yellow quince; consequently the scene is probably one of feasting rather than of enthronement. The winged horses that form the legs of the couch throne on the two vessels distinguish this piece of furniture from the otherwise identical banqueting couches upon which nonroyal figures recline on some Sasanian seals. 65 These winged horses are unquestionably symbolic, but their precise meaning is uncertain. The Sasanian ruler called himself "brother of the sun and the moon." 66

<sup>58.</sup> See note 114 below.

<sup>59.</sup> Trever, Greko-Baktr. Isk., pl. 20; Grünwedel, Alt-Kutscha, pls. 48, 49; Shishkin, "Novye pamîatniki iskusstva sogda," no. 1, opposite p. 62. Many Kushan works illustrate the straight-hem skirt with flaring pointed corners, but these skirts do not have a slit on the sides: Rosenfield, Kushans, pls. 12, 24, 29, etc. On the later Kushan works the downward curve of the hemline at the sides of the skirt is particularly apparent: ibid., pls. 79, 93, 109, 139 (Hatra sculpture). See also this same form of dress on four figures in Bishapur relief II: Ghirshman, Bîchâpour I, pl. XIV. I owe this reference to Georgina Herrmann.

<sup>60.</sup> Göbl, Sas. Num., pls. 11 (191), 12 (199), 14 (220).

<sup>61.</sup> See note 114 below.

<sup>62.</sup> Belenitsky, *Central Asia*, figs. 102, 103, 109; Belenitskiĭ and Marshak, "Stennye rospisi," facing p. 58. See also Sokolovskiĭ, "Zhivopisi Kalaĭ Kakhkakha I," p. 49.

<sup>63.</sup> Herzfeld referred to these benches as seats rather than thrones: "Der Thron," p. 14.
64. Cited by Altheim and Stiehl, Hunnen V, p. 208; also

<sup>64.</sup> Cited by Altherm and Stiehl, Hunnen V, p. 208; also L'Orange, Cosmic Kingship, p. 38.

<sup>65.</sup> Göbl, Siegelkanon, pls. 8, 9 passim; Bivar, Sas. Seals, pl. 8 passim.

<sup>66.</sup> Ammianus Marcellinus, Book XVII, 5, 3.

On the day consecrated to Mithra, he wore a crown that bore the image "of the sun and of the wheel on which it rotates." <sup>67</sup> Since winged horses appear on Sasanian seals drawing the chariot of the sun god, <sup>68</sup> it is probable that the king was deliberately associating himself with the solar deity in the choice of winged horses as legs for his throne. However, the interpretation of this throne as a vehicle for the ascension of the monarch must be questioned, as the winged horses on these vessels do not spring upward but have their forelegs placed on the ground. <sup>69</sup>

The crown of the king on the Strelka plate (Pl. 19), as previously noted, is identical to that appearing on the coins of a number of late Sasanian rulers: Kavad I, Khusro I, Hormizd IV, Bahram VI, Khusro II, and Kavad II. On the rock-crystal medallion in the Bibliothèque Nationale (Pl. 33) the only change in the crown type is the presence of a single row of hatching rather than a double beaded band at the base of the crown. In his depiction of this detail the artist may have intended to represent the crown of Peroz or Kavad I, but it is also possible that the single row of hatched lines was simply easier to execute in this material, rock crystal, than a minute double beaded band.

Setting aside the evidence of the crowns, can one be certain that the vessels in the Hermitage Museum and the Bibliothèque Nationale are Sasanian works of art?

Many of the stylistic and iconographic details in the scenes on the Strelka plate are characteristic of Sasanian royal hunting vessels (see Chapter III, p. 68). The details include: the stylization of drapery folds in a series of short paired lines (a scheme also used to depict the muscles on the back leg of the horse), the portrayal of the king's hair, falling on either side of the head, as a ball covered with dots, the depiction of the drapery of the royal horseman where it spreads out on the saddle as parallel wavy lines, the presence of a bow as the hunting weapon, and the pattern of spaced tufts used to represent the hair of the animal quarry rather than a system of hatched lines covering the whole body. The design fits within the circular frame of the plate, a compositional feature typical of many Sasanian royal vessels. On the exterior, just below the rim, a single line runs around the plate, a technical detail occurring on Sasanian works of art.

Because of these similarities to royal Sasanian silver vessels, and because of the elemental composition of the silver (Part 2, p. 155), it is probable that the Strelka plate was made in a Sasanian workshop. There are, however, deviations from the standard form: an odd rather than an even number of animal quarry, the inclusion of a small bird in the hunting scene, and gilding on portions of the design rather than on all the figural elements or, alternatively, over the entire background. A few hunting plates with kings wearing crowns attributable to Kavad I or later rulers also depart from the established type in various compositional, stylistic, or technical details (Pls. 20, 22). One explanation for the appearance of these vessels and of the Strelka plate is that they were executed at a time when rigid controls over the designs on the royal silver had ceased within the Sasanian kingdom. Another explanation is that the vessels are not, in fact, original Sasanian works of art but rather provincial imitations of Iranian royal silver. The first of these two alternatives is the more likely one for the Strelka plate. The rather unsophisticated arrangement of the scene (the elongation of the attendant immediately on the king's left, and the ignorance of Sasanian formulae, as indicated by the position of the boot worn by the extreme right-hand figure) suggests that this vessel is not the product of a workshop where the level of craftsmanship was high and control of the finished product maintained.

It is difficult to date the Strelka plate exactly. The attribution to Kavad I or a later king is based on the crown type. The form of dress worn by the king appears no later than on the coins of Kavad I (488–531), while that of the attendant figures is unknown before the reign of Khusro II (591–628) if the large niche at Taq-i Bustan is correctly attributed to that king. The scarcity of certainly dated works belonging to the

<sup>67.</sup> Al-Bīrūnī, The Chronology of Ancient Nations, p. 207. 68. Göbl, Siegelkanon, pl. 6, no. 7c; SPA IV, pl. 255EE; L'Orange, Cosmic Kingship, p. 66, fig. 40a. Ettinghausen states that the scene shows the ascension of Mithra: From Byzantium to Sasanian Iran and the Islamic World, p. 14, pl. 15. The same view was expressed by Herzfeld, "Der Thron," p. 108, fig. 14.

<sup>69.</sup> L'Orange, Cosmic Kingship, pp. 37 ff. L'Orange suggests that the glass rosettes and squares may represent the heavens, and the crystal medallion the sun itself; Ettinghausen, From Byzantium to Sasanian Iran and the Islamic World, p. 14; A. Grabar, "Trônes," p. 24.

reigns of Kavad I and Khusro I makes it impossible to judge whether this vessel is more typical of Sasanian works of art dating from the reign of these two kings or if it falls in the period of the niche at Taq-i Bustan and Khusro II. In the opinion of Vladimir Lukonin, the Hephthalite inscription cannot be earlier than the seventh century. The method of manufacture, in which the background is carved away leaving the scene in relief, is characteristic of other late Sasanian silver vessels. <sup>70</sup>

The carved relief figure of an enthroned king on the rock-crystal medallion set into the gold plate in the Bibliothèque Nationale (Pl. 33) is less closely related to Sasanian works of art. In part, this can be explained by the medium—carvings in glass and crystal usually vary in style from works executed in other materials. However, those details unknown on Sasanian monuments, such as the cut of the royal skirt and the profile view of the theriomorphic legs of the throne, have parallels in Central Asian monuments. Is it possible that this is a Central Asian work of art?

The crystal medallion is set into an openwork gold plate with inlays of colored glass. The floral designs on these glass inlays are not peculiar to Sasanian art and do not themselves offer any clue to the place of manufacture.71 Equally indefinite is the evidence provided by the construction of the vessel itself, with numerous settings cut out to hold colored inlays. The use of colored glass or paste inlays on objects made of gold became common in Iran by the middle of the first millennium B.C.72 It was a fashion that had a wide popularity in the art of such steppe peoples as the Scythians, Sarmatians, and Huns. The closest parallel for the Bibliothèque Nationale plate is a deep bowl of the early fifth century A.D. found at Szeged-Nagyszéksós in Hungary. 73 Fettich, in his publication of this piece, stresses the relationship between the shape of this gold vessel and bronzes made by the Huns. For this reason he argued in favor of Hunnish manufacture, in spite of the fact that he considered the type of inlaid decoration to be characteristic of Iranian art. By the first millenium A.D. the extensive use of inlays on objects made of gold was certainly as common in the art of the Khazars and Huns as in that of the Iranians, and this feature is not in fact characteristic of one culture more than another. The Bibliothèque Nationale plate is unique in

form and design if compared to Sasanian vessels, but there is not sufficient evidence to prove that the work, in its entirety or in part, is of foreign manufacture. Arguments in favor of Sasanian workmanship are the form of the king's crown and the presence of a Middle Persian inscription, but these are not conclusive. At present, there is no way of determining where and by whom the rock-crystal medallion was carved.

It is surprising that in the century from the reign of Kavad I (488–531) through that of Khusro II (591–628), when the Sasanian monarchs had great power, the motif of the enthroned ruler played so small a part in Sasanian art and iconography. The two vessels just described are the only monuments with this subject that follow many of the traditional formulae of Sasanian art. It is possible, therefore, that both are Sasanian works. However, the banqueting couch throne never appears on the coins, nor is it represented on the only known rock reliefs belonging to the end of the period, those in the niche of Khusro II at Taq-i Bustan.

A few objects show a familiarity with the banqueting couch as a throne type, but details of their iconography and design indicate that they are not Sasanian works. Three silver vessels fall into this category: one found at Qazvin in Iran (Pl. 34), another from Klimova in the Perm (Pl. 35), and a final example of uncertain but probable Iranian provenance in the collection of the Walters Art Gallery in Baltimore (Pl. 36). Both the Qazvin and Klimova plates have often been cited as partial illustrations of the famous throne of Khusro II, the Takht-i Taqdis.<sup>74</sup> According

<sup>70.</sup> Harper, The Royal Hunter, pls. 14, 19, 25.

<sup>71.</sup> This rosette type appears on Sasanian seal impressions. For references to the widespread occurrence of this form of rosette, see Harper in Frye, Qasr-i Abu Nasr, p. 81.

<sup>72.</sup> A buckle with a Middle Persian inscription ("Ardashir") in the Wiesbaden Museum provides an example of an object with extensive inlay dating from the third or fourth century A.D.: Ghirshman, *Persian Art*, p. 222, fig. 265. For the dating of this buckle in the fourth century, see Altheim and Stiehl, *Hunnen* V, p. 211.

<sup>73.</sup> Fettich, "La Trouvaille de la tombe princière hunnique à Szeged-Nagyszéksós," pp. 139 ff.

<sup>74.</sup> Herzfeld, "Der Thron," pp. 1-24, 103-147; for a translation of the passage in Firdausi, see *The Sháhnáma of Firdaus*í VIII, pp. 391 ff.; Ackerman in *SPA* I, pp. 775-778, 878-879; Christensen, *L'Iran*, pp. 466 ff.; Lehmann, "The Dome of Heaven," pp. 24 ff.

to literary descriptions, this throne, at Shiz in Azerbaijan, was a vastly complex architectural and mechanical monument, a huge platform upon which there was a domed building covered with astronomical symbols. The throne itself moved or turned and could produce thunder and rain. Neither the throne seat nor the enthroned king, apparently hidden from sight behind a curtain, are described in the sources in any detail. An analysis of the literary tradition concerning this Sasanian cosmic throne, supposedly derived from an Achaemenid original, is beyond the scope of this study. The theme is one that belongs entirely to literary tradition, as there are no images on works of Sasanian date and manufacture that illustrate this subject. By the Sasanian period the concept of a cosmic throne existed in many lands both east and west of Iran: in China and India, with the Hsiung-nu and with Turkic peoples, as well as in the West.<sup>75</sup> Descriptions of the various cosmic thrones have many features in common. It is impossible, therefore, to isolate a particular Sasanian type without the support of Sasanian pictorial representations, none of which has survived. Within the limits of this study, the most that can be said is that the silver plates from Qazvin and Klimova reflect one aspect of the literary tradition concerning the Takht-i Taqdis, in that there appears on both a throne which is part of a larger architectural setting, 76 incorporating a crescent moon as part of the design. A careful analysis of the style and iconography of the scenes represented on these plates indicates, however, that they cannot be attributed to Sasanian workshops.

On the Qazvin plate the actual throne seat, a banqueting couch, is a minor element placed in the background behind the king, who is not seated upon it (Pl. 34). 77 The legs of the throne are either hidden or incorporated into the structure of the arch. Only the long bench with five cushions piled up on the king's left appears. The throne building is topped by stepped crenelations and a central crescent, features that have suggested a comparison between this structure and the arched rock-cut niche usually attributed to Khusro II at Taq-i Bustan. A somewhat closer parallel is the newly reconstructed monument at Taq-i Girra, where the sides of the crenelations slant obliquely inward as on the silver plate. 78 This feature is, in general, more typical of Islamic monuments than those of Sasanian date. On the Qazvin plate the

whole throne rests on two lions. 79 Completely unknown on objects belonging to the Sasanian period is the garment worn by the king and his attendants and the absence of a star or globe within the crescent on the royal crown. The fillets, falling below the king's waist, end in three points decorated with circular jewels.80 This is a detail that is repeated on an eighthcentury painting at Qasr al-Hayr West<sup>81</sup> but rarely occurs on Sasanian monuments.82 The sharp upward slant of the wings rising from the king's crown and their straight outline are features that characterize the

<sup>75.</sup> Auboyer, Le Trône et son symbolism dans l'Inde ancienne, pp. 74 ff.; Esin, "Oldruğ-Turuğ, The Hierarchy of Sedent Postures in Turkish Iconography," pp. 1-29; Erdmann, "Universal. Stellung," p. 518. Erdmann gives his opinion that the "Solomon throne" of the tenth century simply goes back to the famous throne of Khusro.

<sup>76.</sup> Enthroned figures in architectural settings occur fairly frequently in Early Christian and Byzantine art: Hanfmann, Roman Art, p. 122, no. 139 (Junius Bassus sarcophagus, A.D. 359); Delbrueck, Consulardiptychen, pl. 62 (missorium of Theodosius, fourth century); ibid., pl. 35 (missorium of Aspar, A.D. 434). There is only one silver plate, possibly Sasanian, that is closely related to these Western scenes of enthroned personages within an architectural setting. This vessel, in a Swiss private collection, is published in Sas. Silver, p. 100, pl. 12. I have never had the opportunity to study the piece at length. The king wears a crown related but not identical to that of a Sasanian king. Moreover, the hair arrangement, dress, and drapery style are quite unlike those on Sasanian works. Other odd features in terms of Sasanian art are the left profile of the enthroned figure, and the hair tassels, commonly attached to straps on the horse's body, here connected to the crescent moon. The inner molding on the plate itself is a detail that appears on the British Museum Shapur plate (Pl. 13) but on no later Sasanian work. In view of these idiosyncrasies, it is conceivable that this vessel was made outside Iran.

<sup>77.</sup> See note 5 above. ILN, 21 (August 1948), p. 214, fig. 5 (post-Sasanian); Erdmann, Kunst, p. 97 (one of the last kings of the Sasanian house . . . perhaps Khusro II); L'Orange, Cosmic Kingship, pp. 37 ff., fig. 17 (Azamidukht or Yazdgard III); Duchesne-Guillemin, La Religion de l'Iran ancien, pp. 293–294; Gall, "Entwicklung des Thrones," pp. 215, 219 ff.

<sup>78.</sup> Ibid., pp. 219 ff. For the most recent reconstruction of the arch at Taq-i Girra, see Kleiss, "Bericht über Erkundungsfahrten in Iran im Jahre 1972," pp. 74 ff. See Ghirshman, Bîchâpour II, pp. 158-160, for early Islamic stepped crenelations.

<sup>79.</sup> A. Grabar notes that lion supports are more typical of Islamic than of Sasanian thrones: "Trônes," p. 27.

<sup>80.</sup> This strange form of fillet was noted by Bahrami, "Some Objects Recently Discovered in Iran," p. 74. 81. Schlumberger, "Deux Fresques omeyyades," p. 91,

<sup>82.</sup> Bivar, Sas. Seals, pl. 4, BC1.

wings on the crowns of the ninth-century Abbasid governors of Tabaristan.83 On Arab-Sasanian coins the position of the king's hands as they grasp the sword is often the opposite of that on Sasanian objects, where the right hand rests on the pommel and the left grasps the hilt.84 The hands are also reversed on the Qazvin plate. The headgear of the attendant standing to the left of the throne on the silver plate is worthy of comment, as it, too, is unique.85 A band passing before the mouth, drawn up to the top of the head and tied so that the ends fall down behind, appears on other Iranian works of art. This covering of the mouth in deference to an exalted presence was a well-known tradition at the Sasanian court.86 On the Qazvin plate a ribbon is attached to the top of the cap but is not visibly connected in any way to the mouth band. A few unusual Arab-Sasanian coins of the late seventh century show the caliph wearing a curved cap having a fillet projecting from the top.87 Above this is a typical Sasanian globe, a major variation from the headgear on the silver plate. It appears that the form and function of the mouthband were no longer understood on the vessel, and that it is consequently portrayed incorrectly.

The Qazvin plate is distinguished from other royal Sasanian silver vessels not only in the details of the iconography but also in the drapery style. Although there are a few short paired lines on the drapery, they are a minor feature. Instead, U-shaped patterns cover the clothing, an exaggerated stylization of late Sasanian drapery folds.

On the basis of this evidence it is not likely that the Qazvin plate is a Sasanian work. Since it was found in Iran, and there is nothing in the iconography, style, or method of manufacture to suggest foreign workmanship, one must suppose that it postdates the Sasanian era. No sample of the silver was available for analysis. The details noted above suggest that the plate may have been made in the century and a half following the collapse of the Sasanian dynasty, but no close parallels exist for its general appearance.

The architectural setting for the enthroned figure on the Klimova plate (Pl. 35)<sup>88</sup> is quite different from that on the vessel from Qazvin (Pl. 34). Two columns support an arch topped by a crescent, but here the resemblance ends. This arch rests on two wheels, and the whole structure is drawn by two pairs of humped bulls. Two figures, the upper seated within the cres-

cent on a couch throne and the lower standing full-front, holding a bow, are represented. Neither wears a Sasanian crown nor, in fact, any elaborate headgear at all. A band around the head may be the rim of a close-fitting cap. There are no ends of ribbons coming from the head or from any other part of the body of either figure to suggest the presence of fillets. The shape of the couch throne and the pose of the personage seated upon it vary markedly from other scenes of Sasanian monarchs enthroned. The throne lacks theriomorphic supports, <sup>89</sup> and the figure with legs bent up and crossed beneath the body is not in a characteristic Sasanian pose. <sup>90</sup> Only minor persons in

<sup>83.</sup> Walker, Arab-Sas. Coins, pls. 23 ff.

<sup>84.</sup> Ibid., pls. 3, 1; 4, 4, 5, 6, etc. In general this seems to have been done to make a perfectly symmetrical arrangement of the figures on the reverse. It is not the rule on Arab-Sasanian coins but happens frequently. This suggests that there was no longer a rigid adherence to a set type.

<sup>85.</sup> This was observed by Bahrami, "Some Objects Recently Discovered in Iran," p. 74.

<sup>86.</sup> Orbeli in SPA I, pp. 716, 732. Orbeli states that such details of protocol were regulated in the Gahnamak, the Book of Rank. It seems probable to me that this is what is represented on one of the wall-painting fragments from Kuh-i Khwaja commonly said to illustrate a flute player: Herzfeld, Iran in the Ancient East, pl. 103. See also Dalton, Oxus, pl. 39, no. 211; Smirnov, Serebro, pl. 37, no. 66; Orbeli and Trever, Sas. Metall, pl. 16.

<sup>87.</sup> Miles, "Mihrāb and 'Anazah," p. 156; O. Grabar, Islamic Art, p. 93, fig. 16.

<sup>88.</sup> See note 4 above. SPA I, p. 736; IV, pl. 207B. The scene is interpreted as a representation of Mah in his lunar chariot. The identification of the bowman, supplied by Ackerman, is Tistrya. Herzfeld, "Die sasanidischen Quadrigae Solis et Lunae," pp. 128–130; Orbeli and Trever, Sas. Metall, pl. 19; Smirnov, Serebro, pl. 121, no. 306; L'Orange, Cosmic Kingship, pp. 37 ff., fig. 19; Lukonin, Persia II, fig. 208; O. Grabar, in the introduction to Sas. Silver, p. 79, states without references that this plate is "correctly attributed to Sogd." Two plates of uncertain date, in Boston and in Geneva, are based on the design on the Klimova plate: Museum of Fine Arts, Boston, acc. no. 57.587, Frye, The Heritage of Persia, fig. 85; Dürr, "Une Nouvelle Carafe sassanide," pp. 25–41, fig. 3. Dürr says that in his opinion the Klimova plate is post-Sasanian from Tabaristan. For a description of the objects found together at Klimova, see Darkevich, Metall Vostoka, p. 23.

<sup>89.</sup> This type of couch leg appears on silver plates with "kings" wearing generalized Sasanian crowns: Orbeli and Trever, Sas. Metall, pl. 16; Erdmann, Kunst, pls. 68, 69; O. Grabar, Islamic Art, fig. 98. All these plates have been called post-Sasanian. The same stylization of the couch leg occurs on the seventh- to eighth-century Brescia cross: Volbach, Early Christian Art, pl. 60.

<sup>90.</sup> In fact, this pose is extremely rare in Sasanian art. See Harper, "The Heavenly Twins," pp. 186–195.



FIG. 40 Impression of seal with a moon god Staatliche Münzsammlung, Munich

Sasanian art are seated in this way. In Central Asia and in India, as well as later, in the Islamic period in Iran, persons of rank are shown seated cross-legged, 91 but never on Sasanian monuments. The way in which the tips of the crescent moon rise from behind the shoulders of the enthroned figure is similar to representations of the moon god on Kushan coins92 and to those of some fifth-century rulers depicted on the coins of the Huns.93 In contrast, a figure on a Sasanian seal (Fig. 40), probably to be identified as the moon god, has a crescent behind the head rather than the shoulders.94 The ax placed upright on the pillows of the throne has been compared to the ax held by an enthroned figure on a clay fragment of an ossuary from Bianayman.95 Although the ax is described as a weapon of Sasanian royalty in Pahlavi texts, 96 it is not associated with any ruler depicted in Sasanian art. An ax of the same type appears among the fallen weapons between two warriors on a Sogdian plate of the end of the seventh century, 97 and is held by a seated prince on a Sogdian painting of the seventh to eighth century at Piandzhikent in Uzbekistan.98

The style in which this scene is executed is unlike that of the vessel from Qazvin (Pl. 34). Short paired lines appear on parts of the drapery as well as on the architectural structure supporting the crescent, but they are entirely absent from parts of the clothing where they might be expected. The deep depressions at the edges of the upper garment of the standing figure and on the leggings of the enthroned figure are an exaggerated stylization not previously noted. Only the king on a hunting plate in Berlin (Pl. 20) is somewhat similar in this detail to the persons represented on the Klimova plate (Pl. 35). In addition, the animal and human figures on both these works have full-face staring eyes, while the animal bodies are covered with hair patterns. Punched circles decorate the background of the rosette wheels of the Klimova

vehicle and the throne cushions. This decorative feature is commonly seen on Central Asian and Far Eastern metalwork in the seventh and eighth centuries but not on that of Sasanian Iran. 99

The scene on the Klimova plate is in slight relief, achieved by carving the background away, and there is an exterior rim line. Technically this vessel, is, in these respects, in the Sasanian tradition. The technique of applying the gilding on this plate is, however, most unusual. On the crescent above the arch, and on the face of the arch itself, the gilding has been applied so heavily that it forms a pattern in relief.

The scene on the Klimova plate has been described as showing the Sasanian version of the moon god Mah<sup>100</sup> or the king himself, ascending in his celestial chariot. <sup>101</sup> Herzfeld's interpretation of the whole

<sup>91.</sup> Persons of rank are seated in this fashion, on low couches, on the Kushano-Sasanian plate in the British Museum (Fig. 35). For the appearance of this pose on Kushan coins, see Rosenfield, *Kushans*, pls. II, no. 20; III, no. 45. Other examples of later date are illustrated in Herzfeld, *Samarra* III, pp. 38–44; Rice, *Ancient Arts of Central Asia*, pp. 104, 105, 165; Belenitsky, *Central Asia*, pls. 52, 143–145; O. Grabar, *Islamic Art*, pls. 98, 111; Sarre, *Die Kunst des alten Persien*, pls. 109, 110.

<sup>92.</sup> Rosenfield, Kushans, pls. V, nos. 98-102; VI, nos. 103-112.

<sup>93.</sup> Göbl, Dokumente III, pl. 17, Em. 49; pl. 18, Em. 50, 51; pl. 19, Em. 52, 53.

<sup>94.</sup> The only probable Sasanian representation of Mah is on the seal in Munich: Göbl, Siegelkanon, pl. 6, no. 7d; Harper, Royal Hunter, pl. 74.

<sup>95.</sup> Borisov, "K istolkovanifu izobrazhenii na Bianaimanskikh ossuarifakh," p. 40, pls. 2, 4 no. 2. Pugachenkova, "Istikhanskii ossuarii," pp. 33–42, with full bibliography.

<sup>96.</sup> Sarre in SPA I, p. 595. The passages quoted are from Hamza al-Isfahāni: Hamzae Isphahanensis Annalium, ed. Gottwaldt, Book X.

<sup>97.</sup> Orbeli and Trever, Sas. Metall, pl. 21; Yakubovskiĭ, Zhivopis, p. 136, fig. 8. This type of ax also appears on a plate in the Hermitage Museum from Malaîa Anikova in the Urals. The vessel is believed to have been cast from an original work of the seventh to eighth century: Orbeli and Trever, Sas. Metall, pl. 20; Darkevich and Marshak, "O tak nazyvaemom siriĭskom blîude iz Permskoĭ oblasti," pp. 215–222, fig. 3 on p. 217.

<sup>98.</sup> Yakubovskii, Zhivopis, pl. 39.

<sup>99.</sup> Marshak, Sog. Serebro, figs. 16, 19, 20, 22, 25; Gyllensvärd, T'ang Gold and Silver, pls. 2–6.

<sup>100.</sup> SPA I, p. 736.

<sup>101.</sup> L'Orange, Cosmic Kingship, pp. 64 ff.; Duchesne-Guillemin, La Religion de l'Iran, p. 293. Duchesne-Guillemin describes the scene on the Klimova dish as the king on his throne at the top of a lunar chariot.

scene, 102 and his idea that this structure and the figures connected with it are a representation of the Kunstuhr (an elaborate clock), has never been widely accepted. 103 The above description of the scene provides ample reason why this cannot be interpreted as an example of Sasanian royal or religious imagery in spite of the presence of the banqueting couch throne. There are essential differences from standard Sasanian imagery, and the style is unparalleled on Sasanian works of art. Analysis of the silver indicates that there is a low probability that this plate belongs to the central Sasanian group. Quite possibly the Klimova plate was made somewhere east of Iran, where Sasanian influence was extensive, but where motifs and designs characteristic of Central Asian art might also be expected to appear. It is impossible to attach a cultural label to the Klimova plate, as it is no more typical of Sogdian or Khoresmian art than of Sasanian. The products of other Eastern workshops in which silver plate was manufactured during the century following the collapse of the Sasanian dynasty in Iran are not sufficiently well known or certainly located to permit precise labeling in terms of a specific style or culture.

The throne on the third vessel belonging to this group, an oval bowl in the Walters Art Gallery (Pl. 36) appears to be a combination of a bench and a banqueting couch, the two types of throne discussed above. 104 The king is seated on a long bench that has legs in the form of eagles with outstretched wings. 105 There is only a single long cushion on the throne seat. No cushions are piled on the king's left. In spite of the length of this piece of furniture, quite appropriate for a banqueting couch, it appears to be only a bench. Although the royal figure wears a crown, there are no fillets coming from any part of his dress. The absence of stepped crenelations on the crown, which includes wings and crescents, is an important variation from all late Sasanian crown types. A few Umayyad coins, barbarous imitations of Sasanian coin images, show the cap alone with wings and a star. 106 Otherwise, the omission of stepped crenelations is extremely rare even on Arab-Sasanian coinage. An interesting detail is the downward-pointing position of the king's feet, as extreme as that on the thirdcentury Nagsh-i Bahram relief (Fig. 25), but not to be seen otherwise on late Sasanian monuments. The position of the royal hands on the sword is reversed,

as on the Qazvin plate (Pl. 34). Perhaps the most surprising feature, in a Sasanian context, is the mixture of imagery. 107 The figures on either side of the king are not a pair, since they are of entirely different status and appearance. One is an attendant with a fly whisk, 108 the other a noble or princely personage who holds a beaded diadem. The latter wears a dress appropriate to his high rank, the skirt with an upward-curving front hemline and sharp points at the corners. 109 It is of the same type as that worn by the royal figure on the crystal medallion in the Bibliothèque Nationale plate (Pl. 33). A nude female dancer (Pl. 36) is carved at each end of the bowl. 110 This is an unexpected addition, since the king is neither banqueting nor reclining on the couch but upright in an enthroned pose.

The drapery style provides no links with any of the representations on Sasanian hunting plates nor with the other silver vessels with enthronement scenes. The clothing is decorated with dots or punched circles, to suggest jewels, and embroidered or beaded hemlines. The king wears the customary Sasanian halter, but tall high boots are worn over the long leggings usually depicted as part of the royal dress. Both of the figures beside the king wear the same boots.

<sup>102.</sup> Herzfeld, "Der Thron," pp. 140 ff.

<sup>103.</sup> See Ackerman, "The Throne of Khusraw," p. 106, note 1. Lukonin appears to accept Herzfeld's interpretation: Persia II, p. 226, no. 208.

<sup>104.</sup> See note 6 above. Also see L'Orange, Cosmic Kingship, pp. 64-79, fig. 55; Ghirshman, Persian Art, p. 216, fig. 258. Gettens and Waring, "The Composition of Some Ancient Silver Objects," p. 88, pl. I, fig. 1. In a personal communication, Dorothy Miner stated that the Walters Art Gallery purchased the piece from Joseph Brummer in 1924.

<sup>105.</sup> In this detail the throne resembles the couch upon which a figure reclines at Tang-i Sarwak: Ghirshman, Persian Art, p. 54, fig. 67.

<sup>106.</sup> Walker, Arab-Sas. Coins, pl. 37, nos. 9, 10; Göbl, Dokumente III, pls. 82, 83. Ghirshman remarks on this unusual feature but does not cite any parallels for it: "Notes iraniennes V," p. 53.

107. Sas. Silver, p. 59.

108. Altheim and Stiehl give a reference to a woven tex-

tile presented to Khusro I by the king of China on which there was a representation of an enthroned king and a servant holding a fly whisk: Hunnen V, p. 230.
109. See notes 57, 58 above. Peck, "Taq-i-Bustan,"

<sup>110.</sup> Because of these nude females Ghirshman suggested some part of India as the probable provenance of this vessel: "Notes iraniennes V," pp. 53-54.



FIG. 41 Khoresmian silver bowl
State Hermitage Museum
Smirnov, Vostochnoe Serebro, pl. 18, no. 42

The dancing girls on the ends of the Walters bowl are as unusual in their appearance as the individuals in the enthronement scene. The peculiar linear stylization of the body muscles and the breasts, the fillets flying out behind the head, and the summary execution of the hair are all details that set them apart from the usual depiction of females on Sasanian bottles and ewers.<sup>111</sup>

The pointed oval shape of this bowl is an indication of at least a late Sasanian date, but the iconography suggests that the vessel is an imitation of a Sasanian work made after the fall of that dynasty.<sup>112</sup>

It is clear that the scene on the Walters bowl does not resemble more than superficially scenes found on Sasanian monuments. Since the provenance of the piece is alleged to be Iran, and since there is no real connection with works made farther east, one must suppose that the plate postdates the Sasanian era. An absence of comparable material makes a more precise dating or attribution impossible. Analysis of the metal suggests that it is unlikely that this bowl was manufactured in a central Sasanian workshop.

With the exception of these last three examples, there are few representations of this couch throne either in Iran or in other regions. One example appears on a silver bowl made in Khoresm (Fig. 41), probably in the first half of the seventh century. A female divinity is seated upright, her legs resting on the ground, knees bent out to the right and to the left, enthroned on a banqueting couch. 113 As with the Klimova plate (Pl. 35), the legs of the couch are geometric forms rather than parts of real or fantastic creatures. Nevertheless this is clearly a couch throne.

The wall painting at Dukhtar-i Noshirwan in Afghanistan has been mentioned above, where it was observed that the published drawing is a hypothetical reconstruction. 114 The only detail of the throne described clearly by the excavator is the profile view of the horses, which differs significantly from the full-face representation on the Strelka plate (Pl. 19). On a seventh-century bone carving in the Walters Art Gallery (Fig. 42), simple and crude in design, there is a frontal image of an enthroned king wearing a crown decorated with vague, winglike forms and superficially resembling that of a Sasanian king. 115 The piece has been said to show evidence of Sasanian influence,

<sup>111.</sup> Orbeli and Trever, Sas. Metall, pls. 44-47.

<sup>112.</sup> O. Grabar, in his introduction to Sas. Silver, p. 59, mentions that this is one of the rare instances where a royal silver vessel is in the shape of a bowl rather than a plate.

<sup>113.</sup> Azarpay, "Nine Inscribed Choresmian Bowls," pp. 185-203. Smirnov, Serebro, pl. 18, no. 42.

<sup>114.</sup> See p. 113 above. A. Godard, Y. Godard, and J. Hackin, Les Antiquités bouddhiques de Bamiyan, pp. 71–72, fig. 25. The only illustration of the enthronement scene is the drawing published in this volume. The scene depicted in this drawing was reconstructed from a number of separate and unconnected fragments of paintings still on the walls of the rock-cut niche. In the text, Godard describes the horses and their position, but other details of the king's throne and dress are simply copied from the representation on the Bibliothèque Nationale rock-crystal bowl.

<sup>115.</sup> Walters Art Gallery, Baltimore, acc. no. 71.62; height 17.6 cm.; width 9.8cm. Provenance unknown, supposedly Sohag in Egypt: Ross, "A Coptic Bone Carving," p. 123, pl. 1. Der Nersessian in a review of the exhibition catalogue Pagan and Christian Egypt describes this plaque as later than the seventh century: ArtB, p. 167; Pagan and Christian Egypt, p. 37, no. 107. Ghirshman compares the bone carving to the rock-crystal medallion on the cup in the Bibliothèque Nationale (Pl. 33); Persian Art, p. 304, fig. 402.

but there is no indication of a couch throne. A Coptic textile from Antinoë, repeatedly cited as Sasanian in style, has as part of its design an enthroned figure. <sup>116</sup> The pose of the enthroned figure is admittedly the same as that on Sasanian works of art. He sits full-front, holding a sword between splayed legs, but neither his dress nor his throne seat in any way reflect Sasanian types.

André Grabar has observed that an illustration of Nebuchadnezzar, in the Mozarabic paintings from the Book of Daniel in the tenth-century *Beatus* of Valladolid, provides an example of the perpetuation of Sasanian influence in the art of the West. 117 Nebuchadnezzar's seat is a high-backed couch, a combination of two different furniture types, chair

FIG. 42 Bone carving

Walters Art Gallery, Baltimore, acc. no. 71.62



and couch. The king half sits and half reclines, his right hand resting on his weapon, his left arm on the single cushion. The artist appears to have had some memory of the couch as the seat of the enthroned king, although he clearly found it hard to express this idea in a pictorial image and was not familiar with the Sasanian form. Since Nebuchadnezzar's throne is a couch, the king had to lean on the pillow, reclining, hence the oblique angle of the lower part of the body. That this reclining pose was not considered suitable for a king on his throne is suggested by the fact that one of the king's feet is placed directly beneath the upper body in the position proper for a person sitting upright. The Sasanian solution of leaving the king upright, ignoring the function of the piece of furniture upon which he is seated, was a more majestic one.

To recapitulate the evidence from the Sasanian monuments, the motif of the throne and the enthroned king appears with some frequency in the dynastic art of the Sasanians at the beginning of the period on rock reliefs and on coins. There is no surviving evidence for its use at this early date on luxury vessels. On the rock reliefs the meaning of the scenes with enthroned kings is varied. At Naqsh-i Bahram (Fig. 25) the theme is one of royal majesty. The king's relation to the secular and religious powers of the day is indicated by the smaller scale of the various dignitaries, including the priest Kartir, who stand beside him. At Bishapur (Fig. 27) the theme of majesty, in the form of the full-face enthroned ruler, is linked to that of victory. The awe-inspiring central figure, holding both lance and sword, is framed by the rows of loyal subjects on one side and the tangible evidence of his triumphs on the other. At Naqsh-i Rustam, the relief is unfinished, but two standing figures are said to exist on one side of the enthroned

<sup>116.</sup> Musée Historique des Tissus, Lyons, inv. no. 28.928; height 80 cm.; width 66 cm. Ghirshman, *Persian Art*, p. 236, fig. 289; *Koptische Kunst*, p. 344, no. 368; Peirce and Tyler, *L'Art byzantin I*, pp. 87 ff., pls. 55, 56; Francovich, "Il concetto della regalità," p. 25. The fabric is said to be copied from Sasanian works.

<sup>117.</sup> A. Grabar, L'Art de la fin de l'antiquité et du moyen âge II, pp. 665-666; idem, "Rayonnement," pp. 701-702, pl. 29, fig. 2. Gall has observed that one Islamic throne type is a mixture of a stool and couch: "Entwicklung des Thrones," p. 235. The Mozarabic miniature may therefore simply be based on an Islamic model.

king, and the scene is therefore probably of the same type as that at Naqsh-i Bahram.

It is less easy to be certain of the significance of the throne-altar (Fig. 3). It is probable that this double image signified the unity of royalty and religion, achieved under the first king, Ardashir I, when the Zoroastrian faith became the religion of the new state. In The Chronology of Ancient Nations, al-Bīrūnī speaks of the presence of royal thrones in temple sanctuaries.118 He describes the Sasanian king Peroz entering a fire temple in Fars to plead with the divine powers for the end of a drought that was causing famine in Iran. The king embraced the fire and then "descended from the altar, left the cupola, and sat down on the [seat] made of gold, similar to a throne, but smaller." It was the custom for a famous fire temple to have a golden seat "for the purpose that the king should sit upon it when he came into the temple." The throne-altar appears, after the reign of Ardashir I, only on special coin issues. The suggestion that these issues celebrated the king's coronation, an event that took place in a fire temple, would explain the use of the double image. 119 After Yazdgard I (399-421), the legend on the coins, which names the king's fire, and this throne-altar disappear. It is possible that this reflects the changing relationship between royalty and clergy in the troubled half century following the death of Yazdgard in 421.

The next monuments showing thrones appear no earlier than the reign of Kavad I (448-531), after a gap of almost a century. The Strelka plate (Pl. 19) and the gold vessel in the Bibliothèque Nationale (Pl. 33) clearly resemble Sasanian works of art. It is possible, therefore, that the couch throne was an official Sasanian type, since it is represented on these two examples of court plate. However, other luxury vessels with figures enthroned on banqueting couches are works of art made outside Iran or after the fall of the Sasanian dynasty. On these objects a series of carefully chosen prestigious images are incorporated in the designs: Sasanian crowns and dress and a throne modeled on a piece of furniture long associated in Iran, and in the lands east and west of Iran, with ceremonial and ritual occasions. 120

It is clear from this review of the monuments that the motif of the throne and the enthroned monarch played only a minor role in Sasanian iconography in the latter part of the period. A new emphasis on the standing monarch is suggested by coins minted in celebration of the accession to the throne of Kavad I (Fig. 37) and Khusro I (Fig. 38). The king is portrayed on the reverse of these coins, his body fullfront and his head in profile, turned toward the jeweled diadem or necklace that he holds in his hand. On the reverse of coins dating from the thirty-third and thirty-fourth years of the reign of Khusro II (623-624; Fig. 39), the same standing and now fully frontal figure, grasping his sword, may symbolize the invincibility of the monarchy, recently victorious in the war against Byzantium. Within the architectural setting of the rock-cut monument at Taq-i Bustan, the elaborately dressed and bejeweled monarch is similarly standing, full-face (Fig. 43), as he is invested with kingship. None of these dynastic images on the coins or the late Sasanian rock reliefs include a throne.

The development of the Sasanian throne, as traced above, fits well into the history of the era. The early Sasanian throne, derived from an Achaemenid form (Fig. 34) but copying neither Achaemenid nor Parthian types, continued in use up to the mid-fifth century. At that point there was a collapse in the fortunes of Iran. The renaissance that occurred in the sixth century during the reigns of Kavad I and Khusro I brought about a transformation of the monarchy itself and, not surprisingly, in the sixth or seventh century a change in royal imagery. At Taq-i Bustan an elaborate architectural setting was designed for the newly powerful and now supreme ruler. In the Shahnameh the tradition of two types of Sasanian throne persists. 121 One is that of Ardashir; the second is Khusro's throne, the great Takht-i Taqdis, essentially an architectural monument.

In the internal dynastic art of Sasanian Iran, the theme of the enthroned ruler was a minor one. This may explain the fact that while the hunting scene, based on Sasanian prototypes, continued to remain a prestigious and popular motif in Islamic art, the banqueting couch as a royal throne disappeared.

<sup>118.</sup> Al-Bīrūnī, The Chronology of Ancient Nations, p. 215. I am grateful to Martha L. Carter for bringing this reference to my attention.

<sup>119.</sup> Göbl, "Investitur," p. 49.

<sup>120.</sup> See note 1 above.

<sup>121.</sup> The Sháhnámah of Firdausí, VIII, pp. 392-393.

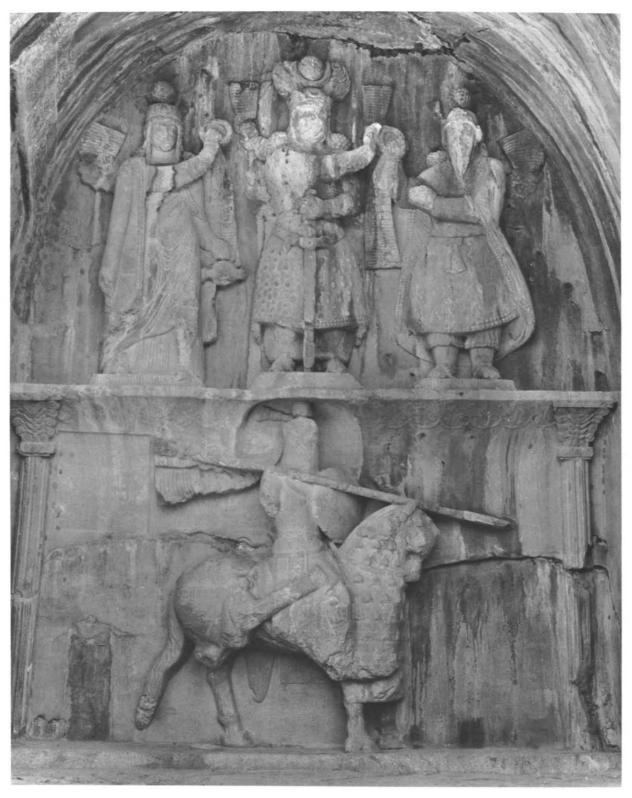


FIG. 43 Back wall of the niche of Khusro II, Taq-i Bustan Photo: Tokyo University, the Institute of Oriental Culture

#### Chapter V

#### Interpretation and Conclusions

he production of royal Sasanian silver plate covers a span of four centuries, from the first decades of Sasanian rule in the Near East to the final years before the Arab conquest. In the preceding chapters, the comprehensive review of the iconography, style, and methods of manufacture of both Sasanian and allegedly Sasanian works provides the basis for a classification of the vessels into stylistic and chronological groups. It is clear from the definition of these groups that there existed both a central Sasanian, royal production, subject to state controls, and an independent, provincial industry that was the source of a related class of vessels. The royal plates identified here as central Sasanian are executed in the paired-line drapery style. On all examples, the kings wear correctly rendered Sasanian crowns. These plates are presumed to have been executed from the time of Shapur II (309–379) onward, in workshops under the control of the Sasanian court. The description of the workshop area at Karkha de Ledan and the position of Posi as chief of artisans, as well as overseer of workshops in other parts of the kingdom, indicate that more than one center of production existed as early as the fourth century.1 However, artisans in all parts of the Sasanian state were evidently subject to royal control.

