The Nasca

Helaine Silverman and Donald A. Proulx



The Nasca



General Editors Alan Kolata and Dean Snow

This series is about the native peoples and civilizations of the Americas, from their origins in ancient times to the present day. Drawing on archaeological, historical, and anthropological evidence, each volume presents a fresh and absorbing account of a group's culture, society, and history.

Accessible and scholarly, and well illustrated with maps and photographs, the volumes of *The Peoples of America* will together provide a comprehensive and vivid picture of the character and variety of the societies of the American past.

Already published

The Tiwanaku: A Portrait of an Andean Civilization Alan Kolata

The Timucua Jerald T. Milanich

The Aztecs Second Edition Michael E. Smith

> The Cheyenne John Moore

The Iroquois Dean Snow

The Moche Garth Bowden

The Nasca Helaine Silverman and Donald A. Proulx

> *The Incas* Terence N. D'Altroy

> > *The Sioux* Guy Gibbon

The Nasca

Helaine Silverman and Donald A. Proulx



© 2002 by Helaine Silverman and Donald A. Proulx

350 Main Street, Malden, MA 02148-5020, USA
108 Cowley Road, Oxford OX4 1JF, UK
550 Swanston Street, Carlton, Victoria 3053, Australia

The right of Helaine Silverman and Donald A. Proulx to be identified as the Authors of this Work has been asserted in accordance with the UK Copyright, Designs, and Patents Act 1988.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, except as permitted by the UK Copyright, Designs, and Patents Act 1988, without the prior permission of the publisher.

First published 2002 by Blackwell Publishing Ltd Reprinted 2003

Library of Congress Cataloging-in-Publication Data has been applied for

ISBN 0-631-16734-X (hardback); ISBN 0-631-23224-9 (paperback)

A catalogue record for this title is available from the British Library.

Set in 11 on 13 pt Sabon by Graphicraft Ltd, Hong Kong Printed and bound in the United Kingdom by TJ International Ltd, Padstow, Cornwall

For further information on Blackwell Publishing, visit our website: http://www.blackwellpublishing.com To my mother, Edith Silverman, with love and gratitude *Helaine*

To my wife, Mary Jean, the joy of my life

Don

Contents

Illustrations		viii
Pref	face	xi
Ack	Acknowledgments	
1	From Pots to People	1
2	Emergence and Evolution of the Nasca Ceramic Tradition	14
3	Life in the Desert	40
4	We, the Nasca	68
5	The Inhabited Landscape	96
6	Symbolic Expressions of the Natural and Supernatural World	125
7	The Geoglyphs of the Río Grande de Nazca Drainage	163
8	Religion and Ritual	193
9	Headhunting and Warfare	228
10	Nasca Sociopolitical Organization	238
11	After Nasca	268
Notes		287
Bibliography		292
Index		328

Illustrations

1.1	Map of the south coast of Peru	2
2.1	Naturalistic, representational, "monumental"	
	style of Nasca pottery	19
2.2	Abstract, conventionalized, "proliferous"	
	style of Nasca pottery	20
2.3	The fine differences in Nasca 3, 5, and 6 images	
	of the Anthropomorphic Mythical Being	24
2.4	Nasca 2 panpipe in the Joerg Haeberli Collection	26
2.5	Nasca 2 drum in the David Bernstein Collection	28
2.6	The Nasca 4–5 Anthropomorphic Monkey	30
2.7	Seated, fat, naked woman showing tattooed or	
	body-painted mythological designs	31
2.8	The "bloody mouth" form of the Killer Whale	32
2.9	Nasca 6 Jagged Staff God	33
2.10	Nasca 7 Mythical Monkey or Affendämon	35
2.11	Nasca 7 Fan-headed Anthropomorphic	
	Mythical Being	35
3.1	Plan of a filtration gallery	46
3.2	An ojo of a filtration gallery near Cantalloc in	
	the Nazca Valley	47
3.3	The major edible plants of the Nasca, as seen in	
	ceramic iconography	53
3.4	Some of the principal birds depicted in Nasca	
	ceramic iconography	58
4.1	Nasca male with moustache and goatee	74

