THE PARACAS POTTERY OF ICA A STUDY IN STYLE AND TIME

BY

DOROTHY MENZEL, JOHN H. ROWE, AND LAWRENCE E. DAWSON

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PREFACE

THE AUTHORS have done field work in the Ica Valley in 1954-1955, 1958, 1959-1960, and 1961. The field work was chiefly archaeological reconnaissance, although both Menzel and Dawson made limited excavations in 1959-1960. The sherd collections resulting from this work are deposited at the Regional Museum of Ica and at the Museum of the Institute of Ethnology and Archaeology of the University of San Marcos in Lima; they provided evidence of associations which has proved of fundamental importance in the present study. However, this study is not a report on field work. It is a general study of one of the major styles of Ica pottery, based on both associated and unassociated specimens in many public and private collections as well as on our own sherd materials. We are deeply grateful to the institutions and individuals who have so generously made their collections available to us for this project.

It is a special pleasure to express our appreciation to Aldo Rubini of the Hacienda Ocucaje who made available to us his excellent excavation notes, taken at Dawson's suggestion, on fifty-seven burials containing Paracas style pottery and eighteen that are attributable to the first phase of the Nasca style. The Rubini collection is the only substantial collection of Paracas pottery in existence with reliable data on grave associations.

Except for the Rubini collection, virtually every collection of Paracas pottery from Ica, public or private, consists of specimens excavated by professional pothunters working for Pablo L. Soldi, a dealer in Ica. In recent years Soldi has discovered that some of his customers will pay more for specimens with archaeological data, and he now furnishes statements of burial association to those interested. Soldi's statements about associations are sometimes correct, but they are not always reliable. Soldi is rarely present at the excavations made for him, and no systematic record is made as things come out of the ground; his statements of grave association are based on the memory of his workmen or even sometimes on his own ideas of what might plausibly be found together. Furthermore, he takes out the finest pieces to sell separately on the art market, so that even when his statements of association are correct the lots are not necessarily complete. We have referred to some of Soldi's purported associations in this study but have tried to avoid basing our argument on such evidence alone. Our sherd collections provide some check on his statements of site or regional provenience.

The most important collections accompanied by some documentation supplied by Pablo Soldi are those of Paul Truel and Carlos Soldi at Ocucaje and the Nathan Cummings collection and Textile Museum collection, both currently at the Textile Museum in Washington, D.C. Dawson studied and photographed the Truel and Carlos Soldi collections directly; our references to specimens in the Nathan Cummings collection are mainly based on photographs and notes furnished by Alan R. Sawyer, to whose kindness we are much indebted. Our references to specimens in the Textile Museum collection are based in part on Dawson's notes and drawings, and in part on slides furnished very kindly by Junius B. Bird.

We have also studied and photographed specimens in the Regional Museum

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of Ica, the National Museum of Anthropology and Archaeology in Pueblo Libre, the Museum of the Institute of Ethnology and Archaeology of the University of San Marcos, the Art Institute of Chicago, the American Museum of Natural History, the Museum of the American Indian, Heye Foundation, and the Brooklyn Museum; in the private collections of Gonzalo del Solar, Lorenzo Rosselló Truel, Pablo L. Soldi, and Mrs. Graciela Laffi de Petrachi in Peru, and in those of Fred Olsen, John Wise, Michael D. Coe, Mr. and Mrs. Paul Tishman, and Mrs. Penelope Strouth in the United States.

The research on which this study is based was carried out in two stages. the first comprising work in Peru in 1959-1960 and the second work in Berkeley and New York in 1960-1962. The work in Peru was sponsored by the U.S. Educational Commission in Peru (the Fulbright Commission) and the University of San Marcos as part of a three-year program of archaeological research on the correlation of cultural sequences along the Peruvian coast. Dawson and Menzel both held appointments under this program. Dawson worked out the general outlines of the sequence here presented while studying Rubini's records of grave association, recording unassociated specimens in other Peruvian collections, and exploring Ica Valley sites, chiefly at Ocucaje and Callango. Menzel prepared a report covering this and other aspects of the Fulbright program, which she submitted to the Commission in 1960 (Menzel, MS). We are deeply grateful to the U.S. Educational Commission in Peru and to its secretary, Dr. Eduardo F. Indacochea, for their support of this work, and to Drs. Luís E. Valcárcel and Jorge C. Muelle for the facilities provided by the University of San Marcos.

The systematic and detailed stylistic analysis that was needed to document the sequence and make it useful to others demanded two years' more work. This part of the project was supported by a grant from the National Science Foundation. It is particularly gratifying to acknowledge the support of the Foundation, because it provided for laboratory work and the processing of data rather than for a new field project. Like most other archaeologists, we have found it easier to finance field work than the preparation of publications, and we salute the Foundation's breadth of vision and understanding of the needs of archaeology in providing support for laboratory and museum studies.

The detailed stylistic analysis was carried out primarily by Menzel, who also wrote the greater part of the text of the present study. Most of the work was done in Berkeley, using the notes, photographs, and drawings we had accumulated, but Menzel also made another trip to Peru and a visit to New York, which provided an opportunity to record some additional pieces that added to our knowledge of the early part of the sequence.

The stylistic analysis led to an important and unanticipated discovery. It has long been recognized that the Paracas style was strongly influenced by the style of Chavín in northern Peru. Menzel's analysis of the Paracas sequence at Ica brought out the fact that the influence of Chavín persisted over a long period and showed changes in character, as if reflecting changes in the style that was the source of the influence. Rowe picked up this lead and did a parallel analysis of the Chavín style, working out the order of changes that took place in it on the basis of their reflection at Ica. A report on this work has been published (Rowe, 1962b). The Chavín study in turn fed back into the Ica one, clarifying the extent and significance of the Chavín influences on the southern style.

Rowe also contributed to the project by directing the archaeological survey work in the Ica Valley that led to the identification of most of the sites referred to in this report. The discussion of the geography of the Ica Valley in the introduction is based on his work. He participated both in the style analysis and in the preparation of the text.

The drawings used are the work of Dawson, Menzel, Irene Brion, and Charlotte Mentges.

We are particularly grateful to Dr. William R. Bascom and the staff of the Robert H. Lowie Museum of Anthropology at the University of California, Berkeley, for providing facilities for our work and for their sympathetic interest in it.

Special thanks are due to Anne H. Brower, editor, and Grace T. Lee, typist, for their interest and important effort in seeing the manuscript through to final completion.

Finally, we should like to thank the many friends who have aided and encouraged us through the long course of our labors, particularly Duncan M. Masson, Edward P. Lanning, Adolfo Bermúdez Jenkins, Alejandro Pezzia Assereto, Dwight T. Wallace, and Junius B. Bird. We shall never forget the warm hospitality of Mr. and Mrs. Aldo Rubini and Mr. and Mrs. Carlos Soldi at the Hacienda Ocucaje.

> D. M. J. H. R. L. E. D.

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INTRODUCTION

THE REPORT that follows is a stylistic analysis of the Paracas style as found in the Ica Valley in southern Peru. Its purpose is to present a chronological sequence for the Ica variety of the Paracas style and a review of the evidence on which the sequence is based. The analysis also provides information on the relationship between local and chronological differences which is fundamental to any study of cultural change in the Ica Valley and of the contacts between this valley and other areas. We are interested not only in recording a particular sequence of changes but also in studying the patterns of change in the sequence and the processes by which changes come about.

One of the obvious uses to which a stylistic analysis of this kind can be put is the identification and dating of unstudied specimens in existing museum collections and specimens recovered in future excavations. We have attempted to provide criteria by which such specimens can be classified. There are two limitations of this study which must be kept in mind in applying its results to new specimens, however. In the first place, our sequence applies only to the Ica Valley; Paracas style specimens from the Paracas peninsula, Pisco, Chincha, Nasca, and other areas should not be expected to fit the criteria set forth here. In the second place, our sample consisted mainly of fancy ware, and the data presented are insufficient to fit all utility ware into the sequence. We fully realize the importance of dating utility ware and hope to provide more information on it in later publications.

Research on chronological differences in Paracas pottery was started by Dawson in 1956, on the basis of the relatively small sample then available to him, primarily in illustrations. Dawson began by distinguishing four phases. An account of Dawson's earlier research was published by Rowe in 1958. In 1959 and 1960, Dawson extended his study of chronological distinctions in the Paracas style of Ica with the support of the U.S. Educational Commission in Peru and under the auspices of the University of San Marcos. At this time he was able to collect a great deal more information on associations, based on an extensive site survey in the Ica Valley carried out jointly with Rowe and Menzel, and on the large number of well-documented burial associations in the collection of Aldo Rubini at Ocucaje. By utilizing general evidence of associations from Dwight T. Wallace's excavations at the site of Cerrillos in the upper Ica Valley, available to him before publication, Dawson was also able to correct at this time an important error in the original sequence, as will be explained below. As a result of his research under the program of the U.S. Educational Commission in Peru, Dawson was able to extend the sequence considerably. The present study involves a further review of the evidence, in which we have worked out the stylistic changes in greater detail and solved a number of the more urgent problems that were pending when Dawson finished his study under the Fulbright program. However, the general outline of the sequence remains the same one that Dawson established in 1956 and 1957.

In order to distinguish the Paracas style of the Ica Valley from other varieties

of Paracas pottery, we shall refer to the variety found at Ica as the Ocucaje style. This usage will make it clear that we do not necessarily expect that the phases we set up for the Ica Valley will be exactly applicable to the sequence at Pisco, Nasca, or other neighboring areas.

In the report that follows we are discussing the Ocucaje style in terms of ten phases succeeding each other in time, which we are designating by Arabic numerals. Of these phases, the first is hypothetical, in the sense that the sample is too small for us to be sure that the vessels assigned to Phase 1 are actually earlier in time than the vessels assigned to Phase 2. However, since we do think that the Phase 1 specimens are earlier, we have reserved a separate number for them, in order to avoid difficulties in the numbering of phases when more evidence is available. The sample for Phases 2, 4, and 5 is also very small, consisting of unassociated vessels with site or valley provenience only. On the other hand, the sample for Phases 3 and 6–10 is reasonably large, and there is excellent evidence of associations for Phases 3, 8, 9, and 10. The limitations of the sample create limitations in the possibilities of interpretation and seriation that have to be kept in mind.

A brief description of Phase 1 of the "Nasca" style of the Ica and Nasca valleys, the phase that succeeds Phase 10 of the Ocucaje style, is included in the present study to show that the division between a "Paracas" and "Nasca" style is an arbitrary one, which is used for convenience in making chronological distinctions but does not mark a break in stylistic continuity.

In making the chronological study of Ocucaje style pottery we have used research materials available to us, including a very considerable collection of photographs and notes on whole specimens in Peruvian and American collections, most of which we have studied directly. References are also made to photographs of specimens we have not studied directly, photographs that were kindly made available by Alan R. Sawyer. Sawyer's photographs were used to add detail and additional information on the range of variation of the style, and are not basic to the analysis. The report includes some information based on our study of sherd collections, but since the present study was prepared in the United States and our sherd collections are deposited in Peru, we were unable to ask all the questions of the sherd materials that the study of the whole specimens suggested. We are certain that more information can be added from the study of the sherd collections, especially on utilitarian ware but also on the range of stylistic variations and technological details of decorated ware. Thus, Wallace uncovered a variety of decorative techniques in his Phase 3 sample from the site of Cerrillos that are not represented on the whole vessels in the collections we examined. We have not attempted to incorporate detailed information on Wallace's collections in this study, since he presumably intends to publish more detail on them himself.

In his report on Dawson's early research, Rowe made it clear that the four phases that could then be distinguished were receiving only temporary numbers (i.e., T-1, T-2, T-3, and T-4), since it was evident even then that these phases represented parts of a longer regional development (Rowe, 1958, p. 10). Dawson's

subsequent research has led to the definition of six additional phases that precede those given temporary numbers in the report of 1958. In the present report we have adopted the consecutive numbering system for the Ocucaje style phases in place of the earlier temporary one because it now appears probable that most of the Ocucaje tradition is represented in our sample, from its beginnings with the earliest Chavín style influences in the Ica Valley in Phase 1 to its merging with the Nasca tradition at the end of Phase 10. It is expectable that refinements in the chronology will be made in future research, but additional phase subdivisions can be designated by letters added to the phase numbers as used here. In the present report, Phase numbers 3, 4, 5, and 6 replace the site names given by Dawson at first to the then newly discovered phases in the course of his research under the Fulbright program, names that are used in a manuscript report to the Fulbright Commission submitted in 1960 by Menzel. The term "Cerrillos" in that report corresponds to the present Phase 3, "La Cruz" to Phase 4, "Animas A" to Phase 5, and "Animas B" to Phase 6.

Additional evidence available in our more recent research has made it possible to correct two major errors in Dawson's seriation of temporary phases reported by Rowe in 1958. Pottery now recognized as belonging to two distinct phases. Phases 3 and 9 of the lower-valley substyle, was included in a single descriptive category, T-3, in the earlier report because of some coincidental similarities in surface finish, use of colors, and design spacing that distinguish both phases from Phases 7, 8, and 10 (the earlier T-1, T-2, and T-4, respectively). In the absence of burial or site associations for either Phase 3 or Phase 9, and in the absence of a sample for the phases intervening between Phases 3 and 7, the coincidental similarities between Phases 3 and 9 in contrast to the rest of the then known Ocucaje style pottery overshadowed the many differences in detail. It should be noted, however, that the description of Phase T-3 in the earlier report brings out primarily features that belong to Phase 9, omitting those that distinguish Phase 3 (Rowe, 1958, pp. 15-17). Another correction of the earlier study on the basis of additional evidence involves the recognition of regional distinctions within the Ica Valley, and the resulting reappraisal of the relationship between Phases T-1 and T-2. Phase T-1 includes two now distinguishable adjoining phases, Ocucaje Phases 7 and 8 of the upper-valley substyle, while Phase T-2 corresponds to the lower-valley substyles of Phase 8 as described in the present study.

Other published reports in which reference is made to chronological subdivisions of the Ocucaje style that are comparable to ours include the preliminary report by William Duncan Strong on the Columbia University Expedition to Peru in 1952 (Strong, 1957), and Wallace's preliminary report on his excavations at the site of Cerrillos (Wallace, 1962). Strong's Late Paracas pottery from his excavations at Nasca is in part identical to our Ocucaje Phase 10 (Strong, 1957, fig. 6, A-C, E) and in part the same as our Nasca Phase 1 (*ibid.*, figs. 6, F-J; 7, A-G; 8A, C-G); his Late Paracas pottery from burials in the Ica Valley belongs in part in our Ocucaje Phase 10 (Ocucaje II, Burial 3) and in part in our Ocucaje Phase 9 (Ocucaje II, Burial 4; *ibid.*, fig. 3, I-L). Strong's Early Paracas pottery as illustrated in his report belongs in our Phase 8 of the upper Ica Valley substyle (*ibid.*, fig. 3, A-G), and his Proto-Nazca style corresponds to our Nasca Phase 1 (*ibid.*, figs. 9, 10). The sherd material that Wallace excavated in his lower "Cerrillos" levels corresponds to our Phase 3, but some of the complete specimens from other collections, which he illustrates as belonging to the Cerrillos style, correspond to our Phase 4 (Wallace, 1962, fig. 3, a, shape S2; fig. 4, a, first design in upper left), and our Phase 2/3 transition (*ibid.*, fig. 3, a, shape S1). As Wallace points out, his "La Isla" style pottery contains a mixture of phases; the mixture includes our Phases 5, 7, 8, and 9 of the upper-valley substyle, although the bulk of the sherds that he excavated appear to belong to our Phase 7.

The period terms used to designate time units in the report that follows are those proposed by Rowe (Rowe, 1960*a*, 1960*c*, 1962*c*). We are using the term Initial Period to designate a time period preceding the beginning of Chavín influences during which pottery was made at Ica. The beginning of the Early Horizon is defined by the first appearance of Chavín influences in the Ica Valley, by definition the beginning of the Ocucaje style. There is no stratigraphic evidence at Ica to indicate the contact point between pottery of the Initial Period and the beginnings of the Early Horizon, but the Ocucaje style pottery assigned to Phase 1 shows clear Chavín influences of a type that appears near the beginning of Chavín influences on the central coast (Lanning, MS, pp. 205-206). The Early Horizon ends by definition with end of the Ocucaje style.

The end of the Early Horizon probably falls between 100 and 150 A.D. (Rowe, 1960b, p. 43). Strong obtained a radiocarbon date of 116 A.D. \pm 100 for a Phase 10 burial from Ica (L-335C), and a date of 16 A.D. \pm 100 for a Phase 9 burial from Ica (L-335D, erroneously reported as 116 A.D. in Strong, 1957, and later corrected in Broecker and Kulp, 1957). Radiocarbon samples associated with the Initial Period occupation at the Hacha site in the Acarí Valley have yielded dates of 1297 B.C. \pm 80 and 997 B.C. \pm 90 (Laboratory, University of California, Los Angeles, Samples No. 153, 154). The beginning of the Early Horizon therefore must fall some time after 1000 B.C., and we are guessing it to be about 600 to 700 B.C.

Some discussion of the geography of the Ica Valley is pertinent as a background for the local differences in the Ocucaje tradition. In its upper reaches, the Ica River flows northeast to southwest, like most other Peruvian rivers that flow to the coast. This section of the river flows through a narrow valley enclosed by the Andean foothills, widening somewhat below Huamaní and ending at a narrows formed by the spurs of Cerro Blanco on the northwest and El Cerrillo on the southeast. Below this narrows, some 10 kilometers above the town of Ica, the river changes its course to an approximate north to south direction, entering a long, wide desert tableland, which it crosses as an interior river for a distance of about 100 kilometers, running almost parallel to the coast and from 35 to 70 kilometers inland. It turns west only briefly near its mouth. It is important to note in connection with communications that the upper part of the Ica Valley lies near the upper Pisco Valley, and its lower course approaches the main or Río Grande channel of the Nasca drainage. The proximity of these different drainage systems to the upper and lower portions of the Ica Valley, respectively, is reflected in differences in stylistic affiliations in some of the substyles of the Early Horizon pottery of Ica.

The Ica River is one of the poorest in water of all the major rivers of the Peruvian coast. The river is seasonal, water usually appearing in it starting some time in December or January and lasting until February or March, a period of three months at best. However, water does not arrive from the mountains every year, and there may be several years in succession when the Ica River carries no water at all. A colonial document of 1594 reports that in very dry years natives of the Ica Valley planted their crops in the Pisco and Chincha valleys (Maldonado de Torres, MS, Section 2). Even in the years of flow the water does not reach the sea, and the river is always dry at its mouth. However, until recent times the ground-water level in the Ica Valley was very high, so that, in spite of the chronically limited water supply in the river, regular cultivation was possible in a series of oases which appear at points where ground water seeps to or very near the surface. These oases were important occupation centers in ancient times.

The headwaters of the Ica River have not been studied archaeologically, so that in discussing the archaeology of the Ica Valley we are referring only to the stretch from Huamaní down. The upper section of the valley from the Hacienda Trapiche down to the end of the narrows between Cerro Blanco and El Cerrillo was traditionally called the Chacama Valley. The river runs close to the northwestern border of the Chacama Valley, and almost all the Early Horizon occupation sites down to the end of the narrows are located on these slopes, close to the river. The only intensive Early Horizon occupation on the opposite side of the valley is located on the slopes of El Cerrillo, and on the slopes of the receding foothills directly below El Cerrillo, bordering the Hacienda Cordero Alto. It is very likely that the lower part of the plain just below El Cerrillo was cultivated by irrigation at the time of the Early Horizon occupation, since large amounts of cultivated plants are found in the Early Horizon refuse from the Cerrillos site at El Cerrillo (Wallace, 1962). At present, a major irrigation channel, the Chirana, skirts the foot of El Cerrillo and irrigates the plain below it through secondary irrigation ditches.

The section of the Ica Valley having the greatest amount of irrigable land and river water supply, is the stretch between Cerro Blanco and Tajahuana, the latter some 10 kilometers below the town of Ica. The floor of this part of the valley slopes slightly from east to west, but there is a very low ridge running southward from Cerro Blanco that holds the main channel of the Ica River to the middle of the valley. This ridge is so low that in years of high water the river used to break across the top of it, forming an overflow channel which skirts the west side of the valley, rejoining the main river at Tajahuana. In colonial times this overflow channel was called the Río Seco or Río de la Macacona. More recently it has been referred to as the Río Viejo. The Río Viejo ran through extensive marshlands, and some patches of marsh still remain along its course, apparently fed today by surplus irrigation water. Near the Río Viejo all along its course, both in the valley and among the dunes that border it on the west, there is a scattering of small, stagnant lagoons without outlets, fed by ground water. Both the marshes and the lagoons were important sources of reeds used for construction, ropes, and matting in ancient times, and some lagoons abound in birds that are still hunted.

Because of the gradient of the valley floor the land east of the river has to be irrigated from a high ditch. Such a ditch was constructed in ancient times and is known as the Chirana. It takes off from the river well up in the Chacama Valley opposite the town of Los Molinos, and ends in the vicinity of Tacaraca. No Early Horizon sites have yet been found in the lower part of the area irrigated from the Chirana, and it is likely that this ditch was very much shorter in the period with which we are dealing. On the other hand, the extensive Early Horizon occupation at El Cerrillo and on the hills by Cordero suggests the probability that the Chirana, or some forerunner of it, had already reached this far.

On the west side of the river, a major irrigation ditch, the Quilloay, runs down the crest of the low ridge south of Cerro Blanco, bringing water to a considerable area around the modern town of San Juan. This ditch is also pre-conquest, but its age is not clear. No Early Horizon sites have yet been found in the area that it serves. The lands watered by the Quilloay end to the south in a zone of large sand hills just north of the present city of Ica. The area where the city of Ica now stands, and the lands below it as far as Tajahuana, are irrigated with water supplied through another major irrigation ditch, the Mochica, which takes off from the river above the city. Again, no Early Horizon sites have been found in the area irrigated by the Mochica, so that it also may have been constructed after our period.

Below Tajahuana there were no major irrigation works until modern times. However, there were places at intervals where ground water emerged in the bed of the river, or at least was near enough the surface so that it could be used for some cultivation. Going south from Tajahuana, the first such oasis was the area of Santiago and Sta. Lucía. Farther down the valley, at Chagua (modern La Venta), there was a great well in Inca times, and probably at least intermittent cultivation was possible. Continuing down the river, below a narrow stretch where it cuts a gorge through the tableland, lies the great basin of Ocucaje where water was available again. Another long stretch of narrows separates Ocucaje from the Callango Basin below it, another oasis, where our archaeological survey ends. Below Callango, there are additional oases at Uyujaya, Zamaca, and Montegrande, where extensive archaeological remains have been reported. Montegrande is the last oasis, not far from the sea.

Below Tajahuana the river again follows the west side of the valley and remains close to it down to the Ocucaje narrows. The many Early Horizon occupation sites that have been located in this stretch are all found either on the western valley border, along the alluvial fans and hill slopes and on top of the plateaus and hills, or they are found in the plain of the Santiago-Sta. Lucía Basin. In the Ocucaje and Callango basins the river passes through the center of the cultivated area, and large Early Horizon occupation sites are found on both sides.

At present, water is increasingly brackish in the lower basins from Ocucaje down, apparently because of the extensive irrigation practiced farther up the valley. In the lower part of Callango the water is now too brackish for cultivation. However, water was probably much less brackish in these lower basins in the past, to judge by the huge Early Horizon occupation sites in parts of Callango that are now uncultivated and uninhabited. Furthermore, at some of these sites large quantities of *Equisetum* rushes were used for building materials, and this plant grows only in water with a low salt content.

Until the end of the nineteenth century, the parts of the valley where no water was available were covered with evergreen forests of huarango trees (*Prosopis chilensis*) and other trees and shrubs, which were instrumental in keeping the ground-water level high by preventing evaporation and which abounded in game animals such as deer and birds and in predatory animals such as wildcats and foxes. Chroniclers and travelers remark on the refreshing coolness of these forests.

Intermittent cultivation is practiced at present in the Yauca and Tingue valleys, two large washes which enter the Ica Valley from the northeast, each ending in a huge, fan-shaped, overlapping flood plain on the east side of the river between Tacaraca and Agua de Palos. The flood plain formed by these washes is today called the Pampa de los Castillos. Water comes down these washes less frequently than down the river, but a crop can be grown in the lower part of the wash in any year in which water comes once. Archaeological sites there indicate that such cultivation dates back to ancient times.

There is an old trail connecting the Ica Valley with the sea that leads from the vicinity of the modern town of Ica to the Bahía de la Independencia, a distance of some 50–60 kilometers. Jorge C. Muelle reports the existence of big Paracas type occupation sites in that bay. The large quantity of shellfish remains in refuse of Early Horizon and later occupation sites in all parts of the Ica Valley makes it likely that the old trail dates back to very early times, and that the Bahía de la Independencia was an important source of fish and shellfish for the ancient inhabitants of Ica, as it is today.

Since the beginning of this century human activities have caused considerable changes in the Ica Valley, notably as a consequence of the drastic lowering of the ground-water table resulting from the use of deep wells, the cementing of irrigation channels, and the destruction of the huarango forests to obtain charcoal and to clear land newly irrigable with well water. At present cotton fields have largely replaced the huarango forests in the middle Ica Valley, and the marshes and lagoons along the western border of the valley are drying up. The use of well water has made it possible to irrigate considerable portions of the Pampa de los Castillos and the Pampa de la Tinguiña above it, and bulldozers have leveled many former rises enclosed by cultivated land, including important occupation sites. At Callango the former forest lands are now desert. A recently completed project leading water from the highland lakes of Chocloccocha and Orcoccocha to the Ica Valley may help to replenish the ground-water level to some extent, but the great extension of cultivated fields has razed old landmarks, important archaeological sites, and huarango forests, to the point where the geography and occupation patterns of the old Ica Valley are increasingly difficult to trace from their present appearance.

In the report that follows, sites located in our archaeological survey are referred to by a lettering and numbering system devised by Rowe for archaeological sites anywhere in the New World. In it, PV62- designates the Ica Valley, the number following the hyphen being the number of the site. In this symbol, "P" stands for Peru and "V" signifies a coastal valley. The number 62 is the valley number assigned to Ica. Counting from the Ecuadorean border southward, the Ica valley is the 62nd geographical unit along the Peruvian coast designated by a separate number. Most of these units are coastal valleys, but some intervening formations and stretches of coast have been given separate numbers. The site numbers are assigned in the order in which the sites were catalogued by University of California personnel.

In describing vessel shapes, especially those of bowls, and in describing some of the abstract designs, we have made extensive use of the terminology proposed by Anna O. Shepard in her book, *Ceramics for the Archaeologist*. We have not used all her terminology, but her ideas have greatly influenced our work. If we have made inadvertent errors in adapting her terminology to our purpose, we hope she will overlook them.

A word of explanation should be added concerning our spelling of the name "Nasca." This name is often spelled with a "z" in archaeological literature. The "z" spelling came into use in the middle of the nineteenth century through an erroneous analogy with the spelling of "Cuzco." Until that time, the name was spelled with an "s" in every written account, from the earliest chroniclers on. Since the "z" spelling has come into use through an error in very recent times, and since "s" and "z" reflect earlier differences in pronunciation, we prefer to use the historically correct "s" spelling.

There are two parts to this study. The first part is a phase-by-phase description of the Ocucaje style, emphasizing not only the presence and absence of significant features, but also the context in which they occur. We have attempted to bring out the fact that each phase is a changing unit composed in part of conservative features surviving from the preceding phase and in part of new features current at the same time.

The second part of the report consists of two tables that provide a guide to contrasting stylistic features, with an explanation of the way the features are arranged and a discussion of the assumptions underlying the arrangement. The arrangement of the features in table 1 by general topics and themes should enable anyone to identify Ocucaje style vessels by phase. The validity of the phase units set up in our study can be checked by testing the association of features on any Ocucaje style vessel against the distribution of features shown in table 2.

The illustrations are an integral part of the study, providing evidence for the stylistic relationships discussed in the text, and the text should be read as a commentary on them.

PHASES 1, 2, AND 2/3

THE SAMPLE

THERE ARE ten vessels in various collections, reported to be from the Ica Valley, that have features of the Ocucaje style but differ from corresponding vessels in all other Ocucaje phases and must be seriated as ealier. An eleventh vessel, which resembles the early Ocucaje style specimens from Ica, is reported to be from Nasca and is included in this study. A twelfth vessel without provenience resembles one of the vessels from Ica in this group and so is also included in the discussion that follows.

There are enough differences among the specimens listed above that probably at least two different phases of the Ocucaje tradition are involved. In order to allow for such stylistic subdivisions when more material is available, we are assigning phase numbers 1 and 2 to this lot, even though at present there is not enough material to justify a conclusive definition of two distinct phases.

Phase 1

Probably the oldest Early Horizon specimen from the Ica Valley is a stirrupspout bottle in the private collection of Mr. Fred Olsen in Guilford, Connecticut. A necked bottle at the Museo Regional de Ica which is probably from the Ica Valley also belongs in this phase. A third vessel, a bowl in the private collection of Lorenzo Rosselló Truel in Lima, purported to be from Nasca, is in a closely related early style and may be contemporary with Phase 1 or of slightly later date.

The stirrup-spout bottle in the Olsen collection was purchased originally by Mrs. Graciela Laffi of Lima from pot-hunters, who stated that it had been found in the Ica Valley. Several stylistic details of this bottle are peculiar to the Ocucaje style and so support the information concerning provenience given by the excavators (figs. 1, a, b; 9, a; and pl. 1, a). Features that mark this specimen as part of the Ocucaje tradition include primarily the decoration, a bodiless front-face feline head placed on one side of the bottle body, transversely to the axis of the stirrup. This position of the design is a peculiarity of the Ocucaje style that distinguishes it from other styles of this period. The fanged mouth, the form of the eyes and arching brows, and the shape of the nose, are also traits having homologous counterparts in the corresponding designs on other spouted bottles in the Ocucaje style.