The provincial category includes a great variety of works. Among the earliest in date is a vessel manufactured, in all probability, in the eastern territory recently incorporated into the Sasanian empire (Pl. 23). This piece reflects closely the style of some of the early nonroyal Sasanian silver vessels with representations of busts of high officials and members of the royal family, but the form and content of the scene are unparalleled on objects known to be of

Sasanian manufacture. This can be explained by the fact that the center of production was remote from the heart of the empire, and the ruler who commissioned the vessel was apparently free to exercise his own choice as far as subject matter and iconography were concerned. Although the ruler may have been a Sasanian prince, the term central Sasanian is not appropriate for this work of art, which is classified as provincial.

Other plates in the provincial category are further removed from central Sasanian court originals, although they are still contemporary in date with the Sasanian era. These pieces imitated either early Sasanian vessels made before the imposition of royal controls (Pl. 13) or early provincial works such as the one cited above (Pl. 23), but an unfamiliarity with Sasanian art caused misunderstandings in the designs, and the dependence on models resulted in the absence of an internal development. All of the works in this category are in the overall parallel-line drapery style. It is significant that the crowns of the royal figures, while clearly derived from Sasanian crown types, do not slavishly copy those of the Sasanian kings.

As might be expected, there are a few vessels of high quality that cannot be certainly classified within the groups established here (Pls. 20, 22, 24, 27). Their similarity to the art of Sasanian Iran points to one provenance, while unique elements in the design, technique of manufacture, or analysis of the metal suggest another. Sasanian court workshops were spread over a large area, and some deviations from

<sup>1.</sup> See Chapter I, p. 17; Pigulevskaya, Les Villes, pp. 160 ff.

The Initial Stages

the norm are to be expected even within a controlled state production. It is not always clear, however, whether unusual features are reasonable variations from the court tradition or whether they are more correctly interpreted as evidence of provincial manufacture. This group will be discussed in greater detail below.

A second point of importance that has emerged from this study is that the products of both the central Sasanian royal workshops and the provincial schools appear to be derived from a Sasanian metalworking tradition that can be traced back to the third century A.D. The Sargveshi and Mtskheta vessels (Pls. 1, 2), with portrayals of a Sasanian king and an official respectively, the medallion bowls (Pls. 3-7) from Iran, and the hunting plates from Shemakha and Krasnaya Polyana as well as the Shapur plate in the British Museum (Pls. 8, 9, 13) represent the initial stages from which there developed both of the later stylistic schools. These original models are datable to the third and early fourth centuries, the sequence beginning only a few decades after the establishment of the dynasty.

Following this early period it is not possible to establish an exact chronology for the central Sasanian silver in the absence of securely dated monuments from the Sasanian period. The crown type may suggest a date but cannot be used as proof of one. Moreover, there was, after 500, considerable repetition in the form of Sasanian crowns, so that this element of the design does not in fact provide a precise indication of date. Following Peroz (459-484) only four Sasanian rulers had crowns of original design: Zamasp (497-499), Khusro II (591-628), Ardashir III (628-630), and Buran (630-631). The remainder repeated the different crown types originated by Yazdgard II (439-457), Peroz, and Khusro II. Evidently the identification of a particular king through the recognition of his crown was no longer a primary con-

It is apparent that on central Sasanian plates with representations of kings wearing crowns of the fourth, fifth, sixth, and early seventh centuries there are changes in certain features of the design that parallel the chronological progression of the crown types. These changes include the form of the bow, the position of the archer's bowstring hand, the number, species, and arrangements of the animals, and,

finally, certain technical factors: the areas to which the gilding is applied and the method of achieving relief. The most probable explanation for these changes is that the royal hunting plates were made at different times during the fourth to seventh centuries, the period of the crowns represented. However, comparable material dating from these centuries does not exist in sufficient quantity to permit the establishment of an absolute chronology for the royal Sasanian silver. Studies of the material remains of the Avars and Turks who occupied territories adjacent to Iran in the sixth and seventh centuries suggest that certain types of weapons and harnessing are not likely to have appeared in Iran before the sixth century.<sup>2</sup> The fourth and fifth centuries are less well documented both within the Sasanian kingdom and in the lands beyond its borders. Consequently it is difficult to determine the date of an object that may fall in this earlier period.

In no instance can the plates belonging to the provincial group be dated according to crown type, since the crowns differ from those on Sasanian coins. It is clear from recent studies that coins with images of persons wearing close imitations of Sasanian crowns were minted in the East by local rulers well after the date of the Sasanian king whose crown type is copied. On provincial vessels, therefore, the crown, if it resembles a Sasanian type, can be used only as a general guide, a terminus post quem, for the work.

The history of the royal silver production will be traced in greater detail below. Viewed in its entirety, the silver plate examined in this volume provides an insight into the political and cultural life of the Sasanian world and offers evidence of the extension of Sasanian influence, particularly in the areas east of Iran.

#### The Initial Stages: Vessels of the Third and Fourth Centuries

The earliest example of a silver vessel with an image of a Sasanian king is the cup found at Sargveshi in Georgia (Pl. 2). The nature of the representations, medallions enclosing the busts of the king, his

<sup>2.</sup> Bálint, "Vestiges archéologiques de l'époque tardive des sassanides et leurs relations avec les peuples des steppes," pp. 173-212.

wife, and his son, indicates that this is a dynastic work of art. The son of Bahram II holds a ring without ribbons, perhaps denoting his role as ruler over a territory newly brought under Sasanian authority.

The slightly earlier plate from Mtskheta with the image of Papak (Pl. 1) and an inscription identifying him as *bitaxš* also appears to be official in nature. The inscription records the rank of the owner, Papak, within the ruling hierarchy.

The human bust within a medallion is the first Sasanian official image used on silver plate. Both of the above-mentioned vessels come from the western provinces of the empire, and it is probable that they served as proclamatory works of art. Certainly the Sargveshi cup with images of three members of the royal family is essentially a form of dynastic propaganda.

Other early Sasanian medallion bowls are of Iranian provenance. They do not have inscriptions naming the persons represented on them or giving their titles (Pls. 3-7). From the appearance and dress of the individuals it is evident that they are members of the highest classes of Iranian society. On one bowl in the Metropolitan Museum (Pl. 5) the female may actually be a member of the royal family. The male and female figures on the other bowls are probably of lower rank, members of the waspuhrakan and wazurgan, classes that held considerable power within Iran, controlling vast territories and some offices by inheritance.3 The fact that the images are in the form of medallion busts, as on the Mtskheta and Sargveshi vessels (Pls. 1, 2), indicates that this was the standard type for personages of high rank and position in the late third and early fourth centuries.

The earliest plates with hunting scenes share many formal and stylistic features with the medallion bowls. The vessels from Shemakha and Krasnaya Polyana (Pls. 8, 9) show hunters who are evidently Sasanian princes or nobles but not the king himself. In several details the human figures and the animals in these scenes resemble early Sasanian seal carvings (Figs. 4, 7) and rock reliefs. Consequently the plates can be identified as Sasanian with some certainty.

The superb plate found near Sari (Pl. 10) in northern Iran is unique in style. The hunter has been identified by some scholars as a Sasanian monarch on the basis of his dress, right profile head, and the lions, traditional royal quarry. The crown is, however,

unknown, and the form of the headdress is close to that of the Shemakha hunter (Pl. 8) and to the Sasanian prince Shapur, son of Papak, as he appears on a graffito at Persepolis (Fig. 19)<sup>4</sup> as well as on the earliest Sasanian coins.<sup>5</sup> In all likelihood this is a royal prince, ruler of a province of the Sasanian empire, perhaps Gilan since the source of the vessel is northern Iran. If the hunter is not only a prince but the heir apparent, then it would be logical that he wear royal dress, carry a sword, and have as his quarry lions.

In spite of the unusual drapery stylization, the form and iconography of the design on the Sari plate relate it closely to those from Shemakha and Krasnaya Polyana and emphasize the unity of the group, all products of a single culture. These works may well have served as official illustrations of Sasanian authority. Admittedly the images are hunting scenes rather than medallion portraits, but the rock relief of Bahram II at Sar Meshed indicates that the hunt had a special significance in the dynastic art of the early Sasanian period. On the silver vessels it was surely an "official" theme as well.

From the evidence of these earliest silver vessels, it is apparent that in the third and early fourth centuries the king was not represented on silver plate in hunting scenes; only princes or rulers of recently conquered provinces were depicted in this fashion. The king, Bahram II, was portrayed on a silver vessel (Pl. 2) in the same form as on his coins, as a bust within a circular frame; the scene is a straightforward political statement.

Almost all of the early vessels decorated with medallion portraits and scenes of hunting are made from silver derived from a restricted geographical area (no samples were obtained from Pls. 8 and 10, and Pl. 6 falls outside the early group, with works in the central Sasanian class to be discussed next). As can be seen by reference to Part 2, p. 152, this silver can be distinguished from that used for the Sasanian vessels dating from the fourth through the seventh century.

At some time, no earlier than the middle or late fourth century, there was a change. The hunter-king became the most common motif on the silver plates.

<sup>3.</sup> See Chapter I, p. 16.

<sup>4.</sup> E. F. Schmidt, Persepolis I, pl. 199.

<sup>5.</sup> Lukonin, Iran, p. 27, fig. 1.

<sup>6.</sup> Hinz, Altiranische Funde, pl. 134.

Moreover, after the fourth-century Sari plate, there are no Sasanian silver vessels with representations of a human figure other than the king, until the end of the Sasanian period in the seventh century. This is a clear indication of the initiation of controls over the production of silver plate. The standardization of the compositional and stylistic features, and the use of a single silver source differing from the sources that provided silver for the majority of third- and early fourth-century vessels, offer support for the thesis that the manufacture of vessels with Sasanian royal images represented an innovation and marked the initiation of a dynastic monopoly. The iconography of the scenes on the central Sasanian court silver, as it may now be designated, remained essentially the same as on the Shemakha, Krasnaya Polyana, and Sari plates (Pls. 8, 9, 10). Reference to the Tables of details in Appendix I will illustrate this point. The consistency in the form and details of the representations indicates that, in spite of the appearance of a new paired-line stylization of the drapery, there was no real break in the sequence of the hunting vessels. A theme originally employed by princes simply became the prerogative of the king of kings. The change in drapery style occurred during the time between the last nonroyal silver plate (from Sari), in the first half of the fourth century, and the beginning of the royal group, which, if one accepts the date of the earliest crown, that of Shapur II (309-379; Pl. 15), may begin at the end of the same century. During this period the influence of works of art made in the newly conquered Kushan lands undoubtedly affected the development of Iranian art. The paired-line stylization of the drapery folds is a simplification of the style used commonly on ivory carvings from Begram, the ancient Kushan capital Kapisa (Fig. 23).7 By the mid- or late fourth century this area was under Sasanian control. The advantages of the paired-line style in terms of speed and ease of reproduction are obvious. It is not surprising, therefore, that in the Sasanian homeland it replaced the various styles of the earlier plates at the time when the silver became part of a large, centrally regulated production.8

#### The Central Sasanian Group: Vessels in the Paired-Line Drapery Style

On the basis of the crown type, the Freer Gallery Shapur II plate (Pl. 15) stands at the beginning of this new sequence of court silver with, in all probability, the Hermitage Pereshchepina plate (Pl. 28). Since the royal crown is damaged and incomplete on the latter, the identification of the king remains uncertain. Neither of these works was found in Iran, and the Pereshchepina plate has Sogdian markings. Although there is no way of determining how or when these plates left Iran, it is quite possible that they were sent abroad as official gifts at the time they were made. A parallel exists in the royal medallion cup from Sargveshi (Pl. 2), which was not found in Iran but in a territory newly brought under Sasanian rule in the West.

Following the Freer Gallery Shapur II and the Pereshchepina plates (Pls. 15, 28), there are a few vessels of Iranian provenance with representations of monarchs who ruled in the fifth century. Two examples are plates with Yazdgard I (Pl. 16) and Peroz-Kavad I (Pl. 17), both in the Metropolitan Museum. The latter is a work of extremely high quality. It would have served as an appropriate gift from the Persian king to the Byzantine ruler Zeno, who had provided the ransom demanded by the Hephthalite captors of Peroz. This type of vessel must have been commissioned in a workshop attached to the royal palace. Few objects of this quality have survived.

The Yazdgard I plate in the Metropolitan Museum (Pl. 16) is of much poorer workmanship. It was manufactured at some other location, more distant, one would suppose, from the royal court. In the iconography, style, technique, and analysis of the metal, however, the vessel falls into the class of central Sasanian works.

The proposal for the dating of the Cleveland Hormizd plate (Pl. 14) to a period later than that of

<sup>7.</sup> Hackin, Recherches archéologiques à Begram, pls. 45, 51, 64, 67.

<sup>8.</sup> I am grateful to Dr. Edith Porada for making this suggestion.

<sup>9.</sup> Hannestad, "Byzance," p. 439.

Hormizd II has been made above. 10 Stylistically and iconographically, the plate cannot be earlier than the reign of Hormizd III (457-459), and it may belong to the following century and a half. Although the crown of Hormizd III, which is unknown, may have been the same as that of his predecessor and namesake, Hormizd II, the dot placed in the center of the forehead of the king on the silver plate suggests that this is a portrayal of the deceased king, Hormizd II, on a work of the late fifth, sixth, or early seventh century.

These plates are the only examples known at present of court silver plate, which, according to the crown types, might fall in the fifth century. However, the absence of comparable Sasanian works of art in silver or any other media attributable to the fifth century prevents the establishment of a rigid chronology. It would not be surprising if there were few royal silver vessels preserved from this century, a period within the Sasanian homeland of political and economic disaster.11 The power of the king was restricted by religious and noble factions struggling for control. In the East, the former Sasanian provinces were lost to the Hephthalites, who exacted tribute from the Sasanian state. All the vessels assigned to this period have as their provenance Iran. No royal silver of the fifth century comes from the lands outside Iran. Historically, this is in accordance with the fact that the territory and influence of the Sasanian dynasty were greatly reduced during this century, and wide exportation of propaganda court silver was, therefore, unlikely to have occurred.

Royal silver plate was next manufactured, if one follows the evidence of the Sasanian crowns, only in the time of Kavad I (488-497; 499-531) or his successors. Since the crowns are no longer distinctive, it is impossible to tell precisely when this production began.

Historically, the revival of the royal silver production is most likely to have occurred with the improvement of economic and political conditions in Iran under Kavad I and Khusro I (531-579) in the sixth century<sup>12</sup> or, alternatively, with the period of renewed territorial expansion under Khusro II (591-628) in the seventh century. 13 The absence of comparable Sasanian works of art belonging to the fifth and sixth centuries, as noted above, makes it hazardous to offer an absolute chronology. Features appearing on the elaborate reliefs in the large rockcarved niche at Taq-i Bustan (Figs. 18, 36, 43) might well have been incorporated into the Sasanian artistic repertory before the reign of Khusro II, if this is accepted as the period in which that monument was made. Without visual evidence there is no way of clarifying this point.

It is equally difficult to determine with any exactness how long this production continued. Although the end of the Sasanian empire is usually set at the time of the death of Yazdgard III in Merv (651), his sons and grandsons attempted to regain the empire and retained the royal title for some time. 14 It is unlikely that these monarchs who reigned only briefly manufactured any quantity of silver plate. More plausible is the theory that Khusro II and his successors before the death of Yazdgard III commissioned the silver.

There are only two vessels among those considered that can be placed with some confidence in this latest phase of the central Sasanian production. On these examples, close adherence to the characteristic features of the paired-line drapery school was still maintained. The Ufa plate (Pl. 18) is a work of considerable skill, while the Strelka plate in the Hermitage (Pl. 19) is more mediocre. The technique of carving the background away as the only method used to achieve relief is a form of manufacture used on the Strelka plate. This technique is not to be found on any works that might be assigned to the fourth or fifth century, on which only small areas of the design are treated in this fashion. The application of the gilding to the background on the Strelka plate and on the Ufa plate is also unparalleled on works of the first half of the Sasanian period. In both instances the design is also spot-gilded, a difference between these examples and the earlier vessels in the paired-line drapery style. Apart from these variations from the standard form, the two plates are related in iconography and style to those illustrating kings wearing crowns of the fourth and fifth centuries. Technically, they share with the latter such peculiarities as the ex-

<sup>10.</sup> See Chapter II, p. 61.

<sup>11.</sup> See Chapter I, p. 18; Pigulevskaya, Les Villes,

<sup>12.</sup> Widengren, "Xosrau Anōšurvān," pp. 69-94.

<sup>13.</sup> Shahid, "Heraclius," pp. 314-315.
14. See Chapter I, p. 22; Harmatta, "Chinese-Sāsānian Relations," pp. 372-373.

ternal rim line, and, in the analysis of the metal, there is no clear difference between these plates and those with figures wearing earlier crown types. Certain elements reflect the development of royal imagery as it can be seen on Sasanian coins. Among those with chronological significance, at least on the coins, is the double line of beading on the lower perimeter of the crown, which begins with Kavad I, and the double or triple bead earring, which is canonical from the time of Yazdgard II until Ardashir III, when the single pendent bead reappears. <sup>15</sup> Although not conclusive, such elements lend support to the attribution of the Ufa hunt (Pl. 18) to the reign of Ardashir III.

The representations of the hunt on these later central Sasanian silver plates become increasingly elaborate. Different species of animal quarry, birds, and hunting dogs characterize the setting as that of the royal game park. The theme of majesty is suggested by the scene illustrated on the Strelka plate (Pl. 19), where the hunt is relegated to the exergue. The frontal enthroned king on this plate is the embodiment of the legend on the coins of Khusro I where the king has the title "deliverer of the world from fear." 16 However, the motif of the enthroned monarch never achieved the popularity in Sasanian Iran that it had in the West. Only on the Strelka plate and on the rockcrystal medallion in the Bibliothèque Nationale gold bowl (Pl. 33), which is less certainly of Sasanian manufacture, does this theme occur. On the central Sasanian court silver the hunt remained the characteristic type.

All of the silver vessels described above, illustrating crown types that date from the fourth to the seventh century, are in the paired-line tradition; they are products of different workshops, but all adhere to certain compositional and stylistic formulae. Some new details appear on the plates, which, according to the crown, may belong to the fifth, sixth, and seventh centuries. The pronounced ridge on the arm of the bow is a detail occurring only on vessels with images of kings who wear the crown of Peroz or later rulers. Other details, such as the bent little finger of the bowstring hand and the flaring sides of the saddle blanket, are already apparent on a fifth-century Hephthalite bowl in the British Museum (Fig. 44).<sup>17</sup> They illustrate the influence of Eastern styles and modes on the art of the second half of the Sasanian period.

There is some variation in iconography and technique on these vessels in the paired-line drapery style. For the most part, however, differences between the individual works are minor and can be explained by the fact that the paired-line plates were produced at different centers. By referring to Table II in Appendix I the reader can note the instances in which such idiosyncrasies occur. It is evident from the elemental composition of the plates listed in Part 2, Table I and Fig. 49, that these examples in the paired-line tradition are in a single group.

On the two latest pieces (Pls. 18, 19) the method of manufacture and the application of the gilding are different than on the earlier vessels in the central Sasanian group. However, these late works are still sufficiently close in style, iconography, and the analysis of the metal to be placed within the central Sasanian category.

Vessels having drapery executed in the paired-line style but differing significantly from the standard works in the group. On some plates having the paired-line drapery stylization, there are major variations in the design, the technique used for the manufacture, or the analysis of the metal. This presents a problem in terms of classification.

One example is the Hermitage plate with Shapur III (383-388) stabbing a leopard (Pl. 24). The drapery and the facial features of the king are Sasanian in appearance, but the crown of the king has dots along the broad band rather than the iconographically correct floral motifs. Moreover, this is the only instance in the paired-line drapery style of a king hunting with a sword. Technical innovations include the spotgilding of the scene and the presence of a double rather than a single line on the exterior of the rim. The analysis of the metal also sets this piece apart from others in the paired-line series. Was this plate made in an Eastern workshop, remote from but still technically under Sasanian court controls, or is it a provincial work imitating the Sasanian court silver? Eastern coins (of unknown rulers) with bilingual

<sup>15.</sup> These details were observed on the plates in Paruck, Sas. Coins, and through an examination of the collection of Sasanian coins in the American Numismatic Society, New York.

<sup>16.</sup> Widengren, "Xosrau Anōšurvan," p. 94.

<sup>17.</sup> Dalton, Oxus, pls. 29-31.





FIG. 44 Hephthalite silver bowl, four views British Museum, acc. no. OA 1963-12-10.1

Sogdian and Bactrian inscriptions may provide a clue to the person who commissioned this plate, 18 since there appears on them a similar dotted crown. This evidence combined with the iconographic, stylistic, and technical criteria strongly suggests that the plate was manufactured in a workshop outside official Sasanian control.

The crude plate from Nizhne Shakharovka (Pl. 32) with a king whose crown again resembles that of Shapur III (383-388) may also be a provincial work and is probably later in date than the fourth century. The bent little finger of the bowstring hand and the pronounced ridge of the bow are indications of a date after Shapur III. The dotted pattern on the rim of the crown, the omission of an earring, the spot-gilding, and the absence of an exterior rim line suggest that the plate is a product of a workshop outside Sasanian control, rather than a central Sasanian court vessel upon which a much earlier king was deliberately depicted. No argument is conclusive because of the extreme crudity of the plate and the fact that the analysis of the metal does not separate it from the central Sasanian group.

The plate in the Hermitage Museum from Tcherdyne (Pl. 27) is unique in design. The drapery is in the paired-line style, and the form of the scene, although unknown on central Sasanian silver, is related to the elaborate hunting panels on the side walls of Taq-i Bustan. The crown is not a Sasanian type, and the royal dress, with a hemline ending at the sides in sharp points, is known east of Iran but is not to be found on Sasanian monuments. 19 There is no external rim line on the Tcherdyne plate, and analysis of the metal does not place it clearly in the paired-line category. The unique crown worn by Khusro II on the relief at Taq-i Bustan (Fig. 18) indicates that crowns on Sasanian dynastic monuments varied from those on the coins in the late sixth century.20 However, the nature of the composition and details of the design

<sup>18.</sup> Göbl, Dokumente I, p. 24, Em. 19.

<sup>19.</sup> Peck, "Taq-i-Bustan," pp. 111-112. 20. Fukai and Horiuchi, *Taq-i-Bustan* II, pl. 7; see also the unique crown of Shapur III at the same site, pl. 67. A stucco bust of a royal figure excavated at Kish cannot be identified on the basis of the crown: Ghirshman, *Persian Art*, p. 186, fig. 228A. Harper, "A Stucco King from Sasanian Kish," pp. 75-79. Göbl gives various reasons why a figure might appear on a Sasanian work of art with a crown not found on Sasanian coins: "Zum Chronologieproblem," p. 32.





strongly favor an attribution to a provincial workshop rather than to a Sasanian center.

The Berlin plate (Pl. 20) illustrates a somewhat different technique from those used on any of the plates described above. The background is carved away in a particularly pronounced fashion around the outlines of the design. The hunter wears a crown identical to that of Kavad I (488-531), Khusro I (531-579), Hormizd IV (579-590), and Kavad II (628). The single bead earring, however, is a fashion that was readopted on coins only after these kings. The triple pendants on the necklace are also indications of a date later than that of Kavad II. This type of necklace occurs on the coins of Ardashir III and is, with the single bead earring, a recurring feature on certain post-Sasanian plates to be described below. The combination of details pointing to one date with a crown of another period prevents the precise identification of the royal personage on the Berlin plate. It is conceivable that this work was made in an area where some independence from Sasanian control was maintained. In this context it is important to remember that Guram I, Stephen I and II, princes of Georgia, the region adjacent to the area in which the vessel was found, copied the coins of Hormizd IV in the sixth and seventh centuries.21 The composition of the silver used for the Berlin plate is not the same as that of the central Sasanian plates, and this supports the attribution of the vessel to a provincial rather than a Sasanian workshop. This plate is the only example with the paired-line drapery stylization where a number of features characteristic of the overall parallel-line style are included in the design. Notable are the triangular arrangement of the scene, the three-quarter view of the king's head as well as that of the horse, and the spot-gilding of the design. In the discussion of the Kutais plate (Pl. 31) below, a similar merging of the two traditions is noted. A possible explanation for this phenomenon will be offered there. <sup>22</sup>

Another problematic piece is the plate in the Bibliothèque Nationale. As noted above in Chapter III, the drapery of the royal hunter on that vessel (Pl. 22) is neither in the paired-line nor in the overall parallel-line style, although reference to Table II in Appendix I will indicate that in other details there is a close connection with works in the paired-line tradition. The crown is not to be seen on Sasanian coins, only on the relief at Taq-i Bustan (Fig. 18). The plate itself is large (diam. 30.6 cm.) and unusually heavy

<sup>21.</sup> Walker, Arab-Sas. Coins, p. XXXVII, pl. 30, 1; Lang, Studies in the Numismatic History of Georgia in Transcaucasia, p. 12.

<sup>22.</sup> See p. 135 below. For other details on the Berlin plate that are characteristic of the overall parallel-line drapery style, see Table II in Appendix I.

(2070 gm.); numerous details of the design are unique, and the provenance, it is suggested, is Afghanistan. These are all factors that raise the question of whether this work can be called "Sasanian." In the elemental analysis of the metal this work is probably to be separated from those in the central Sasanian paired-line drapery style, and it is likely that this is, as Erdmann originally suggested, a provincial rather than a central Sasanian work.<sup>23</sup>

Two vessels are still further removed from the central Sasanian paired-line style. The Anikovska bear hunt (Pl. 21) is so crudely executed that it is obviously not a product of the finest central Sasanian court workshops. The single line of beading on the crown band suggests a date before Kavad I (488–531), but an analysis of the design proves this to be impossible. In all likelihood this is a provincial product, possibly even of post-Sasanian date. Without an examination of the piece to determine which areas are gilded, the method of manufacture, and the chemical content of the silver, this vessel must also remain unclassified.

Because of its poor state of preservation the plate in the Hermitage Museum with a figure lassoing an onager (Pl. 29) is an enigma. As noted above in the original description of this vessel, the condition of the piece is such that it is impossible to compare it stylistically to the other hunting scenes.24 Iconographically, it has many of the characteristics of the central Sasanian paired-line tradition, as reference to Table II in Appendix I will indicate. Technically and in the analysis of the metal, however, it varies from this group. The fact that there is no external rim line also sets it apart from the paired-line series. Since the crown is missing and the workmanship is extremely summary, it is fruitless to speculate on the degree to which central Sasanian control existed in the workshop where this vessel was made.

Two of the four silver vessels with enthronement scenes (Pls. 34, 35) illustrate the paired-line drapery stylization. However, it is evident that neither plate is sufficiently close in style or iconography to Sasanian works of art to be called central Sasanian. No sample of the Qazvin plate was available for elemental analysis, and the Klimova plate falls into the class of vessels having only a low probability of belonging to the central Sasanian group. The Walters Art Gallery bowl (Pl. 36) also has an enthronement scene but

does not illustrate the paired-line drapery stylization. Details of the design suggest a date later than the Sasanian era, and the analysis of the metal almost certainly sets the bowl apart from the central Sasanian vessels.

Summary. Certain facts emerge from this review of the vessels in the paired-line drapery style. The core group, those that will be referred to here as central Sasanian (Pls. 14-19, 28), contains works that share a number of compositional and formal details as well as the particular stylization of the drapery. The analysis of the metal indicates that the silver could in all instances have been derived from a single source. On all these vessels the kings represented wear identifiable Sasanian crowns ranging in date from the fourth to the sixth or seventh century. Changes occur in details of the design and in the form of the composition. This is apparent in the dress and equipment as well as in the elaboration of the scenes. It is reasonable to view these changes as a natural development indicating the passage of time. The final examples (Pls. 18, 19) vary from the norm in the method of manufacture and the application of the gilding.

Related to this core group of central Sasanian vessels, in the depiction of the drapery and in the iconography, are various plates ranging in date from possibly as early as the fourth century (Pl. 24) to the sixth century or later. However, these hunting plates differ from the standard form in a number of respects, and they cannot therefore be identified as central Sasanian works. On three examples (Pls. 20, 21, 22) a known Sasanian crown is represented. On three other vessels (Pls. 24, 27, 32) the crowns are unlike those depicted on Sasanian coins and monuments. Four of the plates (20, 22, 24, 27) are probably not made from the silver employed for the vessels in the core group. No sample of the Anikovska plate (Pl. 21) was available for analysis, and only the Nizhne Shakharovka plate (Pl. 32) is, in the elemental analysis, indistinguishable from the central Sasanian class. One explanation for this last plate is that it illustrates a breakdown in the controls over the workshops producing silver plate in Iran at the end of the Sasanian period or in the cen-

<sup>23.</sup> Erdmann, "Die sasanidischen Jagdschalen," pp. 212 ff.

<sup>24.</sup> See Chapter III, pp. 82 ff.

tury following the fall of the dynasty. This interpretation of the evidence is compatible with the fact that the two latest central Sasanian plates (Pl. 18, 19) already include in their form and design elements that separate them from earlier works in the central Sasanian class. A loosening of restrictions is therefore apparent in objects that may still be classified as royal Sasanian products. It is conceivable that within Iran this process accelerated and that even during the Sasanian period the strict regimentation of the production of royal silver plate ceased. The other unclassified works of art, differing in elemental composition from the central Sasanian vessels (Pls. 29, 35), are probably products of completely independent centers, outside Iran, where the craftsmen were familiar with Sasanian court art but were not bound by the restrictions governing the central Sasanian royal silver.

## The British Museum Shapur Plate and Provincial Silver Plates: Vessels in the Overall Parallel-Line Drapery Style

As early as the third century a few silver vessels illustrate an entirely different drapery style than that which characterizes the central Sasanian silver described above. On plates in this overall parallel-line drapery style, certain details of the human figure and dress are represented in a fashion different from that used in the paired-line drapery tradition. Two hunting plates provide early examples of this overall parallel-line style. One is the British Museum Shapur plate (Pl. 13); the other is the Hermitage plate with a hunter wearing a ram's-horn headdress (Pl. 23). In both instances, features are introduced into the design that clearly differentiate these works from the hunting plates found at Shemakha, Krasnaya Polyana, and Sari (Pls. 8-10). The subject matter is arranged in a triangular scheme within the circular frame of the plate, and certain parts of the scene are cut off by the rim of the plate or by a molding within this rim. Both plates are closely related in the appearance of the human figures and in the representation of the drapery to the medallion bowls from Cincinnati (Pl. 3) and New York (Pl. 6) as well as to figures on early Sasanian seals (Figs. 4, 7).

The drapery of the British Museum hunter (Pl. 13),

who wears a crown known from the rock reliefs of Shapur I, falls in relatively straight lines. This is also true of the representation on the medallion bowl with a male bust in New York (Pl. 6). In size, however, the British Museum plate is small (diam. 18 cm.), resembling only the medallion bowl in the Iran Bastan Museum (Pl. 7). The shape is unusual, halfway between the open hunting plates and the deeper bowls with central roundels. The hunting scene, enclosed within a molding well beneath the rim of the plate, appears almost to be an enlarged medallion. Arguments presented above place this vessel, allegedly acquired in Iran, within the fourth century, at a time early in the reign of Shapur II. This plate predates the earliest works in the paired-line series. The composition of the metal differs from that of the royal plates in the paired-line drapery style and is related to the metal used for some of the vessels of the third and early fourth centuries. Although stylistically the representation appears to be purely Sasanian, the composition of the scene, the shape of the vessel, and the analysis of the metal suggest that the piece was made before the production of royal silver plate had become regulated. At this time there was still no standardized form and style, and the source from which the silver was derived was not the same as that used once the official production was established.

The Hermitage plate with a hunter wearing a ram's-horn headdress (Pl. 23) is as large in size as the Sasanian hunting plates of the third and fourth centuries. The folds of the garment ripple in wavy lines over the surface. This is an exaggeration of the type of drapery, reflecting the body forms, that is depicted on the bowl in the Cincinnati Art Museum (Pl. 3). A molding confines the unusual scene within a space smaller than the diameter of the vessel. The elemental analysis of this work sets it, in all probability, apart from the central Sasanian paired-line style series and also from the plate in the British Museum (Pl. 13). Because deviations from Sasanian works of the third and fourth centuries (composition, drapery stylization, metal analysis) are more pronounced on this plate than on the British Museum Shapur plate, it is suggested that the Hermitage vessel is an early example of a hunting plate commissioned in a provincial workshop. The headdress is similar to that on Kushano-Sasanian coins, and the source of the production could be in the East. Sasanian artisans may

have accompanied members of the royal family who assumed authority in this region in the late third or fourth century. The appearance of the human features is typical of Sasanian works of art, and the presence of an external rim line suggests that there was still a close connection with traditional Sasanian metalworking techniques. It is probable that the clumsy execution of the scene can be explained by the fact that the artist was experimenting with a new design. In choosing to arrange the figures in a markedly triangular composition, and in attempting to achieve perspective through a three-quarter position of the forepart of the horse, the craftsman was influenced by late antique formulae that were current in ancient Bactria but not in early Sasanian Iran.

The provenance of the Burnes plate (Pl. 11), of which only inexpert drawings survive, is Afghanistan, and there is nothing to indicate that it is later than the mid-fourth century in date. Although the style in which the drapery is represented is unclear in the drawings, the design and details relate this vessel to the plate in the Hermitage Museum with a hunter wearing a ram's-horn headdress. This is clear from the triangular arrangement of the scene and from the fact that part of the design, the hair tassels coming from the horse's harness, is cut off by the rim of the plate.

Three other hunting plates illustrate the same overall parallel-line drapery stylization and have the distinctive triangular design in which certain elements do not fit within the circular frame of the plate. On none is there an external rim line, and all are spotgilded. Moreover, the designs are simply chased and engraved on the surface following a dotted pattern, a technique not used on any works certainly in the central Sasanian paired-line tradition.<sup>25</sup> These three vessels are the so-called Bahram Gur plate (Pl. 25) in the British Museum, the Fabricius (Pl. 26), and the Chilek plates (Pl. 30). Of the three, the most sophisticated and expert in workmanship is the one in the British Museum. The crown of the king on this plate, as noted above, lacks any beading at the base. Instead there is a single row of curls above a band with chevrons<sup>26</sup> and a pair of bull's horns arranged in a frontal view so that they appear to form a crescent moon. The same details are included in the crown of the hunter on the Fabricius plate (Pl. 26). Otherwise, the crown of the British Museum hunter could be

that of Bahram V (421-439), while the crown of the Fabricius bullslayer is, with the same exceptions, that of Yazdgard II (439-457), Valash (484-488), and Ardashir III (628-630). Both Sasanian crown types were widely known. Coins of Bahram V existed in quantity in the East because of the successes of this king against the Hephthalites.<sup>27</sup> As early as the end of the fourth century the Kidarite rulers developed a crown identical to that of the future Yazdgard II.<sup>28</sup> If, as Lukonin claims,29 Yazdgard II re-established Sasanian rule in the old Kushan lands, his coins would also have circulated in this region and could have served as the models for the crown on the Fabricius plate. On the fragmentary Chilek plate (Pl. 30) it is possible that there is a more exact copy of an actual Sasanian crown, the third crown of Peroz. As on the two previous vessels, the forehead band has no beading, but this is the only significant variation from the Sasanian form, since the row of curls is absent. The third crown of Peroz was copied by the Hephthalites in the region south of the Hindu Kush from the second half of the fifth century until the second half of the seventh, 30 the period during which the Chilek plate, on archaeological evidence, was buried at that site. On these coins, however, the base of the crown is always beaded. The globe above the head of the hunter on the Chilek plate (Pl. 30) has one new feature, the unrealistic division of the clothcovered ball in the middle with two parallel lines. On

<sup>25.</sup> For a description of how the designs may have been dotted onto the surface of the silver plate from leather overlays, see Marshak and Krikis, "Chilekskie Chashi," p. 59. Dodd describes the transfer of designs onto Byzantine silver objects and the ways in which the sketch was eventually completed by artists working in other locations: Dodd, Byzantine Silver Treasures, pp. 38-46.

<sup>26.</sup> On Sasanian coins there is always a beaded band at the base of the crown from the time of Hormizd II onward. On dynastic sculptures, a figure who may be Ahuramazda appears with a crown having an unbeaded band and curls above on the relief of Ardashir II at Tag-i Bustan: Fukai and Horiuchi, Taq-i-Bustan II, pl. 76. The stucco bust mentioned above, from Kish (note 20), also has a crown with an unbeaded band and forehead curls. The identity of this figure, human or divine, is unknown.

<sup>27.</sup> Göbl, *Dokumente* I, pp. 26, 193, Em. 282-286.28. Ibid., III, pl. 11; Martin, "Coins of Kidara and the Little Kushāns," pl. 1, nos. 1, 2.

29. Lukonin, "Kush.-Sas. monety," pl. 1, g, h.

<sup>30.</sup> Göbl, Dokumente I, pp. 26, 193-195; III, pl. 76, Em. 283c.

the paired-line drapery style plates this occurs only on the late Berlin hunt (Pl. 20). The relationship between this work and those in the overall parallel-line drapery style is considered below.<sup>31</sup>

The three vessels described above can be separated from the central Sasanian silver stylistically, iconographically, technically, and in the elemental analysis of the metal. In composition, the metal of the three plates, the Chilek plate (Pl. 30), the Fabricius plate (Pl. 26), and the so-called Bahram Gur plate in the British Museum (Pl. 25) differs from one example to another. It has already been stated that within the overall parallel-line style there is a subdivision between a wavy- and a straight-line form. The Hermitage plate showing a hunter wearing a horned headdress (Pl. 23), the British Museum hunt (Pl. 25), and the Fabricius plate (Pl. 26) are in the wavy parallelline drapery style. The British Museum Shapur plate (Pl. 13), the Chilek hunt (Pl. 30), and the Kutais plate (Pl. 31) (to be discussed below) illustrate the straight-line form. The Chilek and Kutais vessels are of approximately the same size as the central Sasanian works, and the design includes two animals, one alive and one dead.<sup>32</sup> Other details of the scenes on these plates are also akin to those on the paired-line style court silver. There is no such relationship between the wavy-line drapery group and vessels in the paired-line style.

The vessel from Kutais, having drapery executed in the overall parallel-line style but differing significantly from the standard works in the group. As there were exceptions within the paired-line style Sasanian court silver plate, so within the overall parallel-line drapery tradition one plate stands apart. The vessel in the Hermitage Museum that was found near Kutais in Georgia (Pl. 31) shares only the drapery and the unbeaded crown with those just described. Otherwise, the piece is the closest of all the works in the overall parallel-line style to the paired-line tradition of the Sasanian court silver. The design fits within the frame of this plate. The weapon of the king is a bow. There is an external rim line, and in the analysis of the metal this piece belongs to the paired-line sequence of plates. It is evident that at whatever period the Kutais plate was made, workmen familiar with both central Sasanian and provincial stylistic traditions had access to the central Sasanian silver source and were manufacturing royal silver vessels. The crudity of the workmanship on the Kutais plate, the confusion in the iconography, and the combination of elements from two stylistic traditions suggest that at this center Sasanian standards and controls were not maintained. Yet Sasanian influence remained strong. A similar mixing of traditions and iconography is apparent on the plate in Berlin (Pl. 20), also found in the western part of the Sasanian empire. The appearance of the overall parallel-line style in these areas west of Iran is understandable. Craftsmen, merchants, and bands of warriors (Sogdians, Khazars, and Turks) moved continuously from the East to the Trans-Caucasian region during the sixth and seventh centuries.33 They may have been responsible for the emergence in the West of this style, better known from objects found in the lands east of Iran. It is probable that these works, the Berlin hunt and the Kutais plate, were commissioned by local rulers in the period following the collapse of the Sasanian dynasty or during the years shortly before, when Persian officials, such as the marzban, the governor of a border region, were almost independent of central Sasanian authority.<sup>34</sup> There is, however, nothing to indicate the precise data of manufacture.

<sup>31.</sup> See also remarks on p. 131 above.

<sup>32.</sup> The average diameter of the paired-line style central Sasanian vessels is 21-22 cm. The Hermitage plate with the hunter wearing a ram's-horn headdress (Pl. 23) has, by contrast, a diameter of 28 cm. This is similar to the diameters of the early nonroyal hunting plates from Shemakha (29.1 cm.; Pl. 8), Krasnaya Polyana (28.5 cm.; Pl. 9), Sari (28.8 cm.; Pl. 10) and the Burnes plate (28 cm.; Pl. 11). In the overall parallel-line group, the so-called Bahram Gur plate in the British Museum (27.4 cm.; Pl. 25) is of a similarly large size. The diameter of the British Museum Shapur plate (Pl. 13) is 17.9 cm.; of the Chilek vessel (Pl. 30), 24.3 cm.; and of the Kutais hunt (Pl. 31), 19 cm. For other features relating the Chilek and Kutais plates to those in the paired-line style, see Table I in Appendix I.

in the paired-line style, see Table I in Appendix I.

33. Ierusalimskaîa, "K slozheniîu shkoly khudozhestvennogo shelkotkachestva v Sogde," p. 7. Christensen
mentions the resettlement by Khusro I of peoples from the
East in the Caucasus: L'Iran, p. 369. Bálint remarks on the
westward migrations of Avars and Turks in the mid-sixth
century in "Vestiges archéologiques de l'époque tardive des
sassanides et leurs relations avec les peuples des steppes,"
pp. 96 ff.

<sup>34.</sup> Widengren, "Xosrau Anōšurvān," pp. 92-93. The marzban was entitled to wear a crown and might well have begun to produce so-called royal silver plate. See Tsotseliia on the historical connections between Georgia and Iran, Chapter III, note 38.

Summary. The hunting plates in the overall parallelline drapery style fall into distinct chronological groups. The earliest works are datable to the fourth century. The British Museum Shapur plate (Pl. 13) and the Hermitage plate showing a hunter wearing a ram's-horn headdress (Pl. 23) constitute the first group. The former may have been made in Sasanian Iran, the latter appears to be a provincial work. The so-called Bahram Gur plate in the British Museum and the Fabricius and Chilek plates (Pls. 25, 26, 30) are another class, further removed from Sasanian originals. This silver may have been commissioned by local officials east of Merv who continued to maintain their independence from Kidarites, Hephthalites, and Turks. 35 Apparently they modeled themselves and their silver plate on the "Sasanian" types best known to them, such as the British Museum and Hermitage plates (Pls. 13, 23).36 The division within the overall parallel-line group that is already apparent on these two early vessels (a wavy- and a straight-line style) persists in the later examples. If it is impossible to identify by name the persons who commissioned these later vessels, it is important to recognize that they existed quite apart from, but contemporary with, the Sasanian monarchs.