	List of Illustrations	ix
4.2	Nasca trophy head	78
4.3	The Nasca core and periphery in terms of the	
	distribution and influence of Nasca pottery	80
4.4	Map of Peru with major coastal valleys indicated	81
5.1	Location of principal Nasca sites discussed in text	97
5.2	The central and eastern zones of Cahuachi	100
5.3	The north face of the Step-fret Temple on Unit 10	
	at Cahuachi	101
5.4	Estudiante/Site 455 on the north side of the middle	
	Ingenio Valley	108
5.5	The site of La Muña, at the confluence of	
	the Palpa and Grande rivers	110
5.6	Site 106, looking south at the great bilobal	
	hill huaca	116
5.7	The site of Los Molinos, Palpa Valley	118
6.1	(a) Mythical Killer Whale; (b) Harpy;	
	(c) Horrible Bird; (d) Mythical Spotted Cat;	
	(e) Serpentine Creature; (f) Harvester;	
	(g) Hunter; (h) "Masked Dancer" or Standing	
	Anthropomorphic Mythical Being	138–9
6.2	Example of a figure in the Bizarre	
	Innovation style	141
6.3	Decapitated Mythical Monkey	145
6.4	Nasca 6 textile with geometricized motif	154
6.5	Type A stone sculpture	158
6.6	Type B stone sculpture	159
7.1	The geoglyph-marked Pampa	164
7.2	A ray center on the Pampa	172
7.3	A complex figure on the Pampa in the late Paracas	
	style made by the additive technique	173
7.4	Petroglyphs at Chichiktara, upper Palpa Valley	182
7.5	The Nasca icon identified as the god Kón by	
	Rostworowski (1993) but actually a proliferous	10 -
	form of the Anthropomorphic Mythical Being	185
8.1	Roll-out from a vessel showing the ritual burial of	200
0.0	a cache of trophy heads within a platform mound	200
8.2	Nasca effigy of a "one-man band"	202
8.3	Nasca men carry a trumpet, played by one of them	203
8.4	Panpipe players	203

List of Illustrations

8.5	Cerro Blanco, looking up-valley (east) from the	
	modern town of Nazca	206
8.6	Scene of ancestor veneration or burial ritual	216
9.1	A well-dressed adult Nasca male holds a	
	decapitated human head	231
9.2	The famous Amano Museum vessel showing fierce	
	battle and decapitation of victims	232
11.1	Sketch plan of Site 459 in the middle Ingenio	
	Valley, a possible Wari administrative center	274
11.2	Victor von Hagen's aerial photograph of the Inca	
	administrative center of Tambo de Collao at La	
	Legua in the Ingenio Valley, prior to its destruction	282

х

Nasca is one of the most fascinating archaeological cultures of ancient Peru. Today its name engenders visions of beautiful polychrome painted pottery, grotesque human trophy heads, immense ground drawings, and sand-covered ruins. Among the public at large, Nasca is one of the most familiar of the great pre-Columbian cultures of the Americas because of its popularity with documentary film-makers. Yet scientific knowledge of Nasca is quite recent.

Our purpose in writing this book is to provide a comprehensive synthesis of scholarly knowledge about Nasca culture and society as it exists today. We seek to present the societal context for Nasca's material remains based on the history and results of archaeological investigations conducted over the course of the twentieth century.

The collaboration represented by this book has its origins in a meeting of the Society for American Archaeology held in 1974 when Donald Proulx was long beyond his doctoral dissertation on Nasca pottery and Helaine Silverman was just starting graduate school. We met in the symposium in which we both were participating and in which Silverman was presenting her first professional paper.

Both of us had become enamored with Nasca through its ceramic art. To this intense visual attraction we came to attach the intellectual questions that have guided our research over the years. In each of our cases, passion for Nasca began in the moldy basements of the anthropology buildings in which we had studied, Kroeber Hall at Berkeley for Proulx and Schermerhorn Hall at Columbia for

Preface

Silverman. Each of us had the distinct honor and challenge of working with material collected by pioneers in Andean archaeology, Max Uhle (Proulx) and William Duncan Strong (Silverman). Yet these collections were problematical in ways that forced our research in new directions. For Proulx, this developed into a lifelong study of the Nasca pottery style and its iconography in order to gain keener knowledge of the evolution of Nasca society and beliefs. For Silverman, it meant excavations at Cahuachi and, subsequently, fieldwork in the Pisco Valley in order to obtain new data. For both of us, extensive site survey in several valleys of the Río Grande de Nazca drainage has rounded out our distinct understandings of ancient Nasca society.

This book is the result of a true collaboration. We each affirm that this book could not - or not easily or happily - have been written without the assistance of the other. We have learned immensely from each other during the course of this collaboration. In terms of co-authorship we took different responsibilities and also made certain compromises on the more contentious issues that divide us. In the current book we have each spoken with our own voice, resulting in an internal dialogue readily apparent in the text and, indeed, explicitly signaled. We collaborated by writing different chapters and then extensively editing the manuscript, sending electronic files back and forth numerous times. Silverman appears as first author because of the greater number of chapters originally written by her. Chapter 10 remains her responsibility and she accepts the consequences for the speculation therein. Chapter 11 is based on Silverman's presentation at the 65th Annual Meeting of the Society for American Archaeology (Philadelphia, 2000).