Two additional stirrup-spout bottles of the same type and decorated with the same design theme have turned up very recently in collections with Ica Valley provenience (Penelope Strouth collection, New York, and Paul Tishman collection, New York, cf. Rowe, 1962b, fig. 53) and a third stirrup-spout bottle from Ica, with a slightly different design, is illustrated by Ubbelohde-Doering (1952, fig. 235). Although stylistic details of the last three bottles show them to belong to later phases, there is no reason to doubt that they are from the Ica Valley and that they are variants of the same vessel type represented by the Olsen bottle.

Other features of the Olsen bottle show it to be closely related to other Early Horizon styles in Peru, notably the Chavín style of the north highlands, the Cupisnique style of the north coast, and the Curayacu style of the central coast. The stirrup spout is a feature most characteristic of the Cupisnique style, found more rarely in the other Early Horizon styles. The particular form of the stirrup spout on the Olsen bottle resembles the earliest forms of the Cupisnique stirrupspout bottles, including such features as a small, round stirrup and a nearcylindrical, short spout ending in a broad, thickened, slightly beveled rim (cf. Rowe, MS). On the central coast, stirrup-spout bottles first appear in Phase 3 of the Curayacu style, a phase in which a large number of Chavín and Cupisnique traits without local antecedents appear for the first time (Lanning, MS, pp. 205-206). Other innovations of Curavacu Phase 3 that are also present in the Olsen bottle include a broad, sharply edged, flat bottom, dentate rocker stamping, and broad-grooved incised decoration on a roughened background. The feline representation in modeled relief on the Olsen bottle is a theme that is found most typically carved in stone in the Chavín style, where it is also sometimes accompanied by grooved circles with central dots representing feline body markings.

The early position of the Olsen bottle suggested by the stylistic resemblances to Curayacu Phase 3 and the early Cupisnique style is supported by the seriation of features that distinguish the Olsen bottle from most other Ocucaje style vessels. One, already mentioned, is a broad, nearly perfectly flat, sharply edged bottom with a worn surface, a combination of features confined to Phase 1. Another feature confined to Phase 1 is the use of simple, broad-grooved incised designs carved into a roughened background, the roughening here consisting of dentate rocker stamping. The simple designs are large circles 2.5-2.8 cm in diameter, with central dots, the incisions consisting of relatively shallow grooves 2.0-2.5 mm wide that are filled with red resin paint. Single, incised circle-and-dot designs of this size, and grooves filled with resin paint covering an area no wider than the incisions, are features that do not occur in later phases of the Ocucaje style. The incised grooves used for the principal design (the feline head) are deeper and more irregular in cross section and width than those of the circle-and-dot designs, and deeper and broader than in comparable designs of Phase 3 or later phases. They too are filled with red paint which, because of the breadth of the grooves, forms a color zone contrasting with the intervening painted surfaces. In no designs of later phases where incised lines outline painted color zones are the incisions filled with resin paint. Another feature that distinguishes the Olsen bottle from comparable vessels of later phases is the appearance of the surface, which is gray to tan, with some black fire clouding. Elaborately decorated vessels of the succeeding phases, through Phase 4 or 5, especially the spouted bottles, are thoroughly smoked to a deep, lasting charcoal black. Other features confined to Phase 1 or possibly Phases 1 and 2 include a feline mouth with a double row of teeth and lips contoured around the fangs at the top as well as at the bottom of the mouth.

Other features of the Olsen bottle are confined to Phases 1 and 2 or to Phases 1 to 3 or 1 to 4. The body of the bottle is small (9 cm high) and approximately

globular in its contours, a bottle feature confined to Phases 1 and 2. The face is small in proportion to the design surface, taking up only about half the available space below the stirrup approximately in the center of the side, an early feature in the Ocucaje style. The principal feline head design is enclosed by simpler secondary designs that cover the front half of the bottle in a design field outlined by a vertical incised line (Phases 1 to 4 in stirrup-spout bottles). The opposing fangs are subtriangular rather than triangular, that is, they have slightly curved sides; and the eccentric pupil as well as the iris band below it have approximately circular contours (Phases 1 and 2). The eyebrows consist of short, inflected bands with upturned, pointed tips (Phases 1 to 4), and the ears are indicated by circles and dots joined by a horizontal bar above the brow bands (Phases 1 to 2/3 transition). The brow bands form the top outline of the part of the face that is in relief, the brow ends project beyond the outline of the face at the sides, and the contours of the face are rounded (Phases 1 to 4 in stirrupspout bottle designs, not later than Phase 2 in bird-spout bottle designs).

The features listed above for comparative purposes all have homologous counterparts in vessels of succeeding Ocucaje phases, especially in bird-spout bottles decorated with mythical human heads with feline attributes, and in bowl designs. However, note must be taken of the fact that the Olsen bottle represents a special combination of features, a bottle with a stirrup spout decorated with a feline head in modeled relief without human attributes, a vessel type that forms a separate, comparatively conservative, descent line through succeeding phases to Phase 4 (see fig. 11, a).

The painted decoration of the Olsen bottle is entirely within the Ocucaje tradition. Areas outlined by incision are painted with a hardened coat of resin paint. Part of the paint has worn off, but the remnants indicate that the fangs and iris band were painted a light, off-color white or cream, the nose and lip band red, and the band outlining the lower part of the face yellow. The brow bands, the ears, and the area between the eyes and lips show traces of another lightcolored pigment, possibly a light tan or gray, which contrasts with the cream and yellow. Although the paint has disappeared from the rest of the face, homologous designs of the later phases indicate that the teeth were probably the same color as the fangs and eyes, that the pupils were painted black, and that a lenticular area below the lip was painted with a light color, probably also cream.

A stirrup-spout bottle very similar to the Olsen bottle, but without provenience, is illustrated by Tello (1929, fig. 73). Features of the feline head which have a conspicuous similarity to the feline features on the Olsen bottle include the shape of the eyes, brows, nose, mouth, and fangs.

The second vessel that is included in Ocucaje Phase 1 is the small, necked bottle at the Museo Regional de Ica (fig. 9, c; pl. 1, b). Its shape is vaguely reminiscent of tapering bottles with inflected necks in the Chavín and Cupisnique styles (Tello, 1960, fig. 144, H_j Tello, 1929, figs. 69, 70; Larco, 1941, fig. 77, top row right, third row right, fig. 113). No other vessel with a comparable shape is known in the Ocucaje style. Like the Olsen bottle, the Ica Museum bottle is thick walled, of brownish paste with a gray to reddish brown fired surface, and it also has a broad, sharply edged, flat bottom with a worn surface. The perimeter of the bottom is slightly raised to the height of about 1 mm at the edge, a feature that is also present in the Olsen bottle. As on the Olsen bottle, the decoration consists of broad-grooved incised lines from 2 to 4 mm wide and varying from deep to moderately deep. The design resembles the less elaborately decorated area of the Olsen bottle in having simple incised lines passing through a roughened surface, the roughening here being achieved with wedge-shaped punch marks. The design is unique in the Ocucaje style, consisting of two sets of grooved lines, one a pair of lines forming a deeply waved border at the top of the design area, the other a single wavy line crossing through the design field in the lower portion of the vessel. The design was not painted. Incised, unpainted designs appear early in the Ocucaje sequence, in Phases 1 to 4, and none of the later ones are as deeply grooved as in Phase 1. The surface of the Ica Museum bottle has a more uneven finish than the Olsen bottle, with moderately prominent polishing marks and a low gloss.

The third vessel that may belong to Ocucaje Phase 1 is a small, flat-bottomed bowl in the Rosselló collection (fig. 9, b; Rosselló, 1960, Lám. XII). Like the Olsen bottle, it is an elaborately decorated vessel, and it has on the outside the incised and painted design of a serpent with feline attributes. This figure is present in the stone-carving style of Chavín (cf. Bennett, 1942, fig. 2; Izumi, 1958, p. 7 top; Ishida and others, 1960, p. 307, fig. 5), although some of the details of the Rosselló bowl design are different. The bowl shares the following significant features with the other two Phase 1 vessels: The bottom is straight flat, broad, and sharply edged, and the incisions are deeply grooved. Unlike other Ocucaje style bowls, the Rosselló bowl has flat, straight, flaring sides, a feature that resembles the straight, tapering sides of the necked bottle at the Ica Museum in its lack of curvature. The only similar bowl shape in the Ocucaje style sample belongs to the Phase 2/3 transition (see below). Like the Olsen bottle design, the principal design figure in the Rosselló bowl is painted with resin paint, with a secondary design, consisting of "plumes" projecting from the mouth of the serpent, in which the incisions are slightly shallower and filled with red pigment and the intervening surfaces are left unpainted (Rosselló, 1960, description accompanying Lám. XII). Like the Olsen bottle design, the Rosselló serpent has a feline mouth with two rows of teeth, subtriangular opposing fangs, and a lip band that arches over the projecting fangs, features not found in succeeding phases.

There is at least one significant difference between the Rosselló bowl and the other two vessels assigned to Phase 1. The surface is evenly smoke blackened, to judge by Rosselló's description, a feature that could indicate a slightly later date. The form of the rim is also worth noting. It has a long, sloping outer bevel that merges gradually with the plane of the side and is not thickened. This rim form is characteristic of the Pozuelo style of the Chincha Valley, the earliest Early Horizon style found in that area (Lanning, MS, pp. 414–417). No comparable rim form is known in the Ocucaje style, and although the Pozuelo style must be contemporary with one of the early phases of the Ocucaje tradition, the exact temporal relationship between the two styles cannot be determined on the basis of the present sample.

PHASE 2

Three vessels in the sample, said to be from a single burial, share a number of features with Ocucaje Phase 3 pottery that are not found on the vessels assigned to Phase 1, and they have other features that are stylistically intermediate between the vessels assigned to Phase 1 and those of Phase 3. Two of these vessels are bowls in the Nathan Cummings collection (fig. 9, e, f). The third vessel purported to be from the same burial is a spouted bottle in the private collection of Raymond Wielgus of Chicago (figs. 1, c; 9, d; and Sawyer, 1961, fig. 4, a, b; Rowe, 1962b, fig. 49). The three vessels are said to be from a burial found in the Chiquerillo sector in the narrows below Ocucaje.

The spouted bottle in the Wielgus collection is a single-chambered whistling bottle, the earliest whistling bottle that is known from Peru. Like the Olsen bottle, it has a small, globular body, different in proportions and contouring from spouted bottles of succeeding phases. However, unlike the Olsen bottle, the bottom is very slightly but continuously curved, a feature that resembles the more deeply curved bottoms of bottles of later phases, and the diameter of the bottom is narrower in proportion to the widest diameter of the body. The surface is a glossy, deep charcoal black with only a few brown spots indicating the color of the paste beneath, and the surface of the bottom is not worn, both features that are present on bottles of later phases and that contrast with corresponding features of the Olsen bottle. The design on the Wielgus bottle is comparable to the one on the Olsen bottle in consisting of a relatively small, bodiless face covering approximately half the surface on one side of the vessel body, approximately centered in the side and transverse to the axis of the bridge, beneath the birdheaded whistling spout. In bottle designs of later phases corresponding designs cover an increasingly larger area. The face shares a number of features with the Olsen bottle design that are not present in corresponding designs of later phases. including circular eccentric pupils, curved outlines of the head, inflected brow bands with separate pointed tips that project beyond the side of the face and form the top border of the face, and a lip band that arches over the fangs. The incisions are broad and deep, wedge shaped, and of slightly varying width and depth, as on the Olsen bottle, but the grooves were not filled with resin paint, a feature which the Wielgus bottle shares with all later designs and which distinguishes it from the vessels assigned to Phase 1. Also unlike the Olsen bottle design, the Wielgus bottle figure is not carved into a modeled relief, but only into the regular vessel surface, a feature that it also shares with corresponding designs of later phases.

Although the Wielgus bottle shares a sufficient number of homologous features with the Olsen bottle to make it comparable in many points, it actually represents a distinct theme in two major respects. First, it is a bird-headed bottle with two spouts and a bridge, and second, it is decorated with a mythical human head with feline attributes, rather than with a feline head proper. In these respects the Wielgus bottle is not precisely comparable to the Olsen bottle, but it is precisely comparable to the great majority of spouted bottles of succeeding phases through Phase 7, and continuing into Phase 8 in the upper-valley substyle.

It is possible to identify the Wielgus bottle design as a separate theme by comparing both its features and those of the Olsen bottle design with homologous features of succeeding phases. The subrectangular eyes and subrectangular brows on the Wielgus bottle correspond to rectangular eyes and brows reserved for human representations in succeeding phases, whereas the circular eyes and simply curved brows of the Olsen feline correspond to eyes used in feline designs without human or mythical attributes in later phases. It is also important to note the contrast between the complete feline mouth in the Olsen bottle design and the agnathic feline mouth in the Wielgus bottle figure, which further distinguishes the two design themes. Finally, unlike the Olsen bottle design and its successors, in which the feline head is accompanied by circles and dots, plain circles, or concentric circles designating feline body markings, the Wielgus bottle head and its successors are never accompanied by such markings or similar secondary designs.

In comparing the Wielgus bottle with bird-spout bottles of succeeding phases, there are additional contrasting features that distinguish it from all other vessels and place it at the beginning of a long sequence of progressive changes. The spout is short and only slightly tapering, and it has a thickened rim analogous to the thickened spout rim on the Olsen bottle spout. The bridge on the Wielgus bottle is short and arched, unlike the straight bridge of later-phase bottles, and the reversed bird head on top of the whistling spout has the wings and tail represented by shelflike, modeled protrusions indented with short, wedge-shaped grooves, features that are gradually reduced to a simple incised line in the course of succeeding phases. Brows and eyes in the mythical face are subrectangular, that is, they have approximately rectangular outlines but rounded sides and rounded corners. Traces of these features are present in some Phase 3 designs, but not in succeeding phases. The agnathic mouth of the Wielgus bottle face (that is, a mouth represented by the upper jaw, lips, and teeth only) is absent from all succeeding Ocucaje phases. Its presence on the Wielgus bottle is especially significant, because it represents early Chavín influence at Ica, the agnathic mouth being perhaps the most distinctive characteristic of the stone-carving style of Chavín. The great length of the fangs of the Wielgus bottle face is unique in Ocucaje style designs, but their shape resembles the shape of Phase 3 fangs and is unlike the subtriangular and triangular fangs used for nonmythical feline designs in Phases 1 to 4.

The resin pigments on the Wielgus bottle are hard and well preserved, the colors being in part the same as those on the Olsen bottle, including red, yellow, medium brown, dark brown, black, and pink. The pupils are black, the brow bands are yellow and red, the small triangular teeth, nose arcs, and sides of the face are pink, the long triangular "tooth" in the center is yellow, and the eyes, top and bottom of the face, and fangs are brown. The top of the bird on the bird spout is painted red, a custom that is preserved consistently throughout this bottle tradition.

The two bowls in the Nathan Cummings collection that are reported to be from the same burial as the Wielgus bottle were available to us only in photographs. but the photographs indicate that they also have some stylistic resemblances to Phase 3 that distinguish them from the vessels assigned to Phase 1. One of the bowls is a high, cuplike vessel with a deep charcoal-black surface and a projecting pouring lip in one side of the rim (fig. 9, f). The pouring lip is not present on the Rosselló bowl, but it is a standard bowl feature in Ocucaje Phase 3. The Nathan Cummings bowl is decorated with an incised design consisting of very shallow, broad-grooved incisions, much shallower than those on the vessels assigned to Phase 1, and identical to some unpainted, incised line designs in Phase 3. The vessel has a beveled rim with a rounded top, which is shorter and less sloping than the rim on the Rosselló bowl, and more like the beveled rims on Phase 3 bowls. On the other hand, the vessel has either a flat or a nearly flat, sharply edged bottom, similar to the Wielgus bottle, and unlike the more deeply rounded bottom of comparable vessels of Phase 3, a feature that makes it necessary to seriate the bowl as earlier than similar bowls of Phase 3 or later Ocucaje phases.

The design on the outside of the Nathan Cummings bowl is also unlike any designs known from Phase 3 or later. It consists of a zigzag line with secondary opposing incised chevrons in the triangular spaces. The same design is found carved on the outside of stone mortars from Chavín (Tello, 1960, fig. 130), and evidently also appears in the Cupisnique style (Larco, 1941, design strip at the bottom of the frontispiece to Chapter VIII). Like the agnathic mouth, this design therefore also represents early Chavín influence at Ica. Unpainted line designs similar to this pattern but different in detail are common Phase 3 bowl designs, but are not known from succeeding Ocucaje phases.

The second bowl in the Nathan Cummings collection purported to be from the same burial as the Wielgus bottle is a shallower, broader bowl with a curved bottom and short, vertical, convex sides, and resembles a common bowl category of Phase 3 (fig. 9, e). It also has a glossy, charcoal-black surface, and the design is identical to that on the deeper bowl.

The observations listed above thus indicate a stylistic and chronological position for the Wielgus bottle and the two bowls purported to be from the same burial that is intermediate between the vessels assigned to Phase 1 and Phase 3. The similarities in the glossy charcoal-black surfaces of the three vessels, the form and proportion of the bottom on one of the bowls and the bottle, the identity in surface appearance and design between the two bowls, and the same relative seriational position of all three vessels when they are seriated independently with reference to the other Ocucaje phases, are all factors supporting the contention that they are from a single burial.

There are two other vessels in the Nathan Cummings collection, said to be from the Callango Basin, that are probably earlier than Phase 3 and contemporary with vessels assigned to Phase 2. Both are high, relatively narrow-necked bottles with short, slightly hyperboloid necks, a high-shouldered body with straight or slightly convex, slightly flaring, sides below the shoulder, and a shallow-curved bottom separated from the body of the vessel by a sharp edge (fig. 9, g). Shallow-curved bottoms of this type are also characteristic of Phase 3. One of the Nathan Cummings bottles is plain, and the other is decorated with an unpainted, incised design consisting of a serpentine band winding around the vessel body. The band is outlined with incised lines that enclose a space filled with incised dashes, a pattern reminiscent of the decoration on the high-sided, necked bottle at the Museo Regional de Ica, which is assigned to Phase 1. However, the incisions are shallower than those on the Ica Museum bottle and are identical in appearance to the incisions on the bowls assigned to Phase 2. The incised dashes also differ from the corresponding dashes on the Ica Museum bottle in being longer and shallower. Similar or identical designs are found in Phases 3 and 4 of the Curayacu style, thus providing another link with the central coast sequence (Lanning, MS, pp. 149–150). The serpentine design pattern is not known from the later Ocucaje phases, but shallow incised line designs separating areas of incised dashes are a common Phase 3 design. Shallow grooved incisions and the absence of painted decoration from incised designs are features that are not known after Ocucaje Phase 4 and further mark the Nathan Cummings bottles as belonging to the early part of the Ocucaje tradition.

The only vessel from Ica comparable to the bottles described above is an unassociated, necked bottle in the Truel collection of Ocucaje, which probably belongs in Phase 3 (fig. 10, d). Although the latter vessel resembles the Nathan Cummings bottles in shape as well as in design, it differs from them in the proportions of the neck and body and in the appearance of the incised designs. The combination of likenesses and differences between the Truel collection bottle and the Nathan Cummings bottles suggests that the bottles in the Nathan Cummings collection are variants of the same vessel type, which must be seriated as earlier than the vessel assigned to Phase 3 on the basis of contrasts in homologous features. No similar vessels that can be identified as homologues are known from later Ocucaje phases.

PHASE 2/3 TRANSITION

There are three other vessels purported to be from a single burial from the Chiquerillo sector in the narrows below Ocucaje that are stylistically intermediate between Phases 2 and 3. One of these vessels is a single-chambered whistling bottle with a reversed bird spout, now at the Brooklyn Museum (fig. 9, h; Rowe, 1962b, fig. 48), and the other two vessels are bowls in the Nathan Cummings collection (fig. 9, i, j).

The bottle at the Brooklyn Museum resembles the Wielgus bottle in having the wings and tail of the bird spout represented by a modeled shelf. However, the shelf consists of a single, narrow border rather than of three separate broader sections, in this respect resembling more closely the brief, skirtlike projections that characterize bird spouts of Phase 3. The bridge on the Brooklyn Museum bottle is slightly arched, less so than the Wielgus bottle bridge but more so than the straight bridges on Phase 3 bottles. The hollow spout is proportionately slightly narrower than the spout on the Wielgus bottle, more like Phase 3 bottle spouts, and, like most Phase 3 and later bottle spouts, it does not have a thickened rim. The bottom of the vessel has a very shallow but continuous curvature, slightly more curvature than the Wielgus bottle but less than Phase 3 bottles. The mythical human representation below the bird spout takes up an area of the vessel surface that is smaller than in the corresponding designs of Phase 3 and later phases, but larger than on the Wielgus bottle; as in all subsequent phases and unlike Phase 1 and 2 bottle designs, it covers the entire lower part of the vessel surface down to the base angle.

Although the design on the Brooklyn Museum bottle probably represents the same mythical figure as the Wielgus bottle design, it differs from the latter and from most later bottle designs in consisting of a profile rather than a front-face head; also unlike the Wielgus bottle design, there are limblike features on either side of the lower section of the Brooklyn Museum figure that probably represent part of the body. Profile heads related to the design on the Brooklyn Museum bottle are common in bowl designs of later Ocucaje phases.

A mythical profile head with feline attributes is a common representation in Chavin art, and its presence on the Brooklyn Museum bottle is another example of early Chavin influence at Ica. The Brooklyn Museum bottle design resembles mythical heads in Chavin art especially in having a band ending in a serpent head arching down from the top of the head on either side of the face, a feature that represents hair strands in Chavin art (cf. Rowe, 1962b, p. 16). There is a further resemblance to similar Chavin representations in the single set of two fangs, one in the front and one in the center of the profile mouth, projecting from the upper part of the mouth only, features that are not present in the Ocucaje style from Phase 3 on. The design on the Brooklyn Museum bottle, as well as the Wielgus bottle head, evidently represents specifically the Chavin figure identified by Rowe as the Great Image, a good example of which in front-face view is illustrated by Ayres (1961, p. 242, fig. 10; see also Rowe, 1962b, fig. 11).

Details of the Brooklyn Museum bottle design also indicate a stylistic position intermediate between the Wielgus bottle and Phase 3 (fig. 27, a). The incisions are broad, deep and wedge shaped, as in Phase 1 and 2 designs. Circle-and-dot designs above the face, separated by a horizontal bar, are like the corresponding feature in the feline design on the Olsen bottle. On the other hand, the pupil and eye band have slightly parabolic outlines, resembling feline eyes of succeeding phases.

Like the Wielgus bottle, the Brooklyn Museum bottle has a deep, carbon-black surface with one or two brown spots indicating the firing color of the paste below the surface. The resin paint is hard and well preserved, the colors being red, yellow, pink, black, and cream.

The two bowls purported to be from the same burial as the Brooklyn Museum bottle were studied by us only in photographs. One of them resembles the Rosselló bowl and is unlike any bowls of succeeding phases (fig. 9, i). However, it

is unlike the Rosselló bowl and like most Phase 3 bowls in having a pouring lip, a slightly rounded bottom terminated by a rounded hip rather than by a sharply edged base angle, and sides which, although nearly straight flaring, have a slightly irregular curvature. The bowl has a rim bevel that is like the rim bevels on the Phase 2 bowls and on some Phase 3 bowls, shorter, less sloping and more sharply edged than the rim bevel on the Rosselló bowl. The Nathan Cummings bowl has a black surface, a feature that is shared by the Rosselló bowl as well as by elaborately decorated Phase 3 bowls. The design on the Nathan Cummings bowl consists of a pattern of vertical lines and large concentric circles bordered at the top by a horizontal line around the bowl rim. The design lines consist of very shallow incised grooves painted over with red and yellow or cream-colored resin-painted lines. The painted lines are broader than the incisions that they cover, making it appear that the design consists only of painted lines. Both the design figures and the design technique are characteristic of Phases 3 and 4, with a contrasting homologue in the more deeply grooved circle-and-dot designs filled with red pigment that decorate the Olsen bottle assigned to Phase 1. The Nathan Cummings bowl, therefore, is also stylistically intermediate between Phase 3 and the preceding phases, thus supporting the contention that it is from the same burial as the Brooklyn Museum bottle.

The second bowl purported to be from the same burial is a globular, incurving bowl with a pouring lip (fig. 9, j), a form that may also be present in Phase 3 (information uncertain). The outside is covered with unpainted stamped circleand-dot designs, also a common Phase 3 bowl decoration. Similar designs are also common in Chavín pottery (Tello, 1960, figs. 151, 152), and the same design appears on the central coast late in Curayacu Phase 3 or early in Phase 4 (Lanning, MS, pp. 159–160). The correlation with the central coast sequence supports the chronological ordering of the Ocucaje phases, and indicates that this design must represent continuing northern influences at Ica.

SUMMARY

In summary, the vessels assigned to Phases 1, 2, and the Phase 2/3 transition, which belong stylistically at or near the beginning of the Ocucaje tradition, also show strong influences of foreign styles, including the stone-carving style of Chavín, an early phase of the Cupisnique style of the north coast, and Phase 3 of the Curayacu style of the central coast. The stylistic relationships with the respective Early Horizon pottery styles of the north and central coast suggest that the vessels assigned to Ocucaje Phase 1 probably represent the first appearance of Chavín style influences on the south coast. Some of the features that characterize the vessels assigned to Phases 1 and 2 are not known from succeeding Ocucaje phases, others are not known after Phase 3 or after Phase 4. On the other hand, some of the features that are present on Phase 1 and Phase 2 vessels persist throughout the entire Ocucaje tradition, including, for example, resinpainted designs outlined by incisions. Other Phase 1 and Phase 2 features persist even longer, into the succeeding Nasca tradition, among them bright-colored polychrome designs, feline and human representations, and the tradition of spout-and-bridge bottles. Double-spouted bottles of the later Ocucaje and Nasca traditions are derived from the single-chambered whistling bottles of the type found as early as Phase 2, which in turn has an earlier south coast antecedent in the Initial Period style at the Hacha site in the Acarí Valley. The double-spout and bridge bottle tradition of the south coast thus represents one of the longest and most distinctive stylistic traditions known anywhere in Peru.

PHASE 3

THE SAMPLE

THE SAMPLE for Ocucaje Phase 3 pottery consists of thirty-eight whole vessels, eleven of which are said to have burial associations. There is one additional unassociated vessel which probably belongs to Phase 3, and two others which also may belong to this phase. These vessels are all in museum or private collections, and thirty-four of them were collected originally by Pablo Soldi. Seventeen of the unassociated vessels are in the Truel collection of Ocucaje; all of them are said to have been excavated on the Cerro de la Cruz, one of three low hills in the central part of Ocucaje. Eight of the Phase 3 vessels in the Truel collection have been illustrated by Kroeber (1944, pls. 13, B; 14, F; 15, A, H-J), and one of them has been illustrated by Tello (1959, Lám. II, D). Another Phase 3 vessel said to be from Ocucaje is illustrated by Ubbelohde-Doering (1952, p. 160). One unassociated vessel is in the Aldo Rubini collection of Ocucaje and comes from the Chiquerillo sector, the narrows of the river below Ocucaje. Two other vessels without associations are in the Carlos Soldi collection of Ocucaje and come from the site of Pampa de las Animas, Callango. Two more unassociated vessels are in the Gonzalo del Solar collection in Lima and are also said to be from Callango.

Eight Phase 3 vessels are in the Nathan Cummings collection and were studied by us from photographs made available by Alan R. Sawyer. Of these, five are said to be from the site of Teojate in the upper Ica (Chacama) Valley, and three are said to be from the Chiquerillo sector, two of them from a single burial. Six Phase 3 vessels are in the Textile Museum collection in Washington, D.C. and two of them have been illustrated (Rowe, 1962b, figs. 51, 54). Three of the six are said to be from one burial (Grave 7), reported to be from the Cerro de la Cruz at Ocucaje. The other three are said to be from another burial (Grave 6), also from the Cerro de la Cruz.

SITE ASSOCIATIONS AND STRATIGRAPHY

Sites with Phase 3 pottery on the surface have been found in all parts of the Ica Valley. The first site with Phase 3 refuse was discovered in 1958. In that year Jorge Esparza, assistant to Dwight T. Wallace, who was working under the program of the U.S. Educational Commission in Peru, while exploring the upper portion of the Ica Valley, discovered a site on the slopes of the eastern valley border having a great many surface sherds of Phases 7 and 8, the earliest Ocucaje phases that had been identified up to that time. On the basis of Esparza's report, Rowe, Wallace, Duncan M. Masson of Ica, Esparza, and Menzel visited the site in June of that year to verify the find. This party found that Phase 7 and 8 sherds predominated on the surface, but there were also some sherds of later periods. Rowe and Menzel investigated a steep outcrop of refuse cut by erosion and discovered that it contained a new style that was in part different from any of the Ocucaje phases known to that time, although it resembled them in some respects and clearly belonged to the same tradition. Rowe argued that the new style must be earlier than the known Ocucaje phases because it contained features resembling the Chavín style of the north highlands and the Curayacu style of the central coast more closely than any of the other Ocucaje phases, and because it could not be fitted into the stylistic sequence that was known to follow Phases 7 and 8.

In view of the obvious importance of the new site, Wallace decided to excavate it, and did so with the help of Esparza and students of the University of San Marcos during the period from July to October, 1958. He has published a preliminary report on this excavation (Wallace, 1962). The site is located on the slopes of El Cerrillo, the last spur of the Andean foothills that terminates the Chacama Valley on the southeast. On the southern part of the slope there is a deposit approximately two meters thick containing Phase 3 refuse. This deposit is stratigraphically below Phase 7 and 8 refuse and isolated from it by a wide, thick, clay floor forming a terrace base for later constructions. The associations in this excavation confirm Phase 3 as a unit of contemporaneity, and the stratigraphic position of the refuse is in accord with the early position assigned to the phase in the seriation.