Finally, there is the Kutais plate (Pl. 31), an example of the overall parallel-line drapery style, transformed by craftsmen who were familiar with the Sasanian hunting plates in the paired-line drapery tradition and had access to the same silver as that employed for the central Sasanian royal plate.

This classification of the silver vessels differs in major respects from those proposed by Erdmann, Herzfeld, Marshak, and others. While a general chronological sequence of central Sasanian silver plate, in my opinion, exists, as Erdmann stated, the development step by step is not so clearly definable, and the crowns are not always precise indications of date.

The whole sequence of the royal Sasanian silver production begins, moreover, with a first stage preceding that of the hunting plates. This is illustrated by the Sargveshi cup (Pl. 2), on which the medallion portraits of the royal family are unequivocally political in content. Only in the second stage, beginning no sooner than the reign of Shapur II, does



FIG. 45 Impression of seal with a hunting scene Bibliothèque Nationale, acc. no. 4.51

the hunt become the royal theme. Erdmann noted the growing complexity of the hunting scenes, <sup>37</sup> notably the inclusion of more than one species of animal quarry. The date at which this elaboration of the royal hunting scenes occurred is difficult to determine. An agate seal in the Bibliothèque Nationale (Fig. 45), with a Middle Persian inscription, shows a figure who wears no special headgear, hunting three different species of animal quarry. <sup>38</sup> The form of the letters in the inscription suggests a date in the middle of the Sasanian period, perhaps around the early sixth century. On the silver plates there is no evidence of a similar change in the official design until somewhat later in the period.

In the last stage of the royal silver production there are scenes of enthronement. These appear on one silver plate and on a vessel made of gold, rock crystal,

<sup>35.</sup> Brunner has discussed the continued role of Sasanian nobles and officials in the East under the Chionites in "Chronology," p. 160. Göbl mentions small kings ruling relatively independently from the Kidarite kingdom in *Dokumente* II, p. 54.

<sup>36.</sup> It is evident that the Hermitage plate (Pl. 23) was above ground for some time after it was made, since it has a Sogdian inscription of the fifth century: Lukonin, *Persia* II, p. 222, no. 147. The Burnes plate (Pl. 11) has a Middle Persian inscription, also added much later than the time of manufacture. In the opinion of C. J. Brunner, the inscription is datable to the sixth or seventh century.

<sup>37.</sup> Erdmann, "Die sasanidischen Jagdschalen," p. 209; O. Grabar in his introduction to Sas. Silver places vessels with a number of animals (of the same species) in his third stage: p. 48.

<sup>38.</sup> Göbl, Siegelkanon, p. 8, pl. 3, no. 6c; SPA IV, pl. 256D. C. J. Brunner in a personal communication provided the information on the inscription. Less certainly Sasanian are other late seals with hunting scenes, one with a pseudo-Pahlavi inscription: Borisov and Lukonin, Sas. Gemmy, no. 128, acc. no. GL 583; Horn and Steindorff, Sassanidische Siegelsteine, pl. I, nos. 1087, 1088.

and glass, which is not certainly of Sasanian manufacture. It is evident that this theme, reflecting Western taste, had little popularity in Iran.

Erdmann's first stage, in which the design is arranged in a triangular scheme and the animals directly confront and attack the hunter, has not been found in this survey to be certainly Sasanian at all. 39 It appears in a pronounced fashion on works made in all probability in the newly conquered Kushan realm (Pls. 11, 23) and remains characteristic of provincial vessels (Pls. 25, 26, 30).

Erdmann believed that a number of plates in the overall parallel-line drapery style (the so-called Bahram Gur plate in the British Museum, the Fabricius and Kutais hunts; Pls. 25, 26, 31) were post-Sasanian. 40 This theory was questioned by Marshak, and it is apparent from the archaeological evidence at Chilek as well as from details in the designs that some of these pieces (Pls. 25, 26, 30) are contemporary with the period of Sasanian rule in Iran.<sup>41</sup>

The theory presented here is that the so-called Bahram Gur plate in the British Museum, the Fabricius and Chilek plates (Pls. 25, 26, 30) were not part of a controlled silver production that may be called "Sasanian," but rather that they were provincial works, commissioned by persons living north and south of the Hindu Kush, in the area east of Merv and Herat. Style, iconography, technique, and analysis of the metal support the separation of these plates from the central Sasanian court group. The stark linear style of the representations, particularly the pronounced angularity of the profile human head, is somewhat related to the style illustrated by Sasanian coins minted in the East at Merv and to those minted by independent rulers in the Kabul-Jelalabad region whose identity remains in question. 42 Göbl notes that before the reign of Khusro I the Sasanian coins minted in the East differed occasionally from the established Sasanian canons because of the varying skills of the die cutters. 43 There is, however, on the coins no radical departure from the standard iconography or design as on the provincial silver vessels under consideration here. The general stylistic similarity between these groups of Eastern coins and some of the provincial silver plate does, nevertheless, point to the region east of Merv as an area where workshops, free from direct Sasanian control, could have produced imitations of the royal Sasanian plates.

The central Sasanian court silver was essentially an official production throughout. The direct political content of the scenes on the Sargveshi cup (Pl. 2) is similar to that of the great Sasanian rock reliefs and of the coins. On the silver this type of scene disappeared sometime after the reign of Bahram II, to be replaced by the age-old motif of the hunter-king victorious over animal quarry. 44 The hunting scene retains some military aspects. The hunter is always fully armed with a sword, quiver, and often a dagger as well as with the weapon he uses in the hunt. The chest halter with a central boss is probably derived from the straps and breastplate worn by royal persons in full armor on the rock relief at Firuzabad. It was adopted as part of the royal costume only at the time of Shapur II. The striated globe when it appears may be an indication of battle rather than court dress. All these features can be interpreted as royal rather than military, but the crown alone was sufficient to indicate the status of the hunter, and it is plausible to view the other elements as deliberate references to the warrior-king. The absolute restriction of the representation of human figures on Sasanian silver plate to the king alone, from the time of Shapur II until the

<sup>39.</sup> Erdmann, "Die sasanidischen Jagdschalen," p. 198; Bachhofer, "Sas. Jagdschalen," p. 62.

<sup>40.</sup> Erdmann suggested that some of these vessels might have been provincial imitations contemporary with the Sasanian era, although he questioned whether such copies would have been allowed during the Sasanian period: Kunst, p. 89.

<sup>41.</sup> Marshak and Krikis, "Chilekskie Chashi," p. 59.

<sup>42.</sup> Göbl, Sas. Num., pl. 9, no. 157; idem, Dokumente I, p. 24; III, pl. 13, Em. 29; pl. 14, Em. 30, 31.

<sup>43.</sup> Göbl, Sas. Num., p. 31. 44. Goldman, "Political Realia on Persepolitan Sculpture," p. 41. Goldman states that the Achaemenid relief at Bisitun has a specific propaganda function, whereas the scenes of the "king" killing a lion at Persepolis are allegorical, a "mature issue of the literal scene of victory at Bisitun." See also Farkas, Achaemenid Sculpture, pp. 1, 31, 55; Haskins, "Northern Origins," p. 253; Sas. Silver, pp. 53-54. An entirely unsubstantiated interpretation of the Sasanian hunt as a scene in paradise is presented by Shepherd in "Banquet and Hunt," pp. 79-92. Close parallels for the Sasanian use of the hunt as a symbol for victory and majesty exist in Roman art. In particular, the Hadrianic tondi are similar to Sasanian scenes in some details: Aymard, Les Chasses romaines, pp. 530 ff., pls. 35, 38, 39.

end of the dynasty, indicates that these scenes of the hunt were more than reflections of court life. Rather, they were thinly disguised allegories for the human combats carved on the rock reliefs, official works of art designed to impress the recipient with the valor and prowess of the donor.<sup>45</sup>

Much of the Sasanian court silver was probably sent directly abroad, particularly to areas bordering on the Sasanian empire. Later the vessels were discovered in Georgia, Soviet Azerbaijan, Afghanistan, or in more distant regions such as the Perm, where only the presence of Middle Persian and Sogdian inscriptions remains to testify to the route along which they had passed. In a final stage, the plates were used as valuable objects of barter, traded and exchanged for goods not available to their owners.

Local imitations of the central Sasanian works, such as the so-called Bahram Gur plate in the British Museum, the Fabricius, Chilek, and Kutais plates (Pls. 25, 26, 30, 31), were evidently manufactured in a limited number and in a restricted area remote from the central Sasanian lands. The craftsmen persisted in the use of a style popular in the third and fourth centuries in Iran and did not add new details to the Sasanian "model." There is no evidence that these plates passed far from the regions in which they were originally produced. This accords well with the theory that they were the possessions of minor rulers whose purpose in commissioning the silver was to add to their own prestige rather than to impress their neighbors. The vessels more closely related to the central Sasanian paired-line drapery group (Pls. 20, 24, 27) were made by artisans who were not so isolated from the Sasanian heartland, as the vessels reflect the developments in the court style. Some of these pieces (Pls. 24, 27) eventually reached the same area, in the Ural Mountains, as the official Sasanian products.

The scarcity of comparable Sasanian works of art dating from 400 to 700 makes it difficult to be precise about the date at which many of these silver vessels were made. For this reason, the question of whether silver plates exist which are products of a period later than the date of the king appearing on them must be approached with caution.<sup>47</sup> It is possible that on the late Sasanian Strelka plate (Pl. 19) an early Sasanian king, Shapur I or II, is deliberately portrayed in the small hunting scene in the exergue.<sup>48</sup> The head and

crown are, however, on so minute a scale that one cannot be certain whether the artist intended to represent a specific rather than a general royal crown.

Possible explanations for the crown without a beaded band on the British Museum Shapur plate (Pl. 13) have been given in the preceding chapters. 49 Either this is a deliberate representation of Shapur I, or, conceivably, it is a deviation from the normal type of Shapur II. The dating of the plate in the Cleveland Museum (Pl. 14) to the fifth or sixth century rather than to the reign of Hormizd II has been explained above. The most likely persons to have represented Hormizd II on official silver plate are royal successors of the same name. Alternatively, it is possible, as Marshak has suggested, that the strong interest in the past in sixth-century Iran, which led to the growth of a literature concerning earlier heroes and kings, might have encouraged the rulers, in general, to portray long-dead royal ancestors on their silver plate. 50

The fact that from the end of the fifth century through the early seventh there was much repetition in the crown types makes the use of this feature as a chronological guide limited. Wachtsmuth suggested

<sup>45.</sup> The unreal, ceremonial nature of these hunting scenes is mentioned by Erdmann in "Eberdarstellung," p. 356.

<sup>46.</sup> A particularly striking example of the distance over which these vessels moved and how often they changed hands is the Pereshchepina plate (Pl. 28). Manufactured in all probability in Iran, it has Sogdian markings and was found in the tomb of a Khazar prince at a site northwest of Iran: see Chapter III, note 203. A number of the silver plates have inscriptions in more than one language indicating a variety of owners. See Table IV in Appendix I.

<sup>47.</sup> Göbl has suggested that the accumulation of silver plates in the hands of nobles would have awakened the wish to make a series, and that consequently there may well exist later replicas of plates with representations of earlier kings: "Zum Chronologieproblem," p. 33. In this respect a parallel exists in Roman art where, on the contorniates, special commemorative issues of Roman coins, long-dead rulers are represented. These objects were essentially a propaganda medium of the pagan aristocracy in Rome. The rulers shown are those whose reigns were particularly fortunate: A. and E. Alföldi, Die Kontorniat-Medaillons, Antike Münzen und geschnittene Steine, 6. I am grateful to Richard Brilliant for calling my attention to these objects.

<sup>48.</sup> Erdmann, "Entwicklung," p. 99.

<sup>49.</sup> See Chapter III, pp. 59 ff.

<sup>50.</sup> Marshak proposes this theory to explain the presence of a king he identifies as Bahram V on the Kutais plate (Pl. 31): Marshak and Krikis, "Chilekskie Chashi," p. 64.

decades ago that by the late Sasanian period the intention was not to represent the crown of an individual monarch but only an "ideal" type. 51 It is true that on the late Sasanian royal silver, where there is never any inscription naming the king, the image is almost anonymous, and the glory of the dynasty of Sasan is reflected more than that of any particular king.

Did the animals hunted on these plates have particular meaning? The Sar Meshed relief of Bahram II has been interpreted by Bivar as a scene depicting the contest of that king against two royal foes, namely the Roman emperor Carus and the Kushanshah Hormizd.<sup>52</sup> The lion hunt is rare on the silver vessels, and it may well have a special significance, the lion standing for a royal enemy. Melikov suggested that the presence of the bear (Pls. 9, 21) located the scene in the Caucasus.<sup>53</sup> Lukonin modified this comment to include northern Iran.<sup>54</sup> Other authors have commented on the name of a powerful family in the East, Varaz ("boar").55 The scene on a vessel with boars (Pl. 15) as quarry might be interpreted as an illustration of attacks on Eastern enemies or regions symbolized by boars.

Similarly, the variety of animals on the Berlin hunting plate (Pl. 20) may be intended to suggest not only the game park but also, at another level, the king's dominion over different territories (the bear symbolizing Armenia and Georgia, the boar, Khorasan or other Eastern lands) as well as Iran (the lion). In Islamic literature, Firdausi ranks the animals according to their danger as a form of quarry.<sup>56</sup> The same classification may have existed in Sasanian times, but this is unknown.

Certain species of animals are generally shown on the Sasanian silver plate against particular types of terrain: the boar among reeds and water (Pl. 15) and caprids as well as the lion in a mountainous landscape (Pls. 10, 19). A millennium earlier the Assyrians had depicted the same animals in these appropriate settings,<sup>57</sup> and in Sasanian times this standard hunt imagery continued in use. There are set poses for live and dead quarry as well as specific types of scenery in which the animals are placed.

The scenes on the Sasanian silver plates are extremely repetitive in design and detail. Lavin commented on the difference between the Antioch Worcester hunt mosaic (Fig. 20) and the hunting reliefs at Taq-i Bustan.<sup>58</sup> He characterized the former as "monotonous," the latter as a "complex design in horizontal rows producing bands of tension." A closer comparison may be made between the isolated pictograms of the Worcester hunt and the static hunting motifs on the Sasanian silver plates. In both instances the hunts are "model" scenes restricted in form and content, without much variation in design. There is no feeling for the excitement or thrill of the

It is necessary to include a final word on the use of the term post-Sasanian.<sup>59</sup> Although recent studies<sup>60</sup> permit a more precise classification of some works formerly placed in this category, there are a few silver vessels for which this is still an appropriate label. The Pur-i Vahman plate (Fig. 46), on which there is an uncrowned hunter, is a good example.<sup>61</sup> The presence of a stirrup is an indication of a date at least at the end of the Sasanian era, and the name Pur-i

<sup>51.</sup> Wachtsmuth, "Zur Datierung des Taq-i-Bustan und der Pariser Silberschale," pp. 217-218. O. Grabar also describes the hunt as an abstract visual impression in his introduction to Sas. Silver, p. 50.

<sup>52.</sup> Bivar, "Cavalry Equipment," pp. 280-281.

<sup>53.</sup> Lukonin, Iran, pp. 55-57; Fajans, "Recent Literature," pp. 64, 74.

<sup>54.</sup> Lukonin, Iran, p. 56.

<sup>55.</sup> See Chapter III, notes 116, 171.

<sup>56.</sup> This is noted by Erdmann, "Eberdarstellung." pp. 360-361.

<sup>57.</sup> Barnett, Assyrian Palace Reliefs, pls. 80, 101; Parrot, Assyria, fig. 51. For the same pose of the dead lion as on the Sari (Pl. 10) and other Sasanian plates (Pls. 14, 20), as well as a similar portrayal of captured and dead animals, see Barnett, Assyrian Palace Reliefs, pls. 67, 103, 104.

<sup>58.</sup> Lavin, "The Hunting Mosaics of Antioch, Their Sources," pp. 202-203.

<sup>59.</sup> Erdmann, "Eberdarstellung," p. 358. 60. Marshak and Krikis, "Chilekskie Chashi," pp. 61– 67; Marshak, Sog. Serebro, pp. 109 ff.

<sup>61.</sup> State Hermitage Museum, acc. no. S247; diam. 27.8 cm.; height without foot 3.5 cm.; weight 1265.5 gm. Erdmann, "Die sasanidischen Jagdschalen," p. 222, fig. 16; SPA IV, pl. 217. Bivar has called attention to the fact that the archer pulls the bow with his thumb in a fashion characteristic of the archers of Islam: "Cavalry Equipment," p. 285, note 52. The chemical analysis of this vessel indicates that it may belong to the central Sasanian group of plates. The method of construction, in which large areas of the design were separately made and attached to the shell of the plate, is unique. This is close to a true double shell technique. There is an exterior rim line. For a date in the seventh to eighth century for this plate, see Darkevich, Metall Vostoka, pp. 57-59.



FIG. 46
Pur-i Vahman silver plate
State Hermitage Museum,
acc. no. S247
Photo: Pieter Meyers

Vahman is a Persian form unknown until after the fall of the Sasanian dynasty. 62 The simple hunt, including only two animal quarry, one alive and the other dead, differs from the elaborate late Sasanian hunts at Tag-i Bustan and on the Ufa plate (Pl. 18) as well as from the hunting scenes on the late provincial works (Pl. 22). The hunt depicted on an eighthcentury wall painting at Qasr al-Hayr West is of the same simple type as that on the Pur-i Vahman plate. 63 A return to this less elaborate form may, therefore, be an indication of a date in the Islamic era, as Erdmann originally suggested. Equally distinctive is the almost full-front view of the head on the Pur-i Vahman plate, the Qasr al-Hayr wall painting, and the stucco hunting plaques of late Umayyad or early Abbasid date at Chal Tarkhan. 64 No Sasanian horseman riding at a full gallop is presented in this unnatural pose. A Sogdian vessel dated by Marshak to the ninth century illustrates the persistence of the simple hunt form and the frontal head. 65 On a plate in the Hermitage from

Maltzeva in the Perm (Fig. 47), there is a king with a low, flat cap-crown decorated only with stepped crenelations. <sup>66</sup> The king sits astride a galloping horse, head turned toward the viewer, away from the ani-

<sup>62.</sup> For the presence of the stirrup at Taq-i Bustan, see Ghirshman, "Notes iraniennes XIII," pp. 293-311. Henning's comments are quoted by A. Alföldi, "A Sassanian Silver Phalera at Dumbarton Oaks," p. 239; Livshits and Lukonin, "Nadpisi," pp. 162-163: "the Arab construction of the name was not known in Iran earlier than the eighth to ninth century."

<sup>63.</sup> Schlumberger, "Deux Fresques omeyyades," p. 91, fig. 5, pl. 5 facing p. 96. The incised figure of a fox in the upper left corner does not appear to be part of the original painted design. See Bivar, who mentions that the stirrup does not appear to have been in use in Iran before the coming of Islam: "Cavalry Equipment," p. 290.

64. Thompson, "Stucco Plaque," p. 86, fig. 4; p. 89,

<sup>64.</sup> Thompson, "Stucco Plaque," p. 86, fig. 4; p. 89, note 13, for date.

<sup>65.</sup> Orbeli and Trever, Sas. Metall, pl. 17; Marshak, Sog. Serebro, pp. 120, 154.

<sup>66.</sup> State Hermitage Museum, acc. no. S13; diam. 25 cm.; height with foot 5.1 cm.; weight 1039.2 gm. Orbeli



FIG. 47 Silver plate from Maltzeva, Perm State Hermitage Museum, acc. no. S13

mal quarry, a pair of tigers, one alive and the other dead. In all probability this work also postdates the Sasanian era. Lukonin calls this piece late Sasanian, and there is a Middle Persian inscription on it. 67 It is likely, however, that for a time after the fall of the Sasanian monarchy, members of the nobility continued to imitate royal Sasanian silver plates, free from the influences of the new Arab conquerors. 68 Brilliant, commenting on late imperial Roman art, noted the gradual adoption of imperial motifs by private persons who wished to magnify their own importance. 69 It is conceivable that this happened in the Near East when the Sasanian empire was collapsing as well as during the first century of Islamic rule. It is misleading to label the Pur-i Vahman and Maltzeva hunting plates as Islamic, since they do not reflect the culture or the society of the new Arab rulers. They are, rather, a continuation of a Sasanian royal tradition and were, in all likelihood, made in regions free from Umayyad control. At present there is no way of determining their exact date. For these reasons it is suggested that the term post-Sasanian be used for them until there is good reason to attribute them to a more specific period or region.

The purpose of making this detailed examination

and Trever, Sas. Metall, pl. 15; SPA IV, pl. 208B. The globe above the head is divided by a pair of parallel lines as on the Fabricius and Chilek plates (Pls. 26, 30) and the hunting plate in Berlin (Pl. 20). The background is carved away to leave the design in relief. Spot-gilding occurs on the design, and the background is also gilded. There is niello in the king's eyes and in the eyes and stripes of the tigers. An exterior rim line is present. The chemical analysis places this vessel with those in the paired-line tradition. For a description of the objects found together at Maltzeva, see Darkevich, Metall Vostoka, p. 23.

<sup>67.</sup> Lukonin, *Persia* II, pl. 221, no. 140. Livshits and Lukonin, "Nadpisi," p. 161.

<sup>68.</sup> Bosworth, "The Heritage of Rulership in Early Islamic Iran and the Search for Dynastic Connections with the Past," pp. 51–62; Darkevich, *Metall Vostoka*, pp. 68–71.

of royal Sasanian silver plate has been to establish a classification of the material. Those works that can, as a result of this study, be attributed to workshops under Sasanian court control constitute a new source for an understanding of the role of the monarchy in Sasanian society and the relationship between the Sasanian state and contemporary foreign powers. The vessels that, on careful analysis, do not appear to be Sasanian court products provide an indication of the nature and extent of Sasanian influence in areas beyond the borders of Iran, where independent rulers survived the invasions of Kidarites, Hephthalites, and Turks.

It is evident from this survey that aside from one early silver vessel (Pl. 2) with a medallion portrait of Bahram II and a few late Sasanian enthronement scenes, the hunt was the royal motif *par excellence* in Sasanian Iran. This theme continued to predominate in Islamic court art and literature.<sup>70</sup> It was frequently employed as an allegory for war as well as a symbol of royal prowess and courtly luxury. In the millennia

before the Sasanian period, the hunt appeared as a significant and often specifically royal motif. The small carvings on Near Eastern cylinder and stamp seals provide illustrations of hunting scenes from the third millennium down to the Sasanian era. On a more monumental scale, the stone reliefs from the palaces of the Assyrian and Achaemenid kings, the last great rulers in the Near Eastern world before the rise of the Sasanian dynasty, are decorated with scenes of hunting and heroic combats between the king and a natural or supernatural beast.

The Hellenized style of Sasanian court art is readily apparent, but the themes and artistic conventions follow traditions of the pre-Islamic Near Eastern world. The images associated with the Sasanian king of kings were to persist and have a lasting influence. Identified in later centuries with the concepts of royal power and elegance, the Sasanian motifs introduced an unmistakable Iranian presence into the royal and courtly arts of the medieval world.

<sup>70.</sup> Hanaway, "The Concept of the Hunt in Persian Literature," pp. 21-34.

# Part Two TECHNICAL STUDY

by Pieter Meyers

# Acknowledgments

THIS TECHNICAL STUDY of Sasanian silver vessels with royal imagery has been conducted in close collaboration with Dr. Prudence O. Harper, Curator at The Metropolitan Museum of Art. Without her encouragement, her patient explanations of the art-historical problems related to the objects, and her assistance in the interpretation of the technical and analytical data, this work could not have been completed.

The analytical part of this study was performed at the Chemistry Department of Brookhaven National Laboratory. I am most grateful to Dr. Edward V. Sayre, Senior Chemist at Brookhaven National Laboratory, for his continuing interest in this work and for his valuable suggestions and constructive criticisms. I would like to express special thanks to my friend and colleague Dr. Lambertus van Zelst, who collaborated in the development of the analytical technique and in a large fraction of the elemental analyses.

I am greatly indebted to the various institutions that have allowed me to examine silver vessels in their collections and obtain samples from them. I greatly appreciate the cooperation received from museum administrators, curators, conservators, and scientists. In particular I would like to thank Dr. Vladimir G. Lukonin, Curator of the Oriental Section of the Hermitage Museum, whose encouragement and assistance were invaluable in this investigation.

Financial support for travel in the United States, Europe, U.S.S.R., and Iran was received from the Adelaide Milton de Groot Fund, in memory of the de Groot and Holy families, administered by The Metropolitan Museum of Art.

Parts of this research were performed at Brookhaven National Laboratory under contract with the United States Department of Energy supported by its Division of Basic Energy Sciences.

# Chapter VI

# Technical Study

#### Introduction

Sasanian silver objects, including those discussed in this volume, pose a number of challenging questions to the investigator interested in the technology of the society that produced them.

The most basic questions relate to the production of silver, such as the types of ore used to produce the metal silver and the location of the ore sources, the procedures for smelting the ore and the location of the smelting sites, the extent to which silver was alloyed with copper and the origin of that copper, and whether or not the fineness of the silver was controlled. It should also be considered how much silver metal, if any, was obtained by trade, as tribute, or as booty.

Other questions concern the distribution of the silver. By what mechanism did the silver enter the silversmiths' workshops? Was the distribution of the silver controlled or was the metal freely available to anyone who could afford it? Are there any differences between the silver used in the manufacture of objects and that used for other purposes, such as the minting of coins? How extensively was silver remelted?

The next questions relate to the practices of the Sasanian silversmith. What were the methods of manufacture used to produce the silver vessels and what tools were used? Is it possible to distinguish between workshops based on methods of manufacture and use of tools?

What developments took place in the production of silver metal and in the methods of manufacture during the Sasanian period? Did the availability of silver change, perhaps as a result of changing political or economic situations or due to the discovery of new ore sources? Were there advances or changes in metalworking traditions?

Although much can be learned from a careful study of shape, style, and iconography, traditionally the common methods of examination of objects, more information pertinent to these questions is contained in and on the metal, most of it hidden from and beyond the reach of the human eye or the photographic emulsion. As part of a comprehensive study of Sasanian silver, the research laboratory of The Metropolitan Museum of Art has carried out a program of technical examinations and related research with the aim of answering the questions mentioned above.

During this technical study, approximately three hundred objects were examined. Physical dimensions were measured, and the weight of each object was recorded. Visual and low-power microscopic examinations were carried out to study surface characteristics, tool marks, corrosion, repairs, joining techniques, and gilding. The majority of the objects were subjected to X-ray radiography to obtain information on the method of manufacture. Major, minor, and trace element concentrations were determined on small drilled samples by neutron activation analysis.

A detailed description of the techniques, observations, results, and conclusions on Sasanian silver will be presented in volume II.<sup>1</sup> This chapter will only summarize the general conclusions. However, detailed information on the vessels with royal imagery, the subject of this volume, will be presented below together with a discussion of the technical information that has contributed to a characterization of these objects by date and place of manufacture.

<sup>1.</sup> Harper and Meyers, Silver Vessels of the Sasanian Period: II, to be published.

#### Metal Production

Although the manufacture of silver objects in Iran dates back to at least the fourth millennium B.C., very little is known about the sources and production of silver in antiquity. Written records on the production and use of silver earlier than the Islamic period are not known. Of the historical records dating from the Sasanian period, none provides concrete evidence of silver production.

It is generally assumed that most of the silver used in antiquity was extracted from argentiferous lead ores, especially cerussite (lead carbonate) and possibly galena (lead sulfide).2 Although native silver and silver sulfide ores, such as argentite, may also have been available, the quantity of silver obtained from them was probably negligible compared to that produced from silver-bearing lead ores. Moreover, any native silver and silver sulfide deposits would have been quickly worked and depleted in antiquity.

Geological surveys in Iran have indicated the existence of large deposits of silver-containing lead ores in the mountainous zones formed by the Zagros and Alborz mountains and in the Iranian plateau between them.<sup>3</sup> When these vast resources were first tapped to produce silver metal remains a question still to be answered; however, it is very likely that during the Sasanian period silver was obtained from these lead ores.

That there was a considerable production of silver within the boundaries of the Sasanian empire is indicated by the extensive use of silver metal in this period for coinage as well as for objects. Of course, some of the silver could have been imported, but it appears highly unlikely that importation was the major source of silver except maybe during some of the successful military campaigns.

Substantial direct evidence of mining and smelting is still lacking, but various geological surveys mention "ancient workings" in the lead ore deposits, unfortunately without specifying the estimated date for the ancient workings.4 At least one mining and associated smelting site has recently been identified as Sasanian: in the Nakhlak area, located at the southern fringe of the Great Kavir desert in central Iran, extensive outcroppings occur of lead carbonate and lead sulfide. Much of the oxidized lead ore was worked before recent times.<sup>5</sup> A nearby fortress, surveyed by Hallier, published in 1972, and believed by the author to be Sasanian, was apparently used for activities associated with the smelting of the ore and the production of silver. 6 Furnaces and slags have been found in the area near the fortress.

Further evidence of Sasanian mining activities has been provided by the survey of Berthoud and others, in 1975, who identified sherds found near the mining areas as Sasanian.<sup>7</sup>

Other sites of lead ore smelting were seen during the 1966 Wertime expedition in Iran. They could, however, not reliably be identified as Sasanian.8

The technology of producing silver from lead ores is complicated but was practiced relatively early in the development of ancient metallurgy, probably from the beginning or middle of the third millennium B.C.9 The basic process used for the production of silver in antiquity and undoubtedly also in the Sasanian period involves two steps. The lead ore is first smelted under appropriate reducing and/or oxidizing conditions to produce lead metal. Silver is then extracted from the lead by the cupelation process, during which the lead is heated under strongly oxidizing conditions in a cupel. The litharge (lead oxide) so formed is absorbed in the porous material made of

<sup>2.</sup> Forbes, "Silver and Lead," pp. 196–266; Wertime, "The Beginnings of Metallurgy: A New Look," pp. 882– 884; idem, "A Metallurgical Expedition through the Persian Desert," pp. 927-935.

<sup>3.</sup> Bariand, Issakhanian, and Sadrzadeh, "Preliminary Metallogenic Map of Iran"; Burnol, "Contribution à l'étude des gisements de plomb et zinc de l'Iran. Essais de classification paragénétique"; Ladame, "Les Ressources métalliferes de l'Iran," pp. 276-289.

<sup>4.</sup> Ibid., pp. 282, 286, 288; Holzer and Ghasemipour, "Geology of the Nakhlak Lead Mine Area," p. 10; Holzer and Momenzadeh, "Note on the Geology of Elikah and Duna Lead Mines, Central Alborz, Northern Iran," p. 28.

<sup>5.</sup> Holzer and Ghasemipour, "Geology of the Nakhlak Lead Mine Area," p. 10.

<sup>6.</sup> Hallier, "Fort, Atashgah und Chahar Taq von Nakhlak. Überreste einer sasanidischen Bergbausiedlung," pp. 285-

<sup>7.</sup> Berthoud, Besenval, Cleuziou, and Liszak-Hours, "Etude sur la métallurgie iranienne aux IVè et IIIè

millénaires-Prospection en Iran," pp. 15, 16, 33.

8. Wertime, "A Metallurgical Expedition through the Persian Desert," pp. 927-935; Smith, "Tal-i Iblis: Metallurgical Archaeology," pp. 146-147.

9. Forbes, "Silver and Lead," p. 199.

Methods of Manufacture 147

bone or ground-up potsherds in the cupel, leaving silver metal behind. The cupelation process may then be repeated several times to purify the silver.

For practical reasons, the smelting operations were probably performed close to the ore sources; it is unlikely that the ores were transported to the population centers to be smelted. The identification of the Nakhlak fortress as a site for silver production supports this assumption, at least for the Sasanian period.

Before being distributed to the metal workshops and mints, the pure silver was alloyed with copper, generally in amounts of four to eight percent by weight. Such an addition of copper considerably improves the mechanical properties of the silver, a fact known to silversmiths in antiquity and certainly known to the Sasanian craftsmen. Furthermore, the data from our analyses lead to the interesting conclusion that the copper used in alloying was relatively pure; it was not remelted "scrap" bronze or brass but was most likely freshly smelted. Our analytical data is entirely consistent with the assumption that the copper used for alloying was produced at or near the site of silver production, using local copper ores.

Little is known about the distribution of the silver to mints and workshops. Most likely the production and distribution was under control of the royal court. Additional supplies to mints and workshops may have come from remelted old coins and broken or discarded objects, from silver acquired in trade, as booty, as tribute, or through taxation.

## Methods of Manufacture

Shaping. Since we have no written records or pictorial representations of Sasanian metalworking techniques, our knowledge of the methods of the Sasanian silversmith is limited to what has been learned from the silver objects themselves. Until recently, however, very few objects had been subjected to a thorough technical study. In most cases objects were given only a superficial examination. Methods of manufacture reported in the literature, in exhibition catalogues, and in museum files were often based on properties such as weight, size, and shape, which are not necessarily indicative of the method of manufacture. Conclusions about how an object was made relied heavily on knowledge of modern metalwork-

ing techniques, on comparison of Sasanian objects with similar ones from the Roman and Byzantine periods, which have been studied more extensively, and on the assumption that silversmithing methods did not differ too much from one area or period to another. It is, therefore, not surprising that some of the generally accepted views on Sasanian techniques have been found to be incorrect, based as they were on insufficient technical evidence and unjustified comparisons.

The Sasanian silversmith was thought to have used one of three basic techniques in the manufacture of objects: hammering, casting, or the "double shell" technique. In hammering, the object is shaped from an ingot or blank. The ingot, which is likely to have been cast, can have any shape or form, and may already approximate the general shape of the vessel to be made. The final shape can be created through sinking (hammering on the object while it rests on a flat or concave surface) or through raising (hammering on the object while it rests on a stake, i.e., a tool with a relatively small rounded or convex surface). After shaping, the object is decorated by one of the methods described below.

In casting, a wax model of the object is first produced. Most or all of the decoration is applied to the wax model. The model is placed in a clay investment, the wax is removed by heating, and molten silver is poured in the space once occupied by the wax. An object made in this way requires only a slight amount of tooling and polishing before completion.

Objects made by the "double shell" technique consist of two sheets of hammered silver. One is plain, while the second has a repoussé relief decoration. The two sheets of silver are fastened to each other by soldering or by bending and hammering the edge of one of the sheets over the other.

In our study we have made a special effort to estab-

<sup>10.</sup> Chase, "The Technical Examination of Two Sasanian Silver Plates," pp. 75-93.

<sup>11.</sup> The misunderstandings of the manufacturing techniques of the Sasanian silversmith are probably based on the technical descriptions by Orbeli and Trever in Sas. Metall, pp. xix, xxiii, and by Matzulewitsch in Byzantinische Antike. Studien auf Grund der Silbergefässe der Ermitage, pp. 19, 23, 35, 58, 59, 113. Examples of such misunderstandings can be found among the conclusions on methods of manufacture of Sasanian silver in Shepherd, "Some Problems of Sasanian Silver," pp. 326–352.

lish reliable criteria by which the method of manufacture can be determined. In theory, the differences among the various fabrication techniques are quite distinct. A metallographic study of a metal cross section would clearly show which method was used. In practice, however, metallographic studies are limited to those few objects where a metal cross section can be obtained without disfiguring them. For most objects, sampling for metallography is not permissible. Nondestructive methods must therefore be used in trying to establish how an object was made. In our study, conclusions have been based on visual and microscopic examinations, thickness and profile measurements, and X-ray radiography. The evidence thus obtained, combined with knowledge of silversmithing techniques, has made it possible to arrive at reliable conclusions on the method of manufacture for nearly all objects examined.

X-ray radiography has proved to be especially informative. It convincingly shows whether or not an object is made by the double shell technique. 12 X-ray radiographs of cast objects frequently exhibit a grainy and mottled appearance and usually show the presence of casting flaws or trapped air in the fabric of the metal. Hammered objects, on the other hand, do not contain trapped air; their radiographic images are smooth and sharp with characteristic density changes caused by hammering. Another characteristic difference between cast and hammered objects is the variation in thickness. It is not the thickness by itself but the manner in which the thickness of an object varies from flat areas to areas with considerable curvature that is diagnostic. Hammered objects tend to show increased thickness in flat areas and thinner metal in curved areas, while the opposite is true for cast objects.

A detailed discussion on the determination of methods of manufacture, based on visual and microscopic examination, on thickness measurements, and on X-ray radiographic studies of Sasanian silver objects, will be presented in Volume II. Our findings can be summarized as follows:

a) All objects other than plates and bowls (e.g., ewers, vases, animals, and animal heads) were made

by hammering a single sheet of metal into the desired shape. Decoration was achieved by repoussé. Feet, lids, and handles were made separately, feet and lids by hammering, handles by casting.

- b) All bowls of generally accepted Sasanian provenance were found to have been shaped by hammering.
- c) Among the plates generally accepted as genuine Sasanian, not one could clearly be identified as cast or "double shell." Apparently, all Sasanian plates received their final shape by hammering. The consistent use of hammering for the shaping process argues strongly against the theory that Sasanian craftsmen practiced casting and "double shell" techniques for Sasanian silver vessels. The reason for this consistency in method of manufacture is not that the Sasanian craftsmen were unfamiliar with casting and the "double shell" technique. Also unsatisfactory is the explanation that hammering would have been faster, easier, or better. In fact, some of the bowls and plates could have been produced more conveniently and without loss of aesthetic quality or physical strength by other techniques. It may be that the choice of manufacturing technique was guided by tradition and economics; tradition, even today, plays an important role in craftsmanship, and hammering could well have been part of the traditional arsenal of Sasanian workmanship. The high value of silver metal in the Sasanian period may have restricted the use of casting, since a small amount of silver is irretrievably lost in this process and in the subsequent polishing of cast objects.

There are a large number of "Sasanian" silver objects in existence that were indeed manufactured by casting or by the double shell technique. However, a combination of anomalies in style, iconography, elemental composition, method of manufacture, and corrosion have shown that these objects were not made by a Sasanian silversmith but were probably produced as forgeries during the twentieth century. Modern forgers suffered apparently from the same misunderstandings of Sasanian metalworking techniques as serious scholars.

Decorating. The techniques used to decorate hammered vessels are for the most part standard silversmithing methods, which can be identified by visual and microscopic examination. However, attempts to

<sup>12.</sup> Meyers, "Some Applications of X-Ray Radiography in the Study of Archaeological Objects," pp. 79–96.

Methods of Manufacture 149

reconstruct in detail the process of creating the design on some of the plates and bowls are often complicated by the elaborate and intricate ways by which relief decoration was achieved. In such instances X-ray radiography has provided necessary additional information. The following methods of decoration have been identified.

- a) Chasing and engraving. The decoration was achieved by a continuous succession of punch marks made by a chasing tool or by cutting lines with a sharp engraving tool.
- b) Repoussé. Relief decoration was produced by hammering and punching the metal from the back. Vases and ewers present typical examples of this technique.
- c) Carving. Metal around decorative elements was removed, leaving those elements in low relief. Often entire background areas were carved away to obtain the required height of relief of the decoration.
- d) Added pieces, crimped in place. Many plates and some of the bowls have design elements in high relief. These were obtained by fastening preconstructed cast and hammered pieces of silver to the object. In order to secure the pieces in position, silver metal was removed from the object up to a depth of 1 mm., the edges of the "sunken" area were undercut, and the lip thus formed was bent backward. The preconstructed piece was then inserted and the lip hammered over the edge of the added piece. Decoration was then completed by additional chasing, engraving, and carving.

Tool marks. Microscopic examination of tool marks found on Sasanian silver objects has resulted in a better understanding of the types of tools used by the Sasanian silversmith. A basic tool set seems to have consisted of hammers and stakes, chisels, and tools for engraving, chasing, and punching. The number of different tools appears to have been limited, with little variety in the shapes of engraving and chasing tools. Hammering marks, visible on X-ray radiographs, are in general not sharply defined; this may indicate that the hammers were rounded on the edges and relatively large in diameter (more than 1 cm.). Chisels were used for carving; chisel marks can clearly be observed on objects where added pieces became detached (e.g., Pl. 15). Typical chisel marks indicate the use of chisels 1 to 3 mm. in width.

Engraved designs were applied either with chisels or with the more commonly used pointed engraver. Chasing marks include ovals, squares, and rectangles, often with rounded edges, varying in size up to 2 by 4 mm. On occasion chasing marks were produced by a chisel. Punch marks observed include round dots up to 2 mm. in diameter and circles, also up to 2 mm. in diameter. Circles were produced either by hollow cylinders or, more likely, by solid cylinders partially hollowed out at the bottom end. In many cases the circular tool mark is only partly visible. Apparently, it was common practice to produce the circular tool marks by holding the punch tool not perpendicular, but at an angle to the surface. This set of tools appears to have been used for all types of objects, independent of period and of quality of workmanship.

Lines of decoration were in most cases chased, i.e., formed by a continuous series of overlapping punches. Engraved lines, those formed by removing metal with an engraving tool, were also common, especially as major outlines of decoration and in plates of a lesser quality of workmanship. Beveled lines, produced with chisels and characterized by one vertical and one sloping edge, were used to accentuate major design elements. With the sloping edge closest to the design elements this technique caused the design to appear to be in relief (see Fig. 48).

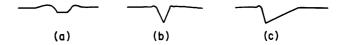


FIG. 48 Schematic cross section through decorative lines showing the differences in profiles of chased (a), engraved (b), and beveled lines (c).

Of interest is the presence of nondecorative lines on a number of plates and bowls. On plates they occur on the exterior, close to and parallel to the rim, or as one or two circles within the foot ring; occasionally these lines appear also on the outside of the foot ring. On some bowls concentric circles appear on the exterior near the center of the bowl. Most of the plates and some of the bowls have so-called centering marks, circular or oval-shaped indentations at or near the center on the exterior of the objects. Few objects have a centering mark on the interior surface.

The purpose of nondecorative lines and centering

marks cannot be established with certainty. It is most likely, however, that nondecorative lines and centering marks were applied as part of the initial definition of the size, shape, and center of the plate or bowl and the placement and size of the foot ring. The fact that the centering mark is frequently off-center and not round in shape provides an argument against the theory that it resulted from fastening the vessel in a rotating device, such as a lathe, for spinning or polishing.

Gilding. The final steps in the manufacture of silver objects were burnishing, polishing, and gilding. All objects examined show evidence of burnishing and polishing, but how this was done and how much silver was removed in this process cannot be stated with certainty.

The vast majority of the objects examined were partially gilded. Analytical and metallurgical tests show that mercury- or fire-gilding was used. In this process an amalgam of mercury and gold was applied to a clean silver surface and heated to remove the excess mercury. This was followed by burnishing the gold until a smooth, shiny surface was obtained. Leaf-gilding, i.e., the fusion of gold foil to the silver surface using mercury metal, was a variation of this technique. None of the objects discussed in this volume was gilded by this method, although at least one Sasanian silver object is known that contains leaf gilding. <sup>13</sup>

### Elemental Composition

The elemental composition of Sasanian silver objects is determined by a number of factors:

- a) The elemental composition of the ore from which the silver is produced.
  - b) The smelting and refining process.
- c) The addition of copper with which the silver is alloyed.