Because of limitations on space we could not present all the figures and data backing up many of our statements and some of our longer arguments here. Readers are referred to Silverman's forthcoming book, *Landscapes of Meaning: Nasca Settlement Patterns in the Río Grande de Nazca Drainage, Peru* (University of Iowa Press, 2002) and to Proulx's almost completed book, *Nasca Ceramic Iconography* (working title).

Following Silverman (1993a: ix), except when quoting others, Nasca (with an "s") specifically refers to the famous archaeological culture dating to the Early Intermediate Period that is characterized by pre-fire slip painting of iconographically complex motifs. Nazca (with a "z") denotes the geographical area encompassed by the Río Grande de Nazca drainage, the specific river, the modern town, and all of the pre-Columbian and post-Conquest societies that existed in the drainage. Silverman has advocated this orthographic convention to avoid semantic confusion, although she recognizes that Menzel et al. (1964: 8) regard Nazca as a misspelling and Nasca as the historically correct form. Rostworowski (1993: 199) says that Nasca (with an "s") is closer to the Colonial Spanish pronunciation. She suggests that the word may have sounded like *Naschca*, similar to the *sch* sound in the name of the central coast Yschma polity.

We abbreviate the names of the time periods in the standard relative chronology for Peru as follows: Initial Period = IP; Early Horizon = EH; Early Intermediate Period = EIP; Middle Horizon = MH; Late Intermediate Period = LIP; Late Horizon = LH. Encompassing several named areas (Pampa de San José, Pampa de Nazca, Pampa de Socos, Pampa de Cinco Cruces, Pampa de Jumana, Pampa de Majuelos, Pampa de Los Chinos, Pampa de Las Carretas), here we refer simply to "the Pampa." Other abbreviations used are MNAAH for the Museo Nacional de Antropología, Arqueología e Historia in Lima; INC for the Instituto Nacional de Cultura; CIPS for the California Institute for Peruvian Studies.

Unless otherwise noted, all radiocarbon dates are presented uncorrected and uncalibrated.

All translations are by Helaine Silverman unless otherwise indicated.

Helaine Silverman: Writing this book has been one of the great pleasures of my academic career because of the opportunity and honor to collaborate with Donald Proulx whose work on Nasca art and society I admired as a graduate student and from which I have continued to benefit immeasurably as a professional. The collaboration is particularly poignant to me because it was Donald Proulx who, along with John H. Rowe, Dorothy Menzel, and the incomparable Lawrence Dawson, was so kind and encouraging to me long ago when, as a young graduate student, I began to work with William Duncan Strong's collections from Cahuachi. These generous colleagues facilitated my entry into the fascinating world of Nasca archaeology.

The fieldwork which underwrites various sections of this book was accomplished with the assistance of colleagues in Peru. I acknowledge with great thanks the professional help, insight, and kindnesses over many years of my Peruvian collaborators: Rubén García, Fernando Herrera, Josué Lancho Rojas, Bernardino Ojeda, Miguel Pazos, José Pinilla, and César Tumay.

Friends and other colleagues in Peru assisted me in countless ways during the years in which I was doing the research upon which this book is based. I remember with appreciation: Pedro Pablo Alayza, Susana Arce, José Canziani, Marta Tapía and Hernán Carrillo, Dante Casereto, Carmen Gabe, Benjamin Guerrero, Sonia Guillén, Pocha de Herrera, Peter Kaulicke, Krzysztof Makowski, Renate and Luis Millones, Pilar Remy, María Rostworowski, Idilio Santillana, Ruth Shady, Ana María Soldi, Oscar Tijero, Berta Vargas, Lidia (Cuqui) de Velayos and the entire Velayos family, Rodolfo Vera, Adriana von Hagen, and Carlos Williams León.

I also acknowledge with appreciation the generous exchanges of information about Nasca that I have had with Anthony Aveni, David Browne, Patrick Carmichael, Anita Cook, Joerg Haeberli, Johny Isla, David Johnson, Josué Lancho Rojas, Giuseppe Orefici, Miguel Pazos, Ann Peters, Phyllis Pitluga, Francis (Fritz) Riddell, Katharina Schreiber, Ruth Shady, Gary Urton, John Verano, Dwight Wallace, and R. Tom Zuidema.