During the continuation of the archaeological survey of the Ica Valley in 1959, Rowe, Dawson, and Menzel discovered twelve additional sites with Phase 3 refuse. Phase 3 pottery was abundant at six of these sites, three of which are in the Chacama Valley, above El Cerrillo on the hills bordering the northwest side of the valley at Trapiche, and directly below El Cerrillo on the slopes of the receding foothills east of Cordero Alto. Another important Phase 3 site is situated in the middle Ica Valley on the slopes west of Sta. Lucía, and two more were found in the lower valley on the Cerro de la Cruz at Ocucaje and in the Callango Basin, respectively. The pottery collected by Rowe, Dawson, and Menzel in the surface surveys, including that from the site of Cerrillos, is used in our study. Although we have had access to the additional information on associations furnished by Wallace's excavations, we are not including it in this report as he plans to publish on it himself.

The survey evidence confirms the impression gained from the burial pottery and its purported provenience, which is that Phase 3 pottery is found in all parts of the Ica Valley, without perceptible stylistic differences, from the borders of the Hacienda Huamaní in the Chacama Valley to the Callango Basin.

GENERAL STYLISTIC CHARACTERISTICS

Phase 3 is the earliest phase of the Ocucaje tradition for which there is a fairly large sample. As is to be expected from the Phase 1 and 2 antecedents, Phase 3 is a fully developed regional style, but with a number of close resemblances to the Chavín style that indicate continued Chavín influences. Phase 3 fancy ware is characterized by relatively large, heavy bowls with beveled rims and everted pouring lips like those on European pitchers, some with smoked carbon-black surfaces (figs. 10, b, c, e; 28, a-c, e); single-chambered whistling bottles (figs. 2, a; 10, a); and the extensive use of resin painting, negative painting, and incision. All these are traits derived from Phase 1 and 2 antecedents. The only ceramic pig-
ment in use is a red slip, a feature present as early as the Initial Period on the south coast. Bowls used as graters are a Phase 3 vessel type that starts a long tradition at Ica. Among utility shapes, large neckless incurving ollas are the most common type.

A number of the Phase 3 features with earlier antecedents do not survive into later phases. These include shallow broad-line incision and pouring lips on bowls. Beveled rims are rare and nontypical in later phases, and none of the later beveled rims are thickened. One of the Phase 3 spouted bottles has a spout with a thicked rim, a rare survival of the Phase 1 and 2 feature. There is at present insufficient evidence on the antecedents of one of the most common Phase 3 features, resin-painted line designs unaccompanied by incision. This feature survives in Phase 3, but is not found in subsequent phases.¹ Phase 3 bowls have special contours that are excellent phase markers because they are not found in other phases.

Phase 3 pottery can be distinguished from Phase 1 and 2 vessels by a number of features, notably by the absence of true, flat bottoms on bottles and bowls, and by the prevalence of narrow "cutting" incisions, usually with small ridges of clay along the sides (fig. 28, e). The narrow "cutting" incisions represent a modified derivative of the broad, irregular, wedge-shaped grooves used for principal designs in Phases 1 and 2. Like finely decorated Phase 2 vessels, the more elaborately decorated spouted bottles and many high-sided bowls in Phase 3 have a smoked carbon-black surface finish. However, bowls and bowl fragments with simpler incised decoration in our sample have dark gray, grayish brown, and orange-brown surfaces. There are a number of additional features of shape and design details that distinguish Phase 3, and which are discussed in the following paragraphs.

TECHNOLOGY

Both decorated and plain ware of Phase 3 is relatively thick walled (on the average 6 mm) and irregularly fired. The paste varies in color from black to gray to brown to orange-brown, the outer shell of the paste tending to be somewhat more oxidized. However, vessels with gray fired surfaces are also found. Most of the fancy decorated vessels have a thin carbon-black coating on top of the partly oxidized paste shell, produced by a smoking process causing carbon to penetrate partly into the paste. The paste is relatively soft and sand tempered, the decorated ware containing less temper than the plainware. Decorated ware is polished to a low gloss.

VESSEL SHAPES

Bowls are the most common vessel form in Phase 3 as in all the rest of the Ocucaje phases. Two shape types outnumber all others. The first (shape theme 5; see fig. 10, b; pl. 2, a) is a large bowl, usually between 7 and 8 cm high and between 17 and 19 cm in diameter, though smaller ones are also found (cf. Kroeber, 1944, pls. 14, F; 15, I). These bowls have composite contours with a relatively

¹ Painted line designs unoutlined by incision recur independently in Phase 8, but the later form probably represents a reintroduction of the old feature from a related style in the Nasca drainage.

high, rounded hip at about one third the height of the bowl, and a correspondingly deep, rounded bottom. The sides are vertical or very slightly flaring, not very high, and usually with a slightly convex curve. All but two of the whole specimens have a pouring lip and a beveled rim. This bowl shape is probably derived from the Phase 2 bowl type illustrated in figure 9, e. There is one Phase 3 bowl variant that probably also belongs in this shape category, but which is smaller, with a lower, more tightly curved hip and straighter, higher sides (shape theme 5a; see fig. 10, c; cf. Kroeber, 1944, pl. 15, J).

The second most common Phase 3 bowl form has on the average a somewhat smaller size and deeper proportions than bowl shape 5, between 7 and 10.5 cm high and between 13 and 17 cm in diameter (shape 8; figs. 10, e_i 28, a, b_j pls. 2, b_j ; 3, a). It has a shallow-curved bottom, a sharp base angle between bottom and sides, and high, nearly straight sides with slightly irregular surfaces, the sides being either vertical or slightly flaring. All these bowls have beveled rims and pouring lips, like shape 5 bowls (cf. Kroeber, 1944, pls. 13, B, 15, A, H_j Ubbelohde-Doering, 1952, fig. 160; Rowe, 1962b, fig. 51).

Phase 3 bowl rim forms have a considerable range of variation. The most distinctive one is a thickened, beveled rim with a flat or slightly convex top and a sharp edge terminating the bevel at its base (fig. 28, c). This rim form is an early feature in other Early Horizon styles, so that the Ocucaje Phase 3 rim probably represents a relatively conservative survival from earlier Ocucaje style bowls not represented in our sample. This form does not appear later than Phase 3. However, some Phase 3 bowl rims are beveled without being thickened or with only a slight thickening, some of the rim edges are horizontally rather than diagonally flattened, the bevels vary from flat to rounded, and many of the rounded bevels lack a sharp basal edge (fig. 28, d, e). Some of the latter rim forms survive in Phase 4. All Phase 3 bowl rims are beveled at a more obtuse angle than the rim of the Rosselló bowl in Phase 1, varying from an angle of approximately 45° to a straight horizontal rim edge.

One unique vessel shape in the Phase 3 sample is a globular open form with a straight, slightly flaring collar (fig. 10, f), which is reported to have come from a burial at Chiquerillo together with a Phase 3 shape 5 bowl. A dipper with a hollow handle and a Phase 3 incised design in the Nathan Cummings collection is reported to have come from the site of Teojate (fig. 10, g). The dipper handle is a hollow cylindrical tube with a tapered end, and the body is a plain round-bottomed bowl with a round shoulder at middle height and only slightly convex, nearly straight tapering sides ending in a rim edge with an interior bevel. Wallace also reports a shallow bowl type with incised, painted decoration on the interior, but we have not found any examples of this form in our surface collections or among the whole specimens.

There are three spout-and-bridge bottles in the Phase 3 sample. Two are in the Truel collection and are whistling bottles with a red painted, modeled bird head forming the top of the whistling spout (shape theme 4; figs. 2, a; 10, a; and Tello, 1959, Lám. II, D). The third bottle is in the Textile Museum collection and is reported to be from a burial with two shape 8 bowls (Rowe, 1962b, fig. 54). The

Textile Museum bottle is like the other Phase 3 bottles in shape (especially the one illustrated in fig. 2, a), but it is not a whistling bottle, and in place of the bird whistle there is a stout, short, modeled human head, which faces outward, away from the hollow spout, unlike the bird heads, which face in reverse position. These bottles, especially the whistling bottles with reversed bird-headed spouts, are derived from the Phase 2 type represented by the Wielgus bottle. The Phase 3 bottles are distinguished from the earlier one in some details of shape as well as design. The Phase 3 bottles have a shallow curved bottom and a sharp base angle, like shape 8 bowls of this phase. The body shape is not globular, but what may be called "helmet shaped," proportionately either higher (fig. 10, a) or broader (fig. 2, a) than the Phase 1 and 2 bottles and with sides slightly less curved in the lower part of the body. The bridge is straight or nearly straight, though it continues to be short, and both the hollow spout and the whistling spout are somewhat longer and narrower than in the preceding phases. The spouts of the Truel collection bottles have a simple, unthickened rim, but the bottle at the Textile Museum has a narrow, thickened rim border, a feature that represents a modified survival from the preceding phases. There is an important distinction in the bird heads of Phase 3. Only the head is shown, unlike the Phase 2 bird on which the wings and tail are also modeled. On the Phase 3 bottles a small, skirtlike projection at the base of the bird head is all that remains of the earlier modeling. These bottles are from 17 to 18 cm high.

Other shape types appear to be rare in Phase 3 decorated ware. There is a necked bottle in the Truel collection (shape theme 7; fig. 10, d) with a slightly rounded, sharply edged bottom like the bottoms of shape 8 bowls and spouted bottles. The body has an ovoid profile with the long axis vertical. Both in neck and body form this vessel resembles the necked bottles assigned to Phase 2 (fig. 9, g), but the body is proportionately broader. It is decorated with an incised design of "cutting" incisions consisting of pendent triangles with dash fillers, recalling the design pattern on one of the Phase 2 necked bottles. An identical design is illustrated by Wallace (1962, fig. 5, f). The combination of features on the Truel bottle indicates that it probably belongs to Phase 3, and that it is derived from an earlier form represented by the necked bottles assigned to Phase 2.

OVER-ALL PATTERNING OF DECORATION

There are some standard rules for the over-all patterning of decoration in Phase 3. All bowls, with the exception of the shallow bowl reported by Wallace, have the decoration on the outside (fig. 28, a, b, d, e). Most of the designs cover the entire outside of the vessel from the shoulder to the rim edge, but an undecorated gap is usually left below the pouring lip, resulting in a gap or parting of the design band (pls. 2, a; 3, a). A somewhat less common bowl design pattern in Phase 3 consists of separate geometric units placed at intervals around the side of the bowl in a single horizontal row. In these patterns the units are spaced so that none come under the pouring lip. Some bowls are decorated with a single very shallow horizontal incised line painted over with a resin paint line that borders the top of the design area just below the rim edge. One spouted whistling bottle is decorated with a single design unit, a bodiless head, in the side of the bottle under the bird spout (fig. 2, a; Tello, 1959, Lám. II, D). This is a patterning derived from Phase 1 and 2 spouted bottles. The Phase 3 design differs from the antecedent forms in that it covers most of the side of the bottle from the base angle to a short distance below the bird spout and extends partly onto either side of the vessel body below the sides of the spout. By comparison, the earlier head designs are smaller, covering only about half the area on the side, and are centered well above the base angle. The Phase 3 spouted bottle with the modeled human head has a body design consisting of anthropomorphic features in the form of arms and hands, and a border of pendent triangles around the base of the head representing a necklace (Rowe, 1962b, fig. 54). The second whistling bottle in the Truel collection (fig. 10, a) is covered with an over-all design of negative-painted dots on a red-slip base. The necked bottle (fig. 10, d) has an incised design consisting of triangles pendent from the base of the neck, as mentioned earlier.

The principal head design on the Phase 3 bird-spout bottle is unaccompanied by secondary designs, a feature it shares with the homologous Phase 2 bottle. However, principal head designs in Phase 3 bowls (shape 8) are regularly accompanied by secondary designs that cover the rest of the surface of the sides, except for the area below the pouring lip (pl. 3, a; Kroeber, 1944, pl. 15, A, H; Ubbelohde-Doering, 1952, fig. 160). These designs consist of simple unincised painted line elements, usually small circles, which may represent derivatives of the incised, paint-filled circle-and-dot designs enclosing the area around the principal feline figure on the Phase 1 bottle. The Phase 3 use is a purely decorative, nonrepresentational one, apparently in analogy with the earlier patterning.

TYPES OF DECORATION

One of the most common types of decoration in Phase 3 consists of incised line or stamped circle designs without resin painting (pl. 2, b; Kroeber, 1944, pl. 14, F; Wallace, 1962, fig. 5, d, f). In the fancy pottery this design technique is found for the most part on bowls. The designs used are few and very simple. They are of particular interest because they retain features of the earlier phases that are not found after Phase 3. Most of the line designs have relatively broad, shallow, smooth incisions without raised side ridges, a technique that does not persist in later phases and which is derived from Phases 1 and 2.

The most elaborate designs in Phase 3 are resin-painted ones. In all designs having fields of color these fields are outlined with narrow "cutting" incisions, a technique that persists throughout the rest of the Ocucaje tradition. Unincised painted line designs also occur, but they are restricted to simple geometric figures (pl. 3, a; Kroeber, 1944, pl. 15, H; Wallace, 1962, fig. 5, a). Design figures, such as anthropomorphic arms on bottles, simple geometric designs, and horizontal outlines on bowl rims, are sometimes made with a very shallow incised groove painted over so that the pigment covers an area wider than the groove (Rowe, 1962b, fig. 54). The technique is a modified derivative of secondary incised designs in Phase 1 in which relatively shallow grooves are filled with paint, leaving the intervening

surfaces unpainted. Both overpainted and unincised painted line designs are found also in Phase 4, but not in succeeding phases until Phase 8 (see also above).

Painted, incised designs are perhaps the most original artistic achievement of the Ocucaje tradition, and one of the most original artistic effects anywhere. The originality results from an unusual dualism of design technique, in which what may be called the principal design figures are done with simple, unobtrusive incisions, while the artistic emphasis of the decoration is on the "background," in which a variety of vivid colors applied in resin paint are used to contrast unexpectedly selected segments of the background spaces. As a result of this dual emphasis, the attention of the eye is drawn as much or more to the "background" as to the "principal" design figures, and thus to a variety of usually unnoticed shapes of background segments and their relationships. This artistic specialization is particularly apparent in geometric designs. In representational figures the pattern is less obvious because the color areas mark representational features. However, the emphasis on color patterning is maintained in the use of many contrasting colors for each representation, sometimes at the expense of naturalism. This artistic dualism, with its emphasis on color, is maintained throughout the entire Ocucaje tradition.

The use of many colors is related to the design emphasis. We have identified eleven distinct colors that are used to contrast color areas in Phase 3, with as many as seven different colors on a single vessel. Most vessels are painted in three or four different colors. The most common colors are red, yellow, and two shades of brown. Other colors are cream, black, gray, pink, orange, white, and a pale green. The resin paint is firm, hard when well preserved, and not soluble in water.

DESIGN FIGURES

The most common representational designs in Phase 3 are rectangular bodiless faces, either representations of a mythical human with a fanged feline mouth (fig. 2, a; Tello, 1959, Lám. II, D; Ubbelohde-Doering, 1952, fig. 160), or of non-mythical human heads without feline features (fig. 28, a; Kroeber, 1944, pls. 13, B, 15, A). There are altogether five bodiless front-face head designs in the sample, four on bowl shape 8 and one on a bird-spouted whistling bottle. The modeled human head on the spouted bottle at the Textile Museum (Rowe, 1962b, fig. 54) also shares features with the other human representations.

In order to distinguish human features from feline or mythical ones, we shall start by describing the human representations that lack feline attributes and that are associated with purely anthropomorphic body features. The main example is the spouted bottle at the Textile Museum (Rowe, 1962b, fig. 54). A bodiless face on one of the bowls in the Truel collection has the same set of features and so is also regarded as a purely human figure (fig. 28, a; Kroeber, 1944, pl. 13, B). The features that distinguish these representations from feline ones include the eyes, the nose, the mouth, a headdress (on the modeled bottle head only), and the presence of "hawk markings" (see below).

The human eyes are in part subrectangular, with curved sides and rounded corners, similar in outline to the Wielgus bottle eyes of Phase 2. They differ from the latter, however, in having a straight outline at the top and in having the side outlines diverging very slightly on three out of the four eyes, to the point where the sides and bottom nearly merge in a single curve in one eye. In all eyes the eccentric pupil has a parabolic rather than a circular outline, in contrast to both Phase 1 and Phase 2 eyes. Unlike the feline eyes on the Phase 1 bottle and the eyes on the mythical head on the Phase 2 bottle, the eyes on the human representations in Phase 3 lack brow bands.

The nose on both the human heads is modeled. On one specimen, it is a high, narrow-bridged human nose with carefully modeled nostrils (fig. 28, a; Kroeber, 1944, pl. 13, B), unlike the modeled feline snout on the Phase 1 bottle or the arching nostrils indicating the nose on the mythical Phase 2 bottle head. The modeled human head on the spouted bottle has a nose consisting of a round appliqué pellet with punched holes for nostrils. The mouth on both specimens consists of a horizontal incised groove, the one on the spouted bottle head slightly raised at the corners, giving it a pleasant expression.

Both human heads have "hawk markings," that is, a broad band that crosses the face vertically or diagonally above and below each eye, the section above the eye being slightly broader than the section below. Identification of these designs as hawk markings follows Yacovleff, 1932b. This is the earliest evidence of hawk markings in the Ocucaje tradition. Since the design is consistently associated with human representations, the hawk markings probably represent face paint. The design is painted red on both specimens. Hawk markings also appear in Chavín art, and their use in Ocucaje Phase 3 is probably attributable to Chavín influence.

The modeled human head on the spouted bottle has two additional distinguishing features. One is a headdress consisting of a row of arches painted in contrasting colors, and forming a frame around the top of the head. Each arch has straight sides, an oval top, and a central line perpendicular to the base of the arch and stopping short of the top. The second distinguishing feature associated with the modeled head is the representation of a necklace on the vessel body at the base of the head, consisting of large pendent triangles painted with a light color, and, like the arches of the headdress, with a short perpendicular line in the center of each.

The head drawn on the side of the bird-spout bottles (fig. 2, a) shares a number of features with the human representations described above, but it also has some contrasting features that mark it as a separate theme. The theme represents a mythical head with both human and feline attributes, in which all features, including the patterning of the design and the association between shape and design, are homologous with those of the Phase 2 bird-spout bottle (fig. 1, c). Features that the Phase 3 bottle design shares with the human representations described above include the shape of the high-bridged modeled nose, the shape of the eyes, and the presence of hawk markings. The bottle head also has a rectangular band framing the top and sides, this frame being the equivalent of the headdress on the modeled human head of the spouted bottle described earlier, to judge by its position and appearance. Like the headdress on the top of the modeled head, the band enclosing the bottle face consists of adjoining segments painted in contrasting colors, with straight sides and short perpendiculars in the center. The principal difference is that the segments are joined by a single straight outline at the top, an adjustment to the nature of the decorated surface, which is the side of the vessel and only slightly curved, in contrast to the tapering surface of the knoblike top of the modeled head.

The two significant contrasts distinguishing the mythical head from the purely human one are in the eyes and the mouth. The mouth is a fanged feline one with a rectangular red lip band, a white central band with vertical tooth subdivisions, and two pairs of opposing fangs. The fanged mouth is homologous with the fanged mouth on the Phase 2 bottle, though the Phase 3 example is not agnathic. The eyes differ from the human eyes proper in being enclosed by a partly rectangular and partly subrectangular three-sided frame, the homologue of the brow bands on the Phase 2 bottle face. Other contrasts with the regular human representations of Phase 3 include the use of paired hawk markings rather than single ones, and trapezoidal eccentric pupils. One Phase 3 bowl design on a shape 8 bowl also represents the mythical human head with framed eyes, trapezoidal eccentric pupils, and a fanged mouth, although the face is framed by a pair of plain red and yellow bands like the other bowl designs, and the hawk markings consist of single bands (Ubbelohde-Doering, 1952, fig. 160). A second Phase 3 bowl has most of the eye and mouth features that distinguish the mythical head from the human ones proper, including a double hawk marking, but the mouth is without fangs (fig. 28, b; Kroeber, 1944, pl. 15, A). Both the bowl designs are therefore less distinct from the purely human representations than is the bottle design, thus possibly constituting less formal representations of the mythical figure. From Phase 6 on, the mythical heads are found exclusively in bottle decoration, a selection supporting the hypothesis that the Phase 3 bowl designs may have less formal significance than the bottle design.

The following features distinguish the mythical head on the Phase 3 bottle (fig. 2, a) from its Phase 2 homologue (fig. 1, c). Although the eyes are also partially subrectangular in having curved side outlines, the top and bottom outlines are straight, a distinctive Phase 3 feature analogous to the contouring of human eyes proper in this phase. The framed eyes in the two bowl designs are more progressive in being completely straight-sided rectangular (fig. 28, b; Ubbelohde-Doering, 1952, fig. 160). The trapezoidal eccentric pupils replace the semicircular ones of Phase 2; one of the bowl designs has rectangular pupils instead (fig. 28, b). The eye frames on the bottle face differ from the Phase 2 ones in having straight-sided rectangular outlines, in which the outer part is straight vertical instead of inflected, overlapping the eye vertically at the base instead of diagonally toward the side, and terminating in a squared end. The brow bands thus remain within the frame of the face and do not extend beyond its side outlines. The Phase 3 eyebrow also differs in consisting of a single band only, a feature that persists in rectangular framed eyes of later phases.

As stated earlier, the feline mouth of the Phase 3 bottle design is not agnathic. It resembles the feline mouth of Phase 1 representations (fig. 1, b), but, unlike

the latter, the lip bands are straight rectangular ones and do not arch over the fangs, the tooth band consists of a single row of teeth only, and the fangs protrude slightly through the straight-sided lip. The fangs are of about the same length as the Phase 1 fangs, but their shape is different, resembling instead the shape of the fangs of the mythical representation in the Phase 2 bottle design (fig. 1, c) and the fangs of the mythical profile figure of the Phase 2/3 transition (fig. 27, a). The Phase 3 feline mouth in the mythical human representations thus exhibits a mixture of derivatives of slightly different representational features, which are used to distinguish the feline mouth in animal representations from the feline mouth in mythical human representations in the earlier phases. This partial loss of earlier distinctions probably explains the disappearance of the agnathic jaw from the Ocucaje style after Phase 2. The position of the fangs in the Phase 3 mouth differs from that in both types of front-face feline mouths in Phases 1 and 2 in not being placed at the ends of the tooth band, a feature, however, which it shares with the profile mouths of the earlier phases. Apparently some earlier distinctions between profile and front-face mouths are also in the process of disappearing.

The most important stylistic distinction between the homologous Phase 2 and Phase 3 designs is the substitution of straight lines for curved ones in most features (compare figs. 2, a and 28, b with fig. 1, a-c). The trend towards rectilinear and rectangular designs is not complete, as can be seen in the treatment of the eyes in some designs (figs. 2, a; 28, a), but it is part of a long-term stylistic trend that culminates in Phase 7. It is also important to note that the bands forming the head frames, brow bands, hawk markings, lip bands, tooth band, base of the fangs, and in some designs the eye and pupil, are of approximately the same width. The use of bands of a modular width to create designs is another important stylistic feature present to a lesser degree in Phases 1 and 2. The rigidity of the modular banding increases in subsequent phases, reaching its most extreme form in Phase 7.

The eyes and fanged mouth that distinguish mythical from nonmythical human representations in Phase 3 are also used as independent abstract designs on bowls, a usage probably reflecting their special importance as mythical attributes. In one variant, a continuous mouth band is placed between two bands of framed eyes (fig. 27, j; Rowe, 1962b, fig. 51), and in another one, the framed eye is used as an independent design unit (fig. 27, i). In both variants, the representational character of the features is lost since they appear out of context and since they are altered slightly in purely decorative, geometric patterns. Features in the continuous mouth band are used as repetitive designs, a further abstraction being added to the eyes by aligning them in bifold rotational symmetry (cf. Shepard, 1956, p. 269, fig. 37) and contrasting them through alternating color patterns. The independent eye design is sometimes elaborated into a larger figure with two four-sided frames.

The rest of the Phase 3 designs are all geometric, used almost exclusively in bowl decoration. Incised, painted geometric designs are used for the most part on shape 5 bowls, and consist of incised designs outlining zones of contrasting colors. An important design is the guilloche, consisting of adjoining S-shaped segments contoured around stamped circles and dots, which looks liked a twined rope (fig. 27, h; pl. 2, a). Both long chains and shorter guilloche segments occur. Some of the guilloche chains are terminated by open ends (Wallace, 1962, fig. 4, top row). Variants of the guilloche are also found in the stone-carved style of Chavín (Tello, 1960, fig. 60; Ayres, 1961, p. 242, fig. 10; Rowe, 1962b, p. 6, figs. 7, a, b, 11). The Ocucaje guilloches are distinguished in having the S-shaped segments and central circles painted in contrasting colors, a stylistic modification of the Ocucaje style that gives the Ocucaje guilloche a distinctive appearance.

Among other common painted geometric designs with incised outlines there are large serrated bands with or without stamped circle-and-dot fillers in the triangular spaces (fig. 27, d-f; Kroeber, 1944, pl. 15, I), stamped circles and dots placed in horizontal or vertical rows connected by an incised line (the "ball band" design, fig. 27, b, c), and diagonal step designs with or without plain circle or circle-and-dot fillers in the spaces (fig. 27, g; Kroeber, 1944, pl. 15, J). In another design category are the diagonal step designs that are also found carved into the outside of stone bowls from Chavín (Tello, 1960, figs. 131, a; 132) and are used as decoration in other Early Horizon styles on the coast. In the Ocucaje style, however, the descriptions of the geometric figures listed above refer only to the incisions, and do not describe the color patterning of the "background" spaces, which is a significant feature.

Bowl design panels are outlined vertically and horizontally by simple incised lines, or by plain single or double bands in contrasting colors (fig. 28, a, b, e). The latter outline technique frames the design area on three sides only and is not used to outline the bottom of the design area horizontally.

Painted line drawings unaccompanied by incisions are used for simple secondary designs, usually around the area covered by principal representational designs on smoke-blackened surfaces of shape 8 bowls (pl. 3, a; Kroeber, 1944, pl. 15, A, H; Ubbelohde-Doering, 1952, fig. 160). Most of the designs consist of small circles in blocks of contrasting colors, but some consist of wavy or straight vertical lines, large concentric circles, pendent triangles filled with dashes, and large circles outlining an area covered with small circles (Wallace, 1962, fig. 5, a). Some of the line drawings are painted over very shallow incised lines, a feature that is also present in the same designs found on the bowl of the Phase 2/3 transition.

Most of the stamped and incised, unpainted designs are used also on shape 5 bowls, but there are two shape 8 bowls with such designs, as well as the collared bowl, the "dipper," and one necked bottle. One of the most common bowl designs consists of stamped circles with central dots, usually about 10 mm in diameter, a design that is also associated with painted decoration in combination with other geometric patterns (pl. 2, b; Wallace, 1962, fig. 5, d). The Phase 3 circle-and-dot designs, in contrast to similar Phase 1 designs, are considerably smaller and are stamped rather than incised, a technique also found on a bowl said to be from the same burial as two vessels of the Phase 2/3 transition. Stamped circles and dots unassociated with painted decoration are used most commonly as an over-all

design on the outside of bowls. They are placed in horizontal rows, the circles in each row being below the spaces between the circles in the row above. The same design is common in Phase 4 of the Curayacu style on the central coast (Lanning, MS, pp. 159–160). Stamped circles and dots are also used as fillers for pendent triangle designs and, not uncommonly, in the form of rosettelike units in which one or two central circles are enclosed by a border of stamped semicircles. Another common form consists of two concentric stamped or shallow incised circles (Kroeber, 1944, pl. 14, F).

Another very common Phase 3 incised unpainted design on bowls is a large crosshatched pattern made with zigzag lines, occasionally with space fillers consisting of shallow incised dashes or crosses (Kroeber, 1944, pl. 14, F). A third design consists of incised triangles pendent from the rim and filled either with dashes or with stamped circles and dots. Unpainted designs consisting of incised dashes in zones outlined by incision are an early feature of the Ocucaje style that does not persist on finely finished ware of succeeding phases, but which has Phase 1 and 2 antecedents.

Negative decoration is found both on unslipped pottery with a dull finish, mostly large jars (Wallace, 1962, fig. 5, e), and on unpigmented or red-slipped polished vessels, both bowls and spouted bottles (fig. 28, d; Wallace, 1962, fig. 5, c). The most common design consists of large, closely spaced dots with irregular outlines, used as an over-all design, or in pendent triangle patterns like the painted line and unpainted incised designs (fig. 28, d). Large, stout, doughnutlike rings with small holes also occur, and the larger vessels are commonly also decorated with plain lines.

UTILITY VESSEL TYPES

An important vessel type in Phase 3 is a shallow, open bowl with simple contours and a plain or red-slipped interior in which the central surface shows wear, as from grinding. Some of these bowls have a pattern of deep incised lines quartering the inner surface of the bowl and leaving only a slipped or unslipped band around the rim. The signs of wear, together with the incisions, indicate that these bowls must have been used as graters. They are the earliest evidence of a long continuous tradition ending only in Ocucaje Phase 10. Similar grater bowls appear early in the central coast sequence, in Phase 3 of the Curayacu style (Lanning, MS, p. 182), and their appearance in the Ocucaje style thus may represent central coast influence.

The most common utility shapes of Phase 3 are large, incurving, neckless ollas or low-necked jars, with unpolished or dull polished, gray-brown, often sootencrusted surfaces. The ollas have unthickened or slightly thickened rim edges, and some have slightly upcurved rims. The jars have a somewhat narrower opening with a low, slightly flaring neck. Some of these vessels have pressed-out bumps below the rim edge or base of the neck, and some neckless ollas are decorated with incised triangles filled with dashes pendent from the rim edge.