The silver-bearing ore, presumably cerussite or possibly galena, contains in addition to lead and a small amount of silver a large number of impurities. Some of these elements are retained in the silver, others are partially or completely removed in the smelting and refining process. The materials used in furnaces, as well as fuel, flux, and other matter em-

ployed or added during smelting and purification, may introduce contaminants. Because the copper that is alloyed with the silver contains other elements in varying concentrations, its addition may significantly alter concentration levels of these elements in the silver. It was the aim of our analysis program to group together objects made of metal from the same ore source and to obtain information on metallurgical procedures.

The analytical technique used was neutron activation analysis. This method was selected because it allowed us to analyze minute samples (ca. 500 micrograms) that could be obtained without disfiguring the object in an unacceptable way. It was possible by this method to determine quantitatively the concentration of the following elements: silver, copper, gold, iridium, zinc, tin, arsenic, antimony, selenium, mercury, chromium, iron, cobalt, scandium, sodium, and potassium. Of these elements only gold and iridium are impurities whose amounts relative to silver remain unaltered throughout the smelting, refining, and alloying process. Copper is invariably an intentional addition, while zinc, tin, arsenic, antimony, and selenium were introduced into the silver mainly as impurities of the copper. Mercury, chromium, iron, cobalt, scandium, sodium, and potassium were found to be inhomogeneously distributed in silver. For these elements the samples used were too small to be representative of the object. Details of the analytical technique have been published elsewhere and will be discussed further in Volume II.14

Because of the complexity of the processes involved in the production and alloying of the silver, interpretation of the analytical results is not an easy task. Yet, after careful study of elemental analyses of more than five hundred samples from Sasanian and related silver objects and coins, including the application of several computerized data treatment techniques (multivariate statistics), various characteristic features could be observed.

<sup>13.</sup> Lechtman, "Ancient Methods of Gilding Silver: Examples from the Old and the New Worlds," p. 4.

<sup>14.</sup> Meyers, Van Zelst, and Sayre, "Determination of Major Components and Trace Elements in Ancient Silver by Thermal Neutron Activation Analysis," pp. 67–78; idem, "Major and Trace Elements in Sasanian Silver," pp. 22–33.

Elemental Composition 151

The concentrations of gold and iridium in silver characterize the ore sources used for the production of that silver. The assumption that variations in gold and iridium content relative to the amount of silver from a single ore source are small as compared to variations in geographically separated ore sources was largely confirmed by the agreement observed in the elemental compositions of sets of related coins and of groups of objects with common stylistic and iconographic properties. Therefore, the concentrations of gold and iridium may indicate whether or not objects are made of silver from a common source. If ore sources are characterized in the same way, it should be possible to determine the geographic provenance of the silver.

With a few exceptions the copper used to alloy the silver was freshly prepared and unalloyed. This observation is based upon the low impurity levels of zinc and tin found in silver, since during the first millennium A.D. copper-based artifacts were invariably produced from copper alloyed with tin and/or zinc. One would therefore expect to find high levels of these elements present if remelted scrap bronze or brass had been used for alloying with silver. Furthermore, our analytical data of Sasanian silver shows that among objects made of silver from a common source (based on identical gold and iridium concentrations) the elements associated with copper (e.g., arsenic, antimony, zinc, tin, and selenium) have similar concentration patterns. In other words, the copper in these objects could also be from a common source.

This observation supports the assumption that copper was produced locally, close to the silver production centers. Therefore, arsenic, antimony, zinc, tin, and selenium concentrations can provide further information on the geographic provenance of the silver-copper alloy. It should be mentioned that these elements are not as characteristic for grouping objects as gold and iridium. However, these elements can be helpful in deciding whether or not an object should be grouped with others, especially when the gold and iridium concentrations are similar to those of the group to which the object in question is compared.

Most Sasanian silver, objects as well as coins, contain a moderately low amount of copper, typically between four and eight percent. This is metallurgically the correct amount of copper that should be added to improve the mechanical properties of silver.

Occasionally, a higher copper content is found (such as in coins struck during the reign of Shapur I). However, the conclusion that a successful control over the fineness of silver was exercised during the entire Sasanian period seems to be well justified.

There is in general good agreement between elemental composition and style and iconography of the objects. Objects that can be grouped together based on characteristic stylistic and iconographic elements have similar elemental concentration patterns. From this observation it can be concluded that certain workshops consistently obtained silver produced from the same ore sources. Evidently, considerable control was exercised over the distribution of silver from the site of its production to the centers of the manufacture of objects. Our observation that the concentration patterns of characteristic elements in Sasanian silver coins are significantly different from those in objects also supports the theory that distribution control was strict; mints received silver from sources different from those that supplied object workshops.

It is apparent that the use of remelted coins to fabricate vessels or the reverse did not take place on a scale sufficiently large to make general conclusions on distribution patterns unreliable. In those cases where old silver may have been reused, the elemental composition may not accurately reflect the source of the silver.

It is of interest to compare analyses of different parts of the same object. For example, the ring feet of plates were made separately and soldered to the plates. When the concentrations of all characteristic elements, i.e., copper, gold, iridium, arsenic, antimony, tin, zinc, and selenium are identical, it is almost certain that both plate and foot were made of the same batch of silver alloy. When only gold and iridium concentrations are identical, while copper, arsenic, antimony, tin, zinc, and selenium are different, the silver for both could have originated from the same ore source but may have been produced in different batches. When gold and iridium concentrations do not agree, the silver must have been produced from different ore sources. We found that the silver for plate and foot was from the same batch in approximately thirty percent of the cases; different batches of the silver from the same source were used to fabricate the plate and foot in about twenty-five

percent of the cases; and metal from entirely different sources was used in about forty-five percent of the objects. A possible explanation for the surprisingly large number of unrelated sources of silver for plates and feet may be found in manufacturing traditions; that is, the feet may have been produced separately as standard items for attachment to plates, or they were replaced in later repairs.

Silver produced in the early part of the Sasanian period is characterized by very low iridium concentrations. After the early part of the fourth century A.D. metal samples from vessels contained considerably larger concentrations of iridium. Apparently the alloy used for objects no longer came from the ore sources that until then had provided the silver but from new, previously unused ore sources. The location of the ore sources can as yet not be identified. For that purpose more data on the actual ore deposits is required. However, one particular source seems to have provided silver exclusively to the workshops producing a stylistically homogeneous group of plates with royal representations; this group of plates will be referred to as central Sasanian hunting plates. This silver, characterized by a high iridium content, was not used for coins and rarely, if at all, for plates with decoration other than royal representations or for other types of vessels. Those were produced of silver from a variety of other sources.

# Technical Description of Objects Bearing Royal Images

Information on physical dimensions, method of manufacture, tool marks, and elemental composition is given in Table 1 and Fig. 49. No elemental analysis was performed, and technical data is incomplete, for the following objects: the Tehran bowl (Pl. 7), the Sari plate (Pl. 10), the Burnes plate (Pl. 11), the Berlin fragment (Pl. 12), the Anikovska plate (Pl. 21), and the gold plate with rock crystal and glass (Pl. 33). A summary of the technical examinations of all other objects is given below.

Four of the medallion bowls (Pls. 3, 4, 6, and 7) form a group similar in many technical aspects. All are similar in size and weight. (The weight of the Tehran bowl could not be determined but is presumed to resemble that of the others.) The bowls

were shaped by hammering. Each has a thick rim (4.5-6.5 mm.). The Freer bowl (Pl. 4) has radial fluting; the New York and Tehran bowls (Pls. 6, 7) have concentric fluting. The fluting is obtained by carving away silver on the interior surface. The Cincinnati bowl (Pl. 3) shows eight concentric rows of round dots, standing out in relief on the interior surface. They were probably produced by punches from the exterior. The resulting indentations on the exterior surface were removed by shaving metal from that surface, followed by polishing. It is possible that the exterior surfaces of the other three bowls were also shaved and polished to obtain a smooth surface and possibly to reduce the weight. All four bowls have a central medallion. The portraits in relief were obtained by adding one or more prefabricated pieces, which were fastened to the bowl by "crimping" (see p. 149). Two concentric circles (three on the Cincinnati bowl) appear on the exterior near the center of each of the four bowls. The diameters of these circles vary from 0.7 cm. to 2.8 cm. The Cincinnati bowl has a centering mark on the exterior; the New York bowl has a centering mark on the interior under the added bust; the Freer bowl has no visible centering mark. It is not known whether the Tehran bowl has a centering mark.

The elemental compositions of two of the bowls (Cincinnati and Freer) are characterized by extremely low iridium concentrations and average gold values. This combination of low iridium and average gold content has been found only in early Sasanian silver objects; apparently the ore sources from which this silver was produced were not used in later periods. The elemental analysis of the New York bowl shows a considerably higher iridium content, typical of the later central Sasanian hunting plates. This bowl is also the only one with a line on the exterior just below the rim. Such an external rim line is also characteristic of central Sasanian hunting plates. These observations support the conclusion, based on stylistic evidence, that this bowl is chronologically last in the series of early Sasanian vessels. In fact, the date of this bowl may define the period of transition from the use of sources providing silver characterized by very low iridium concentrations to sources providing silver with higher iridium levels.

The New York bowl with five medallions on the exterior (Pl. 5) is similar in size to the four bowls

#### FIG. 49 Gold-iridium correlation diagram

This diagram shows the amount of gold and iridium present in each of the objects analyzed. Gold concentrations, expressed in percent relative to 100 percent silver, are indicated on the logarithmic horizontal axis. Iridium concentrations, expressed in micrograms per gram silver, are indicated on the logarithmic vertical axis.

Different symbols are used to identify four vessel groups:

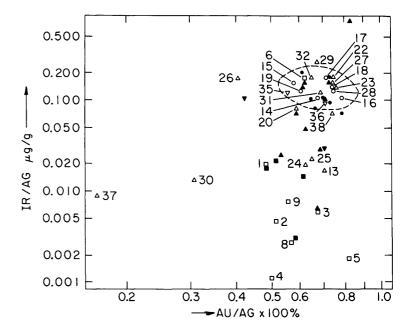
- ☐ early Sasanian bowls or plates
- O central Sasanian hunting plates
- $\triangle$  provincial hunting plates
- □ provincial bowls or plates with enthronement scenes

Open symbols indicate analyses of the main part of the vessel (i.e., plate, bowl, cup). The numbers accompanying the open symbols refer to Pl. numbers. The symbols  $\blacksquare$ ,  $\bullet$ ,  $\bullet$ ,  $\bullet$  represent analyses of feet from vessels in each of the four respective categories.

Gold and iridium are the two elements among those determined that are most characteristic for the provenance of the silver. It can be observed that analyses of central Sasanian silver vessels are very similar. The oval drawn in this diagram is the mathematically determined 95 percent probability limit for the group of central Sasanian silver analyses. The area within the oval defines to a certain extent the concentration ranges for gold and iridium for this group.

Most provincial vessels appear separated from the central Sasanian silver group. Further separation can be achieved when other elements are taken into account.

Analyses of early Sasanian vessels are shown to be characterized by low iridium values.



mentioned above but considerably heavier, suggesting that it might have been cast. However, there is no evidence of casting; all observations indicate that it was shaped by hammering. The bowl has a thickened rim. Low relief decoration was produced by carving and cutting away background metal around the decoration. Four added pieces crimped in place on each medallion provide the required level of relief. There are no concentric circles on the exterior, and there is no centering mark. The elemental composition, especially the low iridium concentration, indicates that the silver was produced from the same ore sources as those of two of the bowls discussed above (Pls. 3, 4).

The Sargveshi cup (Pl. 2) consists of two parts: the cup and a foot. The cup shows several technical similarities to the New York bowl with five medallions. It is hammered and has a thickened rim. The roundels on both objects were executed in a similar fashion, especially the manner in which outlines of the roundels are formed. They appear to be separate pieces attached to the silver, while in fact they are one with the object and not added pieces. The roundels' outlines are rosette-shaped. Low relief was obtained by carving away the silver outside the roundels. Punches near the edge of each rosette caused spreading of the metal over the outlines. The result was that the roundels were lifted out of the plane of the vessel. All relief decoration was obtained by carving and cutting

away background. Additional design was engraved and chased. There are no added pieces on the Sargveshi cup.

The foot of the vessel was made by casting. The X-ray radiographs that could provide direct evidence of casting are not available, but it appears unlikely if not impossible that a foot of this shape and dimension could have been produced by any other technique. The design on the foot was applied by carving and chasing. A centering point and three concentric circles appear on the inner surface of the foot.

The elemental composition of the cup is similar to that of three of the four medallion bowls (Pls. 3, 4, 5) with a characteristically low iridium content, but differs from that of the foot, which has a somewhat higher iridium content. Whether or not the cup and foot were manufactured at the same time for this object cannot be determined definitely. Cup and foot are now separated but were at one time soldered together. The bottom of the cup fits reasonably well onto the top of the foot, but tool marks and execution of the design on cup and foot show few similarities. Differences in elemental composition clearly demonstrate that batches of silver from different ore sources were used for the two parts. However, since the variations lie within the range of composition typical of other early Sasanian silver objects and coins, we may assume that both parts were made of silver from one of the mining areas active during the early Sasanian period.

The Mtskheta plate (Pl. 1) differs in several aspects from the medallion bowls but resembles them in others: its shape is more shallow, and the plate has a ring foot. The plate is shaped by hammering. The thickened rim (ca. 3 mm. thick and 1 cm. wide) is shaped differently from those of the bowls. The dots were made by repoussé from the inside. The low relief of the central medallion results from carving and cutting away the background. There are no added parts. On the exterior within the foot one can observe a centering mark and one partially visible circle (diam. 2.2 cm.). There is also a line on the exterior, just below the rim.

The elemental analysis of the plate is different from those of the objects previously described: the iridium content, although still relatively low, is higher than those of the typical early Sasanian vessels. However, comparison with analyses of coins from the fourth quarter of the third century shows excellent agreement in the characteristic element concentrations. This unique agreement provides evidence for the suggestion that the Mtskheta plate may have been manufactured at a mint rather than at a silversmith's workshop. However, other explanations such as the use of the same silver as that supplied to mints or of remelted coins are equally plausible.

The three earliest hunting plates, the Shemakha plate (Pl. 8), the Krasnaya Polyana plate (Pl. 9), and the Sari plate (Pl. 10), provide convincing evidence that, at this early stage, Sasanian craftsmanship had already reached its full potential. In the manufacturing process a blank was first hammered into the desired shape, followed by the thickening of the rim of the plate; the craftsman then decorated it by carving and cutting away background around the design elements, by using numerous prefabricated pieces crimped in place, and by chasing and engraving. Major outlines were deeply chased or engraved, while other lines were chased. After decoration was completed and a ring foot attached, the plate was polished, spot-gilded, and burnished. With the exception of the use of niello inlays, no further developments have been observed in the methods of manufacturing plates of later date. In fact, the tendency was to simplify, either by using fewer added pieces, or by minimizing the amount of metal cut away around the design elements. In some cases the simplification was so great that the decorating process consisted only of engraving or chasing.

Each of the three plates exhibits an external rim line. Two of the plates (Krasnaya Polyana and Sari) have a centering point and two concentric circles on the exterior surface. The Shemakha plate may also bear a centering point and two concentric circles; their presence, however, is obscured by accumulated layers of corrosion and materials applied during conservation to strengthen the embrittled silver. Each plate has soldered to it a ring foot, straight or slightly flared in cross section, attached perpendicularly to the plate or at a slight outward angle.

Elemental analyses of two of the vessels (Krasnaya Polyana and Shemakha) show the silver alloy to be consistent with those of the early Sasanian silver vessels. Feet appear to be made of silver from related sources but produced in different batches. Samples of the Sari plate were not available for elemental analysis.

The British Museum Shapur plate (Pl. 13) differs from the other plates in that it is smaller in size and more rounded. The plate was shaped by hammering, and the decoration was produced by added pieces, crimped in place, and by chasing and engraving. The exterior surface shows a centering mark and two concentric circles as well as an external rim line. The foot is slightly convex in cross section and is attached perpendicularly to the bottom of the plate. The composition of the plate is similar to that of the Mtskheta plate (Pl. 1) and to contemporary coins: the iridium values are identical, but the gold concentration level is higher in the British Museum Shapur plate. The elemental composition of the foot of this plate, which is probably made of silver from a different source, resembles those of early objects with low iridium levels.

The following plates form a group consistent in its technical characteristics: the Cleveland Hormizd plate (Pl. 14), the Freer Shapur II plate (Pl. 15), the New York Yazdgard I plate (Pl. 16), the New York Peroz-Kavad I plate (Pl. 17), and the plate from Ufa (Pl. 18). They were all made in a fashion similar to that described above for the three early hunting plates. Two of the plates (Cleveland Hormizd and New York Yazdgard I) show no evidence of the cutting away of background metal around the decoration. The two plates also lack the centering mark seen on the others. Of the five plates only the Freer Shapur II plate has concentric circles on the exterior surface, but all exhibit an external rim line. Analyses show similar compositions with characteristic high iridium values, and are virtually identical to that of the New York bowl with the central medallion (Pl. 6). All five plates have ring feet that are straight in cross section and attached perpendicularly to the bottom of the plate.

The Strelka plate (Pl. 19) differs in method of manufacture from the five hunting plates in that the decoration is effected by carving, cutting away background metal, chasing, and engraving; there are no added pieces. A centering mark and an external rim line appear on the exterior surface. A ring foot, slightly concave in cross section, is attached perpen-

dicularly to the plate. Plate and foot are made from the same batch of silver, which is identical in elemental composition to that of the five hunting plates described above.

The Berlin plate (Pl. 20) was made by techniques similar to those of the Strelka plate: the blank was hammered into shape, the background material cut away around the decoration, and the decoration impressed by chasing and engraving. No pieces were added; a centering mark and external rim line appear; a ring foot, straight in cross section, was attached perpendicularly to the plate. The metal composition of the plate is different from that of the five hunting plates.

The Bibliothèque Nationale plate (Pl. 22) is large and heavy and is generally considered to have been cast. There is, however, no direct evidence for casting, such as the presence of casting flaws in an X-ray radiograph or increased thickness in areas of highest curvature. The extensive corrosion on the exterior surface of the plate has resulted in a large number of corrosion pits, which may easily have been misinterpreted as casting flaws. It is most likely that this plate was shaped by hammering, as were all others of this type. The weight and thickness (ca. 3.2 mm. maximum) do not exclude hammering, while the observed thinning in areas of largest curvature is consistent with the suggested technique. The decoration is produced by carving and cutting away the metal around the low-relief decoration. It is uncertain whether a depression in the center of the exterior is a centering mark or a corrosion pit. An external rim line is present. Analyses of samples from plate and foot suggest that they were made of different batches of the same silver. Whether or not the source of this silver is the same as that of the central Sasanian hunting plates is ambiguous; although gold and iridium contents are similar, there is sufficient difference in these and other characteristic elements to suggest that a different silver source may have been used.

The plate with the hunter wearing a ram's-horn headdress (Pl. 23) was shaped by hammering and decorated by adding pieces crimped in place, by carving and cutting metal away around the design, and by chasing and engraving. The foot is missing, but silver solder remains where the foot was attached to the plate. The exterior surface shows a centering point,

three concentric circles near the center of the plate, and an external rim line. The gold and iridium concentrations of the alloy are similar to those of the central Sasanian hunting plates, but other characteristic elements indicate a different source of silver.

The plate with a leopard hunt (Pl. 24) was made by hammering and decorated by adding pieces crimped in place, chasing, and engraving; metal was cut away around the decoration only in an area in the lowest part of the scene near the rim. The foot is straight and attached perpendicularly to the plate. A centering point and two external rim lines are present on the exterior surface. Comparison of the composition of samples from plate and foot clearly shows that silver from different sources were tapped for these parts; the silver used for the plate is significantly different from that of the central Sasanian hunting plates.

The British Museum "Bahram Gur" plate (Pl. 25) is hammered. Only engraving and chasing appear to have been used in decorating it. All major outlines of the design are beveled. The foot is missing except for a small fragment, but the solder still remains. There is no external rim line, but a centering mark appears on the interior. The elemental composition shows that the metal used for this plate came from a source different from the one that produced the silver for the central Sasanian hunting plates.

The Fabricius plate (Pl. 26) was shaped by hammering and exhibits a chased and engraved decoration. The major outlines of the decoration are beveled. The foot is missing. There is a centering mark on the exterior but no external rim line. The composition of the silver differs significantly from that of the central Sasanian hunting plates.

The hunting plate from Tcherdyne (Pl. 27) differs from other comparable hunting plates in that it is shallower and that it does not have a thickened rim. The plate was probably shaped by hammering, although casting cannot be entirely excluded in this case. Shallow depressions on the exterior surface under the various design elements indicate that hammering occurred during or after decorating. These depressions could have resulted from hammering on the inside surface around the relief decoration while the plate was resting on a firm support. Carving, cutting away background metal, and engraving were

used to achieve the decoration. The foot is missing. There is a centering mark on the exterior but no external rim line. The gold and iridium levels in the silver are similar to those of the central Sasanian hunting plates, but other characteristic elements indicate a different origin for the silver alloy.

The Pereschepina plate (Pl. 28) resembles the central Sasanian hunting plates in method of manufacture as well as in composition. The plate is heavily corroded and extremely damaged. The difference in composition of plate and foot indicates that the metal may have come from separate sources.

The plate with an onager hunt (Pl. 29) was manufactured in the same manner as the central Sasanian hunting plates, but differs from them in that there is no external rim line. Composition data also indicate a different source of silver for the onager hunt plate. Plate and foot were made of silver produced from different sources.

The three plates shown in Pls. 30, 31, and 32 were formed by hammering and decorated by chasing and engraving. Beveled lines define the major outlines of the design. Two of the three plates have a centering mark on the exterior surface, while the third (Chilek, Pl. 30) may have a centering mark on the interior surface. Only one plate, the one from Kutais (Pl. 31), exhibits an exterior rim line. The Chilek plate is made of silver different from that used for the central Sasanian hunting plates. The plates from Kutais and Nizhne Shakharovka (Pl. 32) have elemental compositions similar to and indistinguishable from that of the central Sasanian hunting plates, except that the copper content of the Kutais plate is uncharacteristically high.

Two plates with enthronement scenes (Pls. 34, 35) were fabricated by hammering and cutting away background metal around the decoration, and by chasing and engraving. The exterior surface of each plate shows a centering mark and an external rim line, but the plate from Qazvin (Pl. 34) has two concentric circles near the center of the plate. No elemental analysis was performed on the Qazvin plate. The plate from Klimova (Pl. 35) has an elemental composition slightly different from that of the central Sasanian hunting plates, indicating that different sources were used for the production of silver.

The Walters bowl with an enthronement scene

(Pl. 36) was shaped by hammering. It was embellished by cutting away metal from the background around the decoration and by chasing and engraving. Bowl and foot were made of silver from different sources. The silver alloy of the bowl resembles that of the central Sasanian hunting plates, but sufficient differences exist to assume that it is probably not of the same origin.

The plate from Touroucheva (Pl. 37; Appendix II) is unique in several ways. The method of manufacture is basically the same as that of the central Sasanian hunting plates, except that the added pieces appear to be made of thin silver sheet modeled by repoussé, rather than the relatively thick cast and hammered ones that typify other central Sasanian vessels. There is a centering mark at the exterior but no external rim line. The composition of the plate differs greatly not only from the silver alloy of the central Sasanian hunting plates but also from all other Sasanian silver objects analyzed.

The Guennol plate (Pl. 38; Appendix II) is made in the same way as the central Sasanian hunting plates. It shows a centering mark and two external rim lines on the exterior surface. The elemental composition, however, differs significantly from the silver of the central Sasanian hunting plates.

Summary. The technical examinations of the vessels with royal images have revealed certain characteristics that can be summarized as follows.

All objects were shaped by hammering. Nearly all plates and bowls show clear evidence of cold working. Casting and the "double shell" technique were apparently not used. The decorations were achieved by a combination of techniques that included chasing, engraving, carving away metal from the background around the decoration and adding separate cast and cold-worked pieces fastened to the vessel by "crimping." All objects were polished, and most were partially gilded.

Certain aspects of the methods of manufacture correlate with time of manufacture or stylistic properties. <sup>15</sup>

- a) External rim lines occur on early plates and on all central Sasanian hunting plates; of the provincial plates more than half do not have an external rim line.
  - b) Concentric circles near the center on the exte-

rior occur only on early bowls and plates, and on the British Museum Shapur plate (Pl. 13), the "provincial" plate with a hunter wearing a ram's-horn headdress (Pl. 23), and the Freer Shapur II plate (Pl. 15), all from the fourth century A.D.

- c) Beveled lines are prominent on early plates and on later provincial plates. For the latter, these beveled lines serve to give the impression of relief. This technique is a simplification of the methods in early plates and central Sasanian plates where relief is obtained by carving away metal around the decoration and by adding pieces.
- d) Nearly all objects are decorated by mercury-gilding. On the early bowls and plates the gilding covers only parts of the design (spot-gilding). The gilding on the central Sasanian plates covers the entire design, while the background does not contain gilding. In one case (plate from Ufa) only parts of the design and the entire background are gilded. Most of the provincial plates show gilding only on parts of the design.

Careful examination of the elemental analyses of the silver alloys allows the following observations.

- a) Early bowls and plates are made of silver characterized by low iridium concentrations. The variations observed in gold and iridium concentrations of these vessels suggest that the silver was produced from more than one lead ore deposit. However, the similarity, especially in iridium concentration levels, indicates that these ore sources were located in one single geographic area. The Metropolitan Museum bowl with a male portrait (Pl. 6) is the single exception; its elemental composition is probably identical to that of the central Sasanian plates.
- b) The central Sasanian hunting plates were manufactured from silver extracted from one single ore source. The similarity in gold and iridium concentration levels justifies this observation. Comparison of analytical data of these vessels with other objects and

<sup>15.</sup> In the following discussion of technical characteristics, the objects are divided into three categories. This division is based on style and iconography, described in the previous chapters. The three groups are: early cups, bowls, and plates (Pls. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10); central Sasanian hunting plates (Pls. 14, 15, 16, 17, 18, 19, 28); the British Museum Shapur plate (Pl. 13) and "provincial" plates (Pls. 20, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 35, 36, 37, 38).

contemporary coins indicates that this silver was used exclusively in royal workshops, with the possible exception that limited use of this silver may have been made at the end of the Sasanian era or during the Islamic period for coins and nonroyal vessels.

c) Provincial vessels can in most instances be clearly distinguished from central Sasanian plates. Exceptions are the plate from Nizhne Shakharovka (Pl. 32) and the plate from Kutais (Pl. 31), which are made of silver indistinguishable from the central Sasanian silver. Since these plates may have a post-Sasanian date of manufacture, it is possible that at that time the distribution of the silver was no longer controlled and that indeed the same silver was used as that from which the central Sasanian silver was made. It is also possible that a different source of silver was used that provided silver analytically indistinguishable by our methods from the central Sasanian silver source.

Five vessels (Pls. 22, 23, 27, 35, and 36) show gold and iridium concentration levels similar to those of

the central Sasanian silver, but multivariate statistical methods indicate low probabilities for these objects of belonging to the central Sasanian group when other elements are taken into account. Most likely, different ore sources were used for the production of the copper that was alloyed with the silver. The silver conceivably could have come from the same sources that supplied the metal for the central Sasanian objects, but it is more likely that it originated from different silver sources with identical gold and iridium concentration levels.

The remainder of the "provincial" objects show sufficiently large deviations in gold and iridium content from the central Sasanian objects that a common ore source for silver would be highly improbable.

It is not impossible that some of the "provincial" objects with matching gold and iridium concentrations are made of silver from a common ore source (e.g., Pls. 22, 27). However, because of insufficient comparative analytical data such conclusions are at this time not justified.

#### TABLE I Elemental Composition

TABLE I lists the elemental composition of Sasanian silver vessels as determined by thermal neutron activation analysis. All analyses were performed on samples weighing on the average 0.5 mg. The samples were obtained by hand drilling using small, high-speed stainless steel or tungsten carbide drill bits. The drillings of the oxidized or corroded surface were discarded and, where possible, uncorroded metal was collected.

The objects are identified by their plate numbers in column 1. The location on the object where the sample was removed is given in column 2. Columns 3, 4, and 5 list the concentrations of silver, copper, and gold, respectively. These elements were determined by instrumental neutron activation analysis, and their concentrations were calculated based upon the assumption that silver, copper, and gold are the only elements present in significant amounts. The accuracy of the concentrations for these elements is estimated to be better than five percent of reported values.

Columns 6-11 list the concentrations of iridium, zinc, tin, arsenic, antimony, and selenium, respec-

tively. These elements were determined by a neutron activation analysis procedure that included chemical separations after activation of the samples, but before measurement of gamma ray energy spectra. The concentration levels are expressed in micrograms per gram sample (ppm). The precision of the reported values is estimated at fifteen percent, except when the concentration levels approach detection limits; the accuracy, however, is estimated at twenty-five percent.

Columns 12–14 list the concentrations of iron, cobalt, and mercury, respectively. These elements were determined simultaneously with the previous ones. However, it was found that the elements are distributed inhomogeneously in the silver alloy and that the small sample size used does not fairly represent the metal alloy. Although these elements may be of limited use, they are reported here nonetheless for the sake of completeness.

Further details on sampling, analytical techniques, and accuracy have been reported previously. <sup>16</sup> Volume II will also contain a more comprehensive description of the elemental analysis procedure. <sup>17</sup>

<sup>16.</sup> See note 14 above.

<sup>17.</sup> See note 1 above.

TABLE I

Elemental Composition

Elemental Composition	4 701 / 5	0 T	Conce	entrations in	percent
	1. Plate number of object	2. Location of sample	3. Ag	4. Cu	5. Au
	1	plate (a) foot (b)	95. I 95. I	4.42 4.41	0.469 0.467
	2	cup (c) foot (b)	95.1 90.1	4·39 9.46	0.494 0.463
	3	bowl (d)	94.9	4.49	0.645
	4	bowl (d)	98.0	1.47	0.498
	5	bowl (c)	97.7	1.53	0.805
	6	bowl (c) bowl (c) bowl (c)	93.4 94.5 92.2	6.03 4.93 7.18	0.590 0.586 0.584
	7	(g)			
	8	plate (a) foot (b)	98. I 97. I	1.34 2.29	0.560 0.567
	9	plate (a) foot (b)	95·7 96.9	3·73 2.48	0.531 0.593
	10	(g)			
	11	(g)			
	12	(g)			
	13	plate (a) foot (b)	95.6 95.8	3.72 3.53	0.669 0.647
	14	plate (a) foot (b)	90.5 86.8	8.86 12.6	0.612 0.579
	15	plate (a) foot (b)	94·3 94·4	5.10 <b>4</b> .90	0.550 0.691
	16	plate (a) foot (b) foot (b)	96.2 97·3 97·3	3.10 2.01 2.00	0.764 0.678 0.676
Location from which sample was removed:  a) underside of vessel, within foot ring b) rim of foot c) in or near rim of cup or bowl	17	plate (a) foot (b) foot (b) horse leg (e)	94.0 93.4 93.4 92.9	5·37 5·98 5·91 5·60	0.673 0.676 0.672 1.49
<ul><li>d) exterior of bowl, near center</li><li>e) underside of hoof of freestanding horse leg</li><li>f) remains of solder used to join foot ring</li></ul>	18	plate (a) foot (b)	93.9 95.1	5·37 4·29	0.700
(now missing) to plate g) no sample available for analysis	19	plate (a) plate (a)	90.4 91.4	9.00 8.00	0.552 0.550
nm = not measured		foot (b)	89.5	9.89	0.551

Concentrations in µg/g (ppm)								
6. Ir	7. Zn	8. Sn	9. As	10. Sb	11. Se	12. Fe	13. Co	14. Hg
0.018	14	<31	<0.34	0.27	1.4	<6.9	<0.024	0.13
0.018	13	26	<0.36	0.29	I.I	<4.8	0.052	0.057
0.0045	16	<29	0.69	0.16	0.67	≤9.6	0.059	2.8
0.020	120	470	29	29	5.9	28	0.11	0.22
0.0052	16	2 I	10	5.6	1.9	59	0.028	<0.014
0.0013	3.8	<20	0.11	0.14	0.73	< 5.4	<0.019	0.55
0.0019	7.6	<83	nm	0.040	<0.70	<9.3	<0.034	0.34
0.17	17	180	1.4	3.5	1.2	110	0.37	1.7
0.17	15	87	0.55	3.2	<1.3	17	1.3	1.3
0.19	7.4	<74	0.71	2.6	0.27	<9.7	<0.036	0.34
	0 -	<b>/-</b> 0			a	<b>~</b>	0.026	2.25
0.0025	8.o	<18	1.1	0.10	0.52	≤5.4 8.8	0.020	0.079
0.0029	360	<27	1.2	0.56	1.5		0.12	0.17
0.0069 0.014	I 2 I I	<33 1400	2.0 <0.18	2.5 0.20	0.88 1.3	<6.4 ≤4.2	0.041 0.046	0.01
0.016	9.4	<23	0.89	0.51	0.48	<5.2	0.052	0.93
0.0060	9.4 9.2	<11	nm	0.31	0.64	<5.0	<0.014	0.03
	-			-	•		-	-
0.10	530	1500	54	12	7.8	<14	4. I	27
0.071	43	550	54	19	27	<7.5	0.14	0.77
0.14	29	<33	II	3.8	1.6	58	1.2	0.08
0.082	31	<40	13	3.8	7.5	28	0.89	0.52
0.11	22	<97	5.8	2.5	1.4	≤1.9	0.046	1.2
0.10	16	<110	0.28	0.27	0.44	<12	<0.046	0.97
0.093	13	<100	0.20	0.14	0.45	<9.7	<0.040	<0.54
0.16	27	<92	4.3	1.6	2.0	<8.9	0.038	0.83
0.17	24	<170	2.8	2.6	2.2	<27	<0.087	0.60
0.16	25	19	2.4	2.6	1.4	<12	<0.018	0.09
0.52	1760	<500	nm	3.9	5.6	<b>≤</b> 89	0.36	191
O. I 2	28	360	8.1	5.4	1.6	<13	<0.054	0.24
0.098	19	110	6.6	3.9	1.4	<12	<0.050	0.58
0.092	48	860	37	9.2	4.3	<8.9	0.13	0.50
0.13	41	960	51	8.5	2.7	<12	0.069	0.35
0.17	70	1500	47	II	3.7	<17	0.45	0.11

TABLE I			Concentrations in percent		
Elemental Composition	1. Plate number of object	2. Location of sample	3. Ag	4. Cu	5. Au
continued	20	plate (a) foot (b)	61.7 61.8	38.0 37.8	o.364 o.366
	21	(g)			
	22	plate (a) foot (b)	92.2 95.6	7.20 3.68	0.693 0.694
	23	plate (a) solder (f)	92.1 93.3	7.23 6.17	0.703 0.498
	24	plate (a) foot (b)	94·4 94·3	5.03 5.14	0.586 0.584
	25	plate (a)	96.4	3.02	0.634
	26	plate (a)	90.8	8.86	0.371
	27	plate (a) plate (a)	88. ı 88. o	11.2 11.3	0.659 0.661
	28	plate (a) foot (b)	90.0 93.9	9.25 5.44	0.672 0.738
	29	plate (a) foot (b)	91.7 88.7	7.70 10.7	0.617
	30	plate (a) foot (b)	98.0	1.69 7.47	0.295 0.632
	31	plate (a)	81.6	17.8	0.555
	32	plate (a) foot (b)	92.2 93.8	7.22 5.63	o.6o4 o.59o
	33	(g)			
	34	(g)			
	35	plate (a) plate (a) foot (b)	96.1 96.2 94.3	3.41 3.29 5.34	0.541 0.537 0.402
Location from which sample was removed:	36	bowl (a) foot (b)	91.6 94.6	7.70 4.69	o.66o o.668
<ul><li>a) underside of vessel, within foot ring</li><li>b) rim of foot</li><li>c) in or near rim of cup or bowl</li></ul>	37	plate (a) foot (b)	96.6 96.2	3.22 3.19	0.164 0.598
d) exterior of bowl, near center e) underside of hoof of freestanding horse leg f) remains of solder used to join foot ring	38	plate (a) foot (b)	90.6 72.4	8.69 27.0	0.677 0.611

nm = not measured

(now missing) to plate g) no sample available for analysis

Concentrations in µg/g (ppm)								
6. Ir	7. Zn	8. Sn	9. As	10. Sb	11. Se	12. Fe	13. Co	14. Hg
0.050	3000	690	320	51	32	<b>≤</b> 30	19	<0.094
0.045	3000	220	300	51	29	25	19	<0.073
0.17	17	14	8.4	2, 2	1.3	9.3	2.4	0.075
0.14	28	<19	0.92	0.13	0.89	19	1.4	0.048
O. I 2	720	160	I 2	8.3	0.64	26	0.31	4.0
0.024	38	<110	30	33	3.2	77	0.11	4.5
0.017	290	<110	27	10	2.6	≤23	<0.060	2.2
0.13	20	<83	0.90	0.48	1.0	<19	<0.080	Ι.Ι
0.022	32	59	nm	6.9	0.58	<12	0.69	0.15
0. 16	22	48	53	8.8	5. 1	<b>≤</b> 12	0.42	0.18
0.10	92	1300	50	8.4	2.7	<8.0	2.2	0.15
0.17	86	3100	50	II	2. I	<13	1.9	0.28
O. I 2	I 4	<190	3.8	2.3	5.7	<36	<0.15	3.4
0.066	340	4200	43	40	15	<17	0.70	0.40
0.24	110	180	44	13	6. ı	490	0.76	3.4
0.092	20	<69	6.9	2.8	3.0	<7.1	0.18	4.5
0.012	3.9	<46	0.19	0.059	0.19	< 5.3	0.032	0.09
0.027	39	<40	0.25	0.027	<0.27	<8. I	0.020	0.13
0.10	91	740	93	34	16	79	3.7	0.29
0.16	130	610	<b>4</b> I	8.7	3.5	<12	0.26	0.61
0.14	130	290	22	6.4	<b>2.</b> I	<16	1.5	0.36
O. I I	31	18	0.50	0.21	1.5	<4.8	0.048	0.21
O. I 2	37	<8 <sub>7</sub>	0.67	0.13	1.5	<5.7	0.024	0.45
0.091	63	<78	2.5	1.8	2.3	<12	<0.048	1.5
0.087	21	96	180	7-4	3.6	<13	<0.046	0.23
0.026	11	<24	< o. 65	0.53	0.77	<8.4	0.13	0.36
0.0085	13	<74	nm	4.9	2.0	<11	<0.040	0.43
0.048	110	150	nm	4.0	1.6	<24	0.26	1.6
0.054	560	410	160	19	4.8	<6.5	1.5	0.23
0.52	200	1700	230	56	19	55	17	0.71

# Technical Description of Individual Objects

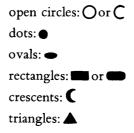
The technical information given is predominantly a result of our own observations. However, weights of some of the objects were duplicated from publications and museum records. Thickness measurements on the Freer medallion bowl and the Freer Shapur II plate were performed by Geoffrey Gordon, who kindly agreed to have parts of his work included in this tabulation.

The first section of the listings concerns the physical dimensions of the objects, most of which are self-explanatory. All measurements are given in centimeters. The reported heights of plates do not include the foot. The shape of the foot is that when viewed sideways: either straight, concave (flaring outward), or convex (flaring inward). The reported angle of attachment is the angle formed by the foot ring and the inside bottom of the plate.

The second section describes the method of manufacture as inferred from visual and microscopic ex-

amination, thickness measurements, and X-ray radiography.

The third section lists information on lines and tool marks on exterior (outside) and interior (inside). The following tool marks have been observed:



The fourth section summarizes the information obtained from the analytical data, while the fifth and last section may describe additional characteristics of the relevant object.

## Plate from Mtskheta

Coll.: Museum of History, Tbilisi acc. no. 18-55:53

## Weight: 850 gm. **Dimensions:**

#### Plate:

diam.: 23.9-24.1 height: 3.4 thickness: at rim 0.32 1-2 cm. below rim 0.11-0.12 2-4 cm. below rim 0.12-0.13 4-7 cm. below rim 0.13-0.15 near center 0.15-0.19 Foot: diam.: 9.1-9.2

thickness: 0.23-0.29

height: 0.65

shape and angle of attachment: See "Remarks" below.

#### Method of Manufacture:

Hammered; round indentations (diam. 1.5 cm.) hammered from inside; central medallion: outside diam. 9.2 cm.; background around decoration carved away.

Gilding only visible on thickened rim of plate.

#### Lines and Tool Marks:

```
exterior: centering mark, diam. 0.13 cm.
  circle, vaguely visible within foot ring, diam. 2.2 cm.
  line, parallel to rim of plate, 0.2-0.3 cm. below rim.
interior:
  chasing marks:
    open circles: diam. 0.25 cm. and 0.10 cm.
    dots: diam. ca. 0.02 cm.
  lines: chased
```

## Elemental Analysis:

Silver for plate and foot from same source, same batch. Composition characteristic of "early Sasanian" silver, but more similar to contemporary coins than to objects.

#### Remarks:

V-shaped foot ring is thicker near bottom of plate. No evidence of seam or solder. Foot ring was either formed as integral part of plate or evidence of joining was obscured by tooling and burnishing.

#### PLATE NUMBER 2

## Cup from Sargveshi

Coll.: Museum of the Society for the History of Ethnography of Georgia, Tbilisi acc. no. P 134

Weight: Cup: 550.5 gm.; Foot: 115.9 gm.

#### **Dimensions:**

#### Cup:

diam.: 12.2-12.4 height: 6.5 (without handles) thickness: at rim 0.31-0.34 1-2 cm. below rim 0.10-0.13 3-4 cm. below rim 0.046-0.069 5 cm. below rim 0.050-0.098 near center 0.21-0.23 Foot: diam.: 5.7

#### Method of Manufacture:

height: ca. 2.4

#### Cup:

Hammered; all relief decoration achieved by carving away background around decoration. No added pieces. Foot:

Cast.

Gilding:

Partially gilded on decoration.

## Lines and Tool Marks:

## Cup:

exterior: no information on specific tool marks. lines: major lines engraved, others chased. interior: line parallel to rim 0.30-0.35 cm. below rim. underside: centering mark, diam. 0.19 cm. concentric circles, diam. 1.5 cm. (partly visible), 3.1 cm. and 3.4 cm. outside: lines: chased.

## Elemental Analysis:

Silver for cup and foot from different sources. Composition of both characteristic of "early Sasanian" silver; cup identical to other "early" silver objects.

#### Remarks:

Cup and foot are at present separated. Technical evidence does not rule out the possibility that the two parts were made at the same time and belong together, but does not provide information to support this assumption.

166

## PLATE NUMBER 3

#### Bow1

Coll.: Cincinnati Art Museum acc. no. 1955.71

Weight: 775 gm.

#### Dimensions:

#### Method of Manufacture:

Hammered; dots, standing out in relief from interior (diam. 0.98 cm.) were probably punched from exterior. Exterior surface was then smoothed by shaving down excess silver followed by polishing. Bust, one single cast and coldworked piece, added, crimped in place. Much carving and chasing took place after added piece was set in place. Circular frame of medallion produced by carving. Gilding:

No gilding visible.

