Preface

This book has two aims. The first is to provide an archaeologically based synthesis of the prominent Regional Developmental Mochica (or Moche) culture that flourished on the North Coast of Peru during the first millennium of our era. This provides the background for the second aim, which is to provide a case study of the city of Pampa Grande, the last capital of this culture.

Many books in different languages have attempted to present comprehensive pictures of the Mochica culture. In reality, however, many have focused on interpreting representational ceramic art. Often one gets an impression that "Mochica archaeology" is a mere supplement to iconographic studies. There are various basic problems with the reading of narrative art on funerary vessels in reconstructing cultural realities other than those pertaining to religion and cosmology.

This book is intended to add to, rather than challenge or replace, art historical visions of the Mochica world. In this book, Mochica art is neither accorded special status nor treated in isolation; rather, art is regarded as an integral part of the cultural system, its stylistic and iconographic changes mirroring important changes in the natural and/or cultural worlds (Shi-

mada 1991a). Overall, the book integrates insights and information from various complementary disciplines such as art history, ethnography, ethnohistory, geography, and geology. Thus, the Mochica prehistory presented in this book is a synthesis of extant archaeological and related knowledge and to a large degree reflects the research priorities and idiosyncracies of the methods and theories adopted by archaeologists.

In regard to the second aim of the book, Pampa Grande remains to date one of the few pre-Hispanic cities in South America for which we have sufficient chronological control and excavation data on a wide range of contexts to allow a detailed, comprehensive, synchronic reconstruction of pre-Hispanic urbanism. The city was rapidly established at the end of the sixth century and abandoned ca. A.D. 700-750. This was a turbulent period when much of the Peruvian Andes was experiencing major environmental and cultural upheavals leading to the demise of various regional cultures and the emergence of the "Wari Empire" centered in the Central Highlands of Peru. In other words, in examining the conditions and processes underlying its emergence and demise, this case study of pre-Hispanic urbanism offers insights into

broader processes and issues that affected the entire Andes.

The potential significance of Pampa Grande with its immense, multilevel adobe platform mound of Huaca Fortaleza (also known as Huaca Grande) was recognized in the early part of this century by Heinrich Brüning (Schaedel 1988: 17), a German ethnologist, who photographed the site in 1907. Starting in the late 1940's, the site was visited by a series of foreign scholars as part of their regional or even pan-Andean settlement surveys (e.g., P. Kosok, H. and P. Reichlen, R. Schaedel, First University of Tokyo Expedition to the Andes [see Ishida]), and by the beginning of the 1950's, the extensive Mochica occupation of the site was firmly established. However, no systematic surveys or excavations were carried out until 1971, when the Royal Ontario Museum of Toronto, Canada, initiated its multiyear investigation into the origin and nature of Mochica urbanism at Pampa Grande under the direction of Kent C. Day.

In 1973, as a graduate student looking for doctoral thesis material, I joined Day in Lambayeque. Together, we carried out four months of intensive surface survey and collection, plane-table mapping of Pampa Grande, and intermittent site surveys in the Lambayeque and adjacent valleys of La Leche and Zaña to the north and south. The architectural and artifactual patterns discerned at the site, in turn, formed the basis for generating specific research questions addressed during the 1975 season and for establishing appropriate methodologies.

The yearlong field season in 1975 took on a more intense and diversified character with the addition of seven new members from different universities in Canada, Peru, and the United States. Following some two months of additional survey and mapping at the site, the remainder of the field season was devoted to large scale excavation and artifact analysis.

Originally, there was a plan to publish an edited book on Pampa Grande with an accompanying volume of plane-table maps covering an estimated 25 percent of the standing architecture at the site. This plan was never implemented, as the project ceased to exist in 1976. Yet there has been increasing recognition of the overall significance of the site and time period. Publications by former project members do exist but are limited to their specific research topics, and a holistic vision of Moche V Pampa Grande cannot be readily gained from them. Thus, one of the basic aims of this book is to describe as much as possible the data generated by our project and offer a coherent synthesis.

Though this book retains some of the basic views regarding socioeconomic organization presented in my doctoral thesis (Shimada 1976), overall it only partially resembles it. Differences have resulted primarily from reassessment of the assumptions underlying the analysis and interpretations presented in the thesis and from the availability of new data on both Pampa Grande and its time period. In response to my requests, fellow members of the Pampa Grande project have generously offered me the opportunity to study and incorporate both published and unpublished data, easily doubling the amount of data compared to my thesis.

Additional data on Pampa Grande were acquired from a series of small excavations carried out in July-August of 1978 (I. Shimada 1982; Shimada and Shimada 1981), as well as from various subsequent visits. An inspection made shortly after the disastrous 1982–1983 rains and floods was informative as well as saddening. The enormous Huaca Fortaleza, which had towered over the site for some 1,400 years, was badly eroded down to its foundation in places, exposing previously unseen construction features (Shimada in press 1; Shimada and Cavallaro 1986, in press).