PHASE 4

THE SAMPLE

THERE ARE twelve vessels in various collections which are very similar to Phase 3 vessels but which have some features that differ from homologous Phase 3 features in the direction of the later phases, together with new features and themes found in the later phases but not in Phases 1 to 3. These vessels are sufficiently distinctive as a group to be assigned to a separate phase, Phase 4. Nine of them are bowls, seven in the Truel collection at Ocucaje, and two in the Nathan Cummings collection. One of the Nathan Cummings bowls has been illustrated (Rowe, 1962b, fig. 50). There are also three spout-and-bridge bottles with whistling spouts in the form of bird heads, two in the Truel collection (Kroeber, 1944, pl. 13, C, E: Tello, 1959, Lám. VI, A), and one in the Nathan Cummings collection (Sawyer, 1961, fig. 4, c). All the Truel collection vessels are probably from Ocucaje, and the single-chambered whistling bottle is said to be from the hill of La Capilla Vieja at Ocucaje. The bottle and one of the Nathan Cummings bowls are said to be from the Chiquerillo sector in the Ica Valley below Ocucaje, and the second bowl is said to be from the site of Teojate in the upper Ica Valley. A peculiar, sausageshaped whistling bottle from Chiquerillo in the Nathan Cummings collection (Sawyer, 1961, fig. 4, j) probably also belongs to Phase 4, and two stirrup-spout bottles from Ica, one of them said to be from Callango, are also attributable to this phase (Ubbelohde-Doering, 1952, fig. 235; Rowe, 1962b, fig. 53).

GENERAL STYLISTIC CHARACTERISTICS

The features that are most useful in distinguishing Phase 4 from Phase 3 are the shape features of bowls, a new design theme consisting of a gliding bird, and some innovations in design details of older themes, notably in the treatment of feline mouths and eyes. Features that Phase 4 vessels share with Phase 3 include incised unpainted designs, incised lines painted over with resin paint, painted unincised line designs, a smoked carbon-black coating on unpainted surfaces of elaborately decorated spouted bottles, and some of the simpler geometric designs. These features, together with others involving shape and design details, show the relative stylistic proximity of Phases 3 and 4.

VESSEL SHAPES

The Phase 4 bowls differ from those of Phase 3 in having simple rounded contours with an unbroken profile; the sides of some of the bowls also flare more, and all lack a pouring lip (fig. 11, c, d; Rowe, 1962b, fig. 50). Most of the bowls also lack a beveled rim. It is clear from their size, and from the design patterning and design elements used in the decoration of these bowls that they are homologues of Phase 3 shape 5 bowls; the Phase 4 bowls are therefore assigned the same theme number. Like Phase 3 shape 5 bowls, those of Phase 4 are large, heavy bowls, though some are slightly thinner walled than Phase 3 ones, being 4 to 5 mm thick. Most of the Phase 4 bowls are between 7 and 8 cm high and from 18 to 20 cm in diameter, almost exactly the size range of Phase 3 shape 5 bowls. As in Phase 3, there are also some smaller bowls in this group, 6 cm high and 14 to 16 cm in diameter. Most of the Phase 4 bowls have a plain, rounded rim edge, but some rim edges have a slight outer bevel, resembling the more rounded rim bevels of Phase 3 bowls. The firing and surface appearance of Phase 4 bowls is like that of Phase 3 shape 5 bowls. Surfaces are fired to an uneven dark grayish black to brown, and all lack the carbon-black coating found on the fancier bottles in both phases and on shape 8 bowls in Phase 3.

Derivatives of Phase 3 shape 8 bowls must also occur in Phase 4, since there are such derivatives in later phases. However, as in later phases, shape 8 bowls are probably rare in Phase 4.

The Phase 4 bottles with bird-headed spouts also differ from their Phase 3 homologues (figs. 11, b, 29, a; Kroeber, 1944, pl. 13, E; Tello, 1959, Lám. VI, A; Sawyer, 1961, fig. 4, c). Two of the bottles are of about the same height as Phase 3 bottles (a height that is maintained approximately the same throughout the Ocucaje and Nasca traditions), but they differ from the Phase 3 bottles in having a proportionately smaller diameter and some have a slightly flatter curve in the sides below the shoulder, both features that continue a trend already present in Phase 3. The spouts on the Phase 4 specimens differ from those of Phase 3 in being shorter, wider at the base, and more tapering below the bridge. The increased width of the spout at the base and greater taper below the bridge are innovations that also mark the beginning of a long-term trend which increases in emphasis in succeeding phases to Phase 7. The bridge is short and straight or nearly straight, as in Phase 3. The bottle in the Nathan Cummings collection has a modeled, red-painted bird head on the whistling spout that is indistinguishable from Phase 3 spouts; the bird head has a small skirtlike projection at its base like Phase 3 bird heads and it faces toward the hollow spout (fig. 29, a). The bottle from the Truel collection has the same type of bird head, but the head faces outward, away from the hollow spout, unlike the other bird heads (fig. 11, b).

A third bottle, one in the Truel collection, is unusual in having a bilobed body divided into two vertical sections by a waistlike constriction that halves the body at an axis transverse to the bridge (Kroeber, 1944, pl. 13, C). This vessel is one of two double-chambered whistling bottles in the Ocucaje style sample, the second one belonging to Phase 5. The bridge is like that on the other Phase 4 bottles. The hollow spout has been broken and repaired, so that its original shape is not certain. However, the bird head on the whistling spout faces outward, like that on one of the other Phase 4 bottles.

The stirrup-spout bottle illustrated by Ubbelohde-Doering, from a collection in Munich (1952, fig. 235) is assigned to Phase 4 on the basis of details of features of the head representation in the side of the bottle, and the size and shape of the head design. The proportions of the bottle body are not entirely clear from the illustration. The bottom is broad and apparently flat or nearly flat, resembling the bottom of the Phase 1 stirrup-spout bottle. The stirrup spout is remarkably conservative, very nearly like that on the Phase 1 bottle. Other conservative features of the bottle are the modeling of the face in low relief and the outlining of design details with deep, broad-grooved incisions, both features that recall the Phase 1 stirrup-spout bottle. In spite of the conservatism of some of the features, however, the details of the design and the shape and size of the face are such that this bottle can only be attributed to Phase 4.

A second stirrup-spout bottle is also attributed to Phase 4 on the basis of its decoration (fig. 11, *a*; Rowe, 1962*b*, fig. 53). Unlike the bottle illustrated by Ubbelohde-Doering, the second one is the exact homologue of the Phase 1 stirrup-spout bottle, in shape as well as in decoration. The contours of the body of the second stirrup-spout bottle resemble those of other spouted bottles in Phase 4, and contrast with the contours of the Phase 1 bottle. However, the bottom of the Phase 4 stirrup-spout bottle is nearly flat, unlike that on other Phase 4 bottles. Since the stirrup-spout bottle illustrated by Ubbelohde-Doering also has a flat or nearly flat bottom, it appears that stirrup-spout bottles surviving in Phase 4 spouted bottles.

OVER-ALL PATTERNING OF DECORATION

The over-all patterning of the decoration on Phase 4 bowls is like that of shape 5 bowls in Phase 3. Although the pouring lip is no longer in use, the design band in continuous designs has a gap at one place in the side, leaving an undecorated space as before (pl. 4, a). This gap in the design band, which hereafter will be described as a parting, persists until Phase 9, though in the later phases unparted continuous design bands are also in use. All the bowls assigned to Phase 4 have the design band outlined by a simple incised line, leaving an unpainted space the width of a narrow band at the top of the design area, below the rim edge. In Phase 3 bowl decoration the designs go to the base of the rim bevel; the space left above the design band on Phase 4 bowls corresponds to the area of the once beveled surface, and, like the parting in the design band, is the survival of a design patterning determined by shape features in Phase 3.

The over-all patterning of the decoration on two of the Phase 4 bird-spout bottles is identical to the homologous shape 4 bottles of the earlier phases. That is, a mythical front-face head with feline attributes covers most of the side below the whistling spout, from the sharp angled base to not far below the base of the spout. As in the earlier phases, there is no other decoration on the bottles except for the painting on the bird head. The double-chambered whistling bottle has a different design in a circular panel, but the position of the design on the body of the vessel is the same as on the other bottles.

Of the stirrup-spout bottles, one is the exact homologue of the Phase 1 stirrup-spout bottle in being decorated with a small, front-face feline head in relief, placed on the body transverse to the axis of the stirrup below one stirrup arch (fig. 11, a; Rowe, 1962b, fig. 53). As on the earlier bottle, the front half of the Phase 4 bottle on each side of the principal design is decorated with simple line drawings of incised, painted circles. The face is conservative not only in being modeled, but also in covering the same small area as on the

Phase 1 bottle. In contrast to the Phase 1 specimen, however, the ears above the face are modeled.

The second stirrup-spout bottle (Ubbelohde-Doering, 1952, fig. 235) is unique in its combination of shape and design. It is decorated with a mythical front-face head of the type usually found on bird-spout bottles. The area covered by the design is the same as the corresponding area covered by the mythical heads on bird-spout bottles of Phases 3 and 4. On the other hand, the head is modeled in low relief, evidently in analogy with the modeling of feline heads on other stirrup-spout bottles, and the brow ends and side whiskers are separately modeled features, like the ears of the feline head on the Phase 4 stirrup-spout bottle described above. In addition, the area above the head is decorated with dentate rouletting and deep grooves, possibly to indicate hair or some other head covering, a design technique that also appears in Phases 3 and 4 of the Curayacu style on the central coast (Lanning, MS, pp. 166-171). Thus, although the stirrup-spout bottle is decorated with the same representational figure as are the bird-spout bottles, the fact that the face is modeled and differences in the details of the design indicate that it should be classified with other stirrup-spout bottles as distinct from bird-spout bottles.

DESIGN TECHNIQUES AND DESIGN PATTERNING

In Phase 4 all the design techniques of Phase 3 are still in use. As in preceding phases, the principal designs consist of painted areas outlined by incision, whereas secondary designs used on the same vessel with principal ones are done in painted line drawings, some of them painted over shallow incised grooves. Simple designs are also done with unpainted incised lines, but these are not found on the same vessel with the other tyes of decoration. Negative decoration must have been in use, but there is no example of it in our sample.

The patterning of the designs on spouted bottles represents relatively conservative survivals from the preceding phases. In contrast, bowl decoration is patterned in new ways, and there is a great increase in the variety of representational designs used on bowls. This innovation is especially noteworthy, since representational designs are not used on shape 5 bowls in Phase 3, this shape type being decorated exclusively with geometric or abstract designs in that phase. Phase 4 bowl designs include a bodiless front-face feline head and a bodiless profile feline head showing a paw drawn up in front of the face, both adaptations from earlier bottle designs. A new design appearing for the first time is the representation of a gliding bird in profile view. Like the human faces in Phase 3. these representations are placed in rectangular panels, but, unlike the Phase 3 patterning, these panels are not individual units enclosed by secondary painted line designs, but rectangular subdivisions of a continuous design band, alternating with other principal representations. In the same way, elaborated eye designs, which occur as individual units in Phase 3 bowl decorations, are found on one Phase 4 bowl as rectangular subdivisions of a continuous design band, alternating with geometrically divided color areas (fig. 29, b). The new patterning marks the beginning of a stylistic trend which gains emphasis in succeeding phases and persists through Phase 8.

As a consequence of the new patterning of principal designs in continuous bands, a new type of band is used to divide panels, together with the more traditional plain, vertical, single- or double-band outlines. The new panel dividers are used to separate rectangular panels containing different representational figures. The panel dividers consist of two plain vertical bands which enclose a wider band decorated with a ladderlike design (fig. 29, e, f). The ladderlike effect is produced by short, horizontal bars which are perpendicular to the side outlines and which do not reach the opposite side of the band. The ladder design continues in use in various modified forms until Phase 8.

There is only one example of incised decoration without painting in the Phase 4 sample. It is a bowl with a Phase 4 shape in the Nathan Cummings collection, with the sides covered by a design of stamped circles without central dots. In the Phase 3 sample all the unpainted stamped circle designs have central dots, so the absence of dots on this specimen may signify stylistic change rather than accidental selection. It is the last occurrence of unpainted stamped circles in the early Ocucaje sequence, though unpainted stamped circle designs reappear briefly in Phase 8 on a special type of bowl.

DESIGN FIGURES

Considering the frequency of front-face human representations, both mythical and nonmythical, in bowl as well as bottle designs of Phase 3, it is surprising at first glance that none are found among the Phase 4 bowl designs. The explanation probably is in part that these designs are found exclusively on bowl shape 8 in Phase 3 and that there is no comparable bowl shape in the Phase 4 sample. Since there are front-face human-head designs on Phase 5 bowls, the design must still be in use in Phase 4 bowl designs, though it is probably rare.

MYTHICAL REPRESENTATIONS

The mythical front-face head continues to be a standard bottle design in Phase 4, there being three examples of it, two on bird-spout bottles (figs. 2, b, 29, a; Kroeber, 1944, pl. 13, E; Tello, 1959, Lám. VI, A; Sawyer, 1961, fig. 4, c), and one on a stirrup-spout bottle (Ubbelohde-Doering, 1952, fig. 235). Although all three designs can be recognized as homologues of the mythical front-face heads on Phase 2 and Phase 3 bird-spout bottles, there are important differences in some of the features of the Phase 4 designs. The bird-spout bottle faces in Phase 4 have eyes derived from earlier feline eyes instead of the human ones, and the hawk markings are omitted. This change may possibly signify a change in the character of the mythical figure, but it is also possible that it is a purely stylistic alteration, part of a trend, already present in the earlier phases, in which old distinctions between the mythical human figures and the nonmythical feline ones are being lost. However, although the old distinction in eye forms disappears, the distinction between a mythical feline mouth and a nonmythical one continues to be maintained, and some new distinctions between mythical heads and nonmythical feline ones are added. The mythical heads on the bird-spout bottles now have "chin whiskers," a design consisting of a subtrapezoid with concave outlines extending from the central part of the lower lip to the bottom of the design area. On one specimen the area below the mouth is further decorated with three stamped circles and dots, one in the center of the subtrapezoid and one on either side of it, designs that probably represent feline body markings (fig. 2, b). The representation shown in figure 29, a has a similar marking on the face above the nose. The mythical heads in Phase 4 also have "side whiskers" consisting of angular projections from the top corners of the lip to the sides of the head, a feature, however, that also appears in somewhat modified form on nonmythical feline heads in bowl designs (fig. 29, e).

There are additional contrasts in detail between mythical heads on the birdspout bottle and bowls of Phase 3, and the bird-spout bottles of Phase 4. The area covered by the Phase 4 heads is approximately the same as in Phase 3. but the contouring at the top of the head is different. The most significant innovation is the one represented by figure 29, a, because it persists in modified forms in succeeding phases, whereas the variant shown in figure 2, b does not. The variant shown in figure 29, a differs from the homologous Phase 3 heads in having a rounded bulge at each top corner of the triple outline banding, with a complement of three short, concavely curved bands on the inside of each bulge creating a lenticular design. The two lenticular figures are connected by a short, straight horizontal section of the outline banding. This innovation in the outline of the mythical head represents a modified adaptation of the incised design representing the ears above the brows of the Phase 1 feline (fig. 1, b), and the corresponding feature on the mythical profile figure of the Phase 2/3 transition (fig. 27, a). The change from circular to lenticular ears is analogous to a similar stylistic innovation in the eye design (see below). The plain multiple outline banding of the head, on the other hand, represents the continuation of the outline banding used for both mythical and nonmythical human representations in Phase 3. The Phase 4 head outline illustrated in figure 2, b appears to be an abbreviated version of the one just described.

Although the mouth of the mythical bottle heads represents a relatively conservative continuation of an innovation introduced in Phase 3, there are some Phase 4 innovations in detail that have special significance. The most interesting one is a modification of the corners of the mouth by the addition of a decorative point (fig. 29, a; Ubbelohde-Doering, 1952, fig. 235). This is a feature which also appears on some of the stone carvings at Chavín (Rowe, 1962b, p. 6, figs. 1, 9, 10), and which is also found on a mythical representation painted on a textile from Ica (Rowe, 1962b, fig. 29). Since the homologous mouths of earlier phases do not have this feature, its presence in Phase 4 furnishes evidence that new influences of the Chavín style appear in the Ica Valley style at this time. The mythical feline mouth illustrated in figure 2, b has an alternative innovation in the shape of the mouth corners, which here have rounded ends in place of the straight vertical ones of Phase 3. This innovation is the more important one as an antecedent for later designs, because the pointed mouth corners do not survive after Phase 4. The rounded corners may represent a new adaptation from a feature of nonmythical feline mouths in bottle designs (compare with fig. 1, b; Rowe, 1962b, fig. 53). It is important to note, however, that the top and bottom lip bands on all mouths are straight bands that do not arch over the fangs, in continuation of a stylistic modification first appearing on a profile mouth in the Phase 2/3 transition.

There are also some important innovations in the shape of the fangs. Phase 4 fangs are longer and comparatively more slender than Phase 3 ones, and they project farther through the lip bands than Phase 3 fangs do. The fangs illustrated in figure 2, b (as well as those in the mythical feline mouth of the central figure on the painted textile illustrated in Rowe, 1962b, fig. 29) also differ from homologous Phase 3 fangs in that both outlines are curved and arch to one side from the base up, and in that both outlines begin to converge at the base, ending in narrower, pointed tips (compare with Phase 3 fangs illustrated in figure 29, a are somewhat more conservative, being intermediate in contouring between Phase 3 fangs and the Phase 4 ones described above. The slightly different contouring of the fangs on the stirrup-spout bottle is probably due to their being modeled rather than plain incised (cf. Ubbelohde-Doering, 1952, fig. 235).

The nose on both the bird-spout bottle designs is represented by a rounded appliqué pellet with two punched holes representing nostrils, one of two human nose types also found in Phase 3. The modeled nose of the mythical front-face head on the stirrup-spout bottle is identical to the high-bridged human noses in the corresponding Phase 3 designs.

As stated earlier, the eyes on the bird-spout bottle designs are derived from the form reserved for the nonmythical feline figure in the earlier phases (compare with fig. 1, a). They contrast with earlier feline eyes in having lenticular pupils and shallow curved eye bands. The brow bands also resemble the feline brows of Phase 1. However, unlike the earlier feline brow bands, those of Phase 4 do not project beyond the side outline of the face, an innovation introduced to mythical human representations in Phase 3. Furthermore, the Phase 4 brows consist of two bands instead of one, another feature they share with the corresponding feature on the mythical human head of Phase 2 (compare with fig. 1, c). Although the brow ends on the Phase 4 eyes illustrated in figure 29, a resemble those of the mythical face in Phase 2, they differ from the latter in having joined tips, a stylistic innovation which persists in succeeding phases. The brow bands on the mythical Phase 4 head illustrated in figure 2, b represent a further modification in being terminated by rounded recurved tips in which the central line ends in a dot finial, an innovation representing the beginning of a long tradition of elaborations of brow-tip ornaments in succeeding phases.

Although the derived feline eye is the only eye form used for mythical heads on bird-spout bottles in the Phase 4 sample and on bird-spout bottles of all succeeding phases, the framed subrectangular eye continues in use on the modeled mythical head on the Phase 4 stirrup-spout bottle (Ubbelohde-Doering,

1952, fig. 235), as well as on the painted textile attributable to this phase (Rowe, 1962b, fig. 29). The eyes in both these representations differ from earlier homologues in their concave-sided top outlines and subrectangular eccentric pupils, features which are identical to the eve on some of the Chavín carvings, and which therefore probably also represent direct new Chavín influence in the Ica style (Rowe, 1962b, fig. 10). The brow bands on the painted textile are also like the corresponding feature in the Chavín style in having concave outlines and pointed tips overlapping the eye at the base. Phase 4 innovations that must therefore also represent new Chavín influences at Ica. Like the decorative point in the mouth corner, these innovations do not persist in later Ocucaje phases. Like the "guardian angels" carved on the Black and White Portal at Chavín, the central figure on the painted textile from Ica has representations of hair strands ending in serpent heads, the top hair being elaborated further into plumelike ornaments which usually project from the mouth of the more elaborate serpent heads (cf. Rowe, 1962b, pp. 15-16). On the stirrup-spout bottle head, the representations of the brow bands and hair strands are combined into a single feature, evidently in an adjustment to the limited space. The serpent heads on the stirrup-spout bottle are long and slender with rounded snouts, and with a mouth line represented by a slit which is the continuation of the upper eye outline. Both these features contrast with homologous head appendages of the Phase 2/3 transition (cf. fig. 27, a), while they are like the corresponding serpent appendages of the guardian angels of the Black and White Portal of Chavín.

Two important points emerge from this analysis of features of mythical representations in Phase 4. The first is that the designs on bird-spout bottles. on the one hand, and the modeled design on the stirrup-spout bottle and the figure on the painted textile, on the other, represent closely related but distinct themes. The second point is that the mythical heads on the painted textile and the stirrup-spout bottle have features which closely resemble the style of the carvings of the Black and White Portal of Chavín and which represent an influx of a considerable number of new features in Phase 4 that are directly attributable to Chavín influence. These features do not persist in succeeding Ocucaje phases. Although the bird-spout bottle heads share some of the newly introduced Chavin features, most of the features used in the bird-spout bottle designs are derived from earlier Ocucaje phases and do not represent direct new Chavín influences. Unlike the newly imported Chavín features, the more traditional Ocucaje style features of the bird-spout bottles persist with modifications in succeeding Ocucaje phases. Thus, although important new influences from Chavín appear in Ocucaje Phase 4, they evidently have relatively little effect on the more traditional Ocucaje style which has been developed in the course of the preceding phases and which continues to develop in succeeding phases.

In addition to the front-face mythical representations described above, there appear in Phase 4 profile heads with feline features (fig. 29, c) that are probably derived from the mythical profile figure illustrated in the Phase 2/3 example (fig. 27, a). The Phase 4 profile heads differ from the earlier one in being bowl

designs rather than bottle designs and in sharing many features with the front-face feline heads in bowl designs. However, the profile heads of Phase 4 are distinguished from the nonmythical feline heads by the single fang projecting from the upper jaw at the front of the mouth, a feature of the mythical profile figure. The fangs of the profile figure in Phase 4 have the shape of those of the mythical front-face heads in bottle designs and not that of nonmythical feline figures. The area above the nose of the profile figure is decorated with a high, partly rectangular scroll which resembles the scroll above the front of the mouth on mythical profile heads at Chavín (cf. Rowe, 1962b, frontispiece, figs. 7, 9). In succeeding phases, a nonmythical feline body is regularly associated with front-face feline designs in bowl decoration, whereas no such body is found in association with the profile head. On the contrary, a more elaborately designed profile head with the same mouth as the bowl designs appears on a mythical profile figure with a human body in a Phase 5 bottle design (fig. 30, a). Although the distinguishing characteristics of the profile heads in the bowl designs therefore suggest that these heads have some mythical attributes, bodiless profile heads do not appear as bottle decoration in this or in any succeeding phase and they represent a different, and less formal, figure from that of the bottle designs.

NONMYTHICAL FELINES

Apparently for the first time, bodiless front-face feline heads appear as bowl as well as bottle designs in Phase 4. The bowl designs are placed in rectangular panels, and design details indicate that they are adaptations of the bodiless front-face feline heads on stirrup-spout bottles.

There is one stirrup-spout bottle, said to be from Callango and assigned to Phase 4, which has a feline design homologous to the one on the Phase 1 stirrupspout bottle (fig. 11, a; Rowe, 1962b, fig. 53). The incised outlines of the principal design on the bottle from Callango are considerably narrower and shallower than the corresponding incisions on the Phase 1 bottle, resembling the type of incision used in principal designs of Phases 3 and 4. The pupils and eyes have parabolic rather than circular outlines, features in which they resemble the eyes in the mythical front-face heads of Phase 4. The upper lip is straight and horizontal and does not arch over the fangs, and the fangs are straight sided triangular rather than subtriangular. Another important contrast between the feline of the Callango bottle and that of the Phase 1 bottle is in the appearance of the circles in the design field enclosing the feline head. On the bottle from Callango these circles are large, concentric ones, painted in lines of contrasting colors over very shallow incisions, a design technique that is found in the Phase 2/3 transition, Phase 3, and Phase 4. The unpainted bottle surface is charcoal-black, like other elaborately decorated spouted bottles in Phases 2, 3, and 4. The ears above the brows on the Callango bottle are modeled, though the modeled form is an imitation of the grooved circle-and-dot incisions with red, paint-filled centers in the Phase 1 design. The modeling of the ears on the Callango bottle is an analogue of the modeling of the brow ends on the mythical front-face head of the other Phase 4 stirrup-spout bottle described earlier. The design details of the stirrup-spout bottle from Callango thus indicate that the bottle probably belongs to Phase 4.

The feline mouth of the nonmythical bottle feline differs in two important respects from the feline mouth in mythical representations of Phase 4. The fangs are straight sided, triangular, and either end at the outer lip outline or project only very slightly through the top of the lip.

The front-face feline designs in Phase 4 bowl panels resemble the bottle feline head in also having straight-sided triangular fangs which terminate at the outer lip outline. In some designs, the fangs are made to terminate at the lip outline by omitting a short section of the pointed tip, so that the fangs appear as straight-sided, near-triangular trapezoids (fig. 29, e). The pupils in the bowl designs are lenticular, and the iris bands are represented by shallow curves, like other Phase 4 eyes in mythical as well as nonmythical feline representations. However, the brow bands in the bowl designs have elongated, upcurving tips which terminate in open ends at the panel border (fig. 29, e). The elongated, upswept brow ends represent an adaptation from the nonmythical bottle feline, in which the brow ends terminate in elongated, upswept, pointed tips which project beyond the outlines of the face. Since it is not possible to have the brow ends project beyond the panel outline that encloses the face in the bowl designs, the brow tips are omitted. The blunting of the brow-end tips in the Phase 4 bowl designs is analogous to the blunting of the fangs at the lip outline. In profile heads with feline attributes in Phase 4 bowl designs, the brow ends receive similar treatment (fig. 29, c). The remains of a small modeled snout are present in one of the front-face feline bowl designs; the other such designs lack a nose representation altogether.

The double-chambered whistling bottle assigned to Phase 4 is decorated with another feline representation that is unique in the Ocucaje style sample (Kroeber, 1944, pl. 13, C). It consists of a profile head articulated with a profile body. Details of the design are like other Phase 4 features found in both mythical and nonmythical representations, including the lenticular pupil, shallow curved eye band, a body marking consisting of a stamped circle with a dot center, space fillers of two stamped circles without dot centers above the figure, and a rounded recurved tip with a central line ending in a dot finial, which is here used to represent the nose instead of the brow end. The body has a banded tail and a rectangular front paw and subtrapezoidal hind paw in which toes are indicated by two or three short perpendicular incisions. The addition of a profile body to a feline head, the body marking, banded tail, and shape of the paws, are all features that also appear on profile feline bodies in bowl design panels of succeeding phases. The Phase 4 design therefore evidently represents the original antecedent to the later bowl designs.

GLIDING BIRDS

Stylized "gliding" birds shown in profile in rectangular panels appear to be a common Phase 4 bowl design; they are found on four of the bowls, in bands, either as the only design or in alternation with feline heads (fig. 29, f). The gliding birds are simple designs in which a large double-circle or circle-and-dot eye is set in the back of a banded rectangle with a hooked beak through its center, and in the front of a T-shaped or serrated M-shaped frame with a band border representing the body and wings of the bird. These bird designs start a tradition of gliding bird representations that persists through Phase 10. The Phase 4 bird bodies are distinguished by irregular, sometimes asymmetric, execution.

ABSTRACT AND GEOMETRIC DESIGNS

Elaborations of the subrectangular and rectangular eye of mythical representations continue in use as abstract designs in bowl decoration. In Phase 4 two types are in use. One (fig. 29, b; pl. 4, a) is derived from the Phase 3 form. The principal stylistic distinction is a high rectangular, nearly square pupil, instead of the narrow, long, rectangular pupil of Phase 3 (compare with fig. 27, i). The second elaborated eye form used as an independent design in Phase 4 has a different frame with concavely curved sides shaped like Phase 4 fangs of mythical representations (fig. 29, d). The sides project considerably below the base of the eye, evidently in analogy with fangs protruding beyond the lip bands in the mythical front-face heads. The distinguishing features of the second elaborated eye variant are adapted from the eye used for mythical representations such as are found on the painted textile and the stirrup-spout bottle of Phase 4 (compare with Rowe, 1962b, fig. 29). However, the trapezoidal pupil of the elaborated eye is a form derived from Phase 3 (compare with fig. 2, a).

Other geometric designs continue in slightly modified form from Phase 3 (fig. 29, b; pls. 3, b, 4, a). The chief difference is that many of the design units are larger, and fewer units are used in making the design. The guilloche is found only in the form of large, abbreviated figure-8 units, placed either vertically or horizontally (pl. 3, b; Tello, 1959, Lám. VII, C; Rowe, 1962b, fig. 50).

Unincised painted line drawings and incised line designs with resin overpaint also continue from Phase 3, but there is a slight change in patterning used for bowl decoration. The line drawings in bowl designs alternate with geometric designs with incised outlines, instead of covering the surface around a single representational figure. On one bowl, small painted circles cover the surface between elaborated eye units. On another bowl the simple line design consists of large vertical meander units of two segments each, which accompany outlined figure-8 designs (pl. 3, b). Like the figure-8 designs, the meanders differ from their Phase 3 homologues in consisting of large, two-segment units rather than smaller continuous wavy lines. However, the older patterning persists in the concentric circles that cover the design area in back of the modeled feline head on the stirrup-spout bottle.

There is no information on negative decoration, incised graters, and plain ware in Phase 4.