#### Lines and Tool Marks:

```
exterior: centering mark, diam. 0.18 cm.
three concentric circles, diam. 0.70, 1.75, and 2.20 cm.
line parallel to rim, 0.19 cm. from rim.
interior:
chasing marks:
dots: diam. 0.08-0.10 cm.
ovals: 0.15 × 0.04 cm.
also smaller tracing marks.
lines: chased.
some carving in hair.
```

#### **Elemental Analysis:**

Characteristic of "early Sasanian" silver objects.

#### PLATE NUMBER 4

#### Bow1

Coll.: Freer Gallery of Art, Smithsonian Institution, Washington, D.C. acc. no. 57.20

Weight: 728 gm.

#### Dimensions:

```
diam.: 20.6–20.8
height: 6.0
thickness:
at rim
0.58–0.64
1–2 cm. below rim
0.050–0.080
7–9 cm. below rim
0.090–0.13
height of fluting ca. 0.02–0.03
```

#### Method of Manufacture:

Hammered; fluting and circular frame of medallion produced by carving; bust consists of two cast and coldworked pieces, crimped in place. Much decoration (carving, chasing) took place after added pieces were set in place. Gilding:

Traces of gilding on outer molding of medallion and on parts of decoration.

## Lines and Tool Marks:

```
exterior: parts of two concentric circles are vaguely visible.

no centering mark.

interior:

chasing marks:

open circles: diam. 0.17 cm.

dots: diam. 0.01-0.02 and 0.04 cm.

rectangles: length 0.083, width 0.02 cm.

also smaller tool marks.

lines: chased.
```

## Elemental Analysis:

Characteristic of "early Sasanian" silver objects.

## Remarks:

A dendritic structure can clearly be observed, especially on the interior surface, close to the rim. These dendrites are most likely remains of the cast structure. In areas where more extensive hammering took place, the dendrites are less clearly or not at all visible.

## **Bowl with Five Females**

Coll.: The Metropolitan Museum of Art, New York acc. no. 1970.5

# Weight: 1235 gm. Dimensions:

#### Method of Manufacture:

Hammered; circular frames of medallions and decoration produced by carving away background around decoration. Four added pieces in each medallion, crimped in place: top part of headdress, head with string of hair, two breasts. Gilding:

No gilding visible.

#### Lines and Tool Marks:

```
exterior: no centering mark.

no lines, no circles.

chasing marks:

open circles: diam. 0.10 cm.

dots: diam. 0.04 cm.

rectangles: ca. 0.12 × 0.03 cm.

others: not clearly visible because of wear and corrosion.

lines: chased.
interior: none.
```

## **Elemental Analysis:**

Characteristic of "early Sasanian" silver objects.

#### PLATE NUMBER 6

#### Bowl with a Male Bust

Coll.: The Metropolitan Museum of Art, New York acc. no. 55.57

Weight: 597 gm.

diam.: 23.3-23.6

## Dimensions:

## Method of Manufacture:

Hammered; concentric fluting achieved by carving and hammering; circular frame of medallion carved; bust consists of one single cast and cold-worked piece, crimped in place. Much decoration (carving, chasing) took place after added piece was set in place.

Gilding:

Traces of gilding on molding and decoration.

## Lines and Tool Marks:

```
exterior: two concentric circles, diam. 1.48 and 1.98 cm. line parallel to rim of bowl, 0.15 cm. below rim. interior: centering mark, under medallion. chasing marks:

open circles: diam. 0.12 cm.
dots: diam. varying from 0.02-0.09 cm.
rectangles: dimensions not clearly defined.
triangles: 0.04 × 0.04 × 0.04 cm.
lines: mostly chased, some engraved.
```

## Elemental Analysis:

Composition similar to "central Sasanian" silver.

### Remarks:

Repair of broken pieces at rim at 5 o'clock, covering area  $4.5 \times 1.5$  cm. Textile pattern on exterior, probably as a result of contact with textile during manufacture or during burial.

#### **Bowl**

Coll.: Iran Bastan Museum, Tehran

acc. no. 1385

Weight: not available.

#### **Dimensions:**

diam.: 18.2-18.4 height: 5.7

thickness: not available.

#### Method of Manufacture:

Hammered; concentric fluting probably achieved by carving; circular frame of medallion carved; bust may consist of three or four cast and cold-worked pieces, crimped in place: head, hair, upper arm, and possibly top of headdress. Also background carved away around decoration, chasing and carving.

Gilding:

No information available.

#### Lines and Tool Marks:

exterior: two concentric circles, diam. 2.5 and 2.8 cm. No further information available.

#### Elemental Analysis:

No analysis performed.

## Remarks:

Exterior covered with thick layer of corrosion products. Therefore, thickness measurements are not useful. Complete technical examination could not be performed.

### PLATE NUMBER 8

#### Plate from Shemakha

Coll.: Museum of the History of Azerbaijan, Baku

Weight: not recorded.

#### **Dimensions:**

Plate:

diam.: 29.1 height: 3.9

thickness: See "Remarks" below.

Foot:

diam.: 9.5

thickness: 0.15-0.20

height: 1.0 shape: straight

angle of attachment: slightly more than 90°

#### Method of Manufacture:

Hammered; background cut away around decoration; cast and cold-worked pieces, crimped in place. Total number of added pieces: ca. 13. Several pieces are missing. Gilding:

Parts of design are gilded.

#### Lines and Tool Marks:

exterior: line parallel to rim, o.1 cm. below rim.

backing material prevented observation of concentric circles and centering mark.

interior:

lines: major outlines beveled.

Other information not available.

## **Elemental Analysis:**

Silver for plate and foot from same source, but from different batches. Compositions characteristic of "early Sasanian" silver objects.

#### Remarks:

Accumulations of corrosion and backing material used in preservation prevent useful thickness measurements.

## Plate from Krasnaya Polyana

Coll.: Abkhazian State Museum, Autonomous Soviet Socialist Republic of Abkhaz acc. no. 47-71

# Weight: 1820 gm. Dimensions:

#### Plate:

diam.: 28.4–28.5
height: 2.2
thickness:

1 cm. below rim
2–3 cm. below rim
4–6 cm. below rim
7–9 cm. below rim
0.17–0.21
7–9 cm. below rim
0.17–0.23
near center
0.19–0.24

Foot:
diam.: 8.8–8.9
thickness: 0.40
height: 1.0

angle of attachment: 90°

Method of Manufacture:

shape: straight

Hammered; background carved away around decoration; cast and cold-worked pieces, crimped in place. Total number of added pieces: ca. 10.

Gilding:

Gilding visible on parts of design and on thickened rim.

## Lines and Tool Marks:

exterior: centering mark, diam. 0.17 cm.

line parallel to rim of plate, 0.17 cm. below rim.

two concentric circles, diam. 2.1 and 2.6 cm.

interior:

chasing marks:

open circles: diam. 0.18 and 0.12 cm.

dots: diam. 0.06-0.09 cm.

other tracing marks could not accurately be measured.

lines: major lines of decoration deeply chased or

#### Elemental Analysis:

engraved, others chased.

Silver for plate and foot probably from same source, but from different batches. Compositions characteristic of "early Sasanian" silver objects.

#### PLATE NUMBER 10

## Plate from Sari

Coll.: Iran Bastan Museum, Tehran acc. no. 1275

Weight: 1302 gm.

#### **Dimensions:**

#### Plate:

diam.: 28.8–29.0 height: 4.3

thickness: not available

Foot:

diam.: 7.7

thickness: 0.25-0.30

height: 1.2

shape: nearly straight

angle of attachment: more than 90°

See "Remarks" below.

#### Method of Manufacture:

Probably hammered; background around decoration carved away; cast and cold-worked pieces, crimped in place. Total number of added pieces: ca. 10.

Gilding:

Parts of design are gilded.

## Lines and Tool Marks:

exterior: centering mark, diam. 0.2 cm.
two concentric circles, diam. 1.63 and 2.10 cm.
line parallel to rim, 0.2 cm. below rim
interior:
chasing marks:
open circles, dots, others (no information available
on shapes and sizes).
lines: major outlines engraved and beveled, others

# chased. Elemental Analysis:

No analysis performed.

#### Remarks:

Only a 4 cm. long fragment of foot has been preserved. In areas where foot is missing a ridge remains. This is probably a result of thinning or polishing the exterior of the plate with an attached foot ring.

TECHNICAL STUDY

#### PLATE NUMBER 11

#### Plate

Coll.: Ex collection Sir Alexander Burnes Since the plate is now lost, no technical examination could be performed.

## PLATE NUMBER 12

## Fragment

Coll.: Formerly in Berlin

Since the fragment is now lost, no technical examination could be performed.

## PLATE NUMBER 13

## Shapur Plate

Coll.: British Museum, London acc. no. 124091

Weight: 394.7 gm.

## **Dimensions:**

#### Plate:

diam.: 17.9 height: 3.7 thickness:

at rim 0.30 2.3 cm. below rim 0.10 near center 0.10

## Foot:

diam.: 4.8

thickness: not recorded

height: 0.8

shape: flaring inward (convex) angle of attachment: 90°

#### Method of Manufacture:

Hammered; cast and cold-worked pieces, crimped in place. Total number of added pieces: ca. 13. Gilding:

Parts of design and inner molding are gilded.

### Lines and Tool Marks:

```
exterior: centering mark, diam. 0.3 cm.

two concentric circles, diam. 1.5 and 1.1 cm.
line parallel to rim of plate, 0.15 cm. below rim.
interior:
chasing marks:
open circles: diam. 0.08 cm.
dots: diam. 0.10, 0.04, and 0.01 cm.
ovals: 0.08 × 0.03 cm.
lines: major lines engraved and beveled, others chased.
```

## **Elemental Analysis:**

Silver for plate and foot probably from different sources. Plate similar to contemporary coins. Foot typical of "early Sasanian" silver objects.

## Hormizd Plate

Coll.: Cleveland Museum of Art acc. no. 62.150

## Weight: ca. 546 gm.

#### **Dimensions:**

### Method of Manufacture:

Hammered; cast and cold-worked pieces, crimped in place. Total number of added pieces: 16. Gilding:

Entire design is gilded except for king's face, neck, and

## Lines and Tool Marks:

```
exterior: line parallel to rim, 0.2 cm. below rim. interior:
    chasing marks:
    open circles: diam. 0.08 cm.
    dots: diam. 0.04-0.08 cm.
    blunt ovals: ca. 0.06 × 0.01 cm.
    sharp ovals: 0.12 × 0.03 cm.
    crescents: length 0.2 cm.
    lines: major outlines beveled, others chased.
```

## Elemental Analysis:

Silver for plate and foot from same source. Composition characteristic of "central Sasanian" silver.

### PLATE NUMBER 15

## Shapur II Plate

```
Coll.: Freer Gallery of Art, Smithsonian Institution, Washington, D.C. acc. no. 34.23
```

## Weight: 870.2 gm.

## Dimensions:

```
Plate:
  diam.: 23.9-24.0
  height: 3.5
  thickness:
                         0.18-0.24
    at rim
    1-2 cm. below rim 0.095-0.13
    3-4 cm. below rim 0.050-0.088
    6-8 cm. below rim 0.055-0.13
    near center
                         0.11-0.14
Foot:
  diam.: 7.7-7.8
  thickness: 0.22-0.35
  height: 1.3
  shape: nearly straight
  angle of attachment: 90°
```

#### Method of Manufacture:

Hammered; background around decoration carved away; cast and hammered pieces, crimped in place. Total number of added pieces: 17. (One of these pieces, rear haunch of lower boar, is now missing.)

Gilding:

Entire design is gilded except king's face and hands.

#### Lines and Tool Marks:

```
exterior: centering mark, not round, diam. 0.18 cm. line parallel to rim of plate, 0.18 cm. below rim. two fragmentary circles within foot ring. interior: chasing marks:

open circles: diam. 0.13 and 0.09 cm. See "Remarks" below.
dots: diam. 0.18 cm.
ovals: 0.09 × 0.01 cm. and 0.15 × 0.04 cm.
crescents: length 0.1 cm.
lines: mostly chased; some lines engraved and beveled (e.g., upper outlines of boars).
```

## Elemental Analysis:

Silver for plate and foot from similar but not identical sources. Composition typical of "central Sasanian" silver.

#### Remarks:

Some of the open circles with diam. 0.13 cm. were apparently produced by a damaged, nicked tool.

Hallmarks are present on outside of plate, on the edge near the king's scarf, and on inside of foot.

The "scarf join" (overlapping tapered ends of strip of silver) on the foot can be clearly observed.

TECHNICAL STUDY

## PLATE NUMBER 16

## Yazdgard I Plate

Coll.: The Metropolitan Museum of Art, New York acc. no. 1970.6

# Weight: 713 gm. Dimensions:

#### Plate:

```
diam.: 23.3-23.4
 height: 3.3
 thickness:
    at rim
                        0.24-0.29
    1-2 cm. below rim 0.082-0.13
    3-4 cm. below rim 0.062-0.084
    5-6 cm. below rim 0.060-0.090
    near center
                        0.11-0.12
Foot:
  diam.: 7.6-7.7
  thickness: 0.22-0.26
  height: 1.1
  shape: straight
  angle of attachment: 90°
```

#### Method of Manufacture:

Hammered; cast and cold-worked pieces, crimped in place. Total number of added pieces: 10.

Entire design is gilded except king's face and hands.

#### Lines and Tool Marks:

```
exterior: no centering mark.

line parallel to rim of plate, 0.3 cm. below rim.
interior:
chasing marks:
open circles: diam. 0.10 cm.
dots: diam. 0.04-0.06 cm.
ovals: varying from 0.06 × 0.02 to 0.09 × 0.03 cm.
lines: major outlines beveled, others chased.
```

## Elemental Analysis:

Silver for foot and plate from similar but not identical sources. Composition typical of "central Sasanian" silver.

### PLATE NUMBER 17

## Peroz-Kavad I Plate

```
Coll.: The Metropolitan Museum of Art, New York acc. no. 34.33
```

## Weight: 721 gm.

## Dimensions:

```
Plate:
  diam.: 21.8-21.9
  height: 3.2
  thickness:
    at rim
                         0.20-0.22
    1-2 cm. below rim 0.076-0.12
    3-4 cm. below rim 0.065-0.11
    5-6 cm. below rim 0.080-0.098
    near center
                         0.066-0.067
Foot:
  diam.: 6.7
  thickness: 0.20-0.27
  height: 1.1
  shape: straight
  angle of attachment: slightly more than 90°
```

#### Method of Manufacture:

Hammered; background around decoration carved away; cast and cold-worked pieces, crimped in place. See "Remarks" below. Total number of added pieces: 18. Niello inlays.

Gilding:

Entire design is gilded except king's face and hands.

## Lines and Tool Marks:

```
exterior: centering mark, diam. 0.12 cm.
line parallel to rim of plate, 0.1 cm. below rim.
interior:
chasing marks:
open circles: diam. 0.08 cm.
dots: diam. ca. 0.08 cm.
rectangles: 0.04 × 0.01 cm.
also: chisel marks, length 0.13 cm.
lines: chased.
```

## Elemental Analysis:

Silver for plate and foot from same source, same batch. Composition typical of "central Sasanian" silver. Silver of freestanding right front leg of horse from different source.

#### Remarks:

The freestanding right front leg of horse is soldered on. This may be a repair, possibly ancient.

#### Plate from Ufa

Coll.: State Hermitage Museum, Leningrad acc. no. S297

Weight: 772.5 gm.

#### **Dimensions:**

```
Plate:
```

diam.: 20.3 height: 3.0 thickness:

1-2 cm. below rim 0.15-0.18 3-4 cm. below rim 0.072-0.099 5-7 cm. below rim 0.12-0.14 near center 0.15-0.17

Foot:

diam.: 7.7 thickness: 0.26 height: 1.4 shape: straight

angle of attachment: 90°

#### Method of Manufacture:

Hammered; background carved away around decoration; cast and cold-worked pieces, crimped in place. Total number of added pieces: ca. 21.

Gilding:

Entire background and parts of design are gilded.

## Lines and Tool Marks:

exterior: centering mark, diam. 0.07 cm.

line parallel to rim of plate, 0.3 cm. below rim.

line parallel to rim of foot, outside, 0.07 cm. below rim.

interior:

chasing marks:

open circles: diam. 0.18, 0.10, and 0.06 cm.

dots: diam. 0.08 and 0.01 cm.

ovals: 0.1 × 0.01 cm.

lines: chased.

## Elemental Analysis:

Silver for plate and foot from same source, but probably from different batches. Compositions characteristic of "central Sasanian" silver.

#### PLATE NUMBER 19

## Plate from Strelka

Coll.: State Hermitage Museum, Leningrad. acc. no. S250

Weight: 985.6 gm.

#### Dimensions:

```
Plate:
```

diam. 26.0–26.1
height: 3.7
thickness:

1–2 cm. below rim
3–4 cm. below rim
6–8 cm. below rim
near center
0.092–0.11
0.092–0.16

Foot:
diam. 8.5
thickness: 0.32
height: 1.4
shape: slightly concave
angle of attachment: 90°

#### Method of Manufacture:

Hammered; background carved away around decoration. Gilding:

Parts of design are gilded, most of it now lost.

## Lines and Tool Marks:

```
exterior: centering mark, diam. 0.22 cm.
line parallel to rim of plate, 0.15 cm. below rim.
interior:
chasing marks:
    open circles: diam. 0.34, 0.11, and 0.08 cm.
    dots: diam. 0.10-0.13 cm.
    ovals: 0.02 × 0.01 cm.
    rectangles: 0.06 × 0.03 cm.
lines: major outlines beveled, some engraved, others chased.
```

## Elemental Analysis:

Silver for foot and plate from same source, probably from the same batch. Composition typical of "central Sasanian" silver.

TECHNICAL STUDY

## PLATE NUMBER 20

#### Plate

Coll.: Museum für Islamische Kunst, Staatliche Museen Preussischer Kulturbesitz, Berlin acc. no. I 4925

```
Weight: ca. 460 gm.
```

#### **Dimensions:**

```
diam.: 19.0–19.3
height: 2.75
```

thickness:

1 cm. below rim
2-3 cm. below rim
4-5 cm. below rim
6-7 cm. below rim
near center
0.094-0.12
0.052-0.079
0.062-0.084
0.074-0.10
0.090-0.11

max. thickness in relief 0.17

Foot:

Plate:

diam.: 6.8–6.9 thickness: 0.16–0.21 height: 1.25 shape: straight

angle of attachment: 90°

#### Method of Manufacture:

Probably hammered; background around decoration carved away.

Gilding:

Entire background including rim is gilded; also parts of design.

## Lines and Tool Marks:

```
exterior: centering mark, diam. 0.18 cm.
line parallel to rim of plate, 0.2 cm. below rim.
interior:
chasing marks:
open circles: diam. 0.22, 0.18, and 0.09 cm. See "Remarks" below.
dots: diam. 0.12, 0.07, and 0.02-0.03 cm.
rectangles: 0.08 × 0.03 cm.
lines: major outlines beveled, others engraved; lines of detail: chased.
```

## Elemental Analysis:

Silver for plate and foot from same source, same batch. Composition is different from "central Sasanian" silver. Also: unusually high copper content: 38 percent.

#### Remarks:

Open circles with diameter of 0.09 cm. were produced by a damaged tool: part of the circle is straight, and a small segment of the circle is missing.

#### PLATE NUMBER 21

## Plate from Anikovska

Coll.: Pushkin Museum, Tcherdyne No technical examination was performed on this plate. Diameter reported to be 21 cm.; weight 841 gm.

## **Plate**

Coll.: Bibliothèque Nationale, Paris acc. no. CH 2881

Weight: 2070 gm.

#### Dimensions:

#### Plate:

diam.: 30.5-30.7 height: 3.5 thickness: 1 cm. below rim 2-3 cm. below ri

2-3 cm. below rim 0.13-0.20 5-7 cm. below rim 0.16-0.18 9-12 cm. below rim 0.16-0.20 near center 0.32

max. thickness on relief decoration: 0.35 cm.

0.14-0.16

#### Foot:

diam. 10.0–10.1 thickness: 0.5 height: 0.90 shape: straight

angle of attachment: 90° or slightly more than 90°

### Method of Manufacture:

Probably hammered; background around decoration carved away.

Gilding:

Entire background and rim are gilded.

## Lines and Tool Marks:

exterior: centering mark, not certain because of corrosive pitting.

line parallel to rim of plate, 0.3 cm. below rim. interior:

chasing marks:

open circles: diam. 0.16 cm.

dots: diam. 0.04 cm.

others: dots and rectangles, dimensions not recorded.

lines: chased, no evidence of engraved or beveled lines, but exact identification of major outlines is obscured by thick gilding layer.

#### Elemental Analysis:

Silver for plate and foot from same source but from different batches. Composition of silver is similar to "central Sasanian" silver, but small differences suggest a source different from the one used for objects in the "central Sasanian" group.

## Remarks:

The scarf join on the foot (overlapping tapered ends of a strip of silver) can be clearly observed.

#### PLATE NUMBER 23

# Plate with a hunter wearing a ram's-horn headdress

Coll.: State Hermitage Museum, Leningrad acc. no. S24

Weight: 636 gm.

## Dimensions:

#### Plate:

diam. 27.6–28.2
height: 4.0
thickness:

1-2 cm. below rim
0.058–0.073
4–5 cm. below rim
0.080–0.084
7–8 cm. below rim
0.080–0.096
near center
0.13–0.16

Foot: See "Remarks" below.
diam.: 6.1
thickness: ca. 0.3

#### Method of Manufacture:

Hammered; background carved away around decoration; cast and cold-worked pieces, crimped in place. Total number of added pieces: ca. 14.

Parts of the design are gilded.

## Lines and Tool Marks:

exterior: centering mark, diam. 0.25 cm.

line parallel to rim of plate, 0.1 cm. below rim.
three concentric circles, diam. 2.6, 2.2, and 2.0 cm.
interior:
chasing marks:
 open circles: diam. 0.13 and 0.08 cm.
 ovals: 0.07 × 0.01 cm.
 crescents: length 0.16-0.22 cm.; width ca. 0.02 cm.
 rectangles: 0.08 × 0.03 cm.
lines: mostly beveled, others chased.

## Elemental Analysis:

Silver for plate and for solder (from join with foot) from different sources. Composition of silver from plate is slightly but yet significantly different from "central Sasanian" silver.

### Remarks:

The foot is missing; only the impression of foot and solder remains

Corrosion in some of the thinnest areas has resulted in losses. Various solder repairs are visible in the damaged area in the upper part of the plate.

Thinly engraved design of human heads, fishes, and animals appears on interior and exterior. This decoration is said to have been applied during the ninth or tenth century A.D.

176 TECHNICAL STUDY

## PLATE NUMBER 24

## Plate with leopard hunt

Coll.: State Hermitage Museum, Leningrad acc. no. S42

Weight: 644.5 gm.

#### **Dimensions:**

#### Plate:

diam.: 21.5-22.0 height: 3.3 thickness:

> 1-2 cm. below rim 0.066-0.10 3-5 cm. below rim 0.070-0.092 near center 0.11-0.13

Foot:

diam.: 7.1-7.2 thickness: 0.22 height: 1.15 shape: straight

angle of attachment: 90°

#### Method of Manufacture:

Hammered; background carved away around decoration (only in area near rim at 6 o'clock); cast and cold-worked pieces, crimped in place. Total number of added pieces: 7. *Gilding:* 

Parts of design are gilded.

## Lines and Tool Marks:

exterior: centering mark, diam. 0.2 cm.
two lines parallel to rim of plate, 0.3 cm. below rim.
interior:
chasing marks:
open circles: diam. 0.11 cm.
dots: diam. 0.12 cm.
triangles: length ca. 0.01 cm.
rectangles: length 0.13 cm.

## **Elemental Analysis:**

Silver for plate and foot from different sources. Composition of plate different from "central Sasanian" silver. Composition of foot similar to "central Sasanian" silver.

lines: chased; some lines possibly engraved.

# PLATE NUMBER 25 "Bahram Gur" Plate

Coll.: British Museum, London acc. no 124092

Weight: 936 gm.

#### Dimensions:

#### Plate:

diam.: 27.4 height: 4.5-5.0 thickness:

at rim 0.35 5 cm. below rim 0.15 Foot: See "Remarks" below.

diam.: 7.4

#### Method of Manufacture:

Hammered; decoration by engraving and chasing. Gilding:

Parts of design are gilded.

## Lines and Tool Marks:

exterior: no centering mark.
no lines.
interior: centering mark, diam. 0.16 cm.
chasing marks:
open circles: diam. 0.08 cm.
dots: diam. 0.03-0.06 cm.
ovals: 0.08 × 0.09 cm.
lines: major outlines beveled, others chased.

## Elemental Analysis:

Composition different from "central Sasanian" silver.

### Remarks:

Foot is missing, except for small fragment and remains of solder. Some lines overlap or follow closely the initial design formed by round punches.

## **Plate**

Coll.: Ex collection Fabricius; New York private collection

Weight: 432 gm.

## Dimensions:

```
Plate:
```

Foot: See "Remarks" below.

diam.: 6.1

#### Method of Manufacture:

Hammered; decoration engraved and chased. Gilding:

Parts of design are gilded, most of it now lost.

#### Lines and Tool Marks:

exterior: centering mark, diam. 0.2 cm., not round.
no lines on plate.
interior:
chasing marks:
open circles: diam. 0.13 cm.
dots: diam. 0.02 and 0.08 cm.
tracing marks in shape varying from round to oval,
0.02 × 0.1 cm.
lines: major outlines beveled, others chased.

## Elemental Analysis:

Composition significantly different from "central Sasanian" silver.

## Remarks:

Foot is missing, but impression of foot is still visible. Dotted lines that are part of the initial design are visible where final chasing and engraving did not overlap them.

#### PLATE NUMBER 27

## Plate from Tcherdyne

Coll.: State Hermitage Museum, Leningrad acc. no. S216

Weight: 1011 gm.

#### **Dimensions:**

#### Plate:

diam.: 24.5–24.8 height: 2.3

thickness: varying from 0.105-0.159

Foot: See "Remarks" below.

diam.: 8.5

## Method of Manufacture:

Probably hammered and background around decoration carved away. This plate differs from others in that it is heavier, more shallow, and does not have a thickened rim. Indentations on exterior, coinciding with the figures of the rams on interior, indicate that hammering on the background around the rams' figures took place while the plate was resting on a firm support.

Gilding:

Entire design is gilded except king's face and hands.

### Lines and Tool Marks:

exterior: centering mark, diam. 0.20 cm.
no lines on plate.
interior:
chasing marks:
open circles: diam. 0.18 and 0.10 cm.
dots: diam. 0.05 cm.
also: fine dotted pattern on bodies of rams.
lines: engraved.

## Elemental Analysis:

Composition of silver from plate is slightly but significantly different from "central Sasanian" silver.

## Remarks:

Foot is now missing, but impression of foot is still visible.

178 TECHNICAL STUDY

## PLATE NUMBER 28

## Plate from Pereshchepina

Coll.: State Hermitage Museum, Leningrad acc. no. S272

Weight: 628 gm.

#### **Dimensions:**

#### Plate:

diam.: ca. 23 height: 2.8

thickness: not recorded because of extensive losses and

extensive corrosion.

#### Foot:

diam.: not recorded thickness: ca. 0.32 height: 1.4

shape: not recorded

angle of attachment: not recorded

#### Method of Manufacture:

Probably hammered; background carved away around decoration; cast and cold-worked pieces, crimped in place. Total number of pieces: ca. 19, also 7 missing. Gilding:

Entire design is gilded except for king's face and hands.

## Lines and Tool Marks:

exterior: centering mark, diam. o.2 cm.

line parallel to rim of plate, 0.2 cm. below rim.

interior:

chasing marks: not recorded.

lines: not recorded.

## **Elemental Analysis:**

Silver for plate and foot probably from different sources. However, the advanced corrosion, especially of the foot, may have altered the composition. Composition of silver from plate is typical of "central Sasanian" silver.

## Remarks:

The object is corroded and extensively mineralized. Large areas of plate are missing.

#### PLATE NUMBER 29

## Plate with onager hunt

Coll.: State Hermitage Museum, Leningrad acc. no. S5

# Weight: 527.5 gm. Dimensions:

## Plate:

```
diam.: 22.3-22.5
height: 3.3
thickness:
```

1-2 cm. below rim 0.088-0.096 3-4 cm. below rim 0.064-0.084 5-7 cm. below rim 0.083-0.10 near center 0.092-0.11

#### Foot:

diam.: 7.3

thickness: 0.22-0.17. See "Remarks" below.

height: 1.4

shape: slightly concave angle of attachment: 90°

#### Method of Manufacture:

Hammered; cast and cold-worked pieces, crimped in place. Total number of added pieces: 7, also 2 missing. Gilding:

Traces of gilding remain on parts of design.

## Lines and Tool Marks:

```
exterior: centering mark, diam. 0.25 cm., not round. no lines on plate or foot.
interior:
    chasing marks:
        open circles: diam. 0.13 cm.
        dots: diam. 0.08, 0.02-0.03 cm.
        ovals: 0.08 × 0.01-0.02 cm.
        rectangles: 0.06 × 0.01 cm.
lines: outlines and major lines beveled, others
```

#### Elemental Analysis:

chased.

Silver for plate and foot from different sources. Composition of silver from plate is different from "central Sasanian" silver. Composition of silver from foot is similar to "central Sasanian" silver.

#### Remarks:

Foot is thicker at rim (0.22 cm.) and narrows down to 0.17 cm. at 0.5 cm. below rim.

Losses occur in plate near rim at 3 and 5 o'clock.

## Plate from Chilek

Coll.: Republican Museum of History and Culture of Uzbekistan, Samarkand

# Weight: 543 gm. Dimensions:

#### Plate:

diam.: 24.3-24.6 height: 3.0-4.0 thickness: ca. 0.1

Foot:

diam.: 6.3 thickness: 0.15 height: 1.5 shape: not recor

shape: not recorded

angle of attachment: not recorded

#### Method of Manufacture:

Hammered; decoration engraved and chased. Gilding:

Parts of design are gilded.

#### Lines and Tool Marks:

exterior: no centering mark.
no lines on plate or foot.
interior: centering mark, diam. 0.16 cm.
chasing marks:
open circles: diam. 0.13 and 0.10 cm.
dots: diam. 0.10 and 0.02 cm.
triangles: 0.03 cm.
rectangles: length 0.05 and 0.02 cm.
lines: major outlines beveled, others chased. See also
"Remarks" below.

#### Elemental Analysis:

Silver for plate and foot from different sources. Compositions of silver of both plate and foot are different from "central Sasanian" silver.

### Remarks:

The plate has been reassembled from 20–25 fragments. Various losses. Some lines overlap or follow closely outlines made by triangular punches (clearly visible in horse's legs).

## PLATE NUMBER 31

## Plate from Kutais

Coll.: State Hermitage Museum, Leningrad acc. no. S58

## Weight: 204 gm.

## Dimensions:

#### Plate:

diam.: 19.0
height: 3.8
thickness:
1-2 cm. below rim 0.039-0.049
3-4 cm. below rim 0.060-0.063
5-6 cm. below rim ca. 0.11
near center ca. 0.098
Foot: See "Remarks" below.

diam.: ca. 5.7

#### Method of Manufacture:

Hammered; decoration engraved and chased. Gilding:

No gilding visible.

#### Lines and Tool Marks:

exterior: centering mark, diam. 0.2 cm.
line parallel to rim of plate, 0.1 cm. below rim.
interior:
chasing marks:
open circles: diam. 0.11 cm.
dots: diam. 0.05 cm.
crescents: 0.12 × 0.01 cm. and 0.2 × 0.03 cm.
lines: major outlines beveled, others chased.

## **Elemental Analysis:**

Composition of plate is typical of "central Sasanian" silver, except for unusually high copper content: 18 percent.

## Remarks:

The foot ring is now missing; only impression of foot remains. Extensive losses in two areas near rim. Various solder repairs.

## Plate from Nizhne Shakharovka

Coll.: State Hermitage Museum, Leningrad acc. no. S16

Weight: 532.8 gm.

#### **Dimensions:**

## Plate:

diam.: 23.1 height: 3.9 thickness:

 1-2 cm. below rim
 0.049-0.10

 3-4 cm. below rim
 0.063-0.091

 5-7 cm. below rim
 0.074-0.084

 near center
 0.084-0.085

Foot:

diam.: 8.2 thickness: ca. 0.3 height: 1.2 shape: straight

angle of attachment: slightly more than 90°

## Method of Manufacture:

Hammered; decoration engraved. Gilding:

Parts of design are gilded.

## Lines and Tool Marks:

exterior: centering mark, diam. 0.1 cm., not in center. no lines on plate or foot. interior: chasing marks: dots: diam. 0.01-0.06 cm. lines: most beveled, others engraved, few if any chased.

## **Elemental Analysis:**

Silver for plate and foot from same source, probably same batch. Composition is typical of "central Sasanian" silver.

#### Remarks:

The area on exterior within the foot was not polished.

# PLATE NUMBER 33 Gold, rock-crystal, and glass bowl

Coll.: Bibliothèque Nationale, Paris

acc. no. 379

No technical examination was performed.

## Plate from Qazvin

Coll.: Iran Bastan Museum, Tehran acc. no. 904

Weight: not recorded

### Dimensions:

```
Plate:
diam.: 21.2-21.8
height: ca. 2.7 cm.
thickness:

1-2 cm. below rim 0.16-0.18
3-4 cm. below rim 0.13-0.15
5-6 cm. below rim 0.10-0.13
7-9 cm. below rim 0.10-0.14
maximum thickness on
relief decoration: 0.22 cm.

Foot:
diam.: 7.1
thickness: 0.30
height: 1.3
shape: straight
```

# angle of attachment: 90° Method of Manufacture:

Probably hammered; background around decoration carved away. Decoration on various levels of relief. Gilding:

Reported to be gilded on background. See Godard, "Plat d'argent découvert près de Kazwin," p. 300; *ILN*, 21 (August 1948), p. 214.

## Lines and Tool Marks:

```
exterior: centering mark, diam. not measured.
line parallel to rim of plate, 0.2 cm. below rim.
two crudely engraved circles, partly visible, diam. 3.5
and 4.2 cm.
line on outside of foot, 0.2 cm. from rim.
interior:
chasing marks: not recorded.
lines: major lines beveled, others chased.
```

#### Elemental Analysis:

No analysis performed.

## Remarks:

Large loss in area right of center.

## PLATE NUMBER 35

## Plate with enthronement scene from Klimova

Coll.: State Hermitage Museum, Leningrad acc. no. S43

Weight: 985 gm.

Dimensions:

### Plate:

```
diam.: 21.2-21.6
height: 3.0
thickness: not recorded
oot:
diam.: 7.1
```

thickness: 0.18-0.20. See "Remarks" below. height: 1.4

shape: concave angle of attachment: 90°

## Method of Manufacture:

Hammered; background carved away around decoration. Gilding:

Entire background is gilded. There is also gilding on part of the design; an ususually thick layer of gilding can be seen in the crescent and in decoration below crescent.

## Lines and Tool Marks:

```
exterior: centering mark, diam. 0.2 cm.
line parallel to rim of plate, 0.22 cm. below rim.
interior:
chasing marks:
open circles: diam. 0.17 and 0.09 cm.
dots: diam. 0.02-0.06 cm.
ovals: 0.15 × 0.05 cm.
rectangles: ca. 0.1 × 0.05 cm.
lines: mostly chased, some engraved.
```

## Elemental Analysis:

Silver for plate and foot from different sources. Composition of plate is similar to "central Sasanian" silver, but small differences suggest a source different from the one used for objects of "central Sasanian" group.

#### Remarks:

The foot is slightly thicker at the rim (0.20 cm.) and narrows down to 0.18 cm. at 0.7 cm. from rim.

## Bowl with an enthronement scene

Coll.: Walters Art Gallery, Baltimore acc. no. 57.625

Weight: 758.6 gm.

#### **Dimensions:**

#### Plate:

near center 0.22-0.24

maximum thickness: 0.30

#### Foot:

oval: 8.4 × 3.1 thickness: 0.30-0.35 height: not recorded shape: straight angle of attachment: 90°

#### Method of Manufacture:

Probably hammered; background around decoration carved away.

Gilding:

No gilding is visible.

## Lines and Tool Marks:

exterior: not recorded. interior: not recorded.

#### **Elemental Analysis:**

Silver for bowl and foot from different sources. Composition of bowl similar to "central Sasanian" silver, but small differences suggest a source different from the one used for "central Sasanian" silver.

#### PLATE NUMBER 37

#### Plate from Touroucheva

Coll.: State Hermitage Museum, Leningrad acc. no. S255

Weight: 838 gm.

#### **Dimensions:**

## Plate:

diam.: 22.9 height: 2.3-3.5 thickness:

1-2 cm. below rim 0.092-0.12 3-4 cm. below rim 0.066-0.11 5-7 cm. below rim 0.080-0.13 near center 0.056-0.060

#### Foot:

diam.: 7.6 thickness: 0.25 height: 1.0 shape: straight angle of attachment: 90°

#### Method of Manufacture:

Hammered; background carved away around decoration. Repoussé pieces, crimped in place. Total number of added pieces: 21.

Gilding:

Parts of design and the two lions are gilded.

#### Lines and Tool Marks:

exterior: centering mark, diam. 0.1 cm.
no lines on plate or foot.
interior:
chasing marks:
open circles: diam. not recorded.
dots: diam. 0.04 cm.
crescents (semicircular): 0.15 × 0.02 cm.
others: dimensions not clearly distinguishable.
lines: only few lines visible, some chased, some engraved, one or two beveled.

### **Elemental Analysis:**

Silver for plate and foot from different sources. Composition of plate unique and different from "central Sasanian" silver. Composition of foot different from "central Sasanian" silver.

## Plate in the Guennol Collection

Coll.: on loan to The Metropolitan Museum of Art acc. no. L63.10.2

thickness: 0.35-0.50 height: 1.1 shape: straight

angle of attachment: 90°

#### Method of Manufacture:

Hammered; cast and cold-worked pieces, crimped in place. Total number of added pieces: 15.

Gilding:

Parts of the design are gilded.

## Lines and Tool Marks:

```
exterior: centering mark, diam. 0.12 cm., not round.

two lines parallel to rim of plate, 0.15 and 0.25 cm.
below rim.
interior:
chasing marks:
open circles: diam. 0.09 and 0.12 cm.
dots: diam. 0.01-0.03 cm.
rectangles: 0.03 × 0.04 cm.
lines: some of the major outlines beveled, others chased.
```

## Elemental Analysis:

Silver from plate and foot from different sources. Both compositions are significantly different from "central Sasanian" silver.

## Remarks:

The join in the foot is of the butt-join type: the ends of the strip of silver do not overlap but meet squarely.

## APPENDICES FOR PART ONE

## List of Abbreviations in Appendices, Arranged by Plate Number

- Pl. 1 Museum of History, Tbilisi—Mtskheta plate: Mtskheta
- Pl. 2 Museum of the Society for the History of Ethnography of Georgia, Tbilisi—Sargveshi cup: Sargveshi cup
- Pl. 3 Cincinnati Art Museum—bowl: Cincinnati medallion bowl
- Pl. 4 Freer Gallery—male medallion bowl: Freer male med.
- Pl. 5 Metropolitan Museum—bowl with five females: MMA females med.
- Pl. 6 Metropolitan Museum—male medallion bowl: MMA male med.
- Pl. 7 Iran Bastan Museum, Tehran—bowl: Tehran medallion bowl
- Pl. 8 Museum of the History of Azerbaijan, Baku—Shemakha plate: Shemakha
- Pl. 9 Abkhazian State Museum—Krasnaya Polyana plate: Krasnaya Polyana
- Pl. 10 Iran Bastan Museum—Sari plate: Sari
- Pl. 11 Burnes plate: Burnes
- Pl. 13 British Museum—Shapur plate: B. M. Shapur
- Pl. 14 Cleveland Museum—Hormizd plate: Clevl. Hormizd
- Pl. 15 Freer Gallery—Shapur II plate: Freer Sh. II
- Pl. 16 Metropolitan Museum—Yazdgard I plate: MMA Yaz. I
- Pl. 17 Metropolitan Museum—Peroz-Kavad I plate: MMA Peroz-Kavad I
- Pl. 18 Hermitage Museum—Ufa plate: Ufa
- Pl. 19 Hermitage Museum—Strelka plate: Strelka
- Pl. 20 Museum für Islamische Kunst, Berlin—hunting plate: Berlin hunt
- Pl. 21 Pushkin Museum, Tcherdyne—Anikovska plate: Anikovska
- Pl. 22 Bibliothèque Nationale—hunting plate: Bib. Nat.
- Pl. 23 Hermitage Museum—plate with a hunter wearing a ram's-horn headdress: Herm. ram's horns
- Pl. 24 Hermitage Museum—Klimova plate with king stabbing a leopard: Sh. III leopard
- Pl. 25 British Museum—"Bahram Gur" plate: B.M. Bah. Gur
- Pl. 26 Fabricius plate: Fabricius
- Pl. 27 Hermitage Museum—Tcherdyne plate: Tcherdyne
- Pl. 28 Hermitage Museum—Pereshchepina plate: Herm. Pereshchepina
- Pl. 29 Hermitage Museum—plate with an onager hunt: Herm. lasso onager
- Pl. 30 Republican Museum of History and Culture of Uzbekistan—Chilek plate: Chilek
- Pl. 31 Hermitage Museum—Kutais plate: Kutais
- Pl. 32 Hermitage Museum—plate with a boar hunt: Nizhne Shakharovka
- Pl. 33 Bibliothèque Nationale—rock-crystal bowl: Bib. Nat. crystal
- Pl. 34 Iran Bastan Museum, Tehran—Qazvin plate: Qazvin
- Pl. 35 Hermitage Museum—Klimova plate with an enthronement scene: Klimova enthroned
- Pl. 36 Walters Art Gallery—bowl with an enthronement scene: Walters bowl
- Pl. 37 Hermitage Museum—Touroucheva plate: Herm. Sh. II
- Pl. 38 Guennol Collection plate: Guennol

# APPENDIX I Tabulation of Iconographic Details According to Style; Data on Inscriptions and Provenance

THE TABLES have been made to demonstrate to the reader, in diagrammatic form, the essence of the results reached by the iconographic and stylistic analyses detailed in the body of this work. Tables I and II list the characteristic features differentiating the two principal styles found on the plates: the overall parallel-line drapery style and the paired-line drapery style. Table III, which contains the results of the arthistorical analyses of the earliest known hunting plates from Shemakha, Krasnaya Polyana, and Sari (Pls. 8, 9, 10), shows their relationship to the two principal styles and indicates, in general, the degree to which the designs are related to those on later plates. Table IV, where the inscriptions and provenances are listed, permits the reader to see at a glance to what extent the inscription and location support the divisions among the plates made on stylistic grounds.