I have consistently received extraordinary institutional cooperation from the Instituto Nacional de Cultura in Lima and Ica, the Museo Regional de Ica, and the Museo Nacional de Antropología, Arqueología e Historia in Lima. To the directors and staffs of these great institutions I offer my thanks.

Doctoral fieldwork was funded by the Fulbright Program (1984-5), the National Science Foundation (1984-5), and the Institute of Latin American Studies at the University of Texas at Austin (1983). Doctoral data analysis was supported by the Wenner-Gren Foundation (1985-6), the Organization of American States (1985), the Social Science Research Council (1985-6) and the National Science Foundation (1985). Post-doctoral fieldwork was funded by the National Endowment for the Humanities (1992), the National Geographic Society (1988-9), the USIA University Affiliations Program/Fulbright (1993-5), and the William and Flora Hewlett Foundation (1992) and the Tinker Foundation (1991) (both administered through the Center for Latin American and Caribbean Studies at the University of Illinois at Urbana-Champaign). Post-doctoral data analysis was supported by the National Endowment for the Humanities (1992) and the University of Illinois at Urbana-Champaign. Leave time was generously provided by the University of Illinois at Urbana-Champaign. Fieldwork was conducted under the following permits: Resolución Suprema 165-84-ED, Resolución Suprema 226-88-ED, Resolución Suprema 282-89-ED, and Acuerdo Número 086-93-CNTCICMA/INC.

Donald Proulx: For me, this book is the culmination of almost forty years of research on the Nasca. Along the way, I have been indebted to many people and agencies for their inspiration, help, and financial assistance. Space does not permit me to acknowledge

everyone, but the following people were especially influential in shaping my career. Lee Parsons, formerly assistant curator at the Milwaukee Public Museum, introduced me to Nasca when I was an undergraduate at the University of Wisconsin–Milwaukee and working part-time at the museum. The museum had just acquired the Malcolm Whyte Collection of pre-Columbian art, and I had the privilege of cataloging and researching part of the collection. This experience motivated me to go on to graduate school with a concentration in Peruvian archaeology.

I was fortunate to be admitted to the graduate program at the University of California at Berkeley where my mentor and friend, John H. Rowe, provided the intellectual and practical training I required to eventually achieve my goals. It was Rowe who first took me to Peru and introduced me to fieldwork and museum research in that country. The brilliant museum preparator at the Lowie (now Hearst) Museum of Anthropology, Lawrence Dawson, taught me how to analyze Nasca pottery and shared his vast knowledge of the style with me. Dorothy Menzel, conducting her own research in the museum at that time, gave me moral support and the benefit of her vast experience working with ceramics. Donald Collier of the Field Museum in Chicago allowed me full access to Kroeber's Nasca collections, which I used in my dissertation research.

Over the years many friends and colleagues have generously shared their own research and materials with me and have served as a sounding board for the exchange of ideas. These include Anthony Aveni, Ulf Bankmann, David Browne, Patrick Carmichael, Persis Clarkson, Vera Penteado Coehlo, Anita Cook, Lisa DeLeonardis, Christopher Donnan, Antonio Guarnotta, Joerg Haeberli, David Johnson, Sarah Massey, Stephen Mabee, Angelika Neudecker, Ana Nieves, Giuseppe Orefici, Tonya Panion, Anne Paul, Ann Peters, Francis Riddell, Richard Roark, Ann Pollard Rowe, Alan Sawyer, Katharina Schreiber, Gary Urton, John Verano, Dwight Wallace, Steven Wegner, and R. Tom Zuidema.

I want to single out my great respect for and the debt I owe to my co-author, Helaine Silverman, whose research at Cahuachi has revolutionized our view of Nasca society. Her extensive research on the south coast and her prolific output of publications has earned her the well-deserved reputation as the leading expert on Nasca culture. Our friendship and collaboration go back almost thirty years, and she has played a major role in shaping (and revising) my view of the Nasca.

A good portion of my Nasca research has centered on the formation of an archive of Nasca pottery modeled after the much more extensive Moche archive established by my good friend Christopher Donnan. The small collection of slides that began in my graduate school days has grown to a respectable collection of over 15,000 slides of more than 6,000 pots located in collections in the United States, Peru, Canada, Great Britain, Germany, France, and elsewhere. A list of all the curators who allowed me access to their collections would take several pages, so I will reserve individual acknowledgments for my upcoming book on Nasca ceramic iconography. However, I do now express my heartfelt thanks to all involved.

In Peru the following individuals have been instrumental in helping me to conduct the research reflected in this book: Jorge and Toni Alva, Susana Arce, José Cahuas Massa, Luis Jaime Castillo, Yolanda de Escobar, Henry Falcón Amado, Rubén García, Miriam Gavilán Roayzo, Fernando Herrera, Liliana Huaco Durand, Johny Isla, Federico Kauffmann Doig, Josué Lancho Rojas, and Miguel Pazos.