In retrospect, it is obvious that before and during the project we did not clearly perceive and appreciate the specific and general significance of what was encompassed by Pampa Grande and its time period. We were overly focused on Pampa Grande without proper regional perspective and examination of broader conditions and long-term developments. Genuine appreciation of its significance has gradually emerged over the past dozen years due to a series of complementary and follow-up investigations in the Lambayeque and other regions of the Central Andes.

The past decade saw a notable concentration of archaeological and ethnohistorical investigations in the Lambayeque region that had been long awaited (Shimada 1985a). For example, the Sicán Archaeological Project under my direction in the Batán Grande region of the La Leche Valley has yielded much new relevant data over the past twelve seasons (e.g., Shimada 1990a). This project was an outgrowth of the Pampa Grande research in that, among other aims, it attempted to elucidate regional cultural developments before, during, and after Moche V Pampa Grande. Survey by J. Nolan (1980) clarified Mochica settlement patterns and associated irrigation systems that linked the Lambayeque Valley and the Zaña Valley to the south. Ongoing excavation of sumptuous Mochica burials at Sipán in the mid-Lambayeque Valley by W. Alva (1988, 1990) and his team have not only brought worldwide attention to the Lambayeque region and Mochica archaeology but have also generated new research questions, particularly in regard to the early phases of Mochica cultural evolution and sociopolitical organization. The ongoing survey of the north bank of the Lambayeque Valley by members of the Sicán Archaeological Project attempts to answer these new questions.

Concurrent fieldwork elsewhere in the Central Andes has helped to place Pampa Grande in an even broader context. For example, the University of Tokyo expeditions to the Cajamarca Basin in the North Highlands of Peru has firmly established the contemporaneity of the Middle Cajamarca culture with Moche IV and V (Matsumoto 1988; Terada and Matsumoto 1985), raising the distinct possibility of strong competition over control of certain areas on the northern North Coast. Similarly, we now have a significant new perspective on the establishment of Pampa Grande with the recent discovery that it coincided closely with a prolonged period of environmental degradation, including a thirty-two-yearlong drought, the severest documented for the past 1,500 years (Schaaf 1988; Shimada et al. 1991a,b).

Overall, these recent developments have helped to rectify the most serious drawback of the single-site, single-period orientation of the Royal Ontario Museum project at Pampa Grande by allowing the placement of Moche V Pampa Grande in proper diachronic, regional, and interregional contexts. Thus, in addition to being a case study of pre-Hispanic urbanism, Pampa Grande can be also seen as a study of creative responses to severe external stresses, both cultural and natural. In essence, Pampa Grande is seen here as the product of creative, systemic responses to (1) a prolonged period of climatic anomalies that spanned much of the sixth century A.D., (2) pressure from the encroaching highland powers of the Cajamarca and Wari cultures during the seventh century, and (3) the political and social instability within the urban population brought together under climatic stress.

Chapter 1 summarizes the developmental trajectory and major achievements of the Mochica culture to define its significance within Andean civilization. It also sets out the major theoretical issues addressed in the book. Chapter 2 describes the growth of Mochica archaeology, including its idiosyncracies and intellectual underpinnings, to allow the reader to evaluate better the weaknesses and strengths of the synthesis offered in this book. In this context, the early and continuing predominance of iconographic studies points to the need for holistic, more broadly based cultural syntheses. Chapter 3 describes the environmental setting of the Mochica culture, emphasizing its dynamic and multifaceted character as well as some creative cultural responses to its potential and its limitations.

Chapters 4 and 5 together offer a comprehensive synthesis of over five hundred years of antecedent Mochica cultural evolution, highlighting the long-term trends and major achievements that were to shape Pampa Grande. Chapter 4 summarizes the difficulties in defining the origins of the Mochica culture and chronicles the evolution of its hegemony over the North Coast of Peru. Chapter 5 focuses on the internal organization and structure and antecedent developments that may have contributed to the Moche V urbanism and state posited for Pampa Grande. In the process, it elucidates the pros and cons of different views

on the nature of Mochica sociopolitical organization and urbanism.

Against this backdrop, Chapter 6 defines the extraordinary circumstances and forces responsible for the Moche IV–V transformation and attendant establishment of Pampa Grande. Explanations invoking climatic anomaly and other alternatives are scrutinized.