In Tables I and II the characteristics listed under each style appear in the same numerical order to enable the reader to refer from one Table to the other easily. When a characteristic feature appears in only one Table, it has an "A" number (i.e., 3A). The characteristics are grouped according to subject. Those concerning the king come first, followed by details of the horse and his trappings, the animal quarry, the overall arrangement of the scene, the areas gilded, and, finally, a few technical features. If a plate does not appear under a heading on the Tables, it is for one of the following reasons: 1) the design does not include this feature (i.e., a plate having no horse in the scene will not appear under headings 12-16, all of which have to do with horses and horse trappings); 2) the area where the feature might appear on the vessel is missing or is too much damaged to permit recognition. Whenever a standard feature is omitted from a design where it might be expected to appear,

this is noted under the appropriate heading and the plate is listed under exceptions with the notation "none." Drawings of specific details, accompanying the Tables, are rendered in schematic fashion.

The arrangement of the vessels under each heading follows the chronological sequence presented in the text. In the case of the latest works, where the date of the vessel is not definitely established, the plates are simply arranged in a consistent form throughout, for easy reference.

Whenever specific characteristics of the overall parallel-line drapery group have been noted by Marshak in "Chilekskie Chashi" or, similarly for the paired-line drapery group by Shepherd in "Sasanian Art in Cleveland," the names of these authors have been placed in brackets following the appropriate heading.

In three instances, the characteristics need further explanation: Table I, 3A (temple hair curl), Table II, 1 (three-quarter view of the king's head), and Table II, 5 (nimbus). The mixture of overall parallel-line and paired-line style plates on which the temple hair curl (Table I, 3A) is represented indicates that this is not a feature of one stylistic group but rather a "royal" detail employed for some reason on a number of central Sasanian and provincial silver plates but not on all examples of either class. The three-quarter profile head of the king (Table II, 1) is typical only of the paired-line style plates, but within that group it appears to have a chronological significance. It does not occur on plates dating from the reign of Peroz or later. The plates on which a nimbus surrounds the king's head (Table II, 5) are also all in the paired-line style. However, on a number of the plates in this style the king is represented without a nimbus. It is evident that this feature is not canonical for plates in APPENDIX I

the paired-line drapery style, and it may therefore have been portrayed for a particular reason on a vessel.

The format of Table III differs from that of the two preceding ones. The three early plates from Shemakha, Krasnaya Polyana, and Sari are listed separately with those features characteristic of one or the other drapery style noted, in each case, under the appropriate heading. The numbers following the details correspond to the numbering of the details in Tables I and II. Asterisks are placed before those features that are characteristic not only of a particular style on the silver plates but are also more generally typical of all early Sasanian works of art. There is also a list of unique details for each plate.

## TABLE I: Characteristics of the Hunting Plates on Which the Folds of the Drapery Are Rendered as Overall Parallel Lines

## 1. Profile head of king

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Chilek

Kutais



Herm. ram's horns-long

B. M. Shapur-tied

B. M. Bah. Gur-tied

Fabricius—tied

Kutais-long

EXCEPTION

Chilek-short as in paired-line style

## 3. King's hair in spiral curls (Marshak)

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Chilek-variation-design confused

## 3A. Temple hair curl on king's head (Marshak)

Herm. ram's horns

B. M. Bah. Gur

**Fabricius** 

Chilek

**EXCEPTIONS** 

B. M. Shapur-none

Kutais-none

MMA Peroz-Kavad I-paired-line plate

Tcherdyne—paired-line plate

Ufa-paired-line plate

## 4. Crescentic mustache (Marshak)

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Chilek

EXCEPTION

Kutais-no mustache

## 5. No nimbus around king's head

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Chilek

Kutais

## 6. Dotted pattern within crenelation of crown

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Chilek

EXCEPTION

Kutais-none

## 7. Globe incorporates dotted pattern within silk folds

B. M. Shapur

B. M. Bah. Gur

Fabricius (1)

Chilek (1)

EXCEPTION

Herm. ram's horns-striated globe

## 8. Weapon—sword

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Chilek

EXCEPTION

Kutais-bow

## 9. Upper garment resting on saddle-broad folds

(Marshak)

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Chilek

Kutais

APPENDIX I

## 9A. Belt with bow ribbons

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Kutais

## 10. Second nostril of horse or quarry visible

(Marshak)

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Chilek

Kutais

EXCEPTION

Berlin hunt-paired-line plate

## 11. Arched muscle pattern on horse's stifle



B. M. Bah. Gur

Fabricius

Kutais

**EXCEPTIONS** 

Herm. ram's horns-none

Chilek-vertical markings

## 12. Crenelated cut of horse's mane (Marshak)

Herm. ram's horns

B. M. Bah. Gur

Fabricius—variation -

Chilek

EXCEPTION

Kutais

## 13. Snaffle bit (Marshak)

Herm. ram's horns

B. M. Bah. Gur

Fabricius

Chilek

Kutais

## 14. No visible saddle pommel

Herm. ram's horns

B. M. Bah. Gur-variation-curvilinear design

**Fabricius** 

## 15. Spaced dotted saddle blanket pattern

Herm. ram's horns

B. M. Bah. Gur

**Fabricius** 

Chilek

Kutais

## Long ribbons with jewels from back corner of saddle blanket

Herm. ram's horns-variation-from side above

corner

B. M. Bah. Gur

**Fabricius** 

Chilek-variation-ribbon from above corner

Kutais-variation-ribbon from above corner

## 17. Animal fur—allover pattern (Marshak)

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Chilek

Kutais

## 18. Scene cut off by rim of plate (Marshak)

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

Fabricius

Chilek

EXCEPTION

Kutais-distorted to fit on plate.

#### 19. Triangular arrangement of the scene

Herm. ram's horns

B. M. Shapur—arm thrust only

B. M. Bah. Gur

Fabricius

Chilek

EXCEPTION

Kutais

## 20. Spot-gilding of design (Marshak)

Herm. ram's horns

B. M. Shapur

B. M. Bah. Gur

**Fabricius** 

Table II

#### 21. No exterior rim line

B. M. Bah. Gur

Chilek

**Fabricius** 

**EXCEPTIONS** 

Herm. ram's horn-rim line

B. M. Shapur-rim line

Kutais-rim line

# TABLE II: Characteristics of the Hunting Plates on Which the Folds of the Drapery Are Rendered as Paired Lines

## 1. King's head, 3/4 view

Clevl. Hormizd

Freer Sh. II

Herm. Pereshchepina

Sh. III leopard

MMA Yaz. I

**EXCEPTIONS:** Profile

MMA Peroz-Kavad I

Nizhne Shakharovka

Tcherdyne

Ufa

Strelka

Berlin hunt

Anikovska

Bib. Nat.

## 2. Beard short and rounded

Clevl. Hormizd

Freer Sh. II

MMA Yaz. I

MMA Peroz-Kavad I

Nizhne Shakharovka

Tcherdyne

Ufa

Strelka-enthroned figure

Berlin hunt

Anikovska

Bib. Nat.

EXCEPTIONS

Herm. Pereshchepina-tied

Strelka-hunter-tied

## 3. King's hair-ball with punched circles or dots

Clevl. Hormizd

Freer Sh. II

Sh. III leopard

MMA Yaz. I

MMA Peroz-Kavad I

Nizhne Shakharovka

Tcherdyne

Strelka

Berlin hunt

Anikovska

Bib. Nat.

EXCEPTIONS

Herm. Pereshchepina—long curled locks

Ufa-no hair visible

## 4. Wavy-line mustache

Herm. Pereshchepina

Sh. III leopard

MMA Yaz. I

MMA Peroz-Kavad I

Tcherdyne

Berlin hunt

Bib. Nat.

EXCEPTIONS

Clevl. Hormizd

Freer Sh. II

Ufa 🌭

Strelka 느

Anikovska 🗀

APPENDIX I

#### 5. Nimbus 8. Weapons Clevl. Hormizd Bow Herm. Pereshchepina Clevl. Hormizd Herm. lasso onager Freer Sh. II Herm. Pereshchepina MMA Yaz. I MMA Peroz-Kavad I MMA Peroz-Kavad I Nizhne Shakharovka Tcherdyne Tcherdyne Ufa Strelka-enthroned figure Ufa Anikovska Strelka **EXCEPTIONS:** No nimbus Bib. Nat. Freer Sh. II Spear Sh. III leopard MMA Yaz. I Nizhne Shakharovka Javelin Strelka—hunter Berlin hunt Berlin hunt Anikovska Bib. Nat. Lasso Herm. lasso onager 6. Crown crenelation—inner outline Freer Sh. II Herm. Pereshchepina Sh. III leopard (finger not over guard) MMA Yaz. I MMA Peroz-Kavad I 9. Upper garment drapery on saddle-linear folds Tcherdyne Clevl. Hormizd Anikovska Freer Sh. II **EXCEPTIONS:** Absent MMA Peroz-Kavad I Ufa Nizhne Shakharovka Strelka Ufa Berlin hunt Strelka Bib. Nat. **EXCEPTIONS** Herm. Pereshchepina 7. Crown globe with linear folds in cloth Berlin hunt Clevl. Hormizd Anikovska Sh. III leopard Bib. Nat. MMA Peroz-Kavad I Ufa 10. Horse's head-pure profile Strelka Clevl. Hormizd Anikovska Freer Sh. II Bib. Nat. MMA Peroz-Kavad I EXCEPTIONS Nizhne Shakharovka Anikovska Freer Sh. II-striated MMA Yaz. I-striated Bib. Nat. Berlin hunt— as on some parallel-line plates EXCEPTIONS Herm. Pereshchepina-in the round Strelka-second nostril depicted Ufa-second ear gives impression of three-

quarter view of head.

## 11. Paired-line muscle pattern on animal's stifle

11 11 11

Clevl. Hormizd Freer Sh. II Sh. III leopard MMA Yaz. I

MMA Peroz-Kavad I—variation—single line / /

Nizhne Shakharovka

Ufa-variation-single line / /

Strelka Berlin hunt Anikovska EXCEPTIONS

Herm. Pereshchepina

Bib. Nat. C

## IIA. Chest muscle or tamga (Shepherd)

Clevl. Hormizd Freer Sh. II

Herm. Pereshchepina MMA Peroz-Kavad I Nizhne Shakharovka

Ufa Strelka Anikovska Bib. Nat.

## 12. Horse's mane (Shepherd)

Clevl. Hormizd

Freer Sh. II

MMA Peroz-Kavad I

Ufa
Bib. Nat.
EXCEPTIONS

Herm. Pereshchepina—plain clipped Nizhne Shakharovka—plain clipped

Strelka—crenelated as in parallel-line style

Berlin hunt-plain clipped

Anikovska-crenelated as in parallel-line style

## 13. Curb bit

Freer Sh. II

MMA Peroz-Kavad I Nizhne Shakharovka

Berlin hunt Bib. Nat. EXCEPTION

Clevl. Hormizd-snaffle

## 14. Saddle pommel accurately portrayed

Clevl. Hormizd Freer Sh. II

Herm. Pereshchepina MMA Peroz-Kavad I Nizhne Shakharovka

Ufa Strelka Berlin hunt Anikovska Bib. Nat.

## 15. Overall crisscross pattern on saddle blanket

Clevl. Hormizd Freer Sh. II

Herm. Pereshchepina

Ufa Strelka Berlin hunt Anikovska EXCEPTIONS

> MMA Peroz-Kavad I—spaced dots Nizhne Shakharovka—spaced dots Bib. Nat.—spaced dots

## 16. Jewels at corner of saddle blanket

Clevl. Hormizd

Freer Sh. II

Herm. Pereshchepina MMA Peroz-Kavad I Nizhne Shakharovka

Ufa

Strelka—variation—ornament at corner, longer ribbons from side *above* corner

Bib. Nat.

Berlin hunt-none

## 17. Spaced pattern used for animal fur, or body plain

Clevl. Hormizd

Freer Sh. II

Herm. Pereshchepina

Sh. III leopard

MMA Yaz. I

MMA Peroz-Kavad I

Nizhne Shakharovka

Ufa

APPENDIX I

Strelka
Berlin hunt
Anikovska
EXCEPTIONS
Tcherdyne—overall pattern
Bib. Nat.—overall pattern

## 18. Scene complete within circular frame of plate

Clevl. Hormizd Freer Sh. II

Herm. Pereshchepina Herm. lasso onager Sh. III leopard MMA Yaz. I

MMA Peroz-Kavad I Nizhne Shakharovka

Tcherdyne
Ufa
Strelka
Berlin hunt
Anikovska
EXCEPTION

Bib. Nat.—scene cut off by rim of plate

## 19. Vertical-horizontal arrangement of the scene

Clevl. Hormizd Freer Sh. II

Herm. Pereshchepina Herm. lasso onager Sh. III leopard MMA Yaz. I MMA Peroz-Kavad I

MMA Peroz-Kavad I Nizhne Shakharovka

Tcherdyne Ufa Strelka Anikovska Bib. Nat. EXCEPTION

Berlin hunt-triangular arrangement

## 20. Gilding over all design or all background

Clevl. Hormizd—design Freer Sh. II—design MMA Yaz. I—design

MMA Peroz-Kavad I-design

Tcherdyne—design
Bib. Nat.—background

**EXCEPTIONS** 

Sh. III leopard—spot-gilding Nizhne Shakharovka—spot-gilding

Berlin hunt-spot-gilding

Ufa-background, gilding; design, spot-gilding

Strelka-spot-gilding

## 21. Exterior rim line

Clevl. Hormizd

Freer Sh. II

Herm. Pereshchepina

Sh. III leopard—variation—two rim lines

MMA Yaz. I

MMA Peroz-Kavad I

Ufa Strelka Berlin hunt Bib. Nat. EXCEPTIONS

> Herm. lasso onager—none Nizhne Shakharovka—none

Tcherdyne—none

## TABLE III: Characteristics of Early Nonroyal Hunting Plates

#### weapon-lasso (8) I. Shemakha—Drapery style: overall parallel horse's head pure profile (10) lines apparent over hunter's leg scene fits within frame (18) Overall parallel-line style vertical-horizontal arrangement of scene (19) \*profile head (1) exterior rim line (21) \*long beard (2) dotted shoulder patch pattern (equivalent to 6, 7) Other \*garment on saddle (9) \*beard-square cut (2) \*hair—long twisted locks (3) \*ribbons off saddle blanket (16) mane-variation of crenelation (12) animal fur (17) \*saddle leg guard (14) spot-gilding (20) saddle blanket—compartments with designs (15) Paired-line style wavy-line mustache (4) III. Sari-Drapery style: unique weapon-bow (8) Overall parallel-line style horse's head pure profile (10) scene fits within frame (18) \*profile head (1) vertical-horizontal arrangement of scene (19) tied beard (2) \*hair curls (3) exterior rim line (21) temple hair curl (3A) Other crescent mustache (4) hair-long curls (3) dotted shoulder patches (equivalent of 6, 7) \*saddle leg guard (14) \*garment folds on saddle (9) mane—plain clipped (12) second nostril of horse visible (10) horse's stifle muscle (11) II. Krasnaya Polyana—Drapery style: \*ribbons off saddle blanket (16) naturalistically rendered animal fur (17) spot-gilding (20) Overall parallel-line style \*profile head (1) Paired-line style \*garment on saddle (9) weapon—bow (8) horse's stifle muscle (11) scene fits within frame (18) snaffle bit (13) vertical-horizontal arrangement of scene (19)

exterior rim line (21)

bit-bow-shaped (13)

mane-variation of crenelation (12)

Other

\*ribbons off saddle blanket (16)

animal fur (17)

Paired-line style

spot-gilding (20)

wavy-line mustache (4)

<sup>\*</sup>Details typical of all early Sasanian works of art

#### INSCRIPTIONS Other regions Herm. Pereshchepina—Poltava, Paired-line style north of Black Sea Berlin hunt-Nor Baiazet, Armenia Clevl. Hormizd-M.P. Herm. Pereshchepina-Sogd. Bib. Nat.—ex coll. Emir of Badakhshan (Afghanistan?) Sh. III leopard—Sogd. Herm. lasso onager—M.P. Parallel-line style MMA Yaz. I-M.P. Iran Nizhne Shakharovka—M.P., Sogd. Cincinnati medallion bowl Touroucheva—Sogd. MMA male med. Guennol-M.P. Tcherdyne-monogram Ural Mountain region Herm. ram's horns Strelka—Hephthalite (x wadew, not before 7th century-Lukonin, private communication) Other regions B. M. Shapur—Anatolia (?) Parallel-line style Herm. ram's horns—Sogd.; monogram— B. M. Bah. Gur-ex coll. Cunningham (Afghanistan or India?) Fabricius—M.P. Fabricius—unknown Other styles Chilek-Uzbekistan Mtskheta-M.P. Kutais-found in the environs of Kutais, Georgia (?) MMA female med.—M.P. Other styles Shemakha-worker's mark Krasnaya Polyana-M.P. Iran Sari-worker's mark Freer male med. Burnes-M.P. MMA females med. Bib. Nat. crystal—M.P. Tehran medallion bowl Herm. Sh. II-Sogd. Sari Qazvin PROVENANCE Ural Mountain region Paired-line style Klimova enthroned Iran Herm. Sh. II Clevl. Hormizd Autonomous Soviet Socialist Republic of Abkhaz MMA Yaz. I Krasnaya Polyana MMA Peroz-Kavad I Guennol Georgia Ural Mountain region Mtskheta Freer Sh. II Sargveshi cup Sh. III leopard Soviet Socialist Republic of Azerbaijan Herm. lasso onager Shemakha Nizhne Shakharovka Tcherdyne Other regions Strelka Burnes-purchased in Afghanistan Ufa Bib. Nat. crystal-unknown

Walters bowl-unknown

Anikovska

## APPENDIX II Part 1

## Touroucheva Plate with Shapur II Hunting Lions

THIS VESSEL (Pl. 37) is placed in an appendix, as it is a unique object in style and in the treatment of many details. The arrangement of the scene and the general technique of manufacture are those of plates in the paired-line drapery tradition. In all other respects, however, the vessel differs from the groups established in this study.

The source of the plate is Touroucheva in the Perm. On the reverse is a Sogdian inscription. The scene is laid out in a horizontal-vertical scheme, and the design fits well within the circular frame of the plate. The reverse or "Parthian" shot of the royal bowman is the same pose that appears on the Sari, Cleveland Museum Hormizd, Ufa, and Strelka plates (Pls. 10, 14, 18, 19). The most unusual features are the appearance of the male head, the narrow, attenuated proportions of the human body, the rendering of the drapery, the curved sword hilt, and the foreshortening of the head and chest of the horse.

The king wears the crown of Shapur II, but on no Sasanian coin or monument do the facial features of this monarch resemble those of the figure on the silver plate. In particular, the long aquiline nose and the extension of the upper eyelid give the face a non-Sasanian look. Haskins identified the king as Shapur II, and stated that there is some evidence that the curved sword hilt was an invention of the Huns.<sup>2</sup> Maenchen-Helfen also noted the curved sword hilt, and believed that the plate could not, therefore, have been made in a royal Sasanian workshop.<sup>3</sup>

The method of fabrication is similar to that of the central Sasanian group. Pieces are added to the background shell of the plate. However, there is a slight variation in the technique, as the added pieces are neither cast nor roughly shaped by hammering as is usual. Rather they are well hammered into sheets of even thickness. Inexperience in working in this fashion may explain the odd placement of the horse's head. The diameter of this plate, 22.9 cm., is standard for the central Sasanian silver, but there is no exterior

rim line, and the design is spot-gilded. Chemical analysis of the metal places this vessel quite apart from the central Sasanian paired-line series and all other provincial plates.<sup>4</sup>

There is nothing in the design of this vessel to suggest a date for it later than the fourth century, judging from Sasanian monuments. The lappet over the rider's leg is an early Sasanian feature, never repeated on late Sasanian monuments or on the other provincial silver plates. The bow has no pronounced ridge at the ear, and both fore- and little fingers of the bowstring hand are outstretched. Moreover, the sword is slung from a scabbard slide, a typical feature on early Sasanian rock reliefs.

It is probable that this vessel is of Eastern manufacture, made during the reign of Shapur II. It is classified here as a provincial work. At present, no closely comparable works of art that might be products of the same school are known.

<sup>1.</sup> StateHermitageMuseum, acc. no. S255; diam. 22.9 cm.; height with foot 3.9 cm.; weight 838 gm. Erdmann, "Die sasanidischen Jagdschalen," pp. 203–204, fig. 4 (Shapur II). Erdmann remarked on the "Hellenistic influence" and thought that the artist was from the West and therefore unfamiliar with the Sasanian inlay technique. He attributed the plate to Shapur II in all his later publications of the vessel: "Zur Chronologie," p. 246; "Entwicklung," p. 99. See also Herzfeld, "Khusrau Parwēz," p. 126, no. 4 (Shapur II, not before mid-reign); Orbeli and Trever, Sas. Metall, pl. 6 (Shapur II); Lukonin, Persia II, figs. 136, 138 (Shapur II). I am grateful to Dr. Lukonin for telling me of the presence of a Sogdian inscription. For a description of the objects found in the "Touroucheva Treasure," see Darkevich, Metall Vostoka, p. 10.

<sup>2.</sup> Haskins, "Northern Origins," p. 330-332.

<sup>3.</sup> Maenchen-Helfen, "Crenelated Mane," p. 111. Trousdale notes the presence of a curved hilt on early Sasanian reliefs: *The Long Sword and Scabbard Slide*, p. 281, note 323. He discusses this plate on p. 92, accepting without question a Sasanian attribution and a date in the reign of Shapur II.

<sup>4.</sup> I owe this observation to Dr. Pieter Meyers. See Part 2, p. 182.

## APPENDIX II Part 2

## Hunting Plate in the Guennol Collection

THE PLATE in the Guennol Collection (Pl. 38) is one of the most interesting and puzzling examples of Sasanian metalwork.<sup>1</sup> The vessel, acquired on the antiquities market, comes from Iran. A Middle Persian inscription is dotted onto the reverse, within the ring foot.<sup>2</sup> The hunter is clearly intended to be a royal personage because of his dress, yet this cannot be a Sasanian monarch. The crown includes the major components of a royal Sasanian headdress (beaded diadem, cloth-covered globe) rather than that of a noble or prince, but it has none of the features that distinguish the individual Sasanian crowns (stepped crenelation, crescent, wings).<sup>3</sup>

Much attention has centered on the unusual subject matter, a representation of a narrative associated, in later Islamic literature, with the Sasanian king Bahram V ("Gur"; 421–439). The royal hunter, spurred on by his female companion, transforms a male animal into a female by shooting off the horns with his arrow, and causes a female to become a male by embedding two arrows, as horns, in her head. Two other plates illustrating this same subject are dated to the Islamic period and attributed to provincial workshops. They are not closely related in iconographic detail or style to the royal vessels that are the subject of this volume. On neither is the crown represented that of Bahram V.

The Guennol plate is certainly a work of Sasanian craftsmen. A close examination of the representation reveals that out of sixteen characteristic features of the paired-line drapery style that might be expected to appear, thirteen are present (Appendix I, Table II: 1-3, 7-11, 17-21). Attention will be drawn here to those factors suggesting a date for the piece. Significant are the bent little finger of the bowstring hand and the pronounced ridge between the arc and the ear on the bow; both are details occurring no earlier than the fifth century as on the Cleveland Museum Hormizd and the Metropolitan Museum Peroz-

Kavad I plates (Pls. 14, 17). The added pieces on the plate in the Guennol Collection are applied so that they form even high relief areas. With the possible exception of the Pereshchepina plate (Pl. 28), this is typical of works attributable to the fifth century or later. The animal quarry do not all face in the same direction as the royal mount, a compositional detail indicating a date later than the fourth century.

The absence of a nimbus around the king's head is perhaps to be explained by the fact that this is not a standard Sasanian king or hunt. The king's dress, however, is the same as that on the central Sasanian silver plates. A necklace similar to that on the Guennol plate, with a single oval pendent bead, occurs on the Sari plate (Pl. 10), the only other vessel on which the arrow is actually shown crossing the figure's neck. The form of the royal drapery and equipment, notably the single row of beading on the crown base and on the crest straps, the bowed belt and the gilding of the design and rim rather than the background of the plate, suggest that the vessel in the Guennol Collection belongs to the fifth or early sixth century rather than to the late sixth or seventh century.

Seated behind the king is a small female, simply dressed with the exception of a long diadem bound around her head. The unusual arrangement of the hair above her forehead may reflect the fact that she is, in the Islamic story, not Iranian but Greek.<sup>5</sup>

<sup>1.</sup> Diam. 20.1 cm.; height with foot 4.1 cm.; weight 647 gm. The Guennol Collection I, ed. Rubin, pp. 103-106; O. Grabar, Sas. Silver, pp. 51-53, 92-93; Harper, Royal Hunter, pp. 48-50, no. 12.

<sup>2.</sup> Brunner in Harper, Royal Hunter, p. 50: Tahmagdast ("having a mighty hand"), 42 s[ter].

<sup>3.</sup> Disks appear on the headdresses of nonroyal figures on Sasanian seals: Harper in Frye, *Qasr-i Abu Nasr*, p. 67 (D1). There are also disks on the crown of one late Sasanian ruler, Buran: Göbl, *Sas. Num.*, Table 13.

<sup>4.</sup> Orbeli and Trever, Sas. Metall, pls. 11, 12.

<sup>5.</sup> Harper, Royal Hunter, p. 49.

APPENDIX II

The design on the Guennol plate is skillfully executed. As noted above, the added pieces give the impression of smoothly modeled high relief. On the uppermost animal quarry, the tips of the horns are completely in the round. Beneath the rim on the exterior surface, two lines run around the plate. The analysis of the metal separates this work from other central Sasanian royal silver.

It appears from this review of the evidence that while the subject matter and the analysis of the metal place the Guennol plate outside the category of royal Sasanian silver vessels, the compositional features of the scene, the style, and the method of manufacture are indistinguishable from the central Sasanian royal vessels. Since the provenance of the Guennol plate is Iran, it belongs in all probability to a large class of Sasanian luxury ware (silver plates, bowls, and ewers) that lack any specifically royal imagery.<sup>6</sup> The

personage on the Guennol plate may be a king, known to the Sasanians from some now lost Iranian epic. The identity of this monarch had been forgotten by Islamic times, and the story of his deeds was assimilated into the fictional life of Bahram V (Gur). A growing interest in the epic past of Iran during the fifth and sixth centuries is illustrated by the fact that Sasanian kings began to adopt names belonging to legendary figures, such as Kavad and Khusro. A Book of Kings (Khvadhaynamagh), part legend, part history, was compiled by the end of the Sasanian period and served as a source for the later Shahnameh. 8 In the arts there is little evidence of this concern for ancient history and traditions. The plate in the Guennol Collection is therefore of considerable importance, as it expands our knowledge of Sasanian culture and provides a clue to a different level of meaning for works of art dating from the Sasanian period.

<sup>6.</sup> Orbeli and Trever, Sas. Metall, pls. 36-41, 44-48; Harper, Royal Hunter, nos. 11, 13, 14, 18, 19.

<sup>7.</sup> O. Grabar in Sas. Silver, p. 52.

<sup>8.</sup> Christensen, L'Iran, pp. 59 ff.

## APPENDIX III Chronology of Kings

Ardashir I	226–241
Shapur I	241-272
Hormizd-Ardashir	272/273
Bahram I	273-276
Bahram II	276-293
Bahram III	293
Narseh	293-302
Hormizd II	302-309
Adhurnarseh	309
Shapur II	309-379
Ardashir II	379-383
Shapur III	383-388
Bahram IV	388-399
Yazdgard I	399-421
Bahram V	421-439
Yazdgard II	439-457
Hormizd III	457-459
Peroz	457/459-484
Valash	484-488
Kavad I	488-497; 499-531
Zamasp	497-499
Khusro I	531-579
Hormizd IV	579-590
Bahram VI	590-591
Khusro II	591-628
Kavad II	628
Ardashir III	628/630
Khusro III	
Buran	630/631
Hormizd V	631/632
Khusro IV	631/632

632-651

Yazdgard III

This chronology is based on that of Jean Gagé, *La Montée*, pp. 157–164, which, in turn, follows Noldeke, Lewy, and Maricq.

## Plates



PL. I Silver-gilt plate from Mtskheta. Medallion enclosing the bust of a male Museum of History, Tbilisi, acc. no. 18-55:53 Photo: V. G. Lukonin





PL. 2 Silver-gilt cup from Sargveshi. Medallions enclosing busts of Bahram II, his wife, and his son

Museum of the Society for the History of Ethnography of Georgia, Tbilisi, acc. no.  $P_{134}$  Photos: V. G. Lukonin and Pieter Meyers



PL. 3 Silver bowl. Medallion enclosing the bust of a male Cincinnati Art Museum, acc. no. 1955.71



PL. 4 Silver-gilt bowl. Medallion enclosing the bust of a male Freer Gallery of Art, Smithsonian Institution, Washington, D.C., acc. no. 57.20



PL. 5 Silver bowl. Five medallions enclosing the busts of females

The Metropolitan Museum of Art, Harris Brisbane Dick Fund, acc. no. 1970.5





PL. 6 Silver-gilt bowl. Medallion enclosing the bust of a male The Metropolitan Museum of Art, Harris Brisbane Dick Fund, acc. no. 55.57



PL. 7 Silver bowl. Medallion enclosing the bust of a female Iran Bastan Museum, Tehran, acc. no. 1385





PL. 8 Silver-gilt plate from Shemakha. Male figure hunting

Museum of the History of Azerbaijan, Baku Photo: V. G. Lukonin





PL. 9 Silver-gilt plate from Krasnaya Polyana. Male figure lassoing a bear Abkhazian State Museum. Abkhaz Autonomous Soviet Socialist Republic, acc. no. 47.71 Lukonin, *Iran*, pl. 11







PL. 10 Silver-gilt plate from Sari. Male figure hunting lions Iran Bastan Museum, Tehran, acc. no. 1275. Mazaheri, Les Trésors de l'Iran, p. 155



PL. 11a Silver plate with lion hunt, Wade drawing

Ex collection Sir Alexander Burnes Burnes, Cabool, pl. 18

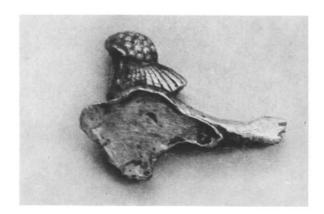
PL. 11b Archer drawing of Burnes plate Erdmann, "Jagdschalen," fig. 21a





PL. 12 Fragment from a plate. Male hunter Now lost, once in Berlin Sarre, "Ein Silberfigürchen des Sassanidenkönigs Narses," pl. facing p. 74







PL. 13 Silver-gilt plate. Shapur slaying a stag
British Museum, acc. no. 124091



PL. 14 Silver-gilt plate. Hormizd hunting lions Cleveland Museum of Art, acc. no. 62.150



PL. 15 Silver-gilt plate. Shapur II hunting boars

Freer Gallery of Art, Smithsonian Institution, Washington, D.C., acc. no. 34.23

See also color illustration in front section of book



PL. 16 Silver-gilt plate. Yazdgard I slaying a stag

The Metropolitan Museum of Art, Harris Brisbane Dick Fund, acc. no. 1970.6. See also color illustration in front section of book



PL. 17 Silver-gilt plate. Peroz or Kavad I hunting rams

The Metropolitan Museum of Art, Fletcher Fund, acc. no. 34.33. See also color illustration in front section of book



PL. 18 Silver-gilt plate from Ufa. King hunting
State Hermitage Museum, acc. no. S297. See also color illustration in front section of book



PL. 19 Silver-gilt plate from Strelka. Enthronement and hunting scenes State Hermitage Museum, acc. no. S250



PL. 20 Silver-gilt plate. King hunting
Museum für Islamische Kunst, Staatliche Museen Preussischer Kulturbesitz, Berlin, acc. no. I. 4925



PL. 21 Silver plate from Anikovska. King hunting bears

Pushkin Museum, Tcherdyne Photo: V. G. Lukonin



PL. 22 Silver-gilt plate. King hunting Bibliothèque Nationale, acc. no. CH 2881



PL. 23 Silver-gilt plate. Hunter wearing a ram's-horn headdress State Hermitage Museum, acc. no. S24. See also color illustration in front section of book



PL. 24 Silver-gilt plate from Klimova. King stabbing a leopard State Hermitage Museum, acc. no. S42. See also color illustration in front section of book



PL. 25 Silver-gilt plate. King hunting lions British Museum, acc. no. 124092



PL. 26 Silver-gilt plate ex collection Fabricius. King slaying a humped bull New York private collection Photo: The Metropolitan Museum of Art



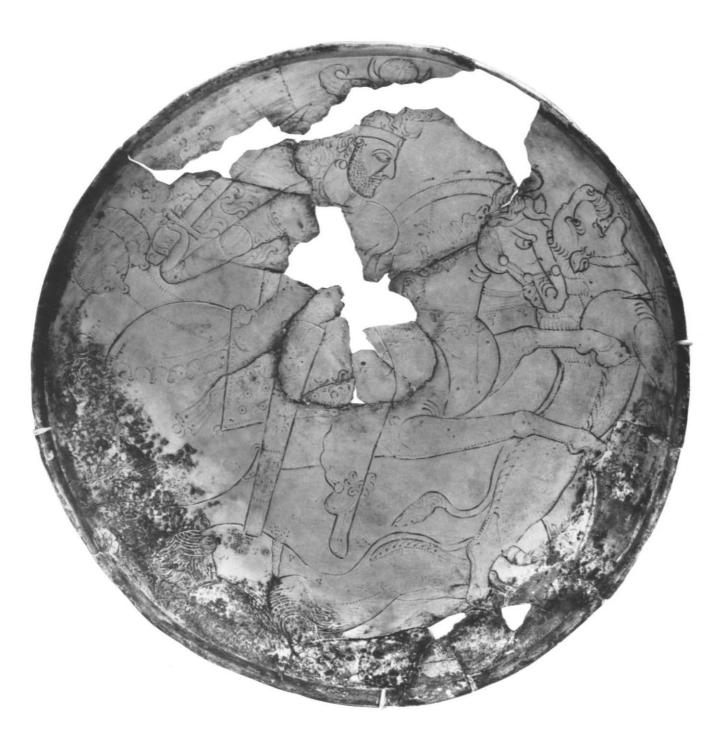
PL. 27 Silver-gilt plate from Tcherdyne. King hunting rams State Hermitage Museum, acc. no. S216



PL. 28 Silver-gilt plate from Pereshchepina. King hunting rams
State Hermitage Museum, acc. no. S272



PL. 29 Silver-gilt plate from Nizhni Novgorod. King lassoing an onager State Hermitage Museum, acc. no. S5



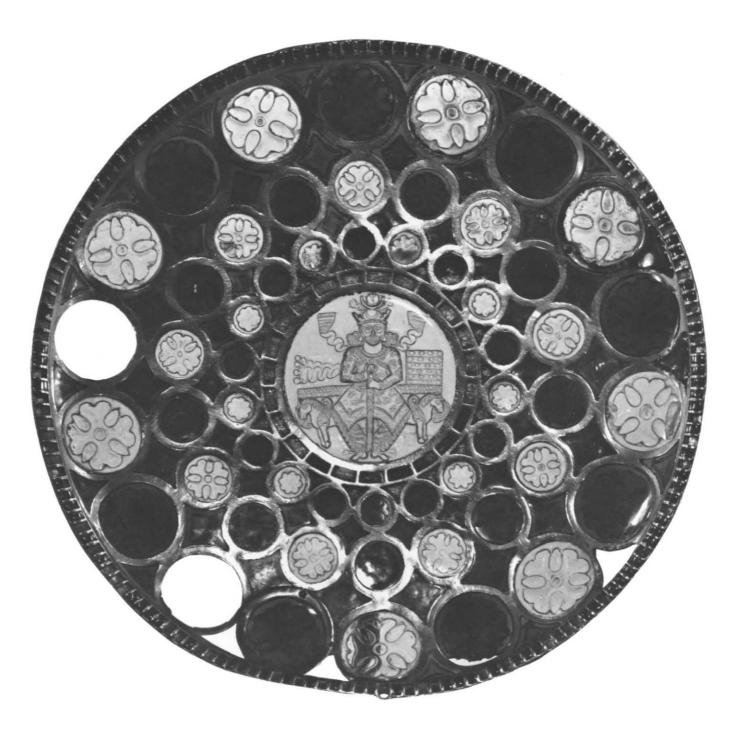
PL. 30 Silver-gilt plate from Chilek. King hunting a lion and a leopard Republican Museum of History and Culture of Uzbekistan, Samarkand Photo: State Hermitage Museum



PL. 31 Silver plate from Kutais. King hunting tigers State Hermitage Museum, acc. no. S58



PL. 32 Silver-gilt plate from Nizhne Shakharovka. King hunting boars State Hermitage Museum, acc. no. S16



PL. 33 Gold, rock-crystal, and glass bowl. Enthronement scene Bibliothèque Nationale, acc. no. 379



PL. 34 Silver-gilt plate from Qazvin. Enthronement scene Iran Bastan Museum, Tehran, acc. no. 904



PL. 35 Silver-gilt plate from Klimova. Enthronement scene State Hermitage Museum, acc. no. S43. See also color illustration in front section of book







PI. 36 Silver bowl. Enthronement scene Walters Art Gallery, Baltimore, acc. no. 57.625



PL. 37 Silver-gilt plate from Touroucheva. King hunting lions State Hermitage Museum, acc. no. S255



PL. 38 Silver-gilt plate in the Guennol Collection. "Bahram Gur" hunting Photo: The Metropolitan Museum of Art

# Bibliography

# List of Abbreviations

ActaAn	Acta Antiqua Academiae	EV	Epigrafika Vostoka
	Scientiarum Hungaricae	IEJ	Israel Exploration Journal
ActaIr	Acta Iranica	IIKNV	Issledovaniîa po istorii kultury
AJA	American Journal of Archaeology		narodov Vostoka
AMI	Archaeologische Mitteilungen aus	IKII	Izvestie kavkazskogo
	Iran		istoricheskogo-arkheologicheskogo
ANS	American Numismatic Society		Instituta
ANS Mus Notes	American Numismatic Society	ILN	Illustrated London News
	Museum Notes	IrAn	Iranica Antiqua
ArchHung	Archaeologia Hungarica	JA	Journal asiatique
ArsIs	Ars Islamica	JDAI	Jahrbuch des deutschen
ArsOr	Ars Orientalis		archäologischen Instituts
ArtB	Art Bulletin	JGS	Journal of Glass Studies
Arte Lomb	Arte lombarde	JMMA	Metropolitan Museum of Art
ArtibAs	Artibus Asiae		Journal
ArtsAs	Arts asiatiques	JNES	Journal of Near Eastern Studies
<b>BCMA</b>	Bulletin of the Cleveland Mu-	JNSI	Journal of the Numismatic Soci-
	seum of Art		ety of India
BibOr	Bibliotheca Orientalis	JPKS	Jahrbuch der preussischen Kunst-
Bivar, Sas. Seals	A.D.H. Bivar. Catalogue of the		sammlungen
	Western Asiatic Seals in the	JRAS	Journal of the Royal Asiatic So-
	British Museum		ciety
BMFA	Bulletin of the Museum of Fine	JRASBL	Journal of the Royal Asiatic So-
	Arts, Boston		ciety of Bengal
BMMA	Metropolitan Museum of Art	JRS	Journal of Roman Studies
	Bulletin	KS IIMK	Kratkiye soobshchenie Instituta
BonnJbb	Bonner Jahrbücher		istorii materialnoĭ kultury,
BSOAS	Bulletin of the School of Oriental		Akademiîa Nauk SSSR
	and African Studies	La Persia	La Persia nel Medioevo, Atti
Bull. Ir. Inst.	Bulletin of the Iranian Institute		del convegno internazionale sul
BZ	Byzantinische Zeitschrift		tema, Accademia Nazionale
CahArch	Cahiers archéologiques		dei Lincei
CAJ	Central Asiatic Journal	MAAR	Memoirs of the American Acad-
CII	Corpus Inscriptionum Iranicarum		emy in Rome
ClassPhil	Classical Philology	MCAAS	Memoirs of the Connecticut
DOP	Dumbarton Oaks Papers		Academy of Arts and Sciences
			2.17

MDAFA	Mémoires de la délégation archéologique française en Af- ghanistan	Studia Ethnog. Studies Miles	Upsalien.	Studia Ethnographica Upsaliensia D. K. Kouymjian, ed. Near Eastern Numismatics, Iconog-
MDAI	Mitteilungen des deutschen archäologischen Instituts			raphy, Epigraphy and History: Studies in Honor of George
NumChron	Numismatic Chronicle			C. Miles
OIP	Oriental Institute Publications		TGE	Trudy Gosudarstvennogo
OS	Orientalia Suecana			Ermitazha
RA	Revue archéologique		TOV	Trudy Otdela Vostoka
RAA	Revue des arts asiatiques		UIF	Uzbekistonda Izhtimoi Fanlar
RevLour	Revue du Louvre		VDI	Vestnik Drevnei Istorii
RN	Revue numismatique		WZKM	Wiener Zeitschrift für die Kunde
SA	Sovetskaîa Arkheologiîa			des Morgenlandes
Sem. Kondak.	Seminarium Kondakovianum		YCS	Yale Classical Studies
SGE	Soobshchenie Gosudarstvennogo		ZDMG	Zeitschrift der deutschen
	Ermitazha	•		morgenländischen Gesellschaft
SPA	Pope, A. U., ed. A Survey of Persian Art			

Abgarians, M. T., and D. G. Sellwood. "A Hoard of Early Parthian Drachms," NumChron, 11 (1971), pp. 103-119.

Ackerman, P. "Review of Orfevrerie sasanide," Bulletin of the American Institute for Persian Art and Archaeology, 4 (1935), pp. 104-105.

. "The Throne of Khusraw," Bulletin of the American Institute for Iranian Art and Archaeology, 5, no. 2 (1937), pp. 106-109.

Adams, R. McC. Land behind Baghdad. A History of Settlement on the Diyala Plains, Chicago, 1965.

Akhmerov, R. B. "Arkheologicheskie nakhodki v Bashkiriĭ," SA, 1974, no. 2, pp. 240-248.

Alarcão, J. "Abraded and Engraved Late Roman Glass from Portugal," JGS, 12 (1970), pp. 28-34.

Alföldi, A. "Insignien und Tracht der römischen Kaiser," MDAI, Römische Abteilung, 50 (1935), pp. 3-158.

Die Kontorniaten: ein verkanntes Propagandamittel der stadtrömischen heidnischen Aristokratie in ihrem Kampfe gegen das christliche Kaisertum, Magyar Numizmatikar Társulat, Budapest, 1942-1943.

. "A Sassanian Silver Phalera at Dumbarton Oaks," DOP, 11 (1957), pp. 237-239.

Alföldi, A. and E. Die Kontorniat-Medaillons, Berlin, 1976. Altheim, F., and R. Stiehl. Ein asiatischer Staat I, Wiesbaden,

.. Finanzgeschichte der Spätantike, Frankfurt am Main, 1957.

.. Geschichte der Hunnen I–V, Berlin, 1959–1962.

Amiet, P. "Antiquités parthes et sassanides," RevLour, 17 (1967), pp. 273-282.

"Orfèvrerie sassanide au Musée du Louvre," Syria,

47 (1970), pp. 51–64. Amiranashvili, Sh. Ia. "Une Coupe en argent du début de l'époque sassanide provenant des fouilles d'Armazis-Kĥevi (Géorgie)," Revista degli studi orientali, 34 (1959),

"Serebrianaia chasha rannesasanidskoĭ epoky iz raskopok v Armaziskhevi," IIKNV, Moscow and Leningrad, 1960, pp. 283-293.

Ammianus Marcellinus. Trans. J. C. Rolfe, Loeb Library edition, Cambridge and London, 1950.