I wish also to acknowledge the loving support of my wife, Mary Jean Proulx, who unselfishly took care of our children while I was off working in Peru. More recently, she has visited Peru on two occasions and has always taken a deep interest in my work. She has put up with my occupation of our basement for a study and the many shelves of books throughout the house. She is also a critical proof-reader who has saved me from many embarrassments.

Lastly, I wish to acknowledge the financial support from the following agencies for the research reflected in this book: University of Massachusetts Faculty Research Grant (1966, 1985, 1988, 1990, 1992, 1996); the American Philosophical Society (1985); DAAD (Deutscher Akademischer Ausrauschdienst) Study Visit Grant (1988); NEH Travel to Collections Grant (1990); the H. John Heinz III Charitable Trust (1998); and the National Geographic Society (1998). My survey of the lower Nazca Valley was conducted under research permit Acuerdo 037G.D. No. 1170 (1998). I acknowledge with thanks the cooperation of the Instituto Nacional de Cultura in facilitating this fieldwork.

The authors wish to express special thanks to David M. Browne for his professional generosity and collegiality. He was the important initial impetus behind this volume. We also thank Steve Holland, the dedicated, superb technical draftsman and photographer in the Department of Anthropology at the University of Illinois at Urbana– Champaign, for his contribution to the book. We reiterate our appreciation to Joerg Haeberli, who has not only shared his vast knowledge of Nasca textiles, panpipes, and the far south coast with us, but also read various versions of relevant sections of the book and corrected them. Any remaining errors are solely our fault.

We acknowledge with many thanks the patience, superlative professionalism, and sympathetic understanding of our editor, Ken Provencher, as we brought this book to completion. We also thank Garth Bawden and Michael Moseley for their suggestions which helped us improve the book's content and style. We, of course, accept responsibility for its final form.



father plays a large panpipe and two smaller ones rest on his head-covering. The mother carries two more panpipes, one in each hand. The unique, modeled, early Nasca scene published by Julio C. Tello in 1931. It depicts the procession of a finely dressed family. The father. The family may be going to Cahuachi (or another Nasca ceremonial center). Perhaps they are bringing the brilliantly colored birds to sacrifice, panpipes to play, and a fancy ceramic bottle to exchange or ritually consume (i.e. deliberately break). The tablet is 2arrots perch on the shoulders of the mother and another sits on the right shoulder of the daughter. The daughter carries a doublespout-and-bridge bottle in her left hand. The family is accompanied by four trotting dogs; another is held under the left arm of the in the collections of the Museo Nacional de Antropología, Arqueología e Historia in Lima, Peru. Size of the plaque to which the figures are affixed: 14.3 cm \times 10.8 cm \times 8 mm thick. Accession number 3/7778C-55308.

From Pots to People

Encountering Nasca

Nasca culture flourished in the Early Intermediate Period (ca. AD 1–700) in the narrow river valleys of the Río Grande de Nazca drainage and the Ica Valley in the midst of the arid south coast of Peru (figure 1.1). By the time of the Spanish conquest of the Inca empire in 1532, most traces of Nasca had long since disappeared, converting the once vibrant society into an archaeological mystery. Unlike the Moche culture of Peru's north coast with its huge adobe pyramids or the megalithic architecture of the Tiwanaku people of the Lake Titicaca region, early explorers and travelers found little of interest in the heartland of Nasca culture, although Luis de Monzón in 1586 (cited in Mejía Xesspe 1940: 569) did note the presence of ancient "roads" on the south coast (hundreds of years later these were rediscovered as geoglyphs).

Until the beginning of the twentieth century the only "excavations" conducted at Nasca sites were the illegal lootings of cemeteries by local *huaqueros* (grave robbers). Indeed, looting began at least as early as the nineteenth century since, by then, a small amount of Nasca pottery already had made its way into the collections of several European museums (Proulx 1968: 101). The most intense and damaging looting in the region, however, occurred in the twentieth century, following the onset of scientific archaeological excavations (Tello and Mejía Xesspe 1967: 156; Uhle 1914: 8).