Chapter 7 describes the planned urban landscape and how topographic and architectural features were used effectively to bipartition the site both physically and socially. It also tackles the sociopolitical significance of architectural organization and variation. Gigantic Huaca Fortaleza was much more than the symbolic and physical center of the emergent city; its construction is believed to have played a critical role in the establishment of new social and administrative rules and forms culminating in the state and the city. Chapter 8 characterizes Moche V urban subsistence and various forms of craft production that satisfied the day-to-day needs of its urban population, as well as the political economy of the Moche V state. In addition, evidence indicating the redistributive nature of the urban economy is discussed. Chapter 9 shows how traditional Mochica iconography and rituals were selectively retained, sometimes with modified usages and significance, suggesting some fundamental ideological reassessment concurrent with the Moche IV-V transformation.

Chapter 10 describes the violent end of Mochica occupation at Pampa Grande and assesses the relative merits of competing explanations for the Moche V demise. The final chapter summarizes the book and discusses the long-term significance of the Moche V culture and Pampa Grande in Andean prehistory.

Certain terms used in this book need to be clarified. The archaeological culture about which this book is written is called Mochica or Moche. We do not know the original name of the culture or how well the archaeological culture corresponds to the natives' perception of their culture (cf. Lanning 1967: 29–30). This book follows the pioneering scholars Rafael Larco Hoyle and Alfred L. Kroeber in using the term *Mochica* to refer to the archaeological culture. This culture is most commonly iden-

tified by a distinct "corporate" (elite/ritual) art style, which emphasized naturalistic representations by means of sculptural treatment of volume and bichrome painting (dark red on cream background or vice versa) and pictorial composition. Usage of the term *Moche* is restricted (except in quotes) to the type site, the valley of that name, and the five phases (Moche I–V) of the Mochica culture.

The disappearance of this art style does not mean that the population that developed it died out or migrated elsewhere; rather, it reflects a significant transformation or displacement of the earlier dominant political and/or religious group together with the media of expression that served to diffuse its dogma. In addition, osteological analyses of human remains and the continuity in "folk" (utilitarian/ domestic) style ceramics argue for the basic biological continuity of populations on the pre-Hispanic North Coast (see Moseley 1978a; Newman 1948). R. Schaedel (1985a, 1987, 1988) sees the Mochica culture as defined here as the first "cultural climax" of the single, long cultural tradition of the Muchik people whose cultural substratum still remains viable. I concur largely, but not entirely, with this view.

Though the term *pyramid* is employed in the literature, strictly speaking, the Mochica did not construct pyramids. While the designation *truncated pyramids* is a better approximation, their mounds are in reality multilevel trapezoidal platforms. In this book the designation *platform mound* replaces *pyramid*.

Moche I-V are classificatory units primarily defined by observed changes in the form of stirrup-spout bottles (Larco Hoyle 1948). Limited stratigraphic data (e.g., Strong and Evans 1952) and independent seriations (e.g., Donnan 1965; Klein 1967) show that they constitute a viable relative chronology at least in the southern Mochica stronghold of the Chicama, Moche, and Virú valleys. The boundary between any two successive phases is arbitrarily drawn and, with the exception of Moche V, the absolute dates bracketing each phase should be considered educated guesses based on a small number of inconclusive radiocarbon dates. Further, these dates are approximate in the sense that the ceramic vessel forms were unlikely to have changed appreciably overnight or even synchronously throughout the extensive Mochica domain. Table 1 (in Chapter 1) summarizes the Mochica cultural chronology and its relationship to the widely used periodization scheme of the Central Andes. According to this scheme, the long evolution of the Mochica culture spanned much of the Early Intermediate Period and the first portion of the Middle Horizon.

Table 2 (also in Chapter 1) summarizes relevant radiocarbon dates. Whenever available, each is accompanied by (1) an assessment of the sample and its relationship with the event or material remains to be dated, and (2) its corresponding computer-calibrated calendrical date. Due to variation in the amount of atmospheric carbon isotopes, radiocarbon years are not a uniform measure of time. To put it another way, conversion of radiocarbon to calendrical dates is neither simple nor linear; the exclusive use of radiocarbon dates deters meaningful chronological comparisons. Until recently, many archaeologists insisted on the exclusive use of uncalibrated radiocarbon dates (5568 half-life radiocarbon age B.P. minus 1950, represented by lowercase b.c./a.d. dates). However, with the recent establishment of high-precision calibration tables as the international standard (Pearson and Stuiver 1986; Stuiver and Pearson 1986) and the ready availability of computer calibration software (e.g., Stuiver and Reimer 1986), calibrated dates (represented by uppercase B.C./A.D. years) should be concurrently utilized, as is done in this book.

In regard to bibliographic citations in the text, the date of original publication appears in parentheses, while the date of the edition used in this book, if different, appears in brackets.

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PAMPA GRANDE AND THE MOCHICA CULTURE