Annales du service archéologique de l'Iran, 3 (1956).

Apakidze, A. M., G. F. Gobedzhishvili, A. N. Kalandadze, and G. A. Lomtatidze. Mtskheta, Itogi arkheologicheskikh issledovanii I, Tbilisi, 1958.

Aslanapa, O., and R. Naumann, eds. Forschungen zur Kunst Asiens, in Memoriam Kurt Erdmann, Istanbul, 1969.

Auboyer, J. Le Trône et son symbolisme dans l'Inde ancienne, Paris. 1040.

Scriptores Historiae Augustae. Trans. D. Magie, Loeb Library edition, London, 1922-1932.

Aymard, J., Essai sur les chasses romaines, Paris, 1951.

Azarpay, G. "Crowns and Some Royal Insignia in Early Iran," IrAn, 9 (1972), pp. 108-115.

. "Nine Inscribed Choresmian Bowls," ArtibAs, 31 (1969), pp. 185-203.

Azarpay, G., and W. B. Henning. "A Hunting Scene on an Inscribed Sassanian Silver Vessel," IrAn, 7 (1967), pp. 145-152.

Babelon, E. Catalogue des camées antiques et modernes de la Bibliothèque Nationale, Paris, 1897.

Bachhofer, L. "Sasanidische Jagdschalen," Pantheon, 11 (1933), pp. 62-66.

Bahrami, M. "Some Objects Recently Discovered in Iran," Bull. Ir. Inst., 6-7 (1946), pp. 71-77.

Balcer, J. M. "Excavations at Tal-i Malyan, Part 2. Parthian and Sasanian Coins and Burials (1976)," Iran, 16 (1978), pp. 88-92.

Bálint, Cs. "Vestiges archéologiques de l'époque tardive des sassanides et leurs relations avec les peuples des steppes," Acta Archaeologica, 30 (1978), pp. 173-

Baltrušaïtis, J. "Sasanian Stucco," SPA I, pp. 601-630. Bariand, P., V. Issakhanian, and M. Sadrzadeh. "Preliminary Metallogenic Map of Iran," Geological Survey of Iran, Report No. 7 (1965).

Barnett, R. D. Assyrian Palace Reliefs, London, n.d.

- Belenitsky, A. M. Central Asia, Cleveland and New York,
- \_. Monumental'noye iskusstvo Pıandzhikenta, Moscow, 1973.
- .. "Raboty Pendzhikentskogo otr1ada, v 1961 g," Trudy Instituta Istorii im. Akhmada Donisha, 42 (1964),
- Belenitski, A., and B. I. Marshak. "L'Art de Piandjikent à la lumière des dernières fouilles (1958-68)," ArtsAs, 23 (1971), pp. 3-39.
- .. "Nastennye rospisi, otkrytye v Pendzhikente v 1971 godu," SGE, 37 (1973), pp. 54-57.
- ... "Stennye rospisi, obnaruzhennye v 1970 godu na gorodishche drevnego Pendzhikenta," SGE, 36 (1973), pp. 58-64.
- Bernard, P. "Sièges et lits en ivoire d'époque hellénistique en Asie Centrale," Syria, 47 (1970), pp. 327-343.
- Berthoud, T., R. Besenval, S. Cleuziou, and J. Liszak-Hours. "Etude sur la métallurgie iranienne aux IVè et IIIè millénaires-Prospection en Iran," Rapport, Commissariat à l'Energie Atomique, Laboratoire de Recherche des Musées de France, Unité de Recherche Archéologique No. 7, Paris, 1975.
- Bīrūnī, al-. The Chronology of Ancient Nations. Trans. and ed. C. E. Sachau, London, 1879
- Bivar, A. D. H. Catalogue of the Western Asiatic Seals in the British Museum: Stamp Seals II: The Sassanian Dynasty, London, 1969.
- .. "Cavalry Equipment and Tactics on the Euphrates Frontier," DOP, 26 (1972), pp. 271-291.
- . "Details and 'Devices' from the Sassanian Sculptures," Oriental Art, 5 (1959), pp. 11-14.
- Kushan and Kushano-Sasanian Seals and Kushano-Sasanian Coins: Sasanian Seals in the British Museum, CII, part III, vol. VI, portfolio I, London, 1968.
- . "The Kushano-Sassanian Coin Series," JNSI, 18 (1956), pp. 13-42.
- "Mithra and Mesopotamia," Mithraic Studies II, ed. J. R. Hinnells, Proceedings of the First International Congress of Mithraic Studies, Manchester, 1975,
- (1963), pp. 157-178.
- "Trade between China and the Near East in the Sasanian and Early Muslim Periods," in Pottery and Metalwork in T'ang China, ed. W. Watson, Colloquies on Art and Archaeology in Asia, I, School of Oriental and African Studies, London, 1970, pp. 1-8.
- Bivar, A. D. H., and S. Shaked. "The Inscriptions at Shīmbār," BSOAS, 27 (1964), pp. 265-290.
- Boehmer, R. M. "Das Auftreten des Wasserbüffels in Mesopotamien in historischer Zeit und seine sumerische Bezeichnung," Zeitschrift für Assyriologie, 64 (1975), pp. 1-19.
- Borisov, A. Ia. "K istolkovanisu izobrazheniĭ na Bianaimanskikh ossuariiakh," TOV, 2 (1940), pp.
- Borisov, A. Ia., and V. G. Lukonin. Sasanidskie Gemmy, Leningrad, 1963.
- Bosworth, C. E. "The Heritage of Rulership in Early Islamic Iran and the Search for Dynastic Connections with the Past," Iran, 11 (1973), pp. 51-62.

- Bosworth, C. E., ed. Iran and Islam, in Memory of the late Vladimir Minorsky, Edinburgh, 1971.
- Boyce, M. I., and I. Gershevitch, eds. W. B. Henning Memorial Volume, London, 1970.
- Brill, R. H., ed. Science and Archaeology, Cambridge, Mass.,
- Brilliant, R. "The Arch of Septimius Severus in the Roman Forum," MAAR, 29 (1967).
- . Gesture and Rank in Roman Art. The Use of Gestures to Denote Status in Roman Sculpture and Coinage, MCAAS,
- Brown, F. E. "A Recently Discovered Compound Bow," Sem. Kondak., 9 (1937), pp. 2-9.
- Brunner, C. J. "The Chronology of the Sasanian Kušānšāhs," ANS, 19 (1974), pp. 145-164.
- "Middle Persian Inscriptions on Sasanian Silverware," JMMA, 9 (1974), pp. 109-121.
- "Sasanian Seals, 3rd-7th Century A.D.," in M. Noveck, The Mark of Ancient Man, The Brooklyn Museum, Brooklyn, 1975, pp. 74-89.
- Bulanda, E. Bogen und Pfeil bei den Völkern des Altertums, Vienna, 1913.
- Burnes, A. Cabool: Being a Personal Narrative of a Journey to and Residence in That City in the Years 1836, 7, and 8, London, 1842.
- Burnol, L. "Contribution à l'étude des gisements de plomb et zinc de l'Iran. Essais de classification paragénétique,' Geological Survey of Iran, Report No. 11 (1968).
- Calmeyer, P. "Zur Genese altiranischer Motive," AMI, n.f., 6 (1973), pp. 135-152.
- "Zur Genese altiranischer Motive, III. Felsgräber," AMI, n.f., 9 (1976), pp. 45-95.
- Cameron, A. "Agathias on the Sassanians," DOP, 23-24 (1969-1970), pp. 69-183.
- Campbell, L. A. Mithraic Iconography and Ideology, Leiden,
- Carter, M. L. "Royal Festal Themes in Sasanian Silverwork and Their Central Asian Parallels," ActaIr, 1, ser. I (1974), pp. 171-202.
- Chabouillet, M. Catalogue général et raisonné des camées et pierres gravées de la Bibliothèque impériale, Paris, 1858.
- Chase, W. T. "The Technical Examination of Two Sasanian Silver Plates," ArsOr, 7 (1968), pp. 75-93.
- Chaumont, M.-L. "A propos de quelques personnages féminins figurant dans l'inscription trilingue de Šāhpuhr Ier à la 'Ka'ba de Zoroastre,'" JNES, 22 (1963), pp. 194-
- .. "Etats vassaux dans l'empire des premiers sassanides," ActIr, 2, ser. I, 4 (1975), pp. 89-156.
- .. "Les Grands Rois sassanides d'Arménie," IrAn, 8 (1968), pp. 81-93.
- "L'Inscription de Kartir à la Ka'bah de Zoroastre," JA, 248 (1960), pp. 339-380.
- \_. Recherches sur l'histoire d'Arménie, Paris, 1969.
- .. "Les Titres de Kartir d'aprés l'inscription pehlevi de la Ka'bah de Zoroastre," Annuaire de l'école pratique des hautes études, Section des sciences religieuses, Paris,
- Chelkowski, P. J., ed. Studies in Art and Literature of the Near East in Honor of Richard Ettinghausen, The Middle East Center, New York, 1974.

- Christensen, A. E. L'Iran sous les sassanides, Copenhagen, 1944.
- Le Règne du roi Kawādh et le communisme mazdakite, Copenhagen, 1925.
- Chubinashvili, G. Der Fund von Sargweschi, IKII, 3 (1925), pp. 83-86.
- Colledge, M. A. R. The Parthians, London, 1967.
- Cottevieille-Giraudet, A. "Coupes et camées sassanides du Cabinet de France," RAA, 12 (1938), pp. 52-64.
- Cultural Relics Unearthed during the Period of the Great Cultural Revolution, Peking, 1972.
- Curiel, R. "Monnaies Arabo-Sasanides," RN, 1965, pp. 321-328; 1966, pp. 61-69; 1967, pp. 103-116.
- "Le Trésor du Tépé Maranjān," in *Trésors monétaires d'Afghanistan*, R. Curiel and D. Schlumberger, *MDAFA*, XIV, Paris, 1953, pp. 101-132.
- Curle, A. O. The Treasure of Traprain, Glasgow, 1923. Dalton, O. M. The Treasure of the Oxus, 3rd ed., London, 1964.
- Danthine, H. "L'Imagerie des trônes vides," Mélanges syriennes II, Paris, 1939, pp. 857-866.
- Darkevich, V. P. Khudozhestvennii Metall Vostoka, Moscow, 1976.
- Darkevich, V. P., and B. I. Marshak. "O tak nazyvaemom siriĭskom blîude iz Permskoĭ oblasti," SA, 1974, no. 2, pp. 213–222.
- David-Weill, J. "Têtes de chevaux sassanides," La Revue des arts, 4 (1954), pp. 157–164.
- Dayet, M. "Monnaies arsacides à bonnet satrapal," RN, 11 (1949), pp. 9-26.
- Delaporte, L. "Une Coupe sassanide de Bahram Gour," Arethuse, 3 (1926), pp. 143-148.
- Delbrueck, R. Die Consulardiptychen und verwandte Denkmäler, Berlin and Leipzig, 1929.
- Dennis, J. M., and C. K. Wilkinson. Chess: East and West, Past and Present, The Metropolitan Museum of Art, New York, 1968.
- Dentzer, J.-M. "Aux Origines de l'iconographie du banquet couché," RA, 1971, pp. 215-258.
- "L'Iconographie iranienne du souverain couché et le motif du banquet," IXe congrès internationale d'archéologie classique, Damascus, 1969, pp. 10-21.
- Der Nersessian, S. "Review of Pagan and Christian Egypt," ArtB, 23 (1941), pp. 165–167.
- Dimand, M. S. "A Group of Sasanian Silver Bowls," Aus der Welt der islamischen Kunst, ed. R. Ettinghausen, Festschrift für Ernst Kühnel, Berlin, 1959, pp. 11-14.
- Dodd, E. C. Byzantine Silver Treasures, Bern, 1973.
- Duchesne-Guillemin, J. "Art et religion sous les sassanides," La Persia, Rome, 1971, pp. 377-388.
- \_\_\_\_\_. La Religion de l'Iran ancien, "Mana" Introduction à l'histoire des religions, I, Paris, 1962.
- \_\_\_\_\_. Symbols and Values in Zoroastrianism, New York, 1966.
- Dürr, N. "Une Nouvelle Carafe sassanide," Genava, 15 (1967), pp. 25-41.
- Erdmann, K. "Das Datum des Tāk-i Bustān," ArsIs, 4, (1937), pp. 79-97.

Erdmann, K. "Eberdarstellung und Ebersymbolik in Iran, BonnJbb, 147 (1942), pp. 345-382.

- . "Die Entwicklung der säsänidischen Krone," ArsIs, 15–16 (1951), pp. 87–123.
- . Die Kunst Irans zur Zeit der Sasaniden, Berlin, 1943. ——. "Die sasanidischen Felsreliefs von Barm i Dilak,"
- ZDMG, 99 (1945–1950), pp. 50–57.

  . "Die sasanidischen Jagdschalen," JPKS, 57 (1936), pp. 193–231.
- . "Eine unbekannte sasanidische Jagdschale," *JPKS*, 59 (1938), pp. 209–217.

- Esin, E. "Oldruğ—Turuğ, The Hierarchy of Sedent Postures in Turkish Iconography," Kunst des Orients, 7 (1971), pp. 1-29.
- Ettinghausen, R. "The Arts of the Sasanian Empire," Connoisseur, February 1978, pp. 104-109.
- \_\_\_\_\_. From Byzantium to Sasanian Iran and the Islamic World, Leiden, 1972.
- \_\_\_\_\_, ed. Aus der Welt der islamischen Kunst, Festschrift für Ernst Kühnel, Berlin, 1959.
- Fajans, S. "Recent Russian Literature on Newly Found Middle Eastern Metal Vessels," *ArsOr*, 2 (1957), pp. 55–76.
- Faravashi, B. "Les Causes de la chute des Sassanides," La Persia, Rome, 1971, pp. 477-484.
- Farkas, A. Achaemenid Sculpture, Nederlands historischarchaeologisch Instituut in het Nabije Oosten, Istanbul, 1974.
- Fehr, B. Orientalische und griechische Gelage, Abhandlungen zur Kunst- Musik- und Literaturwissenschaft, XCIV, Bonn, 1971.
- Fettich, N. "La Trouvaille de la tombe princière hunnique à Szeged-Nagyszéksós," *ArchHung*, 32 (1953), pp. 103–203.
- The Sháhnáma of Firdausí. Trans. A. G. Warner and E. Warner, London, 1905–1925.
- Forbes, R. J. "Gold in the Ancient Near East," Jaarbericht-ex Oriente Lux, 6 (1939), pp. 237-254.

- Francovich, G. de. "Il concetto della regalità nell'arte sasanide e l'interpretazione di due opere d'arte bizantine del periodo della dinastia macedone," *Arte Lomb.*, 9 (1964), pp. 1–48.
- Frye, R. N. "Byzantine and Sasanian Trade Relations with Northeastern Russia," DOP, 26 (1972), pp. 265-269.
- \_\_\_\_\_. "Gestures of Deference to Royalty in Ancient Iran," IrAn, 9 (1972), pp. 102-107.
- \_\_\_\_\_. The Heritage of Persia, Cleveland, 1963.

Frye, R. N. "Napki Malka and the Kushano-Sasanians," Studies Miles, Beirut, 1974, pp. 115-122.

- -. "Notes on the Early Sassanian State and Church," Studi orientalistici in onore di Giorgio Levi Della Vida I, Rome, 1956, pp. 314-335.
- .. "A Parthian Silver Bowl," ArtibAs, 17 (1954), pp. 143-144.
- .. "The Sasanian Bas-Relief at Tang-i Qandil," Iran, 12 (1974), pp. 188-190.
- "Sasanian Numbers and Silver Weights," IRAS (1973), pp. 2-11.
- "Sasanian Silver and History," Iran and Islam, in Memory of the late Vladimir Minorsky, ed. C. E. Bosworth, Edinburgh, 1971, pp. 255-262.
- .. "Some Early Iranian Titles," Oriens, 15 (1962), pp. 352-359.
- ed. Sasanian Remains from Qasr-i Abu Nasr, Cambridge, Mass., 1973.
- Fukai, S. "A Study of a Silver Wine Cup Excavated in the Guilan Province," The Kokka, 842 (May 1962). In Japanese with brief English summary, no page numbers.
- Fukai, S., and K. Horiuchi. Taq-i-Bustan I, Tokyo, 1969; II, Tokyo, 1972.
- Gagé, J. La Montée des sassanides et l'heure de Palmyre, Paris,
- Gall, H. von. "Entwicklung und Gestalt des Thrones im vorislamischen Iran," AMI, n.f. 4 (1971), pp. 207-236. Gallois, H. C. "Une Statuette sassanide au musée du
- Louvre," Arethuse, 1 (1923–1924), pp. 22–27. Gershevitch, I. "Die Sonne das Beste," Mithraic Studies I,
- ed. J. R. Hinnells, Proceedings of the First International Congress of Mithraic Studies, Manchester, 1975, pp. 68-
- Gettens, R. J., and C. L. Waring. "The Composition of Some Ancient Silver Objects," ArsOr, 2 (1957), pp. 83-90. Ghirshman, R. "Bard-è Nechandeh," Syria, 41 (1964), pp. 301-321.
- .. "Bard-è Nechandeh—centre religieux iranien," Acta Archaeologica Academiae Scientiarum Hungaricae, 19 (1967), pp. 3-14.
- "Ĉinq campagnes de fouilles à Suse (1946–1951)," Revue d'assyriologie et d'archéologie orientale, 46 (1952),
- "Une Coupe sassanide à 'scène d'investiture," W. B. Henning Memorial Volume, ed. M. I. Boyce and I. Gershevitch, London, 1970, pp. 175-179.
- . Fouilles de Châpour: Bîchâpour I, Paris, 1971; II, Les mosaîques sassanides, Paris, 1956.
- .. "Notes iraniennes V. Scènes de banquet sur l'argenterie sassanide," ArtibAs, 16 (1953), pp. 51-71. . "Notes iraniennes VI. Une Coupe sassanide à scène
- de chasse," ArtibAs, 18 (1955), pp. 5-19. .. "Notes iraniennes XIII. Trois épées sassanides,"
- ArtibAs, 26 (1963), pp. 293-311. "Un Nouveau Bas-relief sassanide," Ex orbe
- religionem. Studia Geo Widengren, Leiden, 1972, pp. 75-79. . Persian Art. The Parthian and Sassanian Dynasties, 249 B.C.-A.D. 651, New York, 1962.
- \_\_. "La Selle en Iran," IrAn, 10 (1973), pp. 94–107. .. Terrasses sacrées de Bard-è Néchandeh et Masjid-i Solaiman II, Mémoires de la délégation archéologique en Iran, XLV, Paris, 1976.

Gibbons, D. R., K. C. Ruhl, and L. S. Staikoff. "Analysis of Sasanian Silver Objects: A Comparison of Techniques," Archaeological Chemistry, ed. C. Beck, Advances in Chemistry Series, 138, Washington D.C., 1975, pp. 11-21.

Gignoux, P. "La Liste des provinces de l'Erān dans les inscriptions de Šabuhr et de Kirdīr," ActaAn, 19 (1971), pp. 83-94.

- Göbl, R. Dokumente zur Geschichte der iranischen Hunnen in Baktrien und Indien I-IV, Wiesbaden, 1967.
- \_. "Investitur im sasanidischen Iran und ihre numismatische Bezeugung (Zugleich ein Beitrag zur Ikonographie der Göttin Anahit)," WZKM, 56 (1960), pp. 36-51.
- .. "Die Münzprägung der Kušān, von Vima Kadphises bis Bahrām IV," in F. Altheim and R. Stiehl, Finanzgeschichte der Spätantike, Frankfurt am Main, 1957, pp. 173-256.
- \_. Sasanian Numismatics, Braunschweig, 1971.
- Der Sāsānidische Siegelkanon, Handbücher der mittelasiatischen Numismatik, IV, Braunschweig, 1973. "Zum Chronologieproblem der sasanidischen Kunst," Forschungen zur Kunst Asiens, in memoriam Kurt Erdmann, ed. O. Aslanapa and R. Naumann, Istanbul, 1967.
- Godard, A. L'Art de l'Iran, Paris, 1962.
- .... "Plat d'argent découvert près de Kazwin," *Athār-é* Īrān, 3 (1938), pp. 300-302. Godard, A., Y. Godard, and J. Hackin. Les Antiquités
- bouddhiques de Bamiyan, MDAFA, II, Paris, 1928.
- Goldman, B. "Early Iranian Art in the Cincinnati Art Museum," Art Quarterly, 27 (1964), pp. 324-341.
- \_. "Political Realia on Persepolitan Sculpture," Orientalia Lovaniensia Periodica, 5 (1974), pp. 31-46.
- Gordus, A. A. "Neutron Activation Analysis of Coins and Coin-streaks," Methods of Chemical and Metallurgical Investigation of Ancient Coinage, ed. E. T. Hall and D. M. Metcalf, Royal Numismatic Society Special Publication no. 8, London, 1972, pp. 127-148.
- Gottwaldt, J. M. E., ed. Hamzae Isphahanensis Annalium. Latin translation, Leipzig, 1848.
- Grabar, A. L'Art de la fin de l'antiquité et du moyen âge II, Paris, 1968.
- . Christian Iconography: A Study of Its Origins, Princeton, 1968.
- .. "Le Rayonnement de l'art sassanide dans le monde chrétien," La Persia, Rome, 1971, pp. 679-710.
- .. "Trônes épiscopaux du XIème et XIIème siècle en Italie méridionale," Wallraf-Richartz-Jahrbuch, 16 (1954), pp. 7-52.
- Grabar, O. Introduction, Sasanian Silver: Late Antique and Early Mediaeval Arts of Luxury, University of Michigan Museum of Art, Ann Arbor, 1967.
- The Formation of Islamic Art, New Haven and London, 1973.
- "Sasanian and Islamic Art through the Ages," Apollo, 93 (April 1971), pp. 255-263.
- Gropp, G. Archäologische Funde aus Khotan, Chinesisch-Ostturkestan, Bremen, 1974.
- .. "Bericht über eine Reise in West- und Südiran," AMI, n.f. 3 (1970), pp 173-230.
- Grünwedel, A. Alt-Kutscha, Berlin, 1920.

246

- Gullini, G., "Problems of an Excavation in Northern Bab-
- ylonia," Mesopotamia, 1 (1966), pp. 7–38. Gyllensvärd, B. T'ang Gold and Silver, Stockholm, 1957. Haberey, W. "Römische Grabkammer bei Rondorf, Ldkr. Köln," BonnJbb, 161 (1961), pp. 333-395.
- Hackin, J. Recherches archéologiques à Begram, MDÀFA, IX, Paris, 1939
- Hall, E. T., and D. M. Metcalf, eds. Methods of Chemical and Metallurgical Investigation of Ancient Coinage, Royal Numismatic Society Special Publication no. 8, London,
- Hallier, U. W. "Fort, Atashgah und Chahar Taq von Nakhlak. Überreste einer sasanidischen Bergbausiedlung," AMI, n.f. 5 (1972), pp. 285-307.
- Hanfmann, G. M. A. Roman Art, Greenwich, Conn., 1964. Hannaway, W. L. "The Concept of the Hunt in Persian Literature," BMFA, 69 (1971), pp. 21-34.
- Hannestad, K. "Les Relations de Byzance avec la Transcaucasie et l'Asie Centrale aux 5e et 6e siècles," Byzantion, 25-27 (1955-1957), pp. 421-456.
- Harada, Y. "The Interchange of Eastern and Western Cultures," Memoirs of the Research Department of the Toyo Bunko, 11 (1939), pp. 55-78.
- Harmatta, J. "The Golden Bow of the Huns," Acta Archaeologica, 1 (1951), pp. 107-149.
- . "Late Bactrian Inscriptions," ActaAn, 17 (1969), pp.
- 297-432.

  "The Middle Persian-Chinese Bilingual Inscription

  "Essenian Relations." La from Hsian and the Chinese-Sāsānian Relations," La Persia, Rome, 1971, pp. 363-376.
- .. "Minor Bactrian Inscriptions," ActaAn, 13 (1965), pp. 149-205.
- ... "Sino-Iranica," ActaAn, 19 (1971), pp. 113-147. Harper, P. O. "The Heavenly Twins," BMMA, 23 (January 1965), pp. 186-195.
- "Portrait of a King," BMMA, 25 (November 1966), pp. 137-146.
- Review of Von Gall, "Entwicklung des Thrones," BibOr, 30 (1973), pp. 472-474.
- . The Royal Hunter. Art of the Sasanian Empire, Asia House Gallery, New York, 1978.
- "Sasanian Medallion Bowls with Human Busts," Studies Miles, Beirut, 1974, pp. 61-81.
- .. "Sources of Certain Female Representations in Sasanian Art," La Persia, Rome, 1971, pp. 503-516.
- . "A Stucco King from Sasanian Kish," Bibliotheca Mesopotamica, 7 (1977), pp. 75-79.
- "Thrones and Enthronement Scenes in Sasanian Art," Iran, 17 (1979), pp. 49-64.
- Harper, P. O., and P. Meyers. Silver Vessels of the Sasanian Period: II, Nonroyal Imagery, to be published.
- Hart, G. D., "The Diagnosis of Disease from Ancient
- Coins," Archaeology, 26 (April 1973), pp. 123-127. Haskins, J. F. "Northern Origins of 'Sasanian' Metalwork," ArtibAs, 15 (1952), I, pp. 241-267; II, pp. 324-347.
- Henning, W. B. "A Farewell to the Khagan of the Aq-Aqataran (White Khazars)," BSOAS, 14 (1952), pp. 501-522.
- .. "The Monuments and Inscriptions of Tang-i Sarvak," Asia Major, n.s. 2 (1952), pp. 151-178.
- .. "A Sassanian Silver Bowl from Georgia," BSOAS, 24 (1961), pp. 353-356.

- Henning, W. B. "A Sogdian Fragment of the Manichean Cosmogony," BSOAS, 12, part 2 (1948), pp. 306-318. .. "Two Manichean Magical Texts," BSOAS, 12,
- part 1 (1947), pp. 39-66.
- Herrmann, G. "The Darabgird Relief-Ardashīr or Shāhpūr?," Iran, 7 (1969), pp. 63-88.
- .. "The Sculptures of Bahrām II," JRAS, no. 2 (1970), pp. 165-171.
- Herzfeld, E. Am Tor von Asien, Felsdenkmale aus Irans Heldenzeit, Berlin, 1920.
- \_\_\_. Archaeological History of Iran, London, 1935.
- \_. Iran in the Ancient East, London and New York, 1941.
- .. "Khusrau Parwēz und der Tāq-i Vastān," *AMI*, 9 (1938), pp. 91-158.
- Kushano-Sasanian Coins, Memoirs of the Archaeological Survey of India, no. 38, Calcutta, 1930.
- .. Die Malereien von Samarra, Forschungen zur islamischen Kunst II. Die Ausgrabungen von Samarra, III, Berlin, 1927.
- . Paikuli, I, II, Berlin, 1924.
- . "Postsasanidische Inschriften," AMI, 4 (1932),
- pp. 140–156. \_\_\_\_\_. "Die sasanidischen Quadrigae Solis et Lunae,"
- AMI, 2 (1930), pp. 128–131.

  "La Sculpture rupestre de la Perse sassanide," RAA, 5 (1928), pp. 129-142.
- "Der Thron des Khosrô; Quellenkritische und ikonographische Studien über Grenzgebiete der Kunstgeschichte des Morgen- und Abendlandes," IPKS, 41 (1920), pp. 1-24, 103-147.
- Hillenbrand, R. "Recent Work on Islamic Iconography," Oriental Art, 24 (1978), pp. 201-213.
- Hinnells, J. R. "The Iranian Background of Mithraic Iconography," ActaIr, 1 (1974), pp. 242-250.
- . "Reflections on the Bull-Slaying Scene," Mithraic Studies II, ed. J. R. Hinnells, Proceedings of the First International Congress of Mithraic Studies, Manchester, 1975, pp. 290-312.
- ., ed. Mithraic Studies I, II, Proceedings of the First International Congress of Mithraic Studies, Manchester, 1975
- Hinz, W. Altiranische Funde und Forschungen, Berlin, 1969. .. "Mani and Kardēr," La Persia, Rome, 1971, pp. 485-502.
- . "Das sasanidische Felsrelief von Tang-e Qandīl," AMI, n.f. 6 (1973), pp. 201-212.
- Holzer, H. F., and R. Ghasemipour. "Geology of the Nakhlak Lead Mine Area," Contributions to the Geology of Mineral Resources in Iran, Geological Survey of Iran, Report No. 21 (1973), pp. 7-26.
- Holzer, H. F., and M. Momenzadeh. "Note on the Geology of Elikah and Duna Lead Mines, Central Alborz, Northern Iran," Contributions to the Geology of Mineral Resources in Iran, Geological Survey of Iran, Report No. 21 (1973), pp. 27-36.
- Horn, P., and G. Steindorff. Sassanidische Siegelsteine, Berlin, 1891.
- Hutchinson, G. E. "Mammalia in the Hunting Scenes from the Dura Mithraeum," Mithraic Studies I, ed. J. R. Hinnells, Proceedings of the First International Congress of Mithraic Studies, Manchester, 1975, pp. 210-214.

Ierusalimskaía, A. A. "K slozhenisů shkoly khudozhestvennogo shelkotkachestva v Sogde," *Sredniasa Azisa i Iran*, Leningrad, 1972, pp. 5–56.

Ingholt, H. Gandhāran Art in Pakistan, New York, 1957. Invernizzi, A. "A Relief in the Style of the Gandhāra School from Choche," Mesopotamia, 3 (1968–1969), pp. 145–158. Jettmar, K. Art of the Steppes, New York, 1967.

Johansen, W. "Der Reitsattel bei den altaischen Völkern," *CAJ*, 10 (1965), pp. 269–285.

Jucker, H. Das Bildnis im Blätterkelch, Olten, 1961.

Kane, J. P. "The Mithraic Cult Meal in Its Greek and Roman Environment," *Mithraic Studies* II, ed. J. R. Hinnells, Proceedings of the First International Congress of Mithraic Studies, Manchester, 1975, pp. 313-351.

Keall, E. J. "Qal'eh-i Yazdigird: The Question of Its Date," Iran, 15 (1977), pp. 1-10.

Khalilov, J. A. "Serebrîanoe blîudo c pozolotoĭ iz drevneĭ Shemakhi," VDI, 1976, no. 3, pp. 146–149.

Kinch, K. F. L'Arc de Triomphe de Salonique, Paris, 1890. Kleiss, W. "Bericht über Erkundungsfahrten in Iran im Jahre 1972," AMI, n.f. 6 (1973), pp. 7-80.

Koptische Kunst, Villa Hügel, Essen, 1963.

Kouymjiam, D. K., ed. Near Eastern Numismatics, Iconography, Epigraphy and History: Studies in Honor of George C, Miles, Beirut, 1974.

Kühnel, E. Die Ausgrabungen der zweiten Ktesiphon-Expedition (Winter 1931/32), Islamische Kunstabteilung der staatliche Museen, Berlin, 1933.

Kyrieleis, H. Throne und Klinen, JDAI, Erganzungsheft 24 (1969), pp. 6-23.

Ladame, F. "Les Ressources métallifères de l'Iran,"

Ladame, F. "Les Ressources métallifères de l'Iran," Schweizerische mineralogische und petrographische Mitteilungen, 25, no. 1 (1945), pp. 165–303.

Lang, D. M. Studies in the Numismatic History of Georgia in Transcaucasia, Numismatic Notes and Monographs, CXXX, New York, 1955.

Langdon, S., and D. B. Harden. "Excavations at Kish and Barghuthiat 1933," *Iraq*, 1 (1934), pp. 113-136.

La Persia nel Medioevo, Atti del convegno internazionale sul tema, Accademia Nazionale dei Lincei, Rome, 1971.

Latham, J. D. "The Archers of the Middle East: The Turco-Iranian Background," Iran, 8 (1970), pp. 97-103.

Laubscher, H. P. Der Reliefschmuck des Galeriusbogens in Thessaloniki, Archäologische Forschungen, I, Deutsches archäologisches Institut, Berlin, 1975.

Lavin, I. "The Hunting Mosaics of Antioch, Their Sources. A Study of Compositional Principles in the Development of Early Mediaeval Style," DOP, 17 (1963), pp. 179–286.

Lechtman, H. N. "Ancient Methods of Gilding Silver: Examples from the Old and the New Worlds," *Science and Archaeology*, ed. R. H. Brill, Cambridge, Mass., 1971, pp. 2–30.

Lehmann, K. "The Dome of Heaven," ArtB, 27 (1945), pp. 1-27.

Levi, D. Antioch Mosaic Pavements I, II, Princeton, 1947. Lewy, H. "Le Calendrier perse," Orientalia, 10 (1941), pp. 1–64.

Livshits, V. A., and V. G. Lukonin, "Srednepersidskie i sogdiiskie nadpisi na serebrîanikh sosudakh," *VDI*, 1964, no. 3, pp. 155–176.

L'Orange, H. P. Studies on the Iconography of Cosmic Kingship in the Ancient World, Oslo, 1953.

247

Lukonin, V. G. "Historical Aspects in the Study of the Monuments of Sassanian Art," Memorial Volume of the Vth International Congress of Iranian Art and Archaeology, April, 1968, Tehran, 1972, pp. 291-294.

\_\_\_\_\_. Iran v epokhu pervikh sasanidov, Ocherki po istoriĭ Kul'tury, Leningrad, 1961.

pp. 16–33. "Kushano-sasanidskie monety," EV, 18 (1967).

\_\_\_\_\_. "Parthian and Sassanid Administration," Cambridge History of Iran, III, chapter 18 (in press).

\_\_\_\_\_. *Persia* II. Trans. J. Hogarth, Cleveland and New York, 1967.

——. "Reznoi ametist c izobrazheniem tsaritsy tsarits Denak," IIKNV, 1960, pp. 381-385.

Lukonin, V. G., and M. A. Dandamayev. Review of W. Hinz, Altiranische Funde und Forschungen, VDI, 1971, no. 3, pp. 157-164.

Lunegov, I. A. "Sasanidskoe blîudo iz Prikamîa," SA, 1968, no. 4, pp. 256–258.

MacDermot, B. C. "Roman Emperors in the Sassanian Reliefs," JRS, 44 (1954), pp. 76-80.

Machabeli, K. Pozdneantichnasa torevtika Gruzii, Akademisa Nauk Gruzinskoĭ SSR, Tbilisi, 1976.

Maenchen-Helfen, O. "Crenelated Mane and Scabbard Slide," CAJ, 3 (1957-1958), pp. 85-138.

\_\_\_\_\_. "Huns and Hsiung-Nu," Byzantion, 17 (1944–1945), pp. 222–243.

Maricq, A. "'Res gestae divi Saporis.' Le Texte grec," *Syria*, 35 (1958), pp. 293-360.

Marshak, B. I. Sogdiiskoe Serebro, Moscow, 1971.

Marshak, B. I., and Ia. A. Krikis. "Chilekskie Chashi," TGE, 10 (1969), pp. 55-81.

Marshak, B. I., and K. M. Skalon. *Pereshchepinskii Klad* (K vystavke "Sokrovishcha iskusstva drevnego Irana, Kavkaza, Sredneĭ Azii"), Gosudarstvennyĭ ordena Lenina Ermitazh, Leningrad, 1972.

Martin, M. F. C. "Coins of Kidara and the Little Kushāns," *JRASBL*, Numismatic Supplement, 47 (1937–1938), pp. 23–50.

Matzulewitsch, L. Byzantinische Antike. Studien auf Grund der Silvergefässe der Ermitage, Berlin and Leipzig, 1929.

Mayence, F. "La Ve campagne de fouilles à Apamée," Bulletin des Musées royaux d'art et d'histoire, January-February 1936, pp. 2–13.

Mazaheri, A. Les Trésors de l'Iran, Geneva, 1970.

McCracken, U. E., ed. Gatherings in Honor of Dorothy E. Miner, Baltimore, 1974.

Melikhov, A. N. "Serebranoe bhudo iz Krasnoĭ Poliany," KS IIMK, Akademia Nauk SSSR, 43 (1952), pp. 74-79.

Mellink, M. J., ed. Dark Ages and Nomads, Uitgaven van het Nederlands historisch-archaeologisch Instituut te Istanbul, Istanbul, 1964.

Metzger, B. M. "A Greek and Aramaic Inscription Discovered at Armazi in Georgia," JNES, 15 (1956), pp. 18-26.

- Meyers, P. "Some Applications of X-Ray Radiography in the Study of Archaeological Objects," Archaeological Chemistry, ed. G. F. Carter, Advances in Chemistry Series, 171, Washington, D.C., 1978, pp. 79-96.
- Meyers, P., L. van Zelst, and E. V. Sayre. "Determination of Major Components and Trace Elements in Ancient Silver by Thermal Neutron Activation Analysis," Journal of Radioanalytical Chemistry, 16 (1973), pp. 67-78.
- .. "Major and Trace Elements in Sasanian Silver," Archaeological Chemistry, ed. C. Beck, Advances in Chemistry Series, 138, Washington, D.C., 1975, pp. 22-
- Miles, G. C. "Mihrāb and 'Anazah," Archaeologica Orientalia in Memoriam Ernst Herzfeld, Locust Valley, 1952, pp. 156-171.
- . Review of J. Walker, A Catalogue of the Arab-Sassanian Coins, ArsOr, 3 (1959), pp. 207-213.
- .. Review of R. Göbl, chapter "Aufbau der Münzprägung" in Ein asiatischer Staat, ArsOr, 2 (1957), pp. 589-591.
- Minorsky, V. La Domination des Dailamites, Paris, 1932. \_. "Geographical Factors in Persian Art," BSOAS, 9
- BSOAS, 11 (1944), pp. 243-265.
- Mitchiner, M. "A Small Hoard Containing Coins of Arda-mitra," NumChron, 9 (1969), pp. 301-304.
- Morey, C. R. Early Christian Art, Princeton, 1942.
- Murray, H. J. R. The History of Chess, Oxford, 1913. Muscarella, O. W., ed. The Norbert Schimmel Collection,
- Ancient Art, Mainz, 1974.
- Museum für Islamische Kunst, Katalog 1971, Berlin, 1971. Negmatov, N., and V. Sokolovskii. "Dva fragmenta stennoĭ rospisi c izobrazheniem mnogorukoĭ bogini iz Shakhristana," SGE, 37 (1973), pp. 58-60. Negro Ponzi, M. M. "Some Sasanian Moulds," Meso-
- potamia, 2 (1967), pp. 57-92.
- Nickel, H. "About the Sword of the Huns and the 'Urepos' of the Steppes," JMMA, 7 (1973), pp. 131-142.
- .. "The Art of Chivalry," BMMA, 32 (1973-1974), pp. 59-104.
- "Tamgas and Runes, Magic Numbers and Magic Symbols," JMMA, 8 (1973), pp. 165-173.
- Nöldeke, T. Geschichte der Perser und Araber zur Zeit der Sasaniden aus der arabischen Chronik des Tabari, Leiden, 1879.
- Noveck, M. The Mark of Ancient Man, Ancient Near Eastern Stamp Seals and Cylinder Seals: The Gorelick Collection, The Brooklyn Museum, Brooklyn, 1975.
- Oates, D. Studies in the Ancient History of Northern Iraq, London, 1968.
- Olmstead, A. T. "The Mid-Third Century of the Christian Era," ClassPhil, 37 (1942), pp. 241-262.
- Orbeli, J. "Sāsānian and Early Islamic Metalwork," SPA I, pp. 716-770.
- Orbeli, J. A., and K. V. Trever. Sasanidskii Metall, Moscow and Leningrad, 1935.

Pagan and Christian Egypt, The Brooklyn Museum, Brooklyn, 1941.

- Parrot, A. The Arts of Assyria, New York, 1961.
- Paruck, F. D. J. Sāsānian Coins, Bombay, 1924. Peck, E. H. "The Representation of Costumes in the Reliefs of Taq-i-Bustan," ArtibAs, 31 (1969), pp. 101-
- Peirce, H., and R. Tyler. L'Art byzantin I, Paris, 1932; II, Paris, 1934.
- Perkins, A. The Art of Dura-Europos, Oxford, 1973.
- Pfeiler, I. "Der Thron der Achaemeniden als Herrschaftssymbol auf sasanidischen Münzen," Schweizer Münzblätter, 91 (August 1973), pp. 107-111.
- Picard, C. "Le Trône vide d'Alexandre dans la cérémonie de Cyinda et la culte du trône vide à travers le monde gréco-romaine," CahArch, 7 (1954), pp. 1-17.
- Pigulevskaya, N. Les Villes de l'état iranien aux époques parthe et sassanide, Ecole pratique des hautes études-Sorbonne VIe section, Paris, 1963.
- Poinssot, L., and P. Quoniam. "Bêtes d'amphithéâtre sur trois mosaïques du Bardo," Karthago, 3 (1952), pp. 129-165.
- Pope, A. U. "Sāsānian Stucco," SPA I, pp. 630-645. ., ed. A Survey of Persian Art I-VI, London and New
- York, 1938-1939. Porada, E. "Nomads and Luristan Bronzes," Dark Ages and
- Nomads, Uitgaven van het Nederlands historischarchaeologisch Instituut te Istanbul, Istanbul, 1965, pp. 9-31.
- Procopius, History of the Wars, Books I, II. Trans. H. B. Dewing, Loeb Library edition, London and New York,
- Pugachenkova, G. A. "Ishtikhanskii ossuarii-novyi pamıatnik sogdiiskogo iskusstva," UIF, 3 (1975), Obshchestvennye nauki v Uzbekistane, pp. 33-42. . Skul'ptura Khalchasana, Moscow, 1971.
- Reed, C. A. "Imperial Sassanian Hunting of Pig and Fallow-deer and Problems of Survival of These Animals Today in Iran," Postilla, Peabody Museum of Natural History, Yale University, 92 (November 1965), pp. 1-23.
- Reuther, O. Die Ausgrabungen der deutschen Ktesiphon-Expedition im Winter 1928/29, Staatliche Museen in Berlin, Berlin, 1930.
- Rice, D. T. "The Third International Congress and Exhibition of Iranian Art and Archeology, Leningrad, 1935," ArsIs, 3 (1936), pp. 99-111.
- Rice, T. T. Ancient Arts of Central Asia, New York, 1965. Rosen, E. S. "The Begram Ivories," Marsyas, 17 (1974–1975), pp. 39–48.
- Rosenfield, J. M. The Dynastic Art of the Kushans, Berkeley and Los Angeles, 1967.
- Ross, M. C. "A Coptic Bone Carving," Bulletin de la société d'archéologie copte, 6 (1940), pp. 123-126.
- Rostovtzeff, M. I. "Dura and the Problem of Parthian Art," YCS, 5 (1935), pp. 157-304.
- .. Dura-Europos and Its Art, Oxford, 1938.
- . "The Parthian Shot," AJA, 47 (1943), pp. 174-187. .. "Some New Aspects of Iranian Art," Sem. Kondak.,
- 6 (1933), pp. 161-186. Rostovtzeff, M. I., and others. The Excavations at Dura-Europos, Preliminary Report of the Fourth Season, New

- Haven, 1933; Fifth Season, New Haven, 1934; Seventh and Eighth Seasons, New Haven, 1939.
- Roux, Jean-Paul. "Le Taureau sauvage maîtrisé," Syria, 48 (1971), pp. 187-201.
- Rowland, B., Jr. "The Dating of the Sasanian Paintings at Bamiyan and Dukhtar-i-Nushirvan," Bull. Ir. Inst., 6/7, no. 1 (December 1946), pp. 35-42.
- Rubin, I. E., ed. The Guennol Collection I, New York, 1975. Rypka, J. History of Iranian Literature, Dordrecht, 1968.
- Salomonson, J. W. Chair, Scepter and Wreath, Amsterdam, 1956.
- .. "Late-Roman Earthenware with Relief Decoration Found in Northern-Africa and Egypt," Oudheidkundige Mededeelingen uit het Rijksmuseum van Oudheden, 43 (1962) pp. 53-05.
- Sarfarāz, Ali-Akbar. "Kashf yekī az muhimterīn nuqūsh-i barjaste jālib tavajjuh-i doreh-i sāsānī," Barrasīhāyi Ta'rikhi, 6 (1350/1972), pp. 65-86.
- Sarre, F. "Die altorientalischen Feldzeichen; Die Feldzeichen der Sassaniden," Klio, 3 (1903-1904), pp. 356-358.
- \_. Die Kunst des alten Persien, Berlin, 1922.
- "Sāsānian Stone Sculpture," SPA I, pp. 593-600.
- "Ein Silberfigürchen des Sassanidenkönigs Narses im Kaiser-Friedrich-Museum zu Berlin," JPKS, 31 (1910), pp. 73-78.
- Sarre, F., and E. Herzfeld. Archäologische Reise im Euphratund Tigris-Gebiet II, Berlin, 1920.
- Iranische Felsreliefs, Berlin, 1910.
- Sasanian Silver; Late Antique and Early Mediaeval Arts of Luxury, University of Michigan Museum of Art, Ann Arbor, 1967.
- Sauvaget, J. "Remarques sur l'art sassanide; questions de méthode à propos d'une exposition," Revue des études islamiques, 12 (1938), pp. 113–131.
- Schaeder, H. H. "Über das 'Bilderbuch der Sasaniden-
- Konige,'" JPKS, 57 (1936), pp. 231-232. Schlumberger, D. "Descendants non-méditerranéens de l'art grec," Syria, 37 (1960), pp. 253-318.
- .. "Deux Fresques omeyyades," Syria, 25 (1946– 1948), pp. 86-102.
- . "La Représentation frontale dans l'art des sassanides," La Persia e il mondo greco-romano, Accademia Nazionale dei Lincei, Rome, 1966, pp. 383-392.
- , ed. Oèuvres de A. de Longpérier I, Paris, 1883.
- Schmidt, E. F. Excavations at Tepe Hissar, Damghan, Philadelphia, 1937.
- ... Persepolis I, OIP, LXVII, Chicago, 1953. \_\_\_. Persepolis III, OIP, LXX, Chicago, 1970.
- Schmidt, J. H. "Figürliche sasanidische Stückdekorationen aus Ktesiphon," ArsIs, 4 (1937), pp. 175-184.
- Schoenebeck, H. von. "Die zyklische Ordnung der Triumphalreliefs am Galeriusbogen in Saloniki," BZ, 37 (1937), pp. 361-371.
- Schüler, I. "A Note on Jewish Gold Glasses," JGS, 8 (1966), pp. 48-61.
- Histoire d'Héraclius par l'évêque Sebêos. Trans. F. Macler, Paris, 1904.
- Sellwood, D. An Introduction to the Coinage of Parthia, London, 1971.
- Seyrig, H. "Antiquités syriennes 20: Armes et costumes iraniens de Palmyre," Syria, 18 (1937), pp. 4-31.