PHASE 5

THE SAMPLE

LIKE THE PHASE 4 sample, the sample for Phase 5 is small, and there are no burial associations or surface collections from recorded sites. In various collections there are eleven bowls, six spouted bottles, and an anthropomorphic necked bottle which are assigned to this phase. Four bowls are in the Gonzalo del Solar collection in Lima and are said to be from the Callango Basin in the lower Ica Valley. One bowl is in the Carlos Soldi collection at Ocucaje and comes from the Pampa de las Animas, Callango. One bowl and two spouted bottles in the Nathan Cummings collection are said to be from the site of Teojate in the upper Ica (Chacama) Valley. Two other bowls in the Nathan Cummings collection are said to be from the Chiquerillo sector in the lower Ica Valley. Three bowls and two spouted bottles in the Museo Nacional de Arqueología y Antropología in Lima were collected at Ocucaje by Ronald L. Olson (Tello, 1940, fig. 6; idem, 1959, Lám. III, A, VII, B, figs. 7, 8, 9; Cossío del Pomar, 1949, fig. 16). Another bowl corresponding to Ocucaje Phase 5 is in the Museum of Archaeology of the University of San Marcos in Lima and is said to be from the Nasca region (Tello, 1959, Lám. VII, A). A double-chambered whistling bottle said to be from Callango is in the Michael D. Coe collection of New Haven (Rowe, 1962b, figs. 52, 52, a), and a spouted bottle said to be from Teojate is at the Museum of the American Indian in New York (Cat. No. 22/8711). The anthropomorphic necked bottle is in the Truel collection at Ocucaje.

GENERAL STYLISTIC CHARACTERISTICS

There are several major features that distinguish Phase 5 from Phase 4. The fired surfaces of bowls are lighter than in the preceding phases, and most of the bottles, as well as the bowls, lack the carbon-black smoked surface coating. The bowls with representational designs in the sample lack the parting of the design band that is found in bowl designs of Phases 3 and 4. On one bowl the front-face feline head is accompanied by a new profile feline body in a separate panel. There are also a number of new features in design details. Earlier features and themes that continue in use include bird-headed spouted bottles with mythical front-face head designs, the categories of bowl shapes, the patterning of principal designs in rectangular subdivisions of continuous bands in bowl designs, panel-dividing bands, and all the principal design representations, including the bodiless front-face feline head, the bodiless profile feline head with mythical attributes, and the gliding bird.

The unpainted surface of bowls is usually either mottled dark gray to reddish brown or an even dark gray on the outside, and an even polished gray inside, in contrast to Phase 4 bowls in which the surface color is more commonly a mottled gray-black. The bottles have a dark to medium gray, only slightly mottled surface. Smoked carbon-black surfaces appear to be out of style in Phase 5, and they are not in use in Phases 6 and 7, though they reappear in Phase 8.

VESSEL SHAPES

All but one of the Phase 5 bowls in the sample are derived from shape 5 bowls of preceding phases, and so are assigned the same theme number (fig. 11, h, i; Tello, 1959, Lám. VII, A, B, fig. 8). The Phase 5 shape 5 bowls are of about the same size and wall thickness as most of the shape 5 bowls in Phase 4, but they tend to be slightly wider and shallower. The more advanced specimens have new, slightly different contours which anticipate Phase 6 bowl shapes in being marked by a slight, almost imperceptible gambrel between bottom and sides (Tello, 1959, Lám. VII, A, B). One bowl in the Phase 5 sample has a shape derived from Phase 3 shape 8 bowls, a type not represented in the Phase 4 sample (Tello, 1959, fig. 7; Cossío del Pomar, 1949, pl. 16). Like the Phase 4 bowls, most of the bowls in Phase 5 have simple rounded, unthickened rim edges. Rim edges with outer facets are evidently largely out of style, although a few are found in this and succeeding phases. Two of the Phase 5 bowls have a horizontally flattened rim edge, to judge by drawings illustrated by Tello (1959, figs. 7, 8).

One Phase 5 bowl from Chiquerillo in the Nathan Cummings collection belongs to a different shape category. It is an incurving bowl with a sharp, prominent, angular shoulder at approximately middle height, a deep, conically curved bottom, and nearly straight, tapering sides in the upper body. The only earlier vessel shape that it resembles is the Phase 3 dipper from Teojate, but the latter has a more rounded shoulder and, of course, a handle.

Of the six spouted bottles in the sample, only one, said to be from Teojate, is the exact homologue of the traditional bird-spout bottles decorated with a mythical front-face head (fig. 3, a). Of the rest of the bottles, no two are exactly alike, and there are two entirely new types, suggesting that there may be an increase in the variety of spouted bottles made. However, stirrup-spout bottles are not found in the sample for this or any succeeding phase, an indication that this bottle type is probably out of style in Phase 5. Besides the traditional birdspout bottle mentioned above, other traditional types derived from earlier phases include a double-chambered bottle with a reversed bird spout (probably a whistling bottle—fig. 11, f; Rowe, 1962b, figs. 52, 52, a), and a spouted bottle with a knoblike modeled head in the Nathan Cummings collection.

The other three spouted bottles assigned to Phase 5 represent innovating types. One, a bottle from the Ocucaje Basin, has a modeled human head like that of the more traditional bottles, but the head has a rectangular, slablike shape and the body design is new (Tello, 1959, fig. 9). Derivatives of this form are common in Phase 6. A second new variant, said to be from Teojate, appears to have had a modeled feline head in place of the bird spout (fig. 11, e; pl. 4, b). The head of the spout is unfortunately broken off, but a modeled feline body with circle-and-dot body markings at the base of the spout furnishes a clue to the form of the missing head. The body design is very similar to mythical front-face heads on bird-spout bottles, but it represents a distinct new theme. Bottles of this type do not appear in the sample for succeeding phases, so the type may

be confined to Phase 5. The most original new bottle type in the Phase 5 sample is a bird-spout bottle with a modeled body representing the amphisbaena or two-headed worm, a vessel found by Olson in the Ocucaje Basin (Tello, 1940, fig. 6; *idem*, 1959, Lám. III, A). The appearance of the bird spout and bridge and the details of the representational features as illustrated in Tello's publications indicate that this vessel must belong to Phase 5. The appearance of the modeled amphisbaena in this phase is important, because derivations of it are a common vessel type in Phase 8 of the Ocucaje Basin substyle.

In spite of the remarkable variety in Phase 5 spouted bottles, all the bottles share certain standard shape features, some of which distinguish them from other phases. Spout, bridge, and reversed bird spouts are conservative features that resemble the corresponding features in Phase 4. The base of the bird head continues to have a skirtlike protrusion, as do bird spouts of Phases 3 and 4, and the breadth of the spouts at the base and the degree of taper below the bridge is like the corresponding feature in Phase 4. The principal innovation is the increased length of the bridge, but this is related to a change in body proportions. The majority of the Phase 5 bottles have a body that is slightly lower and proportionately much broader than in preceding phases (figs. 3, a, 11, e), an innovation that is the beginning of a long-term trend culminating in Phase 7. The bird-spout bottle with the traditional mythical front-face head design (fig. 3, a) and one of the human-head bottles (Tello, 1959, fig. 9) have a moderately curved bottom, approximately like the Phase 4 bottles, or possibly slightly more curved. The other human-head bottle and the bottle with the modeled feline figure at the base of the spout have a less curved, nearly flat bottom (fig. 11, e), possibly a transfer from the conservative stirrup-spout bottles of the preceding phases. Nearly flat bottoms of this type are not in use in succeeding phases.

Both the modeled human heads on two of the spouted bottles differ from the human heads of Phase 3 in several details. The more conservative knob-shaped head is like its Phase 3 homologue in most respects, but there are differences of detail in the eyes and mouth. The mouth consists of a longer, shallower incised line which has a dot finial at either end. The eyes differ primarily in that a shallow curved horizontal line replaces the straight outline used in the Phase 3 eye, and that this line is placed at the bottom instead of at the top of the eye, in reversed position (the same shape is also in use in Phase 6 and is illustrated in figure 35, a). The formerly subrectangular or subtrapezoidal outline used to delineate the rest of the eye in Phase 3 is modified in Phase 5 into a high, parabolic curve. Since the curve is at the top, the eccentric pupil of the Phase 5 eye is lenticular rather than lunate, and its basal outline is slightly shallower than in Phase 3.

The principal innovation in the rectangular, slablike modeled head is its shape (Tello, 1959, fig. 9). As a consequence of the shape change, the traditional head band is indicated by a horizontal band at the top and vertical bands at the side, forming a three-sided frame around the head homologous to the one enclosing the mythical front-face human-head design on one of the Phase 3 bottles (fig. 2, a). The principal innovation in the Phase 5 modeled head is in the incised subdivisions of the side bands, which are placed at a diagonal and lack short, perpendicular central lines, giving the sides of the frame a corded effect (the same form is also used in Phase 6—cf. fig. 35, a). The eyes on the Phase 5 bottle are very conservative human eyes, indistinguishable from the more advanced form in nonmythical human eyes of Phase 3. The mouth, on the other hand, is a short horizontal slit with dot finials, the latter being a Phase 5 innovation. The hawk markings derived from human representations of previous phases continue in use on both types of modeled heads described above, but the band above the eye is now the same width as the band below the eye.

The Phase 5 sample also includes an anthropomorphic necked bottle that may have earlier antecedents (fig. 11, q_i ; shape theme 11). In body shape, the vessel resembles a necked bottle assigned to Phase 3 (cf. fig. 10, d; shape theme 7). The Phase 5 bottle has a high, ovoid body, with a constricted waist at 3/4 height of the body, a base angle and a shallow curved bottom like those of spouted bottles. The bulged area above the waist is decorated with a human head, and the body below the waist is decorated with anthropomorphic arms and hands. Face and body features resemble the corresponding features on an anthropomorphic spouted bottle of Phase 3, but there are some important differences as well. Although the eyes are shaped like nonmythical human eyes of Phase 3, this is the same eye shape that is found surviving on one of the Phase 5 human-head bottles described above (cf. Tello, 1959, fig. 9). The upper bands of the hawk markings on the anthropomorphic necked bottle are of about the same width as the lower ones, a Phase 5 feature that contrasts with Phase 3 hawk markings. The forehead area above the nose of the anthropomorphic bottle is decorated with a ladderdesign band in the Phase 5 style. a feature also found in other human and feline designs of Phase 5 (see below). Finally, the hands are indicated by squared ends with perpendicular incisions marking three fingers and with additional incised lines marking two wrist bands, features which they share with other human, mythical, and feline designs in Phase 5 and which contrast with the corresponding features on the anthropomorphic spouted bottle in Phase 3. The mouth on the Phase 5 necked bottle has a small, tubular nub in the center, making it appear pursed, as in whistling. The ears are indicated by small modeled lugs, and the hair is indicated by diagonal incisions. The modeled nose is like the high-bridged human nose form in Phase 3, and the arms are overpainted incised lines, also a feature that survives from corresponding Phase 3 designs.

Association of Shapes and Design

Over-all patterning in bowl decoration is similar to that of Phase 4, but there are some changes in the direction of the later phases. Principal designs on shape 5 bowls continue to be placed in rectangular panel subdivisions of continuous bands, separated by panel-dividing bands, but most of the bowls in the sample do not have a parting in the design band. However, parted design bands also continue in use. Three Phase 5 bowls represent the survival of a Phase 3 patterning feature not present in the small Phase 4 sample, but no doubt present in that phase. In this patterning, the bowl decoration consists of a single representational design, a bodiless face, placed in a rectangular panel unaccompanied by other representational designs (Tello, 1959, figs. 7, 8). The Phase 5 patterning differs from the antecedent one in Phase 3 in that the geometric designs are confined to narrow bands on either side of the principal design, the rest of the bowl being decorated with a rim band consisting of unincised painted dots (Tello, 1959, fig. 8). This rim band represents the survival of unincised painted rings and other line drawings which cover the rest of the design surface on Phase 3 shape 8 bowls. On another Phase 5 bowl, in the Nathan Cummings collection, a single row of unincised, painted dots covers the space left by the parting of the regular design band, another modified survival of the earlier technique.

Bowl decoration of Phase 5 is further distinguished in being bordered at the top by a plain, red-painted band with incised outlines, in place of the simple incised line used in Phases 3 and 4. Above this band, an unpainted space the width of another band is left below the rim edge, in continuation of a Phase 4 feature. The use of this bordering band at the top of the bowl design is a good phase marker for Phase 5, because it also differs from most Phase 6 border bands in lacking vertical segmentation. However, the simple incised line border also survives on one of the Phase 5 bowls, together with the new outline banding. Vertical panel-dividing bands continue in use, the more elaborate ones being used to separate different representational figures, as in Phase 4. There are two types of elaborate panel-dividing bands, in addition to the single, double, or triple plain bands. One of the elaborate ones is a variant of the earlier ladder design, a form confined to Phase 5. The Phase 5 ladder design differs from its Phase 4 antecedent in consisting of simple, short perpendicular incisions instead of perpendicular bars (fig. 30, b-d). The Phase 5 variant also differs from its Phase 6 successors in being broader and in lacking dot finials. There is also a new type of panel-dividing band in Phase 5, with a rectangular figure eight (fig. 31, b) or a rectangular three-segment twined fret (fig. 31, a) in the center. The rectangular loops making up these figures are the same innovating feature that also appears in Phase 5 as a brow-end ornament on feline and mythical human eyes, and as a nose ornament on mythical profile feline faces (see below).

Only one bird-spout bottle in the sample is the exact homologue of the single-chambered bird-spout bottles of earlier phases (fig. 3, a). There is no difference in the position and area occupied by the mythical front-face head design associated with this bottle type, except for the fact that the design is proportionately broader, as an adjustment to the increased breadth of the vessel body. A similar design panel with a related but distinct design theme appears on the spouted bottle with a modeled feline at one spout (pl. 4, b), the design being a mythical head with part front-face and part profile features. The design on the double-chambered bird-spout bottle is a unique full-bodied representation of a mythical figure with a profile head and a front-face body (fig. 30, a; Rowe, 1962b, fig. 52). Its patterning and the fact that it is a full-bodied

representation, are features analogous to the design on the double-chambered bird-spout bottle in Phase 4. The only difference in patterning is that the Phase 5 figure occupies a proportionately larger area, covering the entire side of the vessel in front view. As a consequence, the circular panel outline used in the Phase 4 design is replaced by the circular contours of the vessel body.

The decoration on the other three spouted bottles is new. The new spouted bottle with the rectangular, slablike human head (Tello, 1959, fig. 9) has a new type of body decoration which is used in modified forms for homologous and analogous bottles in Phases 6 and 7 as well. It consists of a high, rectangular, apronlike design area the width of the head, which extends from the base of the neck to the lower part of the vessel body, near the base angle. At the top there is a narrow horizontal band with vertical extensions that frame both sides of the upper part of the design area and represent arms ending in pawlike hands. The "hands" are straight sided, slightly trapezoidal, with fingers indicated by two short, perpendicular incisions, and wrist bands indicated by three horizontal incisions above the fingers, features that also represent feline paws in the Phase 4 and Phase 5 feline bodies. Besides the head, these are the only anthropomorphic features of the decoration. The rest of the design area is decorated with a rectangular panel containing a front-face feline head at the top, and an elaborated eye design at the bottom, both designs found as a rule only in bowl decoration. The more traditional spouted bottle with a human head in the Nathan Cummings collection has a body design analogous to the new human-head bottle design just described, consisting of a high, rectangular, apronlike panel below the head. The design used in this panel is a vertical two-segment guilloche, also a bowl design. However, the decoration of later human-head bottles derived from the traditional knob-headed ones indicates that the more traditional anthropomorphic body decoration is retained for other bottles in this vessel category.

The modeled amphisbaena is a double-headed worm or serpent with a mythical feline head at either end, and body markings consisting of single and concentric stamped circles (Tello, 1940, fig. 6; *idem*, 1959, Lám. III, A). Modified forms of both these features also characterize the amphisbaena bottles of succeeding phases.

DECORATIVE TECHNIQUES

There are no incised designs without painting in the Phase 5 sample, and since this feature does not occur in the succeeding phases it is probably out of style in Phase 5 as well. Unincised resin-painted designs persist as rows of dots in bowl designs (Tello, 1959, fig. 8). Since no unincised painted designs are found in Phases 6 and 7, the Phase 5 dots are evidently the last remnant of this design technique in the early part of the Ocucaje tradition. The arms in the anthropomorphic bottle are indicated by overpainted incisions, also an old technique that does not persist in succeeding phases. The rest of the resin-painted designs in Phase 5 are all outlined by incision.

DESIGN FIGURES

Most of the representational figures and geometric designs in Phase 5 are derived from preceding phases, including a mythical front-face head used on bird-spout bottles, and a mythical front-face and a mythical profile head, a front-face feline head, and gliding birds, all used in bowl designs. A profile feline body appears for the first time as a bowl design in a separate panel adjoining a front-face feline head, but its antecedent is an articulated feline figure with a profile body in a Phase 4 bottle design. The transference of elaborate bottle designs to less formal bowl decoration is the continuation of a trend already present in earlier phases. In Phase 5 there also appears a new type of mythical head in which traditional features are combined to form a new theme with part front-face and part profile features. In addition, there appears a unique representation of an elaborate mythical figure with a profile head and a front-face human body which has some close stylistic similarities to Chavín stone carvings, a form of Chavín influence which is either new in Phase 5 or which represents a modified survival from an influence affecting the Ocucaje style in Phase 4. The modeled representation of the amphisbaena, which appears for the first time in the Ocucaje style sample, may also represent Chavín influence.

The long-term trend of exchange of features by a process of analogy between nonmythical feline designs and mythical human representations culminates in Phase 5 in a general mingling of most features. As a result, it is more appropriate to speak of the homologue of the old mythical front-face human head on bird-spout bottles as a mythical front-face feline head (fig. 3, a). The features that distinguish the mythical head design on spouted bottles from the bodiless heads in bowl designs are primarily the contouring and proportions of the face and the presence of chin whiskers. However, in succeeding phases additional distinctions are added, and the bottle design continues to represent a separate theme. In spite of the continued difference in themes, it is convenient from the point of view of stylistic analysis to discuss together both mythical and nonmythical front-face designs having predominantly feline features.

FRONT-FACE FELINE HEADS

(Figs. 3, a; 30, c-1, d-2; 31, a-1; and Tello, 1959, Lám. VII, A, fig. 9)

Feline eyes continue to have lenticular pupils, as in Phase 4, and in most eyes the iris band below the pupil is a short, shallow curved band, also a Phase 4 feature. However, there are in addition some new ways of representing the whites of the eyes. In one new variant (fig. 30, d-2) the iris band is extended to contour the lower part of the brow ends in an upward curve, a transitional form confined to Phase 5. In a more advanced variant (fig. 31, a-1) the extended eye band rests on a horizontal base line which divides the entire panel approximately in half, forming the top outline of a new rectangular banded frame around the mouth. This last variant of the eye band becomes the rule in succeeding phases, and represents a major step in the trend toward strict rectangular patterning and the increased use of bands of a modal width to form the designs. In an intermediate innovating variant, the eye band is not extended under the base of the brow ends, but it does rest directly on the upper lip band or on the band framing the mouth, so that it has a straight horizontal base line (cf. profile head in fig. 31, b-2; Tello, 1969, Lám. VII, A, fig. 9).

Phase 5 brow ends are comparatively long and extend to the panel border, both features derived from Phase 4. The fact that the upper outlines of the brow ends in the bottle design illustrated in figure 3, a do not reach the panel border represents a survival from preceding phases in which brows of mythical front-face heads in bottle designs do not touch the head outlines. The brow ends in the bottle head are also conservative in ending in plain open tips, a feature derived from Phase 4 bowl designs. The rest of the Phase 5 brow ends have a new tip form consisting of a rectangular loop with an empty center. As part of the trend towards rectilinear patterning, many of the brow ends are straight horizontal bands (fig. 30, c), a Phase 5 innovation. However, the up- or down-curving brow end survives in some conservative specimens (fig. 30, d-2). In a somewhat less conservative variant, the brow end slants downward in a straight diagonal (fig. 31, a-1).

The new rectangular frame around the mouth appears first as a bowl design, together with more conservatively patterned variants (fig. 31, a-1). It is created by the centering of the mouth in the lower half of the face in such a way that the spaces between the mouth outline and the panel borders form bands of the same modular width as the lip bands, set off from the lip bands by a light contrasting color, usually white. The incised line halving the face horizontally is added to complete the mouth frame.

In most of the Phase 5 feline heads, the vertical lip ends are curved. This feature is a survival from Phase 4, but it represents in part a transference from an old context, since the rounded lip ends appear in Phase 4 only in bottle designs. Straight vertical lip ends also appear in both bowl and bottle designs in Phase 5, demonstrating further that earlier distinctions between bottle and bowl designs are disappearing.

The appearance of the Phase 5 fangs is a good example of the loss of earlier distinctions between mythical and nonmythical feline mouths, representing the final step in this process. The great majority of the fangs in all feline mouths are derived from the long, curved fangs used exclusively for mythical feline mouths in Phase 4. The Phase 5 fangs differ from those of Phase 4, however, in not projecting through the lip, a feature derived from nonmythical feline designs in Phase 4. As a result of this combined derivation, Phase 5 fangs are both asymmetrically curved and truncated, lacking tips. Most of the Phase 5 fangs are distinguished by their breadth, and by the regularity of their contouring as derived from the mythical feline fangs of Phase 4 (fig. 30, c, d). However, there are also some more advanced specimens in which the fangs are narrower, of irregular width, and veer off at different angles, irregularities which become the rule in Phase 6 (fig. 30, b-1; Tello, 1959, Lám. VII, B, fig. 9).

All front-face feline representations in Phase 5 have small appliqué button

noses with two holes or slits for nostrils, a feature that resembles a human nose form of Phases 3 and 4. In one of the feline designs there appears another innovation in the form of a special ornament above the nose (fig. 30, d-2). The ornament consists of a short vertical band between the inner part of the brow bands and the top panel outline, containing a trapezoid with a diamond in the center. This nose ornament represents the beginning of a long tradition of ornamental projections above the nose of front-face feline designs in the later Ocucaje phases.

Side whiskers survive on some of the front-face feline designs in modified form as a pair of horizontal bands slightly narrower than the lip which extend from either lip end to the panel border (fig. 30, d-2).

The mythical front-face feline head on the bird-spout bottle continues to be distinguished from other feline representations by the presence of subtrapezoidal chin whiskers below the lip and a distinctive head outline with curved projections on either side at the top representing ears (fig. 3, a). These features differ from their Phase 4 antecedents principally in their broader proportions, an adjustment to the increased width of the design and the vessel body. There also is a slight modification in the top outline band, which passes under the ear lobes in the Phase 5 variant, forming straight base outlines for the ears.

PROFILE FELINE HEADS

(Figs. 30, c-2, d-3; 31, b-2; and Tello, 1959, Lám. VII, A)

Profile feline heads appear in rectangular panels in bowl designs. They differ from their Phase 4 antecedents only in sharing stylistic innovations in eyes, brows, mouth, fangs, and internal patterning with front-face feline heads of Phase 5 and in being influenced by the great popularity of a new mythical representation with part front-face and part profile features. The latter influence is manifested chiefly in the presence of two sets of front-face fangs, in addition to the traditional single fang protruding from the front of the upper jaw. This addition makes the mouth of the profile feline heads in Phase 5 in part a front-face one and in part a profile one, an innovation that also appears in the new mythical heads (see below). Another example of the influence of the new head type on the older mythical feline profile heads is the presence of a hawk marking on one of the profile feline heads (fig. 30, d-3), a unique transference of this feature. One of the profile heads with feline eyes lacks fangs altogether (fig. 31, b-2), probably also a transference from other bodiless head designs, here a mythical human one of the older tradition (compare with Tello, 1959, fig. 8). There are two additional innovations in the profile feline heads of Phase 5. One is the elaboration of the nose ornament into a rectangular loop of the type also used as a brow-tip ornament and as a panel-dividing design in Phase 5. The second innovation is the modification of the front of the upper lip into a low rectangular or rounded recurved tip, a feature that contrasts with the vertically elongated upper lip in the homologous Phase 4 designs.

PART FRONT-FACE AND PART PROFILE HEADS WITH HUMAN AND FELINE FEATURES

(Pl. 4, b; Tello, 1959, Lám. VII, B, fig. 7)

One spouted bottle and three bowls in the sample are decorated with an entirely new theme consisting of a front-face feline mouth and, on three of the vessels, a single mythical human eye with a hawk marking (pl. 4, b; Tello, 1959, Lám. VII, B, fig. 7). On the fourth specimen, the angular incurving bowl in the Nathan Cummings collection, the single eye is a feline one. On three of the specimens, some profile features are also added to what is basically a front-face mouth. On one specimen, one side of the face above the mouth is decorated with an imitation of the nose ornament of profile feline designs (Tello, 1959, fig. 7). On a second specimen, the bowl design with the feline eye in the Nathan Cummings collection, the side opposite the eye, above the lip, is also decorated with a nose ornament, and there is an erect paw on that side in imitation of profile feline heads. On the third specimen, the mouth has only a single set of fangs (pl. 4, b).

The mythical human eye in this new combination front-face/profile figure is a rectangular framed one, a derivative of mythical human eyes of preceding phases (pl. 4, b; Tello, 1959, Lám. VII, B, fig. 7). The Phase 5 eye differs from earlier rectangular framed eyes in having a horizontal extension of the frame on one side, a kind of tail with an open end (see also fig. 30, b-1). On two of the profile figures the opposite side of the eye is ornamented with a common new brow-tip ornament, the rectangular loop, which is also used for feline eyes (Tello, 1959, Lám. VII, B, fig. 7). The eccentric pupils are the narrow, long, rectangular form already present in Phase 3. The mouth is for the most part identical to front-face feline mouths in other Phase 5 representations with feline features, but on two of the specimens with human eyes the fangs are straight-sided triangular ones, a form derived from earlier nonmythical feline designs (pl. 4, b; Tello, 1959, fig. 7). The rest of the features of these mythical representations, including the internal patterning and the shape of the mouth, are like those of other representational designs in Phase 5.

All the features that make up this new design theme are thus traditional features found in earlier Ocucaje phases. However, two important innovations distinguish the new design as a different theme. One is the combination of a mythical human eye with a feline mouth in a new pattern, indicating that this representation is distinct from the other mythical representations in Phase 5. The second innovation is the combination of front-face and profile features in a single design. The concepts underlying both these innovations are also present in Chavín art (Rowe, 1962b, p. 14, figs. 9, 10, 14), although the Ocucaje Phase 5 designs differ in detail. It is therefore possible that the apparently great popularity of the new representation in Ocucaje Phase 5 is either the result of direct new influences from Chavín, or the modified survival of earlier Chavín influences which enter the Ica Valley in Phase 4.

The unique full-bodied figure with a profile head and a front-face body which appears on the double-chambered bottle from Ica is closely related to the bodiless head designs just described (fig. 30, a). It differs primarily in being more

elaborate, in having a profile mouth as well as a profile eye, and in showing a much more obvious relationship to the Chavín style. The additional resemblances to Chavín designs are primarily the presence of a front-face human body below the head, and the serpent-head appendages that mark the hair and loincloth ties of the figure. The details of the eye and mouth are like other feline and mythical human features in Phase 5, the curved projections and horizontal outline at the top of the head are like the corresponding features on the mythical front-face head on one of the Phase 5 bird-spout bottles (cf. fig. 3, a), and the theme is evidently a homologue of the mythical profile figure on a spouted bottle of the Phase 2/3 transition in the Ocucaje style (cf. fig. 27, a). The serpent-head appendages differ from the Phase 4 stirrup-spout bottles.

MYTHICAL FRONT-FACE HUMAN HEADS

Two bowl designs in the Phase 5 sample represent the last survivals of the mythical front-face human heads popular in Phase 3 (fig. 30, b-1; Tello, 1959, fig. 8). Both the Phase 5 designs appear on shape 5 bowls rather than on the traditional shape 8 one, and each face represents a unique combination of features. In one specimen (Tello, 1959, fig. 8), the face has a fangless mouth like the corresponding Phase 3 bowl designs, but the eyes are modified feline ones with a uniquely looped brow end, and the figure has an ornament above the nose consisting of a Phase 5 ladder design. This face is placed in a rectangular panel in the traditional manner as the only principal design, the rest of the bowl being decorated only with a rim band of unincised painted dots. In contrast, the second example of a mythical front-face human head is placed in a rectangular subdivision of a band containing other principal designs, a standard technique of Phase 5 (fig. 30, b). The eyes are rectangular-framed ones in the Phase 5 style, whereas the mouth is a fanged feline one, a more traditional combination of features. The design details and patterning are the same as in other Phase 5 head designs.

PROFILE FELINE BODY

On one Phase 5 bowl there appears a new representation which is the beginning of a long tradition persisting throughout the rest of the Ocucaje tradition. It is a humped feline body shown in profile (fig. 30, d-1), which is distinguished from the Phase 4 profile feline in accompanying a bodiless front-face head, and in being placed in a rectangular panel separated from the head by a vertical panel-dividing band. It is further distinct in having the arched back decorated with a border of rays with rectangular recurved tips which contour the body, a feature also found as an ornament for the upper lip in profile feline heads of Phase 5. Rectangular recurved ray tips appear for the first time in Phase 5 of the Ocucaje tradition. Features derived from the Phase 4 feline body include a banded tail, circle-and-dot body spots which represent feline markings, circle-and-dot space fillers above the body, and rectangular paws with an ankle band each and three toes indicated by two short perpendicular incisions. The space between the feet is decorated with a concentric rectangle design which anticipates elaborated eye designs used as adornments for this body area in succeeding phases. The Phase 5 feline body is further distinguished from its later derivatives in having an arching, contoured top, leaving spaces between the figure and the panel outline.

GLIDING BIRDS

Gliding bird designs continue in use from the preceding phase. On one bowl (fig. 30, b-2) the gliding bird is like the Phase 4 ones, but on three other bowls the execution is much neater and more symmetrical and differs slightly in detail (fig. 31, a-2, b-1; Tello, 1959, Lám. VII, A, B). The body section behind the eye is derived from the T-shaped Phase 4 variant, but the stem of the T figure is longer and more slender, and the outline band has even contours and borders not only the body, but the edge of the panel as well, resulting in two rectangular or sub-rectangular symmetrical loops which imitate the lip band of Phase 5 feline mouths. Like feline mouths, two of the specimens have curved vertical ends, giving a concave outline to one side of the body. On one of the bird designs (fig. 31, a-2) there is a further alteration in the front portion, in which lines of the beak's near-rectangle overlap and end in dot finials, a feature that is characteristic of the succeeding phases and marks the general trend towards the increased use of dot finials and overlapping lines.

ABSTRACT AND GEOMETRIC DESIGNS

Abstract and geometric designs used in bowl decoration are derived from preceding phases, but the Phase 5 sample is very small. Circle-and-dot elements connected by an incised line, the ball-band design, persist much as in Phases 3 and 4 (Tello, 1959, figs. 7, 8). Diagonal step designs with circle-and-dot fillers in opposite corners also continue in use (fig. 31, a-3), but they are modified, consisting of three diagonal steps instead of one in the center of the panel, the steps dividing contrasting color areas. The use of two circles in one of the opposing triangles is also an innovation. Both these Phase 5 innovations of the diagonal step design persist in succeeding phases.

The elaborated eye continues in use, but it is used in slightly modified forms and a new variant appears. The more traditional variants are indistinguishable from some of the corresponding Phase 3 figures, but in one example the eye is placed vertically as a narrow subdivision in a shape 5 bowl design band (fig. 31, b-3), and in another example the eye is used as a design on the new human-head bottle with the rectangular modeled head (Tello, 1959, fig. 9). The Phase 5 innovating form may be called a "keyhole" design (figs. 30, b-3, 31, b-4). It recalls the elaborated eye in having two three-sided rectangular frames, but the proportions are higher and narrower than in the more traditional forms, and the center consists of a simple bar or a perpendicular incised line in place of the eccentric pupil. This abbreviation is evidently also a convenience, to be used in narrow spaces left in bowl design bands.

There is no evidence on negative decoration, graters, or plain ware for Phase 5.

PHASE 6

BEGINNING WITH Ocucaje Phase 6, regional differences can be seen in the pottery style of the Ica Valley. The Phase 6 collections available for study are from two sites. One is the cemetery of Teojate² in the upper Ica (Chacama) Valley, and the other is the Pampa de las Animas in the Callango Basin. The regional distinctions are not great, so we can describe all Phase 6 pottery vessels as a unit, merely pointing out the regional differences in separate features if such differences are present. Whenever regional differences are described, the two substyles are distinguished as the upper-valley substyle and the Callango Basin substyle.

THE SAMPLE

The sample for the upper-valley substyle of Phase 6 includes thirty-seven whole vessels from looted burials at the site of Teojate, and one additional vessel without provenience in the collection of Mrs. Graciela Laffi in Lima. Nineteen of the vessels from Teojate are in the Truel collection at Ocucaje, fifteen are in the Nathan Cummings collection, and two in the John Wise collection in New York. The sample includes twelve bowls, three dippers, four necked bottles, and nineteen spouted bottles. Eight of the spouted bottles have a traditional modeled bird head on top of one spout, six have a modeled human head in place of one spout, four have a new type of modeled bird head representing a hawk, and one, a derivative of an earlier sausage-shaped whistling bottle, has an unidentifiable, thick bird head also derived from the antecedent form. Published illustrations of Phase 6 vessels from Teojate include a human-head bottle (Soldi, 1956, center row right), the sketch of part of a hawk-head bottle (Rosselló, 1960, Lám. IX, a), a hawk-head bottle in the Nathan Cummings collection (Sawyer, 1961, fig. 4, m), and the odd-shaped whistling bottle in the Nathan Cummings collection (Sawyer, 1961, fig. 4, k). Two additional bird-spout bottles also illustrated by Sawyer (1961, fig. 4, d, e) are transitional between Phases 6 and 7.

The sample for Phase 6 from the Pampa de las Animas at Callango includes seventeen whole vessels and twenty-five large fragments of seventeen additional vessels, all probably from the same looted cemetery site. Three of the whole vessels are in the Gonzalo del Solar collection of Lima, and one specimen said to be from Callango is in the Nathan Cummings collection. All the rest of the sample are in the Carlos Soldi collection at Ocucaje. Two of the whole vessels are spouted bottles with modeled human heads, one fragment belongs to a bird-spout bottle, and one fragment belongs to a hawk-head bottle. One vessel is an anthropomorphic necked bottle. All the rest of the sample, including fourteen whole specimens and seventeen fragmentary ones, are bowls. There are no published illustrations of Phase 6 pottery from the Callango Basin.

 $^{^2}$ The site is known locally as the Pampa de Teojate. In the archaelogical literature it is sometimes called Juan Pablo, a name coined by William Duncan Strong in honor of Pablo Soldi's son. We prefer to use the name Teojate because it is the traditional one in local use. With the exception of four burials excavated at Teojate by Strong (1957, p. 11), all the Ocucaje style pottery from Teojate in our sample was excavated under the direction of Pablo Soldi.

TECHNOLOGY

Vessels of the upper valley and the Callango Basin reflect the same firing technique. The firing is about the same as in Phase 5. Vessel surfaces are a mottled medium gray tending toward an oxidized pink in spots, and fragments show that the paste tends to have a gray cast throughout. Some Phase 6 bottles have a very dark, partly black surface, as in Phase 5, but the majority have the same surface appearance as bowls. The surfaces of decorated ware are evenly polished and have a low gloss. At least some of the bottles were once covered with a thin glossy black surface coating which has worn off in spots, exposing the gray to orange-pink surface of the paste. This black differs from the smoked carbon-black surfaces of Phase 1 to 4 bottles in its tendency to wear off, a characteristic which suggests that it may have been effected with a scorched organic wash, the technique also used for negative decoration.

VESSEL SHAPES

TRADITIONAL TYPES

Most of the Phase 6 vessel shapes in both the upper-valley and Callango Basin substyles are modified derivations from earlier forms, including spouted bottles with a modeled bird head in reversed position topping one spout (fig. 12, g), spouted bottles with a modeled human head in place of one spout, a derivative of the sausage-shaped whistling bottle (Sawyer, 1961, fig. 4, b), and bowls in general (fig. 12, a-e; pl. 5, a). Dippers with hollow handles are a traditional form found only in the sample from Teojate, and a traditional necked bottle with anthropomorphic features is found only in the sample from Callango. Since in the samples of succeeding phases dippers continue to be confined to collections from the upper valley and anthropomorphic necked bottles to those of the lower, their distribution in the Phase 6 sample probably reflects stylistic differences between the two substyles. Necked bottles with neck forms much like that of the anthropomorphic Callango bottle, but without anthropomorphic features, are included in the sample from Teojate but not in that from Callango (fig. 12, i, j).

NEW VESSEL TYPES AND GENERAL STYLISTIC INNOVATIONS

The principal new vessel type in both strains is a bottle like the human-headed spouted bottles, but with a hawk head in place of the human one, and it has a new pattern of body decoration (Sawyer, 1961, fig. 4, m). General stylistic innovations in both strains include broader, squatter proportions of most vessel forms, and the appearance of basal angles between the bottom and side of the most common bowl type, a shape derived from shape theme 5 of preceding phases (fig. 12, a, b, d, e). For the first time bird-spout bottles are not whistling bottles, whistling bottles now being confined to a rare, odd-shaped bottle type (Sawyer, 1961, fig. 4, k). Other innovations in details are discussed in the following paragraphs.

SPOUTED BOTTLES IN GENERAL

The great majority of spouted bottles in the Phase 6 sample is from the site of Teojate, but this preponderance may be the result of selection by the pot-hunters and collectors. In the Teojate sample bottles with bird-headed spouts and bottles with human heads are the most common, whereas the new hawk-headed bottles are fewer and the odd-shaped whistling bottle is represented by only one specimen.

Bottles with bird-tipped spouts are somewhat larger as well as proportionately broader and squatter than their Phase 5 antecedents and also than the humanhead bottles of Phase 6. The bird-spout bottles range in body diameter from $14\frac{1}{2}$ cm to 16 cm and in height from 14 cm to 16 cm, whereas the human-head bottles range from 10 cm to $14\frac{1}{2}$ cm in diameter and from 10 cm to 14 cm in height. In other respects the body contours of most of the bottles are much as before, with a slightly curved bottom, a base angle between bottom and side, diverging sides, a moderately prominent rounded shoulder at or slightly below middle height, and a conically curved top. The body of one of the human-head bottles from Callango in the del Solar collection has higher, narrower proportions, as in the earlier phases, but the other Callango bottle is like the Teojate ones. The nearly flat bottom found on some spouted bottles in Phase 5 appears to be out of style.

There is one new complex bottle shape which apparently originates in Phase 6 and which becomes important in the two succeeding phases (fig. 12, h). The bottom part of the body of one of the human-head bottles has the shape of a vertical-sided base-angled bowl with a corresponding bowl design. The top part is arched like other bottles, but the base of the arch is set back from the rim of the "bowl" bottom, leaving a small shelf.

The hollow spouts of Phase 6 bottles are more prominently conical than in Phase 5, particularly below the bridge where they taper, with a slightly concave curvature, from a broader base. The bridge is usually straight as before but proportionately longer. Reversed bird heads on the spout tips are in most respects like the earlier ones, but most of the Phase 6 specimens lack the skirtlike projection at the base, which is replaced by a simple incised line at the height of the bridge. The skirtlike projection survives on a bottle which is transitional between Phases 6 and 7 but is not present on bottles from Phase 7 on.

SPOUTED BOTTLES WITH HUMAN HEADS

All but one of the spouted bottles with modeled human heads from Teojate and both the Callango specimens have rectangular slablike heads (figs. 12, h, 35, a, 36, d), which are derived from the Phase 5 form represented by the specimen collected by Olson at Ocucaje (cf. Tello, 1959, fig. 9). The Phase 6 heads are virtually unchanged from their Phase 5 prototypes, except for the eye form and a detail of the frame of the head on some of the specimens. The frame and the head are rectangular in front view, but the head tapers from base to top in profile
and faces outward, unlike the bird heads on spout bases. The back portion of the human head is painted red, like the back and top of the bird heads. Most of the Phase 6 bottles have an innovating feature; the short perpendicular incisions in each subdivision of the top of the frame headdress have dot finials (fig. 35, a), part of an increase in the popularity of dot finials that also affects other design features in Phase 6.

The more conservative of the unframed human eyes of Phases 3 to 5 is out of style from Phase 6 on, but an advanced Phase 5 form continues in use. In Phase 6 there are two variants. In the more conservative one, a specimen from Teojate (fig. 36, d), the eye is very similar to the conservative Phase 3 to 5 antecedent. It differs from the latter primarily in being proportionately higher, and in having a slightly curved top border in place of the straight horizontal one (compare with figs. 11, g, 28, a). The sides and lower portion of the eye continue to have a subtrapezoidal outline with slightly curved sides, as in the earlier version, and the eccentric pupil continues to have a parabolic outline. The pupil is lenticular instead of lunate, because the upper outline of the eye is curved. The specimens from Callango have two more advanced eye forms. In the most common one (fig. 35, a), already present in Phase 5, the position of the shallow curved horizontal outline is shifted from the top of the eye to the base, and the rest of the eye is outlined with a parabolic curve. In a specimen from Callango in the del Solar collection, the eye outline is more advanced, having a shallower curved, nearly straight line at the base and a higher, less parabolic arch at the top. The latter is the most advanced form in Phase 6 and is the only example in the Phase 6 sample.

In addition to the standard nonmythical human eyes just described, there is one human-head bottle from Teojate in the Truel collection (fig. 12, h), which has an unframed rectangular eye (i.e., lacking brow bands), with a high rectangular eccentric pupil, a form derived from the framed human eyes of Phase 3 in a separate descent line. In the Phase 6 form the rectangle has slightly irregular angles and some of the incisions overlap at the corners, a carelessness in execution which also appears in other design details in Phase 6.

SPOUTED BOTTLES WITH HAWK HEADS

The shape and size of the modeled hawk heads on four of the bottles from Teojate are approximately those of the cylindrical human head (Sawyer, 1961, fig. 4, m). They differ from the human head in having circle-and-dot eyes, a modeled protuberance resembling a beak rather than a nose, and an incised line mouth which passes in a loop through the beak and down each side below it. The back of the head is red like other modeled heads, the zoned red surface ending in a pointed wedge on the forehead like a widow's peak. Banded markings on each side below the eye resemble the hawk markings used traditionally for human heads. In contrast to these hawk heads, the bird heads on spout tips have only generalized bird features and lack any specific identifying markings.

The fragment of a modeled hawk head with part of a bridge attached was found at Callango, indicating the presence of this bottle type in the lower valley as well.

WHISTLING BOTTLES

The odd-shaped whistling bottle from Teojate (Sawyer, 1961, fig. 4, k) resembles the sausagelike, crescent-shaped Phase 4 whistling bottle from the lower Ica Valley (Sawyer, 1961, fig. 4, j). The Phase 6 vessel differs in having the sausagelike protuberances confined to brief projections in the upper part of the body, the lower portion being approximately cylindrical. Like its Phase 4 antecedent, the Phase 6 specimen has a thick, birdlike head which differs from the other bird heads in details of markings and faces in reverse position, toward the hollow spout, like the bird heads on spouts. However, the body decoration of the Phase 6 variant is a new one, the same as that on hawk-head bottles, evidently an analogy introduced in this phase.

BOWLS

Shape 5 bowls of both substyles in Phase 6 are wider and shallower than shape 5 bowls of earlier phases, and most have composite contours and a base angle between bottom and side (fig. 12, a, b, d, e; pl. 5, a). The bottom is a shallow curve, the base angle is visible on both the inside and outside, and the sides are straight or very slightly convex, with a slight-to-intermediate flare. All but two of the Teojate bowls in the sample are shape 5 bowls (fig. 12, d, e), and eighteen of the whole and fragmentary Callango bowls also belong to this bowl type (fig. 12, a, b; pl. 5, a). The principal difference between the bowls of the two substyles is that Callango bowls are proportionately wider and tend to have somewhat lower sides than Teojate bowls, the height to diameter ratio of Callango bowls ranging from 26 per cent to 29 per cent, that of Teojate bowls from 32 per cent to 41 per cent. These figures show also that there is a greater range of variation in proportions among the Teojate bowls. In absolute size, Teojate bowls range from 16 cm to $18\frac{1}{2}$ cm in diameter and from $5\frac{1}{2}$ to $6\frac{3}{4}$ cm in height, while the Callango bowls have a range of 18 4/5 to $21\frac{1}{2}$ cm in diameter and 5 cm to 6 cm in height. All shape 5 bowls of Phase 6 have a plain, rounded, unthinned rim edge, and a polished gray surface on the inside and on all undecorated parts of the outside.

Two bowls in the Teojate sample, which probably belong to Phase 6 on the basis of their design, have simple spherical or near-spherical contours ending just below the equator of the projected sphere (fig. 12, f, shape theme 12). This bowl type may be a more conservative derivative of the common bowls with simple contours in Phases 4 and 5, but it may also be an entirely new form. For that reason we have assigned it a new theme number.

In the sample from Callango a few of the bowl fragments belong to another bowl type, an incurving form with simple contours and a rounded bottom, approximately of the same width and depth as the base-angled Callango bowls. This shape continues in use in Phase 7, the Phase 7 variant being illustrated in figure 14, m.

The Callango sample also includes a tall, cuplike bowl that is derived from Phase 3 shape 8 bowls (fig. 12, c). The Phase 6 form has higher, narrower proportions than the earlier forms, and it also differs in having a gray surface and a Phase 6 design. However, it has a slightly beveled rim, an unusual conservative trait in Phase 6.

DIPPERS

Three dippers from Teojate in the Nathan Cummings collection are assigned to Phase 6 on the basis of the design. They are incurving bowls with hollow handles and they differ from the Phase 3 antecedent in being broader, in having a shoulder slightly below middle height and a slightly convex curvature to the upper sides (characteristics that they share with shape 5 bowls and spouted bottles in Phase 6), and in having handles with vertically compressed ends, which give the end a wedge-shaped appearance.

ANTHROPOMORPHIC NECKED BOTTLE

The anthropomorphic necked bottle from Callango, a specimen in the Nathan Cummings collection, is very similar to its Phase 5 antecedent, but the neck is somewhat narrower and has a slightly thickened, rolled-out rim edge. The principal difference between the Phase 5 and Phase 6 forms is in the representation of the anthropomorphic features. On the Phase 6 specimen the face and arm details are composed of standard Phase 6 features found also on human-head bottles and in feline faces.

NECKED BOTTLES WITHOUT ANTHROPOMORPHIC FEATURES

Four necked bottles in the Teojate sample lack anthropomorphic features and are unlike the Callango bottle in body shape, but the bottle size and the neck form and size are approximately the same as on the Callango bottle (fig. 12, *i*, *j*). The necks are hyperboloid (i.e., "spoolshaped"), $2\frac{1}{2}$ to 3 cm high and 3 to $3\frac{1}{2}$ cm in diameter. Three of the four bottles have a bilobed body, halved by a vertical waist (fig. 12, *i*, shape theme 13). This body shape is probably derived from double-chambered whistling bottles in Phases 4 and 5. The relationship of the Phase 6 necked bottles to the earlier spouted bottles is emphasized by one of the Teojate bottles in the Truel collection which instead of one neck had two (now broken off), one in each lobe, in analogy with the spouted bottles. This bottle also has the approximate size and the body design of spouted bottles (the body is 13 cm high), whereas the other three are larger (with a body height of 15 to 19 cm) and a different design pattern. Two of the bottles with bilobed bodies have a special body feature at the top, a cylindrical shelf 2 to $3\frac{1}{2}$ cm high and 6 to $6\frac{1}{2}$ cm in diameter. This feature is unique among the Phase 6 vessels.

Associations of Shapes and Designs

BOTTLES WITH BIRD SPOUTS

Bottles with bird-tipped spouts have bodiless front-face feline head designs under the bird spout derived with some modifications in detail from the corresponding antecedent in Phase 5 (figs. 3, b, 4, a, b). One difference is in the area covered by the design. The panel extends nearer to the base of the bird spout, and the lobes on each side of the top of the panel reach approximately to the level of the base of the spout.

SPOUTED BOTTLES WITH HUMAN HEADS

The decoration on the bottles with rectangular human heads is similar to the corresponding Phase 5 antecedent illustrated by Tello (1959, fig. 9), but with innovations in the details of features corresponding to Phase 6 designs in general. It extends in an apronlike, slightly trapezoidal panel from the base and sides of the head to the lower half of the bottle body. The anthropomorphic features are painted and incised and consist of a narrow red band or a rectangular design which evidently represents a shirt, with its top side hugging the base of the neck. On each side of the "shirt" there are thin vertical arms, widening slightly into slender trapezoidal hands at about middle height of the bottle body. The upper part of the arms is painted red, continuous with the shirt, the center of the arms consists of one or two wrist bands, and the trapezoidal ends have three fingers separated by two short perpendicular incisions with dot finials. These are the only representational features. On some specimens the "shirt" is further decorated with a single row of four or five stamped circles, generally with central dots, or with a row of incised dashes, both special Phase 6 features which also appear in the corresponding area on hawk-head bottles (cf. Rosselló, 1960, Lám. IX, a; Sawyer, 1961, fig. 4, m). The area below the "shirt" and between the arms is decorated with one or two vertically adjoining elaborated eye designs, generally separated from the "shirt" by one or two plain horizontal bands. On some specimens vertical striping in contrasting colors is used in place of the elaborated eyes. One of the bottles from Callango has an unusual advanced treatment of the hands, which are large rectangular blocks attached to thin band arms, with fingers of uneven length and squared nails. This hand form resembles a new elaborated hand design used in geometric panels in Phase 6, and also in anthropomorphic body designs in succeeding phases.

SPOUTED BOTTLES WITH HAWK HEADS

The body design of hawk-head bottles follows the same pattern as that of humanhead bottles, but with wings in place of the arms (Rosselló, 1960, Lám. IX, a; Sawyer, 1961, fig. 4, m). The wings are broad and nearly lenticular, and extend diagonally backward from the "shirt" sleeves to the lower half of the vessel body, ending in a point. They are framed by a banded outline at the top and are segmented by closely spaced transverse incisions. On two of the bottles there are additional anthropomorphic hand designs forming small triangular wedges between the wings and body, a decorative anomaly which demonstrates the analogy in decoration to human-head bottles. Two of the bottles have a special modification of the body design, in which two vertically placed, elaborated eyes are separated by a band of stacked chevrons, a new design (Rosselló, 1960, Lám. IX, a).

BOWLS

All bowls are decorated on the outside only, and the over-all patterning resembles that of the preceding phases (pl. 5, a). The entire side of the bowl is decorated, from just below the rim edge to the base angle, to the middle of the shoulder on

incurving bowls or to the middle or lower side of bowls with simple contours. As before, the designs are usually representational figures or geometric patterns set in rectangular subdivisions of a continuous design band. Some geometric designs are continuous without panel subdivisions, and on two specimens the decoration consists only of widely spaced geometric units; both these designs are traditional patterning types. All the Teojate bowls have a traditional gap or parting in the design band, of about the same width as in the earlier phases. Among the Callango bowls, all those with geometric designs have a parted band, but only one of the bowls with representational designs has. The rest of the bowls with representational designs have continuous decoration without a gap, an innovation also present in some Phase 5 bowls from the lower Ica Valley. Another important difference between Callango and Teojate bowls is in the width of the gap. Callango bowls have a much narrower parting, about one third as wide as in the bowls from Teojate, and the parting is higher than it is wide, another advanced trait in the Callango Basin substyle. Evidently in correlation with this difference, almost all the Teojate bowls have one or two outline bands on either side of the parting in the design band, whereas in the Callango bowls the design area is outlined at the parting with a single incised line only.

Although the differences between the Callango Basin and upper-valley substyles in the patterning of bowl designs on the whole point to a greater conservatism in the upper valley, there are also conservative survivals of patterning at Callango that are not found in the Teojate sample. The conservative high, cuplike shape 8 bowl from Callango is decorated with a single profile feline head panel, in analogy with the front-face human designs found in that position on shape 8 bowls in the preceding phases. Unlike the earlier design patterning, the Phase 6 panel extends only about two thirds of the way down the side of the bowl, and there is no further decoration on its sides. However, the traditional continuous decoration and parting of a design band are suggested by a sketchy outline band around the rim, a good indication of the continuity in design patterning as well as in vessel type.

DIPPERS

The three dippers from Teojate are all decorated with three units of elaborated eye designs spaced around the rim and a stamped circle-and-dot design on either side of the wedge-shaped tip of the handle. This pattern of dipper decoration is entirely new.

NECKED BOTTLES

The necked bottles from Teojate are all decorated with one or two horizontally adjoining units of elaborated eye designs, or a short panel decorated with another geometric design, on both sides of the upper body of the vessel, either below the neck or below the cylindrical shelf. The top of the shelf is also decorated with geometric designs. The two-necked bottle has an elaborated eye design on one side of the body but a front-face feline design of the type used for bird-spout bottles on the other, further evidence that the potters considered this vessel to have been a cross between the single-necked bottle type and the spouted bottles.

ANTHROPOMORPHIC NECKED BOTTLE

The anthropomorphic bottle from Callango differs from its Phase 5 antecedent in having a face with feline attributes without modeled features, framed by thin band arms on the sides and trapezoidal hands at the base, a patterning present in other Phase 6 representations, both human and feline. The feline attributes are unique; anthropomorphic necked bottles of succeeding phases do not have them. The arms as well as the head on the Phase 6 bottle are on the upper part of the body above the waist, unlike both the earlier and later specimens in this tradition.

PAINTED DECORATION

GENERAL CHARACTERISTICS

All the resin-painted designs in the Phase 6 sample have incised outlines marking details of features and separating color areas. It is a special innovation of Phase 6, however, that in some designs the same color is used to cover several details separated by incised lines. This innovation represents a slight breakdown of the old rule that incisions are to mark areas of contrasting colors. It is a peculiarity of most of the Phase 6 vessels in the sample that the pigments are not well preserved, being usually of a powdery consistency that allows them to be rubbed off. On many specimens the colors are lost altogether, but certain colors, notably red. have a tendency to be better preserved than others. Since Ocucaje tradition vessels of all the earlier phases, as well as later ones, generally have well-preserved resin pigments not soluble in water, the fugitive character of many of the Phase 6 pigments may be an accident of preservation induced by excessive moisture in the ground of some sites which may have leached out the necessary fixing agents in the original resin. At the site of Teojate, at least, there is an unusual amount of moisture in the ground, apparently due to an old irrigation ditch which crosses the site.

COLORS AND THEIR USES

Because of the poor preservation of the pigments the inventory of the Phase 6 colors and their patterning is not complete and most of our information on colors is based on the sample from Callango. On these vessels, red, preserved on most of the specimens, appears to have been the most frequently used color, while white is second. Red and white together dominate most of the designs. Pink is a fairly popular color and is usually used as an alternative for red or white in some representational features. Yellow, brown, and orange were used on some specimens, and black was used on most specimens for certain small design details, notably in representational figures. The extensive use of white instead of yellow is a Phase 6 innovation also characteristic of Phases 7 and 8 and contrasting these three phases with the rest of the Ocucaje style.³ The colors are fewer than in Phase 3.

³ Wallace reports that red and yellow are the most common colors in his "La Isla" pottery from the site of Cerrillos, a grouping that includes pottery of Phases 5, 7, 8, and 9 of the upper-valley substyle, with Phase 7 evidently predominating (Wallace, 1962, p. 310). Our observation contradicts Wallace's. However, our information on color comes primarily from Callango Basin vessels, since the colors on the specimens from Teojate in our sample are largely gone. It is therefore possible that yellow was the more common color in the upper-valley substyle, whereas white was more common in the Callango Basin.

and their uses are more standardized. Gray and pale green do not appear in the sample for Phases 6, 7, and 8.

Each color has its special uses. Red is used for most unsegmented outline bands at the top of bowl designs, or for one if they are paired. It is also used for one of the outline bands in bottle designs. At times the band-wide gap above the design area on bowls functions as an outline band and is then painted red. Generally the outline bands of panel dividers are also painted red, enclosing a white center. In representational features, lips, nose, and the central spaces in looped brow ends are red, and on most of the specimens the body of the feline figure is also red. In gliding bird designs the spaces between wings and tail and those on either side of the beak are red. In modeled heads, the back and top of the head are always red, and hawk markings usually are. In geometric designs the principal area, or at least one of the principal areas if there are several, is painted red. The emphasis and patterning of red is carried over from Phase 5. White is reserved for the central band or design in panel dividers, and is also usually used for the eye band below the pupil and for circular bird eyes, for parts of the area around the mouth of feline faces, for the paws, underbelly, and spots on feline bodies, for alternate subdivisions in segmented bands, and usually for the recurved ray border at the top of feline bodies. The white at times overlaps several adjoining features. In geometric designs it is the most common complementary color to offset red. The patterning and uses of white in Phase 6 are a combination of the uses of white and yellow in Phase 5, with some additional new functions. Black is used for such details as eye pupils, ankle bands on paws or wrist bands on hands, and alternate sections in segmented bands. Pink is sometimes used in place of red or white to designate representational features such as brows, eye bands, or feline bodies, and it is also used at times for ray projections above feline noses and for the recurved ray border at the top of feline bodies. On one specimen orange is used for the wings, tail, and beak of a gliding bird, a traditional use.

OUTLINING TECHNIQUES AND DESIGN AREAS

The outlining of design areas also follows regular conventions derived with slight modifications from Phase 5. Bowl designs continue to be outlined with bands from 4 to 7 mm wide at the top of the design area and, in the upper-valley substyle, on each side of the parting of the band. The principal innovation is the vertical segmentation of many of the zoned bands, which border the design area at the top, into oblong sections by incised lines (figs. 32, d, 33, a, 34, b, d, 35, c, f, 36, a-c, e, f, h, i), and the addition of a second band on many of the specimens. Ten of the Callango bowls and eight of the Teojate ones have one or both of these innovating features. However, the use of one outlined band alone at the top of bowl designs survives on seven Callango and two Teojate bowls, and the much older feature of plain incised outlining of the design band without outlined border bands survives on six of the bowls from Callango. As in Phase 5, the bands with incised outlines border only the top of the design band and, on most Teojate specimens, the vertical sides of the design area on either side of the parting. Another survival of earlier usage is the band-wide space between the rim edge and the design area.

However, an innovating feature of Phase 6 is that occasionally this space is painted red, thus becoming a functioning outline band. On some of the specimens that have two border bands, the second band is not continuous, but is used only for special panel subdivisions of the design band, either those containing gliding bird designs or a profile feline body (figs. 32, c-2, 33, b-3). In these designs the second band is on the inside of the panel.

Wherever there are two outline bands, one of them is segmented into vertical sections which are usually painted alternatingly white and black. Segmented bands are also used by themselves. There is only one specimen in which a continuous unsegmented band adjoins sections of another unsegmented band and the second band is confined only to certain panels.

Vertical panel divisions are derived with very few modifications from Phase 5. The principal innovation is in panel dividers decorated with a ladder design (fig. 34, c). The Phase 6 ladder designs are narrower than those in Phase 5 (about 8 mm instead of 15 mm), and the short perpendicular incisions have dot finials. By far the most common panel divider is an old one consisting of three zoned vertical bands 3-7 mm wide, in which the two outer bands are painted red and the central one is painted white (in place of the Phase 5 yellow). Occasionally only two bands are used. Red bands also enclose the ladder designs. A vertical two-segment twined-fret design is used in some Callango bowls (fig. 32, c), but is not found in the Teojate sample. It represents a conservative feature of the Callango Basin substyle. In the Teojate sample one bowl has a panel divider consisting of a vertical serrated band, a special new adaptation of a geometric design confined to the upper-valley substyle.

The front-face feline heads on bird spout bottles (figs. 3, b, 4, a, b) are framed by two plain outline bands one of which is red, much as from Phase 4 on, and the contours are also much as before. It is essentially a rectangular outline, but with slightly curving sides following the bottle contours, and with arched lobes traditionally representing ears on either side of the top of the head, separated by a horizontal outline section. The ear lobes are marked off on the inside by one or two horizontal or curved bands, both variants being derived from Phase 5. Some specimens have short perpendicular incisions with dot finials in this enclosure, evidently a Phase 6 innovation. Feline faces on bottles differ from those on bowls primarily in the contours, in having chin whiskers, and in being larger, particularly in height. As a result of this additional height there is more space above the eyebrows as well as below the mouth. The elaborations in chin whisker designs and forehead ornaments that appear on the more advanced bottle designs are evidently an adaptation to this added space.

DESIGN FIGURES: GENERAL STYLISTIC CHARACTERISTICS

Phase 6 designs are distinguished from both earlier and later designs by their irregularity, which lies in the uneven execution of the incised lines. The incisions are often of uneven depth; they sometimes fail to meet and at other times overlap; designs intended to be rectangular often have irregular angles and "straight" lines sometimes waver. Although such irregularities are common, there are also carefully incised pieces. On the whole the Callango Basin substyle shows more careful execution than the upper-valley substyle.

The trend toward more rigidly rectilinear design conventions which is present throughout the early Ocucaje tradition is increased in Phase 6. This development is especially apparent in the treatment of the feline body, eyes, and mouth. Most of the curvilinear features that still survive in Phase 5 are out of style in Phase 6, and only the rectilinear features remain, together with new ones added in this phase. For example, all Phase 6 eye bands rest on a horizontal base, the feline mouth always has straight vertical ends, and the feline body does not have an arched back (figs. 32-34, 36, a). Another aspect of this trend is the spacing. Whenever possible, design features and spaces between the features are composed of bands of a modal width. Thus, outline bands, brows, lips, mouth frames, ankle bands, ray appendages, and details of geometric designs are all bands of the same width, with slight variations in the irregularity of the execution only. There are very few curvilinear features in Phase 6 designs, barring the stamped circles. On some specimens wings of gliding birds are curved, the bird beaks are usually outlined with curved lines, and in feline designs the nose, top of the eve brows. and base of the pupils are curved. In all other designs curved lines are very rare, and parallel lines are more common than converging ones.

Like the vessel shapes, Phase 6 designs are also wider and lower than before. The widening affects especially the panels containing feline faces, both on bowls and bottles, but it also affects other designs. Callango designs tend to be proportionately wider than those of Teojate, and they are also usually executed with slightly narrower bands and spacing (design bands on Callango bowls are most frequently 4–5 mm wide, on Teojate bowls 6–7 mm). As a correlate of the narrower spacing, incisions are finer and narrower than in Phase 5. In these respects the upper-valley substyle is the more conservative.

There are two other general stylistic innovations that characterize Phase 6. The use of dot finials at the end of lines with unattached ends is greatly increased. New uses for dot finials include the tips of short perpendicular incisions in ladder designs, the tips of perpendicular incisions marking off fingers, toes, bird tails, head frames in modeled human heads, and, more rarely, other design details. The older uses of dot finials derived from Phases 4 and 5 continue, mainly as dots in recurved ray tips and at the ends of lines representing mouths on modeled heads. Another Phase 6 innovation is the segmentation by cross lines of outline bands and other designs, such as the tail and wings of gliding birds and the wing designs on hawk-headed bottles.

DESIGN FIGURES: DETAILS

A few new geometric design motives appear in Phase 6, but for the most part Phase 6 designs are modified derivations of the geometric and representational designs of the preceding phases. As a general rule, vessels are decorated either entirely with geometric or entirely with representational designs, but occasionally short geometric panels fill in spaces on bowls which have primarily representational decoration (figs. 32, d, 33, a, 34, c). Most Callango bowls in the sample are decorated with representational designs, but only three of the Teojate bowls are. Callango bowls are more elaborately and carefully decorated than Teojate ones. The most elaborate designs in the Teojate sample are the feline heads on bird-spout bottles (figs. 3, a, 4, a, b). All the representational designs are enclosed in rectangular panels on bowls or in the approximately rectangular panels on bird-spout bottles and are drawn to fill the entire space of the panel.

Representational designs include the front-face feline head, used on bird-spout bottles and on bowls, and the profile feline body, profile feline head, and gliding bird—the latter three used only in bowl decoration. In bowl panels with representational designs the usual pattern is an alternation of a front-face feline head, a profile feline body (sometimes omitted), and a gliding bird. Profile feline heads are used more rarely, and a few bowls have only bird designs. There are no human heads other than the modeled ones in Phase 6, the painted mythical heads with human features having gone out of style. Geometric motives consisting of specially modified representational features include the continuous mouth band and elaborated eye, both traditional designs from Phase 3 on, and a new design, an elaborated hand motive. The latter is found only in the Callango sample. The elaborated eye is used for both bottle and bowl decoration. The mouth band and elaborated hand are used only on bowls.

FRONT-FACE FELINE HEADS

Patterning (figs. 3, a, 4, a, b, 32, a, b-2, c-1, d-2, 33, a-1, b-1, c-1, 34, a, b-1, 36, a).—Only the more advanced Phase 5 forms of internal patterning of frontface feline heads survive in Phase 6, the traditionally independent curved eye and separate mouth having gone out of style. In Phase 6, the panel in bottle as well as in bowl designs is always divided horizontally by a straight line or band. In bowl designs the outline or band divides the panel approximately in half, whereas in bottle designs it tends to be slightly below middle height of the panel. Three types of patterning of facial features occur. In a relatively conservative variant derived from Phase 5, the eyes rest directly on the lip, with the incised division line overlapping the sides of the lip to the sides of the panel (figs. 32, a, 34, a). In a new variation, the eye rests on a band of standard width which adjoins the lip and overlaps it to the sides of the panel (figs. 32, c-1, d-2, 33, a-1, b-1, 34, b-1). In both variations the effect of a continuous rectangular band frame around the mouth is destroyed, particularly since the band that rests on the upper lip is often painted a different color from the space on the sides and bottom of the mouth, also a Phase 6 innovation. However, the continuous rectangular banded frame around the mouth, painted in white, also persists from the preceding phase (figs. 32, b-2, 33, c-1).

The feline faces on vessels from Teojate have two additional advanced features not found in the Callango Basin substyle. On some specimens the sides of the lip extend all the way to the sides of the panel (figs. 4, b, 36, a), and on some specimens the upper and lower lip bands are not connected and do not form a frame around the tooth band (fig. 4, a).

Nose.-Most of the Callango feline faces have an incised painted nose in place

of the older modeled button nose, an advanced feature not present in the Teojate sample. Occasionally specimens in both substyles lack a nose altogether, a feature confined to Phase 6. The painted noses usually are represented by a parabolic arch which may or may not be divided down the center by an incised line. The nostrils are indicated by two short perpendicular incisions with dot finials or, more rarely, by plain dots. Occasionally the nose is simply indicated by an irregular undecorated space between the brows.

Eyes and brows.—Only eyes and brows of the lenticular tradition are in use for the front-face feline heads, and only the most advanced forms of Phase 5 persist. That is, in all designs the white of the eye forms a continuous band from below the pupil to the base of the brow ends at the sides of the panel. The treatment of the eyes and pupils in the upper-valley substyle is more conservative than at Callango. The majority of Teojate pupils have a strongly curved base within the arch of the brow (figs. 3, a, 4, a, b, 36, a). In the most advanced eye form at Teojate the base of the pupil is only slightly curved, in part nearly straight, and it adjoins the base of the brow arch on its outer side. The base of the brow ends is either straight or slightly curved, either slightly diagonal or horizontal, but nowhere does the base of the pupil form a continuous line with the sides of the brow. In contrast to this conservatism at Teojate, there are three specimens in the Callango sample in which the base of the pupil is perfectly horizontal and does form a continuous line with the base of the brow end, the resulting effect being that of a standard horizontal eye band like the bands used for the lip or panel outlines, a very advanced feature in this pattern sequence (figs. 33, a-1, b-1, c-1, 34, b-1. It is possible that some of these specimens may be of slightly later date than the rest of the Callango Basin pottery assigned to Phase 6.) Also in contrast to the Teojate strain, only three Callango specimens have pupils with prominently curved bases entirely within the arch of the brow (fig. 32, a). Most of the Callango designs have eyes like the more advanced form in the upper-valley substyle. There also is a special Callango variant, not found at Teojate, in which the base of the pupil is a straight, or nearly straight, nearly horizontal line entirely within the arch of the brow (fig. 34, a; also cf. fig. 34, c-2). This form is derived from a Phase 5 variant in which the base of the pupil is curved (cf. fig. 31, b-2). On the great majority of the Phase 6 specimens the arch of the brow is parabolic and irregular, but a few of the specimens have more regularly formed, almost spherical, arches, the latter being an advanced feature.

Brow ends.—The brow ends also tend to be more conservative in the uppervalley substyle than at Callango. All but one of the brow-tip ornaments in the Teojate sample are forms already present in the earlier phases, including a rectangular loop which originates in Phase 5 (figs. 4, a, b, 36, a), a rectangular recurved ray with dot finial center, and a recurved ray with one curved side (fig. 3, b). Recurved ray brow ends originate in Phase 4. The great majority of the Callango feline heads also have rectangular loop brow ends, but there are none with simple recurved ray tips. Two of the Callango examples have rectangular loop ends with dot centers, the dot centers being a Phase 6 innovation (fig. 33, a-1, c-1). Two specimens in the Callango sample and one specimen in the Teojate sample have triangular loop ends instead of the rectangular ones, also a Phase 6 innovation (figs. 32, d-2, 33, b-1). In addition, three of the Callango specimens have a special advanced feature not found in the upper-valley substyle. The browtip ornaments on these designs are closed rectangular vertical bars with a short vertical incision in the center ending in a dot finial, apparently a modified variant of rectangular recurved ray ends (fig. 34, b-1). This form may also be of slightly later date than the rest of the vessels assigned to Phase 6.

Ornaments above the nose.—Six out of fourteen front-face feline bowl designs in the Callango sample, and all the bottle felines in the Teojate sample have an ornament above the nose, a feature introduced in Phase 5. The Phase 6 ornaments differ from those of Phase 5, however. They all consist of a pair of vertical rays which project from the top of the nose and cover the relatively short space between it and the top of the design panel (figs. 3, b, 4, a, b, 32, b-2, c-1, d-2, 33, b-1, c-1, 34, b-1). The two rays are sometimes adjoining, but more often they are separated by a plain band. Two types of rays are used, one plain (figs. 32, b-2, 33, b-1, c-1, the other with recurved tips (figs. 3, a, 4, a, b, 32, c-1, d-2, 34, b-1). The plain ones are identical to the closed rectangular brow ends, the advanced Callango form, with short vertical incisions in the center ending in dot finials. Most of the other projections have rectangular recurved tips, like a browtip ornament confined to the upper-valley substyle (figs. 4, a, b, 32, c-1, d-2, 34, b-1), and two of the Teojate felines have nose projections with rounded ray tips (fig. 3, b) a form confined to the upper-valley substyle. One Callango design is unique in having a stamped circle without central dot in the space above the nose, the survival of an old feature found as early as Phase 4.

Fangs.—The forms of the fangs of feline faces are slightly altered from their Phase 5 antecedents. Phase 6 fangs are all truncated, with the broader base at the inner side of one lip and the narrower open end at the outer side of the opposite lip. Phase 6 fangs are more irregular than those of Phase 5, and they taper less. Some of them have slightly curved sides, or one curved and one straight side, but the majority are straight-sided and only slightly tapering. They also tend to be narrower than Phase 5 fangs and taper at irregular angles. One specimen at Teojate and one at Callango have an even more advanced form, in which the fangs are straight, parallel-sided, and diagonal (fig. 3, a), but this form is evidently rare in Phase 6. A few of the tapering fangs taper so slightly as to have almost parallel vertical sides.

Side whiskers.—A few of the front-face feline heads in both the upper-valley and Callango Basin substyles have one, two, or three short horizontal bands extending from the side of the mouth to the side of the panel, the continuation of the side whiskers of Phase 5 (fig. 3, b).

FILLER DESIGNS ON BOTTLE FELINES

The features of front-face feline heads described above appear on both the bowl and bottle forms. However, there are two special filler designs used only for feline faces on bottles, partly because there is room for space fillers in the larger panels, and partly because of a tradition begun in Phase 4. The traditional design consists of the chin whiskers, a trapezoidal appendage below the mouth, between the lip and lower border of the panel (figs. 3, b, 4, a, b). Most Phase 6 specimens are distinguished from their Phase 4 and Phase 5 antecedents in having straight outlines and in being more ornate. The Phase 6 trapezoid is bordered by one, two, or three outlined bands instead of a simple incised line, and its center is decorated with an elaborated eye design. On some specimens there is a circleand-dot filler on either side of the trapezoid (fig. 3, b), an old feature already present in Phase 4. On some of the bottle felines one or two circle-and-dot space fillers appear on either side of the nose ornament above the brow ends, aligned in a single row (fig. 3, b), also a Phase 6 innovation. On one specimen a new filler type appears in place of the circles, a horizontal dash with dot finials on either side of the nose ornament. Both the circle and dot fillers and the dashed lines are used to represent feline spots in this and later phases.

PROFILE FELINES

Heads.—Profile feline heads survive into Phase 6 (fig. 34, c-2, d, e). Most of the Phase 6 variants share details of eyes, brows, mouth, nose ornament, and general patterning with front-face feline heads of Phase 6. They also differ from earlier profile heads in lacking the single fang in the front of the mouth. The mouth is a fully rectangular, front-face one, and only the single eye, single browtip ornament, and front nose represent profile features. Profile heads in the Callango sample, in continuation of the earlier form, all have an upright paw, which is in front of the head except in one specimen, where it is in the back of the head. The single example from Teojate differs in lacking the paw, apparently a distinction between the two substyles. Only one of the profile heads has a nose ornament not found in the sample of front-face heads; it is a ladder design band (fig. 34, d).

Bodies.—Profile feline bodies differ from the Phase 5 variant in several ways (figs. 32, b-1, c-2, d-1, 33, a-2, b-2, 34, a, b-2). The body is rectangular, not arched, and is made to fill the rectangular panel that frames it. Only the tail continues to have a convex curve on some conservative specimens (figs. 32, c-2, 33, a-2). The majority of the bodies have a fringe of recurved rays at the top, as before, but the rays are horizontal bands which parallel the panel border, and the recurved tips face down instead of up. The feet are set vertically in the body, as before, but their length and width are more variable and their outlines are usually slightly tapering or diverging; on some specimens they are partly curved.

Feline paws now have two, three, or four toes instead of the uniform three of Phase 5, and the toe lines are marked by dot finials. Most of the paws have one or two ankle bands, as before, but on one advanced bowl the paws have three ankle bands (fig. 33, b-2). In place of a concentric rectangle design, the space between the paws is now decorated with variants of the elaborated eye, usually an oblong form with an old-fashioned three-sided frame and an eccentric pupil, either at the bottom or top of the space. The pupil is usually rectangular, and more rarely trapezoidal, both old features. However, a number of the "pupils" have an innovating feature in being decorated with a ladder design of short opposing lines (figs. 32, b-1, c-2, 34, b-2).

The tail differs from the Phase 5 variant in being usually straight instead of arched, or sometimes even concave sided, although a few slightly arched tails survive. Most of the tails cross the panel diagonally, as before, and the triangular spaces left between the sides of the panel and the tail and leg are decorated with fillers consisting of a triangle, a simple dash, or even a very irregularly contoured variant of the elaborated eye. One very advanced example has a vertical tail which borders the side of the panel (fig. 32, d-1).

Another new feature is the patterning of the spots that mark the body. Most of them are stamped circles with dot centers, as before, but some lack dots (figs. 32, c-2, 34, b-2). Generally from four to six circles are placed in a single row in an approximately horizontal or slightly irregular line, a new feature. They average 7-8 mm in diameter, about 1 mm less than the Phase 5 spots.

On most specimens the body is a single color, red or pink, an old feature. However, on a few specimens the body is marked off into three vertical sections, in which the outer ones are red and the central one is white or pink, a Phase 6 innovation (figs. 32, d-1, 34, a, b-2). Usually these color areas are not separated by incisions, but on one specimen they are marked off by incised lines which, together with the feline spots, form a vertical ball-band design. Both the color division and incised dividing lines are analogous to purely geometric designs and in part convert the representational function of the feline spots into an abstract ornamental one, an advanced feature in the pattern sequence.

GLIDING BIRDS

Gliding birds differ in a number of ways from their Phase 5 antecedents (figs. 32, d-3, 33, a-3, b-3, c-2, 34, c-1, 36, b, e). They are more variable in shape and proportions, and a number of innovating features appear in association with the survivals of traditional ones. Gliding bird designs of the Callango Basin substyle tend to be more conservative than those of the upper valley. In the Callango Basin examples, the old wing and tail form with the T-shaped body core and rectangular loop outline banding persists on some specimens without modifications. However, on the majority of the conservative specimens the tail is segmented by one or more cross lines, and there are one or more short perpendicular incisions ending in dot finials which project from the base of the tail (figs. 32, d-3, 33, c-2). On more advanced specimens from Callango, the space between wings and tail is omitted or imperfectly drawn, the vertical band outline of the wing end is omitted, and the wing bands are made to taper and are segmented with cross lines, like the tail (figs. 33, a-3, b-3, 34, c-1). The T-bar of the body and the near-rectangle representing the head in front of it usually have much more irregular contours than in Phase 5, with various angles and sometimes partly curved lines. There also is a much greater variety in beak forms. Some down-curving beaks look much as in Phase 5, with slightly truncated tips (figs. 32, d-3, 33, a-3, c-2), but modified variants are also common. The principal Phase 6 innovation is that the inner rear outline of the head rectangle is merged with the beak outlines instead of forming separate features (figs. 33, b-3, 34, c-1). The new beaks are either only slightly downward curving (fig. 34, c-1) or horizontal (fig. 33, b-3), one or both outlines are concave instead of convex, and they all have truncated tips. Another innovation is the use, in the spaces above and below the beak, of filler elements consisting of incised dots or, on one specimen, of dashes with dot finials (fig. 33, c-2).

In the upper-valley substyle there are two variants of gliding birds, both in some ways more modified from earlier forms than those of the Callango Basin (fig. 36, b, e). Both Phase 6 forms of the upper-valley substyle share Callango basin Phase 6 innovations in having a segmented tail and horizontally positioned beaks with truncated tips. The more conservative variant from Teojate (fig. 36, b) resembles the Phase 5 form in other respects, but, like the more advanced Callango Basin examples, it lacks the vertical end outlines of the body. There also is a more original advanced variant in the upper-valley substyle, the "clothespin"-headed bird (fig. 36, e), which represents the beginning of an important regional development distinguishing the upper-valley substyle in Phases 6, 7, 8, and 9. The tapering, segmented wings and the segmented tail of the new form are like the corresponding parts of Phase 6 gliding birds from Callango. However, the upper-valley form is distinct in having rounded "shoulders" at the front of the body, and in not having the body contoured by the panel outline. The most important distinction is in the head. The older head rectangle is omitted, and instead two straight, converging bands with recurved tips are added to the front of the double circle that forms the eye in the more traditional variants. The recurved tips have curved sides. This head shape resembles a clothespin, as indicated above.

ABSTRACT AND GEOMETRIC DESIGNS

As in preceding phases, abstract and geometric designs are found primarily in bowl decoration, but they also have a new use in decorating "floating" panels on necked bottles and on a spouted bottle of the upper-valley substyle (figs. 12, i, j, 36, g), and in decorating the lower "bowl" section of a spouted bottle with complex body contours (figs. 12, h, 36, i). In bowl decoration abstract designs are found either as continuous bands (figs. 35, d-g, 36, c, h), as rectangular panel subdivisions of bands (figs. 32, d-3, 35, b, c, 36, f, g, i), or as unit designs, all traditional uses. Elaborated variants of representational figures function as abstract and geometric designs, and include the elaborated eye, the continuous mouth band, and the elaborated hand (see below).

The continuous mouth band differs from its Phase 3 antecedent in not being associated with elaborated eyes, and in having the general stylistic characteristics in detail that belong to Phase 6, as described above (fig. 35, f).

Elaborated eye designs also differ from the earlier ones and have a number of new uses. In addition to decorating panels in bowl designs (fig. 36, i), they are used to decorate the apronlike panel on the body of anthropomorphic human-head bottles and hawk-head bottles (Sawyer, 1961, fig. 4, m), the chin whiskers of feline

heads on bird-spout bottles (figs. 3, b, 4, a, b), the space between the legs of feline bodies (figs. 32, b-1, c-2, d-1, 33, a-2, b-2, 34, a, b-2), and the base of the elaborated hand designs (fig. 35, b, c). They are also used as unit designs on necked bottles and dippers in the upper-valley substyle (fig. 36, g). Slightly different variants are used to fill spaces such as the area between feline legs, from those used for principal designs. The majority of the Phase 6 elaborated eyes are derived from two separate strains, one appearing first in the Phase 3 sample, and the other originating in Phase 4. Most Phase 6 designs have two or three stacked or opposing interlocking frames, either with vertical or slightly diverging sides. The majority have straight sides, but on a few the side arms of the frame are slightly curved, a form derived from the "fang sided" eyes of Phase 4. However, the Phase 6 variants all have truncated sides terminating at the base line (fig. 36, g). The pupils are either rectangular or slightly trapezoidal, and most are approximately as high as they are wide, a feature also derived from Phase 4 and 5 antecedents. However, the older narrow, oblong pupil form persists in such special uses as between the paws of feline bodies, and in one specimen on a principal design. On a few specimens in both substyles the basal outline of the pupil overlaps the sides, another innovating feature. Most of these base lines lack dot finials, but on one Callango specimen in which a pupil is used as a filler design in an elaborated hand, dot finials are present. This is a very advanced feature which becomes common only in the succeeding phases. Although the majority of the elaborated eye designs are placed in a horizontal plane, some are drawn vertically with one side arm forming the base, in continuation of a patterning device introduced in Phase 5.

There are also two other new designs related to the elaborated eye tradition. One new variant has L-shaped interlocking frames and is higher than it is wide. On some of the L-shaped eye forms the core is a vertical pendent band instead of a pupil (fig. 34, c-3). This eye form is derived from the "keyhole" design appearing in Phase 5, but the two-sided interlocking frame arms are a Phase 6 innovation. The second new elaborated eye form is a small unframed lenticular eye with an eccentric pupil which is abstracted from the feline eye tradition, but which functions like a standard elaborated eye in the body design of a human-head bottle from Callango.

The new elaborated hand design in the Callango Basin substyle usually fills approximately two thirds of a panel in bowl designs (fig. 35, b, c). It is basically a rectangular design. The base of the hand is an oblong rectangle containing an eccentric pupil, a modified variant of the elaborated eye. Attached to this base are five long tapered fingers, the central one being the longest, with the ends sectioned off to mark nails. The bases of the lines dividing the fingers have dot finials, and the front corners of the panel have small step designs which help to create the effect of an outline band around the hand. Like the elaborated eye, elaborated hand designs are sometimes used in vertical position to fill narrow spaces in bowl design bands (fig. 32, d-3).

A number of the other geometric designs are derived from old traditional motives, including small, nearly square panels of vertical ball-band designs (fig. 35, c), and rectangular panels with diagonal step designs having a circle-and-dot filler in the two opposing corners (fig. 36, f). The diagonal step design is like the form found in Phase 5. The ball band designs of Phase 6 differ from those of preceding phases in consisting of slightly smaller circles (size ranges from 6 to 10 mm in diameter), with two or three circles in a column instead of one or two. In addition, there are two columns in each panel instead of one. The serrated band design is another traditional design present in the Phase 3 sample, but it is not represented in the small samples for Phases 4 and 5. The Phase 6 variant is found only in the upper-valley substyles, and may represent a conservative feature confined to that substyle (fig. 36, c). It consists of a serrated incised line dividing a panel or band in half horizontally. The Phase 6 variant differs from that of Phase 3 in having smaller, more irregular serrations in a narrower band or panel (compare with fig. 27, d-f).

An apparently popular new design of Phase 6 is a continuous band design consisting of angular, somewhat irregular vertical figure-eight designs alternating with approximately diamond-shaped figures with which they interlock (fig. 35, d, e). The diamonds are usually segmented transversely through the center by two lines, and the spaces in both the diamond and figure-eight designs are further decorated with incised dot or line-and-dot fillers. This design is probably a Phase 6 innovation. However, one of the bowls in the Phase 5 sample from Chiquerillo has a design that is similar and that may be an antecedent of the Phase 6 band. The Phase 5 design consists of adjoining diamonds without figure-eights.

There are three other new geometric designs in Phase 6. One is found only in the Callango sample, the other two only in the Teojate one. The new Callango design consists of a continuous band of parallel diagonal columns of steps (fig. 35, g). It is probably derived from the traditional diagonal step design, but it differs in having smaller steps and in having the columns aligned in a continuous band without corner spaces or circle-and-dot fillers. The two new Teojate designs are also continuous band designs, and they lack earlier antecedents. One is a checkerboard design of incised lines with punched dot fillers in the squares. The other consists of a pattern of vertical, opposing banded chevrons separated by trapezoidal banded frames, with punched dot fillers in the intervening spaces (fig. 36, h). This design is the "opposing hook" design, the antecedent to popular broad-band designs in Phases 7 and 8 (cf. table 2, 5.13).

There is no evidence on negative decoration, graters, or plain ware for Phase 6.

PHASE 7

THE SAMPLE

ALMOST THE entire sample for Phase 7 is from the upper Ica (Chacama) Valley and belongs to the upper-valley substyle. One hundred forty-two whole vessels from the cemetery site of Teojate have been used to define the phase. All of them were excavated under the direction of Pablo Soldi, and are distributed in various collections. Seventy-two are in the Nathan Cummings collection, fifty-nine are in the Truel collection at Ocucaje, two are in the Carlos Soldi collection at Ocucaje, and one is at the Museum of the American Indian in New York (Cat. No. 22/ 8788). Eight other vessels from Teojate are in various private collections. In addition to the whole vessels, there are fragments collected from the surface of the Teojate site and at three other major sites in the upper valley which contain Phase 7 refuse, including two sites on the valley border above Teojate and the site of Cerrillos on the opposite side of the valley.

Since there are no burial associations for the Phase 7 sample, the unit of contemporaneity had to be defined on the basis of matching patterns of associated features. Because of the limitations of this type of evidence, there are some forty additional vessels from Teojate which can only be classified as belonging either to Phase 7 or to an adjacent phase. Some are conservative and belong either to Phase 6 or Phase 7 or the transition between them, and some are advanced and belong either to Phase 7 or Phase 8 or the transition between.

Thirty-nine of the Teojate vessels definitely assigned to Phase 7 are spouted bottles, forty-three are necked bottles or jars, fifty-two are bowls, five are dippers, and three are grater bowls.

Published illustrations of Phase 7 vessels include a hawk-head bottle with a neck and a necked football-shaped bottle from Teojate in the Truel collection (Soldi, 1956, center row, second from right, top row, second from right), fragments of two bowls from the Callango Basin in the Rosselló collection (Rosselló, 1960, Lám. X), and two bird-spout bottles, one whistling bottle, and one hawk-head bottle from Teojate in the Nathan Cummings collection (Sawyer, 1961, fig. 4, f, g, l, o).

To date the only evidence of Phase 7 pottery in the lower Ica Valley consists of a few fragments which probably belong to this phase, and which are discussed separately at the end of this section.

THE UPPER-VALLEY SUBSTYLE

TECHNOLOGY

The appearance of the paste and the firing technique of the majority of the Phase 7 vessels are approximately the same as in Phase 6. Most of the decorated vessels have a mottled medium-gray surface color tending toward pinkish in spots. The surface is covered with an unpigmented slip polished to a low gloss. Separate polishing marks are discernible if the surface is slanted against the light, but no unevenness of surface due to polishing is perceptible to the touch. On the un-

painted part of the surface most of the bottles have remnants of a thin glossy black cover which has worn off in spots, and so may be described as a fugitive black, just as in Phase 6. The few fragments available for this type of examination vary from 3 to 5 mm in wall thickness, with one of them having a thickness of as much as 6 mm in one section. The paste is relatively soft (Grade 3 on the Mohs scale of hardness) and of about the same gray to pinkish hue throughout. However, one or two fragments have a gray core and a dull pink to dull orange outer shell, an advanced feature. The paste has a fine-grained consistency and the sand temper is fine to medium fine and of medium density.

VESSEL SHAPES

TRADITIONAL TYPES

Traditional vessel shapes include bird-spout bottles, hawk-head bottles, humanhead bottles, sausage-shaped whistling bottles, necked bottles, decorated bowls, dippers, and grater bowls. All the traditional types show some modifications that distinguish them from the Phase 6 variants, but in many the modifications are relatively slight and there is considerable overlap of shape features between Phases 6 and 7. The Phase 7 variants of the upper-valley substyle are all derived from the upper-valley types of Phase 6 insofar as these are distinguished from the Callango Basin ones, and there is no evidence that the separate Callango features influenced pottery of the upper valley in Phase 7. Equally, the few fragments from the Callango Basin probably attributable to Phase 7 are related specifically to Callango Basin antecedents, including base-angled bowls and an incurving bowl.

NEW VESSEL TYPES AND GENERAL STYLISTIC INNOVATIONS

There are more new shape categories in Phase 7 than in Phase 6. The innovations affect primarily necked bottles and bowls, but there are also two new shapes of hawk-headed spouted bottles. Necked bottles with a bilobed body appear to be out of style, and bodies with simple contours predominate. However, along with the traditional forms there appear two new body types of necked bottles, one football shaped (fig. 13, f) and the other barrel shaped (Soldi, 1956, top row, second from right). Both are relatively scarce. There is a greater variety of body size and proportions than before, and a few bottles have much longer necks with smaller bodies (fig. 13, g), another innovating type. In addition to modified variants of the traditional base-angled bowls, there is a new bowl type, a plain red-slipped bowl with a shallow curved bottom and concavely flaring sides (fig. 14, k). Another new bowl category has the same body contours as dippers but lacks the dipper handle. The principal new shape type among the hawk-headed bottles has a large body and thick, hyperboloid spout resembling features of necked bottles (fig. 13, b).

The general stylistic trend towards lower, broader proportions continues in spouted bottles and dippers, but the increase is slighter than between Phases 5 and 6. The shapes of base-angled bowls participate only slightly in this trend. On

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the whole, differences in shape details between traditional Phase 6 and 7 types are relatively slight.

SPOUTED BOTTLES IN GENERAL

Bottles with bird-headed spouts continue to be common (there are twelve in the sample; for examples, see figs. 5, a, b; 6, a; 13, a), but human-head bottles are comparatively scarce (there are seven in the sample; for example, see fig. 13, c), and they are very variable, no two being alike. In contrast, hawk-headed bottles are apparently much more common than before, there being nineteen in the sample (for examples, see figs. 13, b, d), and they appear predominantly in two standard forms.

All the bird-spout bottles have a body form derived from the traditional composite type (fig. 13, a, shape theme 4), but eight of the hawk-head bottles and four of the human-head bottles have different shapes, including the new large bodied form (fig. 13, b, shape theme 4c), an older form with complex contours (fig. 13, c, d, shape theme 4a), and variously modeled specimens. Only two of the human-head bottles have a simple traditional body shape, and one of these is slightly modified, with an angular shoulder which suggests the contours of complex bodies.

TRADITIONAL SPOUTED BOTTLES

Human- and hawk-headed bottles with traditional shape 4 bodies are no longer distinguished from bird-spout bottles in size and proportions; all three types have bodies that fit into the same range of variability and have the closest resemblance to bird-spout bottles of Phase 6. There is a slightly greater variability in the range of size and proportions than among the Phase 6 bird-spout bottles. in part no doubt because the sample is larger. However, the variability is also the result of there being some conservative shapes along with the more advanced ones. The majority of Phase 7 bottle bodies are somewhat broader and squatter than in Phase 6, and the widest diameter (the shoulder) tends to be slightly lower on the body (figs. 5, a, b; 6, a; 13, a). On these advanced types the top of the body usually also forms a shallower arch, in contrast to the higher spheroid or conical tops of the more traditional shapes. The ten bottles that could be measured in detail range in total height from 12 to 14.5 cm, somewhat lower than the birdspout bottles in the Phase 6 sample. The body height is about the same as in Phase 6, all but one being between 9 and 10 cm high, and the smallest being 8 cm high. However, the body height of the Phase 7 bottles is from 56 to 66 per cent as great as the body diameter, whereas in Phase 6 it is from 63 to 73 per cent as great. Two specimens which are probably transitional between Phases 7 and 8 have a height/diameter ratio of 53 per cent and 55 per cent respectively. Equally, the shoulder of Phase 7 bottles is almost always at or below middle height of the body, the range being 42-52 per cent of body height, whereas in Phase 6 the shoulder ranges in height 45-55 per cent of the total height of the body. These data show that there is some overlap between the two phases, but since the differences in proportionate width and shoulder height do not necessarily

occur together, there are only a few vessels that cannot be distinguished from Phase 6 bottles by their shape.

Two human-head bottles and three hawk-head bottles have bodies with complex contours (fig. 13, c, d), derived from an antecedent form represented by a humanhead bottle in the Phase 6 sample. The lower portion of the body represents a base-angled bowl, and the upper portion is arched like other bottle bodies. The Phase 7 variants are distinguished from the Phase 6 bottles in that the sides of the bowl-shaped bottom portion are flaring rather than vertical, and in that the entire vessel is 3-8 per cent broader. On two of the Phase 7 specimens the arched top is set back from the "bowl" rim edge, leaving a shelf, as in Phase 6 (fig. 13, c), but three more advanced specimens lack the shelf, and the arched top joins with the rim edge of the bowl bottom (fig. 13, d).

Hollow spouts, bridges, bird-tipped spouts and hawk heads are unchanged from Phase 6. However, the rectangular slablike modeled human heads of Phases 5 and 6 appear to have gone out of style, and the only form among the seven human-head bottles in the sample is the older tradition of conical, knoblike ones (fig. 13, c). The principal innovation of the Phase 7 heads is in the eye form. Six specimens have a new circular eye in which the eccentric pupil is indicated either by a straight line which halves the circle, or by a more traditional curvilinear base. This eye form may be confined to the upper-valley substyle. One of the heads has the old parabolic eye, a survival from Phase 6.

NEW SHAPE TYPES AMONG SPOUTED BOTTLES WITH HUMAN AND HAWK HEADS

Five bottles with hawk heads and two bottles with human heads have a new, enlarged body and a broad spout that resembles a bottle neck (fig. 13, b). The three that could be measured in detail are from 19 to 21 cm high, with a body height of from 15 to 18 cm, the same size range as necked bottles in Phase 6. The combination of features of necked and spouted bottles is one that is also present on one of the bilobed Phase 6 vessels and indicates that the idea for the Phase 7 bottles is not new, but a derivation of a Phase 6 antecedent. The Phase 7 shape is approximately like that of the necked bottle with a simple shape in the Phase 6 sample (cf. fig. 12, j), but two of the Phase 7 bottles have shallow curved, broad bottoms like standard composite spouted bottles of shape theme 4. The rest have a deep, some a near-conical, lower portion, a fairly prominent rounded shoulder at middle height or slightly higher, and an arched top which is approximately symmetrical to the curve of the bottom. The "spouts" are like standard hyperboloid necks of necked bottles, but they are slightly higher and narrower in proportion. The length of the bridge is much more variable than on the traditional spouted bottles, but the modeled heads are the same.

Another Phase 7 feature is the use of modeled representations in place of standard body shapes for spouted bottles with human or hawk heads. One hawk-headed bottle has a body representing the body of a bird, with a modeled tail and wings, and one human-head bottle has a body representing a gabled house. The modeled amphisbaena in the Phase 5 sample represents an antecedent for these modeled forms of Phase 7.

WHISTLING BOTTLES

There are two Phase 7 derivations of the tradition of sausagelike whistling bottles and two additional ones which belong to Phase 7 or Phase 8, but no two are alike. One of the two assigned to Phase 7 is very similar to a Phase 6 antecedent, but is slightly larger (Sawyer, 1961, fig. 4, 1). Another specimen in the Nathan Cummings collection which belongs to Phase 7 or Phase 8 is quite distinct in that the protuberances are separate necklike bulges below the spout and modeled head. A third specimen in the Truel collection resembles the lastnamed specimen in the Nathan Cummings collection, but the bulges are much less prominent, constituting only slight swellings below the head and spout tip. Both the latter specimens are advanced forms in which the body has rounded rather than cylindrical contours. The fourth specimen, also in the Truel collection, which may belong to Phase 8, resembles the other advanced bottle in the collection. Its head is distinct, however, a hawk head, but with circular eyes like those of human heads in Phase 7, and it faces outward like other hawk and human heads on spouted bottles and unlike the heads on other whistling bottles. In the absence of further examples, it is not apparent to what exent this treatment is unique or to what extent it may represent stylistic innovation.

TRADITIONAL BOWLS

Twenty-seven of the vessels from Teojate are base-angled bowls derived from Phase 6 shape 5 bowls (fig. 14, a-e; pls. 5, b; 6, a). The proportions of the bowls are for the most part within the shallower range of Phase 6 bowls of the upper-valley substyle, and five are slightly shallower than any in the Phase 6 sample. The range of the height/diameter ratio for twenty-two of the bowls is from 30 to 39 per cent, and five others vary from 41 per cent to 45 per cent. The total size range is greater than in Phase 6, and there are a number of Phase 7 bowls that are smaller than any in the Phase 6 sample. The size range of the bowls that could be measured in detail is from 11.8 cm to 17.3 cm in diameter and from 4.8 cm to 6.4 cm in height. In addition to the slight changes in size and proportions, there are also some changes in contours. All but one of the Phase 7 bowls have convex sides, and the sides of many are more curved than any in Phase 6, in which straight or only very slightly curved sides are found. The variation in flare (slight to medium) is about the same as in Phase 6, but a few specimens have approximately vertical sides (fig. 14, c, d; pl. 6, a) and two have converging sides, the latter two being Phase 7 innovations. The bowls with converging sides are the deepest ones in the sample. Most of the Phase 7 bowls have sharply defined base angles as in Phase 6, but in a few specimens the base angle is rounded off (fig. 14, b, c). The curvature of the bottom is about the same as in Phase 6, but one specimen has a nearly flat bottom, possibly a unique trait. The rim edges are simple, unthinned, and rounded, as in Phase 6. The more convex sided and less flaring base-angled bowls in this category are sufficiently distinctive so that they have been grouped under a theme subheading (shape theme 5b).

The contours of eighteen of the bowls from Teojate are simple hemispherical

(fig. 14, h, j, l, shape theme 12) or horizontally ellipsoid (fig. 14, n, shape theme 19), many ending nearly at the equator of the projected sphere or ellipsis. The rim edges are the same as on other Teojate bowls. Both shapes are derived from bowls of Phase 6, with simple contours, but the ellipsoid shape, which is the most common, appears to be a Phase 7 innovation. These bowls are much more common than in the Phase 6 sample, probably reflecting an actual increase in popularity. Their size range is from 15 to 22 cm in diameter and from 4.2 to 9.3 cm in height, but all but two vary in height only between 4.5 and 6.7 cm, and all but these two have a height/diameter ratio ranging between 29 per cent and 39 per cent. The shallowest bowl has a depth 25 per cent of the diameter.

NEW BOWL TYPES

Red-slipped bowls with concave or straight flaring sides, a shallow curved bottom, and a base angle between bottom and side form a new vessel type which is found commonly in fragments at Phase 7 sites in the upper valley (fig. 14, k, shape theme 21). There are six whole specimens from Teojate in the Truel collection. They vary in size from 15 to 18 cm in diameter and from 4.8 to 6.3 cm in height, and have a height/diameter ratio ranging from 32 per cent to 37 per cent.

Seven bowls from Teojate have body shapes like dippers but without the dipper handles (shape theme 17). They are either incurving, horizontally ellipsoid bowls that end above the equator of the projected ellipsis (cf. fig. 14, f), or convex-sided, tapering-sided bowls with a prominent angular shoulder in the lower third of the vessel (fig. 14, e). Both types differ from other incurved or base-angled bowls in being deeper, the sides converging more, and the height/diameter ratio ranging between 51 per cent and 53 per cent. One of the vessels has a straight, vertical collar a little more than 1 cm high at the top (fig. 14, g, shape theme 18), but the rest have simple, rounded rim edges like other bowls and dippers.

GRATER BOWLS

Three bowls from Teojate, probably attributable to Phase 7, are graters (fig. 14, i, shape theme 20; pl. 6, b), and grater fragments are common in surface collections from sites containing Phase 7 pottery. The grater bowls are conical in shape with straight flaring sides and constitute the only bowl category with a rough surface finish and no decoration on the outside. The inner rim is covered with a broad red-slipped or unpigmented band several centimeters wide, and the center is covered with parallel incisions patterned in quarter sections which interlock.

DIPPERS

Seven dippers in the Teojate sample are assigned to Phase 7 on the basis of designs (shape theme 10). They fall into two shape categories, a conservative and an advanced one. Conservative specimens have incurved, horizontally ellipsoid bodies with a rounded shoulder at approximately middle height, an old

traditional form found as early as Phase 3 (fig. 14, f). The Phase 7 bowls are proportionately broader than the Phase 3 antecedent and have a height/diameter ratio of 49 per cent. The more advanced Phase 7 dippers are proportionately broader and squatter than the conservative ones (a height/diameter ratio of from about 40 per cent to 46 per cent), and the contours are derived from a special antecedent form already present in Phase 6. These dippers differ from the Phase 6 ones in having a more sharply defined, usually angular shoulder, and in being proportionately somewhat broader (cf. fig. 14, e). The shoulder is in the lower third of the vessel, and the sides taper in a convex curve. Handles are about the same as in Phase 6, that is, hollow, 8 to 9 cm long, with a wedgelike, vertically flattened end.

NECKED BOTTLES

There are no anthropomorphic necked bottles in the Teojate sample, but there is a much larger number of nonanthropomorphic necked bottles than before. Forty-five necked bottles are definitely attributable to Phase 7, and a number of others probably also belong to this phase. Of the forty-five bottles, thirty have simple body shapes and traditional necks derived from Phase 6; ten belong to three new shape categories; and five are a different, plain type, which probably has some Phase 6 antecedents not represented in the sample.

The most common necked bottle form in Phase 7 has a spherical or very slightly vertically ellipsoid body, and a hyperboloid or "spoolshaped" neck much like the Phase 6 ones (fig. 13, e, shape theme 14). These bottles vary from $14\frac{1}{2}$ cm to $19\frac{1}{2}$ cm in height, the majority being slightly smaller than Phase 6 necked bottles. Necks on almost all the bottles vary from $2\frac{1}{4}$ cm to $3\frac{1}{2}$ cm in diameter. Another category of necked bottles with simple contours has a slightly smaller size range (8 to 16 cm high) and more irregular contours, most of them having horizontally slightly ellipsoid bodies with more prominent shoulders than the first group. The shoulder is usually at middle height or slightly below middle height. There are also two bottles with high, rounded shoulders and a markedly tapering, conical bottom, resulting in an inverted ovoid or "pear-shaped" form. One unique specimen is a tripod with three thick, hollow supports $3\frac{1}{2}$ cm high.

The vessels described above all have the standard surface finishes of decorated bottles (i.e., an unpigmented slip polished to a low gloss or a fugitive black surface coating), but there are five additional vessels with a rougher surface finish and a different type of neck. The surface on three is unslipped and has a rough finish like plain ware, and the necks are wider, so that these forms should be called "jars" rather than "bottles." Two have a slightly more carefully executed finish.

In addition to these shapes there are three new necked bottle shapes in Phase 7 that have no known earlier antecedents. On has a barrel-shaped body (Soldi, 1956, top row, second from right), another has a football-shaped body (fig. 13, f), and the third has a body which resembles spouted bottle bodies in having a shallow, curved bottom, a base angle between bottom and side, and an arching

body similar to shape 4 spouted bottles (fig. 13, g). The latter type also has a smaller body size, like spouted bottles, and usually an especially long neck varying from $4\frac{1}{2}$ to $6\frac{1}{4}$ cm in height.

Associations of Shapes and Designs

BOTTLES WITH BIRD SPOUTS

Bird-spout bottles continue to be decorated with a front-face feline head design below the bird-headed spout, but the area covered by the design is larger than in Phase 6, in continuation of a pattern sequence apparent as early as Phase 3 (figs. 5, a, b; 6, a; 13, a). In Phase 7 the feline design panel is contoured around the base of the spout and extends farther to the back on either side (figs. 5, a, b; 13, a). On some specimens the panel passes across the top of the vessel in back of the bird spout and covers the entire front half of the bottle (fig. 6, a), but on most of the specimens only from about a quarter to a third of the front of the body is covered by the panel.

There are a great many bird-spout bottles in the different collections from Teojate that are decorated only with negative-painted dots which cover the entire body. The majority of these bottles probably belong to Phase 8, on the basis of shape details and the appearance of the dots, but there are some with shape contours within the conservative range of Phase 7 bottle shapes and with large dot designs, which belong almost certainly to Phase 7. An over-all design of negative dots is used for spouted bottles as early as Phase 3. Though there are no examples of it in the samples for Phases 4, 5, and 6, the Phase 7 use is probably a continuation of the old pattern. However, at least one of the bird-spout bottles with a front-face feline design in the sample has negative dots on the rest of the body surface. This combination of negative and painted designs on the same vessel is a Phase 7 innovation.

SPOUTED BOTTLES WITH HUMAN HEADS

The body design used for human-head bottles with rectangular heads in Phases 5 and 6 is out of style in Phase 7, together with the rectangular heads themselves. Insofar as anthropomorphic designs are used, they are derived from the older tradition of human-head bottles with knob-shaped heads, to which the Phase 7 bottles belong (fig. 13, c). That is, two of the bottles in the Phase 7 sample, one with a complex body (shape theme 4a) and the other with a new enlarged one (shape theme 4c), are decorated with pendent triangles filled with short perpendicular incisions around the base of the neck, representing a necklace, or with a single large, triangular figure at the front of the neck, representing a pendant. The arm and hand designs of the earlier phases are no longer in use, and there is no further decoration. Another of the human-head bottles with an enlarged body has an aberrant adaptation of the body design appropriate to the earlier rectangular-head bottles, the last survival of the older tradition. It resembles the older designs in diverging in an apronlike trapezoid from the base of the neck, bordered on each side by spindly vertical arms and hands of the Phase 6 type. However, the design is a front-face feline head design such as is found on bird-spout bottles.

There are four other human-head bottles with front-face feline designs. Two of these bottles have the most common traditional bottle shape (shape theme 4), like the bird-spout bottles, and the feline panels are also patterned the same way. The third bottle has a complex body with a bowl-shaped bottom (shape theme 4a). The upper part of the body is decorated with the design panel form which is appropriate for front-face feline heads on shape 4 bottles, but there is a separate feline head in each half, separated in the center by a ladder panel dividing band such as is used in bowl designs. In the fourth example, front-face feline designs are used to decorate either side of the "roof" portion of the modeled body representing a gabled house. Thus, of the five human-head bottles with front-face feline designs, only two of the designs are on shape 4 bottle bodies and are patterned exactly as on bird-spout bottles, and the rest are unique. The use of any feline design on human-head bottles is a Phase 7 innovation, marking the breakdown of the older conventions. Bottles with complex bodies follow additional special conventions of decoration, to be described below.

The absence of standardization of design in the decoration of human-head bottles, the diversity of shape types, and the small number of such bottles compared with the very standardized hawk-head bottles in the sample are all indications that the old human-head bottle traditions were undergoing a process of disappearance during this phase.

SPOUTED BOTTLES WITH HAWK HEADS

The traditional body design of hawk-head bottles of Phase 6 is continued on most of the Phase 7 bottles with slight modifications, both on bottles with the traditional body shape and those with the enlarged form (Sawyer, 1961, fig. 40). On the traditional bodies, the design covers the entire front side of the vessel from the base of the hawk head to the base angle, but on the enlarged form the design extends only over the upper part of the body to or above the shoulder. On one of the enlarged bottles, the entire remainder of the body is covered with large negative dots, an association new in Phase 7.

The Phase 7 designs differ in a number of ways from those of Phase 6. The stamped circles on the "shirt" section always lack central dots, and on some vessels they are 5-6 mm in diameter, smaller than any found in Phase 6. In Phase 7 the stamped circles are no longer confined to a single row; there are generally additional circles scattered below the first row on the "sleeves," and on some specimens the central part of the "shirt" has an irregular scattering of dots. The wings are longer and narrower than in Phase 6, on some specimens they are prominently arched, and on most Phase 7 specimens they extend at a wider angle away from the body, sometimes even at a right angle. On these specimens the anthropomorphic arms and hands can no longer fill the angle between body and wing, and instead of forming small wedge-shaped inserts they border the body as slender vertical trapezoids, like the arms and hands on human-head bottles of Phase 6.

The body design below the "shirt" is also patterned in new ways which are derived from an advanced Phase 6 variant. On most of the specimens with standard sized bodies, rectangular or lenticular elaborated eye or "keyhole" designs are placed vertically on end instead of horizontally, either in one column as before or in two or more columns, a Phase 7 innovation. If a single eye column is used, it is enclosed on either side by ornamental bands sectioned into rectangular subdivisions with short perpendicular filler lines, a design that recalls the traditional headdress band on human heads. If two or more columns are used, they are generally separated by such a sectioned design band, or by one or more vertical bands containing incised chevrons. On one specimen the hawk's body is represented simply by several vertical sectioned bands. The conservative treatment in which the hawk's body is represented by a single column of horizontally placed rectangular elaborated eye designs without further adornments persists on all the enlarged hawk bottles in the sample and on one of the standard sized ones. However, on some of the vessels there are three eyes in the column in place of the traditional two.

Two hawk-head bottles have decoration appropriate to other bottle types in place of their proper design. One has an anthropomorphic necklace and pendant design like human-head bottles (see above), and the other has a front-face feline head in place of the elaborated eye designs below the "shirt" and wings. This transference of designs from other types occurs only on hawk- and human-head bottles.

SPOUTED BOTTLES WITH COMPLEX BODIES

Two human-head and three hawk-head bottles in the sample have complex bodies with a bowl-shaped bottom and an arched top (fig. 13, c, d). On the two conservative variants with an inset top (fig. 13, c) the bowl-shaped lower sections are decorated with a standard bowl design as in Phase 6; the upper parts of the bodies are decorated with the design appropriate for the bottles, one a necklace around the base of a human head, the other a standard hawk bottle design. On the three innovating shapes without the inset between the bottom and top (fig. 13, d), the lower "bowl" portion is undecorated, an innovation, and on two of the bottles the bowl design is transferred to the arched top, also a new feature. Both the latter vessels are hawk-head bottles. One of them has a standard bowl design around the base of the arched top, on the back portion of the vessel adjoining the standard bottle design. On the other specimen the hawk wings are elongated diagonally toward the back, and the triangular space between them and the "bowl" rim below is decorated with a standard bowl design. In both specimens the bowl designs are gliding birds. The last two specimens may actually belong to a transitional phase between Phases 7 and 8.

WHISTLING BOTTLES

Two of the whistling bottles have the same designs as hawk-head bottles, a design association already present in Phase 6 (Sawyer, 1961, fig. 4, l). The third has a unique design involving the combination of elements of hawk designs

with elements of feline heads patterned in geometric bands. One specimen which may belong to a transition between Phases 7 and 8 has a front-face feline design.

BOWLS

Shape 5 (and shape 5b) bowls are decorated much as before, but there are two major innovations and some detailed ones. About half the bowls have a red-slipped interior, and most, if not all, are decorated with negative dots in the parting of the design band (pl. 5, b). Both these features are useful phase markers in distinguishing Phases 6 and 7. The parting of the design bands is at least as wide as in the preceding phase of the upper-valley substyle, and in some designs even wider; it is much wider than the parting on Phase 6 bowls of the Callango Basin substyle. On most bowls the design band covers the outer side of the vessel from the rim edge to the base angle (a width of about 4-5 centimeters), but on three vessels with geometric band designs the band is narrow, reaching only halfway or two thirds down the side of the vessel from the rim edge. The latter patterning is a secondary adaptation from bowls with simple contours.

Spheroid or horizontally ellipsoid bowls (shapes 12 and 19) have a new design patterning. The parting of the design band is wider than before, and the bands are much narrower (a width of about 1.5 to 3.25 centimeters, including outlining), covering only the upper part of the side from the rim edge down. The designs used are exclusively geometric ones and gliding birds, no other representational design being used. The geometric decoration falls most commonly into two new design categories, one consisting of variants of the diagonal single-step design (fig. 37, e, g, h; design area from 1.2 to 1.75 cm wide), the other of variants of the horizontal single-step design (fig. 37, b, c; design area from 1 to 1.5 cm wide). The traditional continuous mouth band is used as another narrow-band design in Phase 7 (design area from 1.5 to 2 cm wide), in contrast to earlier phases in which it is a broad-band design. Occasionally some other designs are used as narrow-band decoration in Phase 7. The design area of bands with gliding bird designs is slightly wider than in other narrow-band designs (from 1.75 to 2.5 cm wide). The area of the parting of the band is decorated with negative dots on most specimens, and there is usually also a single row of large negative dots below the design band. About half these bowls have a red-slipped interior, like the base-angled bowls.

Dipper-shaped bowls (shape 17) for the most part are decorated like the ellipsoid and spheroid bowls. However, two dipper-shaped bowls have a singleunit design consisting of a clothespin bird pendent from the rim, with only an outline band around the rim of the rest of the surface.

DIPPERS

Dippers (shape 10) are also decorated like the ellipsoid and spheroid bowls, but the use of spaced elaborated eye designs around the rim survives on one dipper. On two dippers there are negative dots on the surface not covered by the design band.

NECKED BOTTLES

The patterning of designs on Phase 6 necked bottles survives on some of the Phase 7 bottles (shapes 14, 15), and consists of units of elaborated eye designs or short geometric panels on opposite sides of the upper body, below the neck. However, most of the necked bottles are decorated with the same narrow design band as on ellipsoid bowls, a band that circles the upper body around the base of the neck. The designs in the bands are the same as on the ellipsoid and spheroid bowls. On some vessels the rest of the body is decorated with large negative dots, like the bowls, and two necked bottles are decorated only with negative decoration.

The two barrel-shaped necked bottles in the sample have a different pattern of decoration. The flat end on either side of the barrel shape is decorated with a profile feline head, and a bowl design band proper to shape 5 and 5b bowls crosses lengthwise over the top of the body, connecting the two end designs.

Long-necked bottles (shape 16) are undecorated, except for an over-all red slip. Five necked vessels with variable body contours and neck forms, and some with a rough surface finish, are decorated with incised triangles pendent from the base of the neck, filled with other stacked triangles or incised dashes. These designs are unpainted. These vessels are classified as utilitarian rather than fancy ware.

PAINTED DECORATION

GENERAL FEATURES AND THE USES OF COLORS

Resin-painted designs outlined by incision are the only form of painted or incised decoration, except for the unpainted incised triangles on utilitarian bottles and jars. On the vessels from Teojate the resin paint is for the most part powdery and poorly preserved, with much of it gone, but there are Phase 7 fragments from other sites with perfectly preserved resinous paint which is not readily soluble in water.

Insofar as can be judged from the remaining pigments, the inventory of colors and the uses of the colors are about the same as in Phase 6. If there are innovations, they are not apparent in the sample. According to Wallace, the most common pigment, along with red, is yellow rather than white in the upper-valley substyle (Wallace, 1962, p. 318).

OUTLINING TECHNIQUES AND DESIGN AREAS

There are only very slight changes from Phase 6 in the outlining of bowl designs. Bowl outline bands vary in width from 4 to 7 mm, as before, but there is a slight change in the preferred patterning. Segmented outline bands are very rare, as is the use of two outlined bands at the top of the design area. Another usage characteristic of Phase 6, short horizontal bands at the top of separate panel subdivisions, appears to have gone out of style altogether. By far the most preferred outlining technique in Phase 7 consists of one outlined, unsegmented white band which borders the design area at the top and usually on either side of the parting of the band (fig. 37). Rarely, it frames the entire design. The space between the white band and the rim edge is painted red and functions as a second outline at the top, as before. This technique is found on all the spheriod and ellipsoid bowls and on the great majority of the rest of the bowls and dippers. There are only three shape 5 or 5b bowls in which the outlined band is segmented as in Phase 6, and there is only one other bowl on which two outlined bands, one segmented, are used at the top of the design area (fig. 37, k), a very common usage in Phase 6. However, the latter technique is used on two shape 4a spouted bottles with bowl-shaped bottoms, where bowl decoration is used (fig. 13, c), representing a more conservative treatment of the designs on these bottles. There are only two dippers and two shape 17 bowls, on which the old feature of a single incised outline line of the design area is retained.

The great majority of the bowl designs with panel subdivisions, most of them on base-angled bowls, have panel dividers consisting of one, two, or three vertical bands or a simple incised line (fig. 37, d). The vertical bands are painted alternately red and white (or yellow), and their use is a traditional one. The increased frequency of omission of panel dividers beyond the simple incised line represents a new trend in Phase 7. There are only two bowls in which ladder panel dividers are used (fig. 37, a); both of them are like those of Phase 6.

Front-face feline heads on bird-spout bottles are outlined as in Phase 6 by two bands, one of which is red, but the shape of the panel is new (figs. 5, a, b; 6, a; 13, a). Four stages of innovation in the patterning and shape of the panel are included in Phase 7. The most conservative specimens retain the ear lobes at the top of the panel, but the panel is contoured around the base of the spout, and the ears form a continuous curve with the center of the outline and are looped towards the top of the body on each side of the spout base (figs. 5, a; 13, a). In a more advanced variant of this patterning, only one or neither of the outline bands contours the base of the spout; instead, the front part of the spout rests within the design field, and the outline bands end at the spout base (fig. 5, b). In a third variant, slightly more advanced, the patterning is the same as in the second, but the ear designs are omitted, and their traces survive only in the slight lobing of the outline. In the fourth, most advanced variant, the outline bands cross transversely in a straight line over the top of the vessel in back of the bird spout, and the spout is entirely within the design field (fig. 6, a). Of these four variants, the second and third are the most common in Phase 7.

There are three bird-spout bottles from Teojate with another patterning innovation that is transitional between Phases 7 and 8. In it the feline-head panel is bordered on either side by a narrow vertical geometric design band; on these specimens this band is a horizontal twined fret which represents an adaptation from chin-whisker designs (fig. 6, b). A third bird-spout bottle, in most respects a conservative Phase 7 type, has a unique advanced feature, a clothespin bird design placed vertically on the side of the feline head within the panel outline.

DESIGN FIGURES: GENERAL STYLISTIC CHARACTERISTICS

Most of the Phase 7 vessels of the upper-valley substyle have more carefully and evenly executed designs than do upper-valley vessels of Phase 6, though irregularities of angles, overlapping lines, and slightly wavering lines continue to occur. The use of overlapping lines is even considerably increased in specialized contexts, such as gliding-bird designs and elaborated eyes (fig. 37, d, f, i), and in one feature, the base of pupils in the rectangular eye tradition, it is systematized into a popular standard form (fig. 37, d). The trend toward more strictly rectilinear and right-angled designs continues to increase, although the increase is less than before, because most of the opportunities for rectilinear devices are already exploited in Phase 6. As examples of this trend; curvilinear bases of eye pupils virtually disappear, except for rare survivals; "eye