Ancient Nasca culture was literally discovered by Max Uhle in Ica in 1901. Uhle, a German-born archaeologist, was working at



Figure 1.1 Map of the south coast of Peru.

the Museum für Völkerkunde in Berlin in the 1880s when he first saw several examples of exquisite polychrome pottery said to be from Peru. Fascinated by its beauty, Uhle began a decade-long quest to discover the source of these pots. His travels took him to various South American countries where he collected ethnographic and archaeological specimens for the Museum für Völkerkunde and later for the University of Pennsylvania Museum. In February 1901, Uhle realized his goal when he became the first person to scientifically excavate cemeteries containing Nasca polychrome pottery (for historical details, see Proulx 1970: 1–44). The location of these ancient graves was along the barren desert borders of the Hacienda Ocucaje in the lower Ica Valley on the south coast of Peru. Uhle sent the precisely provenienced grave goods to the University of California in Berkeley whose patron, Phoebe Apperson Hearst, had sponsored Uhle's project.

Uhle returned to the south coast of Peru in 1905 but did not excavate at this time. Rather, he purchased a large collection of pottery in the town of Nazca that had been looted from various sites in the Río Grande de Nazca drainage (Gayton and Kroeber 1927: 3–4; Uhle 1914). This collection also was sent to Berkeley and the pottery from Uhle's two south-coast trips form the core of the Hearst Museum's outstanding collection of Nasca pottery.

It is important to put Uhle's explorations and activities on the south coast in the larger perspective of what he was trying to accomplish in Peru (see Kroeber and Strong 1924: 97–8; Rowe 1962a: 398–9). Whereas, with few exceptions, nineteenth-century books on the ancient peoples of Peru attributed all ruins to the Incas, Uhle recognized that the people who made the exquisite Nasca pottery had lived long before the Incas. Since the time of Uhle's fieldwork, Nasca has occupied an important position in the development of Peruvian archaeology and our conceptualization of the kinds of societies that existed before the Incas. The history of the investigation of Nasca society reflects, in large part, the trajectory of the study of Peru's past and trends in archaeological research.

In the years following Uhle's discovery, knowledge of the attractive polychrome pottery became widespread as more specimens arrived in Europe. Thomas A. Joyce (1912) was the first scholar to use a color drawing – published as the frontispiece of his book on South American archaeology – to illustrate the beauty of the ware. Joyce (1912: 181) also seems to have been the first to use the term "Nasca Style" to describe this pottery. He elaborated further on the nature of the pottery in an article published in *The Burlington Magazine* (Joyce 1913a).

At the same time as Joyce, Henry Forbes (1913) published a short article on Nasca pottery. In it he illustrated in color eleven superb vessels from his own collection and described mummy bundles of this culture. It is unclear where Forbes obtained his information about Nasca mummy bundles but it could have come from an article by Uhle, also published in 1913. Written in German and while Uhle was living in Santiago, Chile, this article was Uhle's first major publication on his fieldwork in the Ica Valley, conducted twelve years earlier. In 1914 Uhle published an account in English of his discovery of the Nasca style and his chronology for the Ica Valley. In the same monograph, Edward K. Putnam (1914) described and illustrated a collection of ninety-four Nasca vessels at the Davenport Academy of Sciences. The pots had been purchased in Peru in 1911 by the Honorable C. A. Ficke, then president of that institution.

Ales Hrdlicka, a physical anthropologist, made two trips to Peru around this time, the first a brief survey in 1910 (see Hrdlicka 1911) and the second a three-month tour in 1913 which included visits to sites in the Acarí and Nazca valleys (see Hrdlicka 1914). Hrdlicka's objectives were "to determine, as far as possible, the anthropological relation of the mountain people with those of the coast; to make further studies regarding the distribution of the coast type; to determine the type of the important Nasca group of people; and to extend the writer's researches on Indian and especially pre-Columbian pathology" (Hrdlicka 1914: 2). Hrdlicka's research provided valuable insights into the form and variety of Nasca graves, the amount of looting in the area, and the range of grave goods being extracted by huaqueros. Hrdlicka was among the first to describe such important Acarí Valley sites as Chaviña and Tambo Viejo. He also contributed valuable information on Nasca practices of skull deformation and trephination (see discussion in chapter 4).

In 1915, Peruvian archaeologist Julio C. Tello conducted fieldwork in the Río Grande de Nazca region "with the purpose of studying the different classes of cemeteries there" (Tello 1917: 283). Tello recorded information on the shape, building material, and construction of the tombs as well as the orientation of the body and common grave goods. The frequent presence of trophy heads in the cemeteries interested Tello so much that they became the subject of his 1918 doctoral dissertation (see chapter 9). William C. Farabee, curator of the American collections at the University Museum in Philadelphia, spent one month in 1922 excavating sites in the Nazca Valley (see Mason 1926). Like Tello and other archaeologists at this time, Farabee's interest centered on cemetery excavation for the purpose of recovering fine grave goods, especially pottery.

Meanwhile, Alfred Louis Kroeber and his students at the University of California at Berkeley were analyzing Uhle's pottery collections from the many coastal valleys in which Uhle had worked, including Nazca and Ica. In the study of Uhle's materials from the Ica Valley excavations, Nasca did not figure exclusively but was one of several major pre-Columbian styles represented (Kroeber and Strong 1924). Furthermore, Nasca was not called Nasca but, rather, "Proto-Nazca as it has become customary to designate a very striking ware" (Kroeber and Strong 1924: 96; see Uhle 1913, 1914). The concept of proto-cultures had been coined by Uhle in his study of several of the ancient coastal cultures and, despite its connotation, referred to fully developed art complexes and societies (for example, Proto-Chimú: see Uhle 1998: 206). A later study, undertaken by Kroeber with Anna Gayton, dealt specifically with Uhle's Nasca pottery from Nazca and chronologically ordered the style into four sequential phases (see chapter 2). Diagnostic Nasca forms of pottery also were identified (see Gayton and Kroeber 1927).

Kroeber's experience with the Uhle collections convinced him of the importance of conducting new fieldwork because he was dissatisfied with the ceramic seriation he had worked out with Gayton. By obtaining a new sample of Nasca pottery from carefully controlled grave excavations Kroeber hoped to be able to substantiate or modify the Gayton-Kroeber sequence that had relied on pottery without grave and other definite local provenience (Gayton and Kroeber 1927: 4; see also Kroeber 1956: 330). In 1926 Kroeber conducted fieldwork in Nazca which he regarded as one of the most "strategic points of attack ... because the several cultures already known from the Nazca region presented a problem of several cultures whose sequence had not been definitely determined" (Kroeber 1937: 127). For more than three months Kroeber excavated tombs, keeping a meticulous inventory of the grave associations of each burial and recording data on the burials themselves (see Kroeber and Collier 1998). In this fieldwork Kroeber was specifically more interested in "grave contents and interrelations of these as intact units than on settlements and buildings" for he thought that "Nazca ruins and structures are modest in comparison with the fine ceramics and textiles contained in Nazca cemeteries" (Kroeber and Collier 1998: 25). The importance of Kroeber's Nasca and Nazca work cannot be overemphasized. Kroeber (1928: 8-9) established a multi-phase chrono-stylistic sequence that ran from "Nazca A" to Inca. At the time, this was the "longest continuous [series] yet determined in Peru, possibly the oldest in absolute time, almost certainly as old as any vet resolved"

(Kroeber 1928: 9). Kroeber clearly articulated the goal of archaeological research at the time as chronology building on the basis of pottery collected through cemetery excavations; he eschewed settlement pattern archaeology. This perspective in Peruvian archaeology would not change till the Virú Valley project was conducted two decades later.

Tello returned to the Nazca region in 1926 and again in 1927. He specifically sought to excavate tombs whose contents would form collections for the Museo de Arqueología Peruana, some of which would be exhibited in Peru's pavilion at the Ibero-American Exposition in Sevilla in 1929. The nine months of fieldwork in 1927 resulted in the excavation of 537 tombs of which eighty pertained to "*Nasca clásico*" (early Nasca) and 176 to "*Chanka o Pre-Nasca*" (late Nasca) (Tello and Mejía Xesspe 1967: 147).

In 1932 the German archaeologist Heinrich Ubbelohde-Doering (1958; Neudecker 1979) traveled to the extremely arid and narrow Santa Cruz Valley in the northern Río Grande de Nazca drainage. His goal was to determine the kinds of graves in which Nasca pottery was found, the types of pottery that were found together and the kinds of weavings that were associated with the pots. He excavated about fifty graves, eight of which pertain to Nasca (see Neudecker 1979). He also excavated two Nasca graves at Cahuachi in the Nazca Valley (Ubbelohde-Doering 1958).

In so far as we know, the only fieldwork conducted in the following twenty years was a small excavation at Chaviña in Acarí in 1943 (see Lothrop and Mahler 1957). The situation changed dramatically in 1952, however, when William Duncan Strong (1957) undertook a major survey and excavation project in Ica and Nazca. It is important to remember that Strong had analyzed Uhle's pottery collections from Ica under the guidance of Kroeber when he was a college senior at Berkeley (see Kroeber and Strong 1924). Thus, Nasca was not unfamiliar to him.

Strong also had been a key participant in an important archaeological and interdisciplinary project in the Virú Valley on the north coast in 1946. In conceiving his south-coast project, Strong was influenced by the Virú Valley project's emphasis on settlement pattern archaeology. Strong (1957: 3) clearly described the primary purpose of his 1952 investigations as the determination of the temporal relationship between the Paracas and Nasca cultures and, concomitantly, the study of settlement patterns so as to "select the most promising sites for sondage." Strong (1957: 2) proposed to work by means of "detailed survey and stratigraphic techniques along the lines already inaugurated in Central and North Coastal Peru."

Strong chose to concentrate his efforts at Cahuachi because he believed he would get a deeply stratified sequence there. Thus, prior to excavation, Strong already was interpreting some of Cahuachi's architecture as "house mounds" in association with temples and cemeteries (see Strong 1957: table 1), implying that these mounds were formed by the sequential accumulation of domestic refuse and abandoned structures that then became stratified in situ over time. Strong's view was repeated by various scholars (for example, Matos 1980: 488; Rowe 1960: 41) and only came to be criticized when Silverman's (1993a inter alia) excavations at the site revealed that much of what Strong had interpreted as stratified habitation refuse was, in fact, construction fill for non-domestic mound architecture. What remains indisputable from Strong's (1957: 32) project, however, is his conclusion that "Cahuachi was the greatest, and probably the main capital site of the Nazca civilization in the time of its own peculiar highest florescence" which was the early Nasca period.

Strong (1957: 36–41) also excavated at Huaca del Loro in Las Trancas, the site which gave its name to the Huaca del Loro (Nasca 8) phase and culture (see Paulsen 1983; Silverman 1988b). In addition, Strong put in a stratigraphic trench at Estaquería, a few kilometers downstream from Cahuachi, in which he recovered sherds "which were mainly of Late Nazca (B) type but also included those of the Huaca del Loro culture of the succeeding epoch of Fusion. Earlier or later types were absent" (Strong 1957: 34). Strong (1957: 34) concluded that Estaquería "is really an extension of the Cahuachi site," a conclusion Silverman (1993a: ch. 5) has disputed.

In 1954–5 John H. Rowe (1956) directed a survey and excavation project that covered the vast southern portion of Peru. The overall purpose of this project was to establish relative chronological relationships among regions. The completion of a detailed chronology of the Nasca pottery style was assigned to Lawrence Dawson who had been working on a seriation since 1952 using Uhle's collections at Berkeley (Rowe 1956: 135, 146, 1960). In Peru,

From Pots to People

Dawson continued to gather more data with which to further refine the sequence. At the same time, Dorothy Menzel and Francis Riddell conducted fieldwork in the Acarí Valley (Menzel and Riddell 1986; see also Rowe 1956, 1963). They identified important Nasca 3 and Inca occupations at Tambo Viejo, the largest and most complex site in the Acarí Valley. Rowe (1963: 11–12) identified Tambo Viejo, Huarato, Chocavento, and Amato as Nasca 3 habitation sites of an intrusive and fortified nature (see counterargument in Carmichael 1992; Valdez 1998). Rowe argued that early Nasca society had been organized as a small, militaristic empire led from a capital city at Cahuachi. According to him, the empire conquered Acarí before falling at the end of Nasca 3.

Rowe, Menzel, and Dawson returned to Peru a few years later under the aegis of the US government's Fulbright Exchange Program to carry out extensive and intensive investigations in Ica (see Menzel 1971; Rowe 1963; Wallace 1962). Their fieldwork provided important new information on the Nasca occupation of the valley, particularly during epoch 7 of the Early Intermediate Period (see Menzel 1971: 86-92). Concurrently, Wallace (1958, 1971, 1986; see also Menzel 1971) surveyed and conducted small-scale excavations in Pisco, Chincha, and Cañete, gathering important information on the Nasca-contemporary styles called Carmen and Estrella (see discussion in chapters 4 and 10; Silverman 1991: fig. 9.2). In 1975 Hans Disselhoff collected fragmentary cross-knit looped and embroidered textiles at Cahuachi. Unfortunately, the context of the finds and the nature of his work are unpublished other than mention in Eisleb's (1975: figs 127-9, 138, 139, 143, 145, 148a-b) catalog of ancient Peruvian art in the Museum für Völkekunde in Berlin.

Although the 1950s were characterized by excavation, the goal of Nasca research continued to be ceramic chronology. This focus continued in the 1960s, now in museum basements using extant collections. This endeavor was not meant to be an end in itself but rather a tool to be taken to the field so that contemporaneity and change in the archaeological record could be recognized, thereby opening up the possibility for diachronic interpretation of cultural process.

At Berkeley, Dawson finalized a nine-phase Nasca ceramic sequence using the method of similiary seriation by continuity of