Seyrig, H. "Antiquités syriennes 90: Sur un bas relief de Tang-i Sarvak," Syria, 47 (1970), pp. 113-116.

- Shahid, I. "The Iranian Factor in Byzantium during the Reign of Heraclius," DOP, 26 (1972), pp. 295-320.
- Shepherd, D. G. "Banquet and Hunt in Medieval Islamic Iconography," Gatherings in Honor of Dorothy E. Miner, ed. U. E. McCracken, Baltimore, 1974, pp. 79-92.
- . "Sasanian Art in Cleveland," BCMA, 51 (April
- 1964), pp. 66–92.
  \_\_\_\_\_. "Some Problems of Sassanian Silver," The Memorial Volume of the Vth International Congress of Iranian Art and Archaeology I, April 1968, Tehran, 1972, pp. 326-352. .. "Two Silver Rhyta," BCMA, 53 (October 1966), pp. 289-311.
- Shishkin, V. "Novye pamiatniki iskusstva sogda," Iskusstvo, 1 (1966), pp. 62-66.
- The Letters of Sidonius. Trans. O. M. Dalton, Oxford, 1915. Smirnov, Ia. I. "Bibliographical Notice on Argenterie orientale," BZ, 18 (1909), pp. 673-681.
- .. Vostochnoe Serebro, St. Petersburg, 1909.
- Smith, C. S. "Tal-i Iblis: Metallurgical Archaeology," in "Survey of Excavations in Iran during 1965–66," Iran, 5 (1967), pp. 146-147.
- Sokolovskii, V. "O zhivopisi 'malogo' zala dvortsovogo kompleksa gorodishcha Kalaĭ Kakhkakha I," SGE, 39 (1974), pp. 48-52.
- Soper, A. C. "Recent Studies Involving the Date of Kanishka II," ArtibAs, 34 (1972), pp. 102-113.
- Soucek, P. P. "Farhad and Tāq-i Būstan: The Growth of a Legend," Studies in Art and Literature of the Near East in Honor of Richard Ettinghausen, ed. P. J. Chelkowski, New York, 1974, pp. 27-52.
- Sperber, D. "Silver as a Status-Symbol in Sasanian Persia," Persica, 5 (1970-1971), pp. 103-105.
- Stavisky, B. Ia., ed. Materialy sovmestnoï arkheologicheskoï ekspeditsii na Kara-Tepe, Moscow, 1972.
- Stern, S. M. "Arabico-Persica," W. B. Henning Memorial Volume, ed. M. I. Boyce and I. Gershevitch, London, 1970, pp. 409-416.
- Strommenger, E. 5000 Years of the Art of Mesopotamia, London and New York, 1964.
- Strong, D. E. Greek and Roman Gold and Silver Plate, London, 1966.
- Studi orientalistici in onore di Giorgio Levi Della Vida I, Rome,
- Sulimirski, T. "Les Archers à cheval, cavalerie légère des anciens," Revue internationale d'histoire militaire, 12 (1952), pp. 447-461.
- Tadmor, M. "Fragments of an Achaemenid Throne from Samaria," IEJ, 24 (1974), pp. 37-43.
- Tafazzoli, A. "A List of Trades and Crafts in the Sassanian Period," AMI, n.f. 7 (1974), pp. 191-196.
- Taqizadeh, S. H. "The Early Sasanians," BSOAS, 11 (1943), pp. 6-51.
- Taylor, F. H. "In Defense of the Classics," Worcester Art Museum Annual, 2 (1936-1937), pp. 1-27.
- Thompson, D. "A Fragmentary Stucco Plaque in the Royal Ontario Museum," Studies Miles, Beirut, 1974, pp. 83-96.
- Trésors de l'ancien Iran, Musée Rath, Geneva, 1966.
- Trever, K. V. "K voprosu o tak nazyvaemikh sasanidskikh pamiatnikakh," SA, 16 (1952), pp. 282-286.

- Trever, K. V. "Khudozhestvennoe znachenye sasanidskikh monet," TOV, 1 (1939), pp. 255-285.
- ——. "Otrazhenye v iskusstve dualisticheskoĭ kontseptsiĭ Zoroastrizma," TOV, 1 (1939), pp. 243–254.
- \_\_\_\_\_. Pamiatniki Greko-Baktriiskogo Iskusstva, Moscow and Leningrad, 1940.
- Trousdale, W. The Long Sword and Scabbard Slide in Asia, Smithsonian Contributions to Anthropology, XVII, Washington, D.C., 1975.
- Trümpelmann, L. "Šapūr mit der Adlerkopfkappe," AMI, n.f. 4 (1971), pp. 173–186.
- Tsotselifa, M. V. Iz istorii vzaimootnoshenii Kartli c sasanidskim Iranom, Tbilisi, 1975, pp. 3-41.
- Unvala, J. M. The Pahlavi Text "King Husrav and His Boy," Paris, n.d.
- Upton, J. M., and P. Ackerman, "Furniture," SPA III, pp. 2628–2658.
- Vainberg, B. I. "Nekotorye voprosy istorii Tokharistana v IV-V vv.," in *Materialy sovmestnoĭ arkheologicheskoĭ ekspeditsiĭ-na Kara-Tepe*, ed. B. Ia. Stavisky, Moscow, 1972, pp. 129–145.
- Vanden Berghe, L. L'Archéologie de l'Iran ancien, Leiden, 1959.
- —... De iconografische Betekenis van het sassanidisch Rotsrelief van Sarāb-i Qandīl (Irān), Mededeelingen van de koniklijke Academie voor Wetenschappen, Letteren en schone Kunsten van België, Klasse der Letteren, 35, no. 1, Brussels, 1973.
- \_\_\_\_\_. "Le Relief parthe de Hung-i Naurūzī," IrAn, 3 (1963), pp. 155-168.
- Volbach, W. F. Early Christian Art, New York, 1962.
- Voshchinina, A. I. "O svíazíakh priuralia c vostokom v VI–VII vv. n.e.," SA, 17 (1953), pp. 183–196.
- Wachtsmuth, F. "Zur Datierung des Taq-i-Bustan und der Pariser Silberschale," ZDMG, 99 (1945–1949), pp. 212–224.

- Waele, E. de. "Nouvelles miettes de sculpture rupestre sassanide à Naqš-e Rostam," Syria, 54 (1977), pp. 65-84.
- Walker, J. A Catalogue of the Arab-Sassanian Coins, British Museum, London, 1941.
- Wander, S. H. "The Cyprus Plates: The Story of David and Goliath," *JMMA*, 8 (1973), pp. 89–104.
- Watson, W., ed. Pottery and Metalwork in T'ang China, Colloquies on Art and Archaeology in Asia, I, London, 1970.
- Weber, O. Altorientalische Siegelbilder, Leipzig, 1920.
- Weitzmann, K. "Three 'Bactrian' Silver Vessels with Illustrations from Euripides," ArtB, 25 (1943), pp. 289-324.
- Wertime, T. A. "The Beginnings of Metallurgy: A New Look," Science, 182 (1973), pp. 875-887.
- White, L. T. Medieval Technology and Social Change, Oxford, 1062.
- Whitehouse, D., and A. Williamson. "Sasanian Maritime Trade," Iran, 11 (1973), pp. 29-49.
- Widengren, G. "The Establishment of the Sasanian Dynasty in the Light of New Evidence," *La Persia*, Rome, 1971, pp. 711-782.
- \_\_\_\_. Les Religions de l'Iran, Paris, 1968.
- "La Royauté de l'Iran antique," *ActaIr*, 1 (1974), pp. 84–89.
- \_\_\_\_\_. "Some Remarks on Riding Costume and Articles of Dress among Iranian Peoples in Antiquity," *Studia Ethnog. Upsalien.*, 11 (1956), pp. 228–276.
- "Xosrau Anōšurvān, les Hephthalites et les peuples turcs," OS, 1 (1952–1953), pp. 69–94.
- Wikander, S. Feuerpriester in Kleinasien und Iran, Lund, 1946.
- Winkes, R. Clipeata Imago, Bonn, 1969.
- Wroth, W. Catalogue of the Coins of Parthia, British Museum, London, 1903.
- Yakubovskii, A. U., and others. Zhivopis drevnego Pîandzhikenta, Moscow, 1954.
- Yar-Shater, E. "Were the Sasanians Heirs to the Achaemenids?" La Persia, Rome, 1971, pp. 517-531.

# Index

# A

Abarshahr, 16 Abbasids, 23, 117, 140; coins, 46 Achaemenid dynasty, 21; reliefs, 104, 108, 116, 122, 137 n.44, 142 Adhurnarseh, 102 n.11, 200 Afghanistan, 104, 134, 138, 196 Ahuramazda, 55, 65 n.126, 69, 87, 134 n.26 Ahwaz, 96 n.231 Ai Khanoum, 108 Alexander the Great, 88, 104 Alexandria, 20, 21 altar. See fire altar; thrones, altar Alxon, coins, 43, 45 Amida, 21 Ammianus Marcellinus, 21, 50 n.57 Anahita, 34, 35, 38 n.50, 53 n.71 Anikovska, plate from, Pl. 21, 70, 87, 88, 132, 152, 162, 174, 186, 191-194, 196, 222 Antinöe, textiles from, 69, 121 Antioch, 20; mosaics, 21, 77, 139 Apamea, mosaic from, 49 n.46 Arab-Sasanian coins, 46, 117 Arda-mitra, coin, 104 Ardashir, bitaxš, 30 Ardashir, king of Istakr, 16 Ardashir I, 16, 20, 30, 34 n.37, 43, 200; coins, 16, 25, 66, 98, 104, 122; reliefs, 38 n.50, 50 n.54, 51 n.64, 65 n. 127, 96, 98 Ardashir II, reliefs, 18 n.15, 52 n.68, 53 n.74, 55, 75 n.179, 111, 134 n.26, 200 Ardashir III, 66, 85, 125, 129, 131, 134, 200 argentiferous (silver-bearing) lead ore, 146, 150 argentite, 146 Armenia, 5, 16, 20, 139, 196 Arsacid dynasty, 16, 39 n.56, 49 n.49; coins, 52, 104-107; relief of, 102, 104-105 Artabanus V, 16; relief, 102, 104-105 Aspahbad family, 19 Aurelian, Emperor, 20, 59 Avars, 69 n. 145, 125, 135 n. 33 azatan, 16, 19

# B

Babylonia, 16, 19
Bactrian: bowls, 87-88, 108 n.42; coins, 45, 75, 129-130
Badakhshan, 55, 71, 196
Bahram I, 17, 29; coins, 36 n.45, 44, 200
Bahram II, 17, 20, 29, 30, 36 n.45, 137, 142, 200; coins, 38, 44; reliefs, 18 n.15, 38, 52, 97, 102-103, 110, 121,

126, 139; see also Krasnaya Polyana, plate from, and Sargveshi, cup from Bahram III, 17, 38 n.51, 200 Bahram IV, 200; coins, 17, 45, 104 Bahram V (Gur), 18, 21, 76, 77, 92, 198, 200; coins, 45-46, 134, 198; see also British Museum "Bahram Gur" plate Bahram VI (Chobin), 19, 100, 200 Balkh, 8, 43 Bamiyan, 60 n. 103 Bard-i Nishandeh, 96 Barm-i Dilak, reliefs, 34, 35, 37 n.49, 38 n.53, 104 Bartym, silver bowl from, 28 Beatus of Valladolid, 121 Begram, ivory carvings from, 97-98, 127 Berlin Museum hunting plate from Nor Baiazet, Pl. 20, 41, 67, 68-70, 74, 80, 84, 87, 88, 93, 94, 118, 124, 131, 135, 138, 139, 141 n.66, 186, 221; technical analysis of, 155, 162, 174, 190, 191, 192, 193, 194 Berlin Museum hunting plate fragment, Pl. 12, 32, 37, 57, 62, 69, 81, 89, 90, 152, 160, 186, 213 Bezeklik, 111 Bianayman, 118 Bibliothèque Nationale gold bowl with crystal medallion, Pl. 33, 100, 102, 110-111, 113, 114, 115, 119, 120 n.114, 122, 129, 152, 162, 180, 186, 196, 234 Bibliothèque Nationale plate, Pl. 22, 41-42, 71-72, 80, 84, 87-88, 94, 102, 124, 131-132, 140, 223; technical analysis of, 155, 158, 162, 175, 186, 191, 192, 193, 194, 196 Bid Zard, 96 Bīrūnī, al, The Chronology of Ancient Nations, 122 Bishapur: reliefs, 18 n.15, 23, 62 n.114, 70 n.147, 102-103, 113 n.59, 121; of Shapur I at, 20, 51 n.64, 58, 102 Bisitun: reliefs, Achaemenid, 137 n.44; of Mithradates II, 110 n.49 bitaxš, 29, 30, 31, 37, 126 Bivar, A. D. H., 43, 139 Book of Kings. See Khvadhaynamagh Book of Rank. See Gahnamak British Museum "Bahram Gur" plate, Pl. 25, 41, 76-77, 78, 79, 81, 84, 85, 90, 91, 92, 93, 96, 137, 138, 186, 226; technical analysis of, 156, 162, 176, 189, 190, 191, 196 British Museum Hephthalite bowl, 62 n.114, 70 n.150, 87, 129, 130-131 British Museum Shapur plate, Pl. 13, 36, 37, 41, 54, 57-60, 61, 62 n.111, 63, 73, 74, 75, 77, 84, 87, 89, 90, 91, 92, 93, 116 n.76, 124, 125, 133–136, 138, 186, 214; technical analysis of, 155, 157, 160, 170, 189, 190, 191,

252 INDEX

Brunner, C. J., 43, 61 buckles, 65, 72, 80, 87, 115 n,72; see also clasps bullae, 8 n.5, 9 Buran, 125, 198 n.3, 200 Burnes plate, Pl. 11, 55-58, 63, 72, 73, 74, 82, 94-95, 134, 135 n.32, 136 n.36, 137, 152, 160, 170, 186, 196, 212 Burnes, Sir Alexander, 55, 56 Byzantine silver objects, 65 n.125, 134 n.25

### $\mathbf{C}$

Carthage, mosaic, 70 n. 148 Carus, Emperor, 20, 139 carving, 149, 153 Cassius Dio, Roman History, 105 casting, 147, 148, 153-154, 157 cerussite (lead carbonate), 146, 150 Chal Tarkhan, stucco from, 140 chasing, 149, 154, 155, 156 Chilek, hunting plate from, Pl. 30, 83, 85, 86, 90, 91, 92, 93, 96, 134, 135, 136, 137, 138, 141 n.66, 186, 231; technical analysis of, 156, 162, 179, 189, 190, 191, 196 China, trade with, 22 Chionites, 21, 136 n.35 Cincinnati Museum bowl, Pl. 3, 25, 27, 31-32, 35, 36, 37, 38, 39, 54, 73, 89, 90, 125, 126, 133, 186, 204; technical analysis of, 152, 153, 154, 160, 166, 196 clasps, 53, 66, 69-70, 76, 85; see also buckles Cleveland Museum Hormizd II plate, Pl. 14, 60, 61, 62, 63, 65, 66, 81, 82, 87, 93, 94, 127–128, 132, 138, 186, 198, 215; technical analysis of, 155, 160, 171, 191, 192, 193, 194, 196 coinage, 9, 16-17, 67, 78, 99, 103-104, 107, 108, 111 n.52, 114, 118, 121, 122, 125, 129, 131, 137; Abbasid, 46; Alxon, 43, 45; Arab-Sasanian, 46, 117, 119; Arda-mitra, 104; of Ardashir I, 104; Arsacid, 52, 104-105; Bactrian, 45, 129-130; of Bahram I, 44; of Bahram II, 38, 44, 126; of Bahram IV, 17, 45, 99, 104; of Bahram V, 45-46, 70, 134; Byzantine, 17; crowns on, 9, 43, 44, 45; Eastern, 45; fire altars on, 17-18, 103-104; of Hephthalites, 43, 45-46, 63 n.116; of Hormizd III, 43-44, 46, 61; of Hormizd IV, 46, 67, 114, 131; Indo-Parthian, 104; from Kabul-Jelalabad region, 45, 137; of Kavad I, 17, 45, 67, 113-114, 122, 129; of Khusro I, 11, 45, 67, 113-114, 122, 129; of Khusro II, 11, 46, 67, 113-114, 122; Kidarite, 36, 42, 43, 44, 45; of Kujula Kadphises, 107; Kushano-Sasanian, 36, 42-47, 61, 75, 76 n. 181, 133; NSPK-šah or Napki, 43, 45, 46; of Peroz, 27, 43, 45, 65, 114; Roman, 138 n.47; of Shapur I, 58, 151; of Shapur II, 21, 44-45, 104; of Shapur III, 45, 75, 104; Sogdian, 129-130; Umayyad, 46, 119; of Valash, 45, 78; of Valerian, 30; of Vima Kadphises, 107; of Yazdgard I, 104, 110 122, of Yazdgard II, 18, 129, 134; of Yazdgard III, 46, 78; see also mints Constantine I, 98 n.242, 106-107 copper, 147, 150-151, 158 crimping, 149, 152, 157

Ctesiphon, 12, 16, 20, 21, 48 n.45, 50 n.57 cupelation, 146–147 Cyrus, 75 n.177

# D

Darab, 35 n.39, 54 n.78, 96
Dastagird, 19, 21
dastkart, 16
Denak, seal of, 34
Derbend, 20
Devonshire gem, 29, 36
diberbad, 18
Diocletian, Emperor, 19, 59 n.101
Dizful, 32; see also Berlin Museum hunting plate fragment
"double shell," 139 n.61, 147–148, 157
Dukhtar-i Noshirwan, 111, 113, 120
Dura-Europos, 49 n.48, 54 n.78, 62 n.114, 64 n.122, 102

# E

Elymais, 53 n.74, 96, 105, 106 engraving, 149, 155, 156 Erdmann, Kurt, 10, 40–42, 56, 73, 88, 132, 136–137, 140 Etchmiadzin, manuscript from, 110 n.47

# F

Fabricius plate, Pl. 26, 77-79, 81, 84, 85, 90-92, 96, 134, 135, 136, 137, 138, 141 n.66, 186, 196, 227; technical analysis of, 156, 162, 177, 189, 190, 191 Fars, 23, 122; reliefs, 18 Firdausi, 139 fire altar, 17-18, 38, 103-104, 122 Firuzabad reliefs, 51 n.64, 56, 137 Fondukistan, 111 footstools, 105, 107, 110 forgeries, 74 n. 172, 148 Freer Gallery bowl, Pl. 4, 26, 27, 31-32, 37, 39, 89, 90, 125-126, 128, 186, 205; technical analysis of, 152-154, 166, 196 Freer Gallery Shapur II plate, Pl. 15, 41, 50 n.53, 60, 61-63, 65, 70, 72, 75, 76, 81, 82, 86, 88, 93, 94, 98, 127, 132, 139, 186, 216; technical analysis of, 155, 157, 160, 171, 191, 192, 193, 194, 196 Frye, R. N., 43, 61

# G

Gahnamak (Book of Rank), 117 n.86
galena (lead sulfide), 146, 150
Galerius, Emperor, arch of, 20
Gandharan stone sculptures, 97–98
Ganzak, 21
gems, 29, 31, 35 n.39, 36, 81; Bibliothèque Nationale sardonyx, 79 n.193; of Denak, 34; Devonshire, 29, 36; of lw'gn wyst, 29, 36; of Narseh-shah, 32; see also seals Georgia (U.S.S.R.), 5, 138–139, 196; see also Iberia Gilan province, 17, 52; see also Sari, plate from

Index 253

gilding, 59, 64, 150, 157, 190 Göbl, R., 16-17, 42-45, 137 gold-iridium correlation, 151, 152, 153, 156 Guennol Collection plate, Pl. 38, 186, 198-199, 239; technical analysis of, 157, 162, 183, 196, 198-199 Guram I, 131

halo, 60 n. 103, 63, 66, 81, 83; see also nimbus; xvarnah hammering, 147-148, 152, 153, 154, 155, 156, 157, 197 Hamza al-Isfahāni, 118 n.96 Haskins, J. F., 58, 197 headdresses: with bull's horns, 76, 78; with crest, 49, 53; with ram's horns, 36, 41, 44, 72-73; in shape of a bird, 44, 61 Henning, W. B., 29, 30 Hephthalites, 18, 21-22, 43, 100, 127-128, 134, 136, 142; coins, 43, 45-46; silver bowls, 48 n.44, 62 n.114, 67, 70 n. 148, 74 n. 166, 80 n. 201, 87, 115, 129, 130, 131, 196 Heraclius, Emperor, 19, 21 Herat, 22, 43, 137 herbad, 17 Hermitage Museum hunting plate with ram's horns, Pl. 23, 36-37, 41, 44, 54 n.77, 65, 72-74, 75, 76, 77, 81-82, 84, 89-92, 124, 133, 135, 136, 137, 186, 189, 224; technical analysis of, 155-156, 158, 162, 175, 190, 191, 196 Hermitage Museum onager hunt plate (from Nizhni Novgorod), Pl. 29, 82-83, 93, 132-133, 186, 230; technical analysis of, 156, 162, 178, 196 Hermitage Museum Shapur III plate (from Klimova), Pl. 24, 41, 42, 74-76, 81, 82, 83, 88, 94, 124, 129, 132, 138, 186, 225; technical analysis of, 156, 162, 176 Herzfeld, E., 42-43, 118, 119, 136 Hindu Kush, 43, 45-46, 134 Hormizd I, 17, 55, 81, 200 Hormizd II, 44, 50 n.54, 60, 128, 138, 200; see also Cleveland Museum Hormizd II plate Hormizd III, 34 n.37, 200; coins, 43-44, 46, 61, 128 Hormizd IV, 68 n. 139, 200; coins, 46, 100, 131 Hormizd Kushanshah, 139 Hsiung-nu, 116 Huns, 20, 21, 22, 43, 46, 115, 118, 197; see also Chionites; Hephthalites hutukhshbad, 18

Iberia, 16, 30; see also Georgia (U.S.S.R.) Indo-Parthian coins, 104 Iran Bastan Museum medallion bowl, Pl. 7, 27, 34-35, 37, 39, 125, 126, 133, 186, 208; technical analysis of, 152, 160, 168, 196 Iran Bastan Museum plate from Qazvin. See Qazvin, Islamic era, 10, 20, 22-23; art, 12, 88, 198 ispahbad, 46 Istakhr, 16 ivory: carvings from Begram, 97-98, 127; consular diptychs, 107

Jerusalem, 20-21 Julian, Emperor, 20 Justinian, Emperor, 21, 34

# K

Kabul-Jelalabad, coins from region of, 45, 137 Kalaĭ Kakhkakha I, 113 Kalila wa Dimna, 22 Kanishka, statue of, 60 n. 103 Karkha de Ledan, 17, 124 Kartir, 17, 121 Kavad I, 17, 18-19, 21, 22, 64, 67, 68 n.139, 93, 94, 100, 115, 122, 128, 132, 200; coins, 17, 45, 46 n.38, 113, 122, 131; see also Metropolitan Museum Peroz-Kavad I Kavad II, 68 n.139, 79 n.195, 100, 131, 200 Kerman, 29, 54 Kermanshah, 20 Khalchayan, terracotta from, 62 n. 114 Khazars, 21, 115, 135, 142, 150 Khirbet al-Mafjar, throne apse, 75 n.177 Khorasan region, 19, 21, 23, 139; coins, 45, 46 Khoresm, silver bowl from, 119, 120 Khosrov-Hormizd, shahrab, 36 Khotan, stucco figures from, 96 Khusro I, 13, 14, 19, 21, 22, 70 n.146, 100, 115, 122, 128, 131, 200; coins, 11, 45, 113, 122, 129, 137 Khusro II, 19, 21, 22, 38, 71 n.153, 100, 115, 128, 200; coins, 11, 46, 113, 122; reliefs, 19, 42, 47, 49, 71-72, 75 n. 179, 80, 82, 87, 111, 128; throne, 115-116, 122 Khusro III, 200 Khusro IV, 200 Khvadhaynamagh (Book of Kings), 199 Kidarites, 134, 136, 142; coins, 36, 42, 43, 44, 45 kirrokbad, 17 Kish, pottery from, 12; stucco bust from, 130 n.20 Kitabu't-Tanbih (Book of Admonition), 18 Klimova, 177 n.88; enthronement plate from, Pl. 35, 59 n. 101, 68 n. 139, 86, 100, 102, 115, 116, 117, 118, 120, 132, 133, 186, 236; technical analysis of, 156, 158, 162, 181, 196; see also Hermitage Museum Shapur III plate Krasnaya Polyana, plate from, Pl. 9, 29, 30, 31, 37, 48, 50-52, 53, 54, 56, 57, 60, 62, 74, 81-82, 87, 88, 89, 90, 94-95, 125, 126, 127, 133, 135 n.32, 139, 186, 210; technical analysis of, 154, 160, 169, 187, 188, 196 Kuh-i Khwaja, wall paintings from, 117 n.86 Kujula Kadphises, coins, 107 Kushano-Sasanian: coins, 36, 42-44, 61, 75, 108-109, 118 n.91; plate, 108-110, 113, 118 n.91 Kushans, 16, 21, 37, 60 n. 103, 98, 127, 134; coins, 36, Kushanshah, Bahram, 36 n.45 Kushanshah, Hormizd, 139 Kutais, plate from, Pl. 31, 41, 84-86, 90, 96, 131, 135, 136, 137, 138, 186, 232; technical analysis of, 156, 158, 162, 179, 189, 190, 191, 196 Kutcha, Maya cave, 65

landscape in Sasanian art, 52, 60, 68-70, 73, 76, 79, 83, 85-86, 130 Lord, Dr. Percival, 55 Lukonin, V. G., 28, 29, 30, 42, 43, 44, 61, 103, 115, 134, 139, 141, 196, 197 n.1 lw'gn wyst, gem of, 25, 29, 36

Mah, 76 n. 181, 117 n. 88, 118 Maltzeva, plate from, 140-141 Mani, 28 Marandjan, 184 Marshak, B., 10, 42, 65, 80, 84-85, 89, 91, 92, 136, 137, 140, 189, 190 Marw-rud, 22, 37 marzban, 135 Mas'udi: Kitabu't-Tanbih, 18; Muruju'dh-dhahab, 19 Mazdak, 18 Mazdakite revolution, 18-19, 22 Merv, 8, 23, 43, 128, 136, 137, 144 Mesene, 16 Metropolitan Museum bowl with five medallions, Pl. 5, 26, 27, 28, 31-32, 35, 37, 39, 89, 90, 125, 126, 186, 206; technical analysis of, 152, 153, 154, 160, 167, 196 Metropolitan Museum Peroz-Kavad I plate, Pl. 17, 41-42, 64-65, 66, 67, 72, 79, 81, 82, 85, 87, 88, 93, 94, 98, 127, 132, 186, 198, 218; technical analysis of, 155, 160, 172, 189, 191, 192, 193, 194, 196 Metropolitan Museum single medallion bowl, Pl. 6, 27, 28, 34–35, 36–37, 39, 54, 89, 90, 125, 126, 133, 186, 207; technical analysis of, 152, 155, 157, 160, 167 Metropolitan Museum Yazdgard I plate, Pl. 16, 63-64, 75, 76, 81, 82, 83, 88, 93, 127, 132, 186, 217; technical analysis of, 155, 160, 172, 191, 192, 193, 194, 196 Mihragan, 127 Mihran family, 19 mines. See silver, sources of mints, 16-17, 43, 46, 145, 147, 151-152; see also coinage missorium: of Aspar, 107; of Theodosius, 106, 107 Mithra, 59, 76 n. 181, 114; hunt, 71 n. 154 Mithradates II, relief at Bisitun, 110 n.49 mobad, 17 mobadan mobad, 18, 19 mosaics: in Antioch, 77, 139; from Apamea, 49 n.46; in Carthage, 70 n. 148; in Ctesiphon, 21 Mtskheta, plate from, Pl. 1, 24-25, 26, 29, 30, 35, 37, 89, 125, 126, 186, 202; technical analysis of, 154, 160, 165, 196 murals. See wall paintings Muruju'dh-dhahab. See Mas'udi

Nakhlak fortress, 146, 147 Napki (NSPK-šah), coins, 43, 45, 46 Nagsh-i Bahram, relief of Bahram II, 18 n.15, 101, 102, 103, 108, 110, 119, 121-122

Naqsh-i Radjab, reliefs: 34, 96; of Ardashir I, 38 n.50 Naqsh-i Rustam, reliefs, 20, 58, 121, 122; Achaemenid, 108; of Ardashir I, 65 n.127, 96; of Bahram II, 38, 53, 56, 121; of Hormizd II, 51 n.64, 54 n.78, 102-103, 108; of Narseh, 34, 35, 97; of Shapur I, 20, 54 n. 78, 58, 62 n.114, 96 Narseh, 17, 20, 29, 32, 34, 37, 38, 57, 81, 97, 104 n.17, 200; reliefs, 34, 35, 97 Narseh-shah, 32 Nebuchadnezzar, throne, 121 Nehavend, 20 neutron activation analysis, 145, 150, 159 niello, 65, 141 n.66, 154 nimbus, 60, 64, 80, 93, 98; see also halo; xvarnah Nineveh, 21, 35; Akkadian bronze head from, 110 n.47; Assyrian reliefs, 54 n. 79, 83 n. 213 Nizhne Shakharovka, plate from, Pl. 32, 81, 86, 94, 130, 132, 186, 233; technical analysis of, 156, 158, 162, 180, 191, 192, 193, 194, 196 Nizhni Novgorod, plate from. See Hermitage Museum onager hunt plate Nor Baiazet, plate from. See Berlin Museum hunting plate NSPK-šah. See Napki Nysa, 48 n.44, 108

Orodes, 106

Paikuli, monument of, 17, 29-30, 34 n.37 Pañcatantra, 22 Papak, seal of, 36 Papak the bitaxš, 29, 30, 31, 35, 37, 55, 126 Parthians, 16, 39 n.56, 49 n.45, 88; mother-of-pearl plaque, 98; reliefs, 96, 105-106, 122; terracottas, 96 Parthian shot, 48, 52, 57, 60, 61, 68, 93, 95, 197 Pasargadae, tomb of Cyrus, 75 n.177 Pazyryk: carpet from, 75 n.177; tapestry from, 62 n.114 Pereshchepina, plate from, Pl. 28, 41, 81, 82, 83, 84, 88, 93, 127, 132, 138 n.46, 186, 198, 229; technical analysis of, 156, 162, 178, 191, 192, 193, 194, 196 Peroz, 17-18, 21-22, 34 n.37, 41-42, 61, 64, 79 n.195, 92, 122, 200; coins, 17, 43, 45, 100; crown, 41, 42, 64, 67, 80 n. 195, 83, 84, 125, 127, 129, 134; see also Metropolitan Museum Peroz-Kavad I plate Peroz, son of Yazdgard III, 23 n.56 Persepolis: grafitto, 53 n.71, 55, 75 n.179, 126; reliefs, 108, 137 n.44 Persis, 53 n. 74 Peshawar, Gandharan reliefs, 97-98 phalerae, 51, 56, 67, 68, 69, 70, 82. Phraates IV, 105 Piandzhikent: carvings, 113; wall paintings, 12, 48 n.44, 50 n.53, 60 n.103, 65 n.127, 80 n.201, 84 n.215, 113, 118 Posi, 17, 124 Procopius, History of the Wars, 20-21, 49 n.50 Pur-i Vahman plate, 88, 139-140, 141

Index 255

# Q

Qadisiyya, 20 Qasr al-Hayr West, 116, 140 Qasr-i Abu Nasr, 8 n.5, 12, 70 Qasr-i Shirin, 19, 25 n.5 Qazvin, plate from, *Pl. 34*, 100, 102, 115, 116, 117, 118, 119, 132, 186, 235; technical analysis of, 156, 162, 181, 196 Qyzil, 71 n.155

# R

Rawak, stucco figures from, 96
Rawalpindi, 108–110
repoussé, 148, 149, 157
rhyton, 12
rock reliefs, 5, 18, 29, 30, 49, 51, 53–54, 56, 62, 88, 96, 99, 102, 121–122, 126, 133, 138; see also under name of king or site
Roman coins, 104, 138 n.47; glass, 31 n.29
Rome, arch of Septimius Severus, 16 n.9

# S

saddlebow, 62, 67-68, 77, 86-87, 92 Sakastan, 16 Salonika, arch of Galerius, 20 n.34, 33 Sargveshi, cup from, Pl. 2, 11, 14, 24-25, 28, 30-31, 35, 37, 38, 40, 51, 53, 89, 90, 125–126, 127, 136, 142, 186, 203; technical analysis of, 153-154, 160, 165, 196 Sari, plate from, Pl. 10, 52-55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 74, 79, 85, 88, 89, 94, 95, 126, 127, 133, 135 n.32, 139, 186, 198, 211; technical analysis of, 152, 154, 160, 169, 187, 195, 196, 197 Sar Meshed, reliefs of Bahram II, 38, 52, 54 n.79, 57, 126, 139 Sarre, F., 32, 57 Scriptores Historiae Augustae, 59 seals, 9, 29, 51-52, 113-114, 115 n.71, 118, 126; agate with hunt scene, 136; of Denak, 34; of Papak, 36; see Septimius Severus, arch of, 16 n.o. Shahnameh, 122, 199 shahrab, 36 shahrdaran, 16 Shami, mother-of-pearl plaque from, 98 Shapur (?), son of Papak, 53 n.71, 55, 126 Shapur I, 16, 17, 20, 36, 41, 98, 200; coins, 58, 66, 68; reliefs, 20, 34 n. 36, 50 n. 54, 51 n. 64, 54 n. 78, 58, 59, 62 n. 114, 96, 97; see also British Museum Shapur plate Shapur II, 16, 17, 18, 20-21, 36, 41, 43, 50 n.53, 55, 68, 81, 86, 87, 94, 98, 102 n.11, 103, 111, 124, 127, 133, 136-137, 197, 200; coins, 45, 104; see also British Museum Shapur plate; Freer Gallery Shapur II plate Shapur II/III relief, 18 n.15, 75 n.179, 102 n.11 Shapur III, 41, 83, 86, 111, 200; coins, 45, 74-75, 104, 130; see also Hermitage Museum Shapur III plate Shapurdukhtak, 30, 37-38 Shemakha, plate from, Pl. 8, 30, 40 n.2, 48, 50, 51, 52,

53, 54, 56, 57, 59-60, 74, 87, 88, 94-95, 125, 126, 127, 133, 135 n.32, 186, 209; technical analysis of, 154, 160, 168, 187, 188, 195, 196 Shirin, 19 Shiz, 116 silver: alloying of, 146, 147, 150, 151; control of, 124-125, 127, 132-133, 145, 151, 158; distribution of, 145, 147, 151, 157, 158; mining and smelting of, 145, 146, 147, 150, 151; sources of, 127, 145, 146, 147, 150, 151, 152, 157-158 silversmithing techniques, 145, 147-150, 197 Sloudka, ewer from, 12-13 Sogdians, 12, 22, 48 n.44, 73, 86, 118-119, 127; coins, 45, 46, 129-130, 135, 138, 140, 196, 197; see also Piandzhikent, wall paintings "Solomon throne," 116 n.75 spahbad, 18-20 Strelka, plate from, Pl. 19, 41, 60, 67-68, 69, 70, 80, 92, 100, 110-111, 113-114, 120, 122, 128-129, 132, 133, 138, 186, 197, 220; technical analysis of, 155, 160, 173, 191, 192, 193, 196 stucco, 5, 50 n.57, 96, 97, 130 n.20, 140 Susa, 11, 65 n.127; relief of Artabanus V, 102, 104–105 sword with unsharpened area, 54, 58, 73, 75, 84-85, Szeged-Nagyszéksós, bowl from, 115

### T

Tabari, Annals, 113

Tabaristan, coins, 46; plate from, 93-94, 117 Takht-i Taqdis, 115-116, 122; see also thrones, cosmic tamga, 49, 51, 60-61, 65, 68, 70, 82, 93 Tang-i Butan, reliefs, 96 Tang-i Qandil, reliefs, 34, 35 n.39, 64 n.122 Tang-i Sarwak, reliefs, 105-106, 119 n.105 tapestry. See textiles Taq-i Bustan, reliefs, 42, 47, 62, 66, 69, 80, 112-113, 115, 130-131, 139, 140; of Ardashir II, 18 n.15, 53, 55, 63, 64, 65, 75 n.179, 134 n.26; of Khusro II, 19, 42, 49, 65, 71, 72, 75 n.179, 80, 82, 87, 111, 115, 116, 122, 123, 128, 130; of Shapur II/III, 18 n.15, 53, 63-64, 75 n. 179 Taq-i Girra, 116 Tcherdyne, plate from, Pl. 27, 72, 79-81, 84, 87, 94, 111, 113, 124, 130-131, 132, 138, 186, 228; technical analysis of, 156, 158, 162, 177, 189, 191, 192, 194, 196 terracottas, 62 n.114, 65 n.127, 96 textiles: from China, 119 n.108; Coptic, 69, 121; from Pazyryk, 62 n.114 Theodosius, Emperor, 20; missorium of, 106-107 thrones, 11, 99-102, 136; altar, 103-104, 110, 122; banqueting couch, 110, 113, 115-120; bench, 103-105, 107-108, 113, 116, 119; cosmic, 116, 122; "empty, 104, 110; of Nebuchadnezzar, 121; of "Solomon," 116 n. 75; with winged horses, 111, 113-114 tool marks, 149 Touroucheva, plate from, Pl. 37, 186, 197; technical analysis of, 157, 162, 182, 196 Trevor, K. V., 5 n. 1, 80, 139 Turks, 22, 125, 135, 136, 142

256 INDEX

### U

Ufa, plate from, Pl. 18, 66-67, 82, 84, 86, 87, 88, 93, 128-129, 132, 133, 140, 186, 197, 219; technical analysis of, 155, 157, 160, 173, 189, 191, 192, 193, 194, 196; scabbard from, 75 n.179

Umayyad dynasty, 20, 22-23, 140, 141; coins, 46, 119

# V

Valash, 18, 87, 134, 200; coins, 45 Valerian, Emperor, 20; coin, 30 Valladolid, Beatus of, 121 Varaz, 139 Vima Kadphises, coins, 107 vuzurg-framadar, 18

# W

wall paintings: Dukhtar-i Noshirwan, 111, 113, 120; Dura-Europos, 49 n.48, 54 n.78, 62 n.114, 64 n.122, 102; Kalaĭ Kakhkakha, 113; Kuh-i Khwaja, 117 n.86; Piandzhikent, 12, 48 n.44, 50 n.53, 60 n.103, 65 n.127, 80 n.201, 84 n.215, 113, 118; Qasr al-Hayr, 116, 140; Uygur, 111 n.51

Walters Art Gallery: bone carving, 120–121; bowl, *Pl.* 36, 102, 115, 119–120, 132, 186, 237; technical analysis of, 156–157, 158, 162, 182

waspuhrakan, 16, 39, 126 wazurgan, 16, 17, 39, 126 Wereino, plate from, 61 workshops, 151-162; provincial, 119, 124-125, 130-137, 158; royal, 8, 17-18, 42, 124-125, 127, 132-133

# X

X-ray radiography, 145, 148, 149, 154, 155 xvarnah, 60 n.103; see also halo; nimbus

# Y

Yasna, 76 n.181, 79 n.193 Yazdgard I, 16, 18, 20, 63, 76, 81, 88, 200; coins, 103, 104, 108; see also Metropolitan Museum Yazdgard I plate Yazdgard II, 18, 27, 43, 44, 125, 134, 200; coins, 18, 134 Yazdgard III, 20, 22, 23, 128, 200; coins, 46

# Z

Zamasp, 18, 125, 200 Zeno, Emperor, 21-22, 127 Zoroastrianism, 15, 17-18, 23, 30, 31, 55, 59 n.100, 122; Yasna ritual, 76 n.181, 79 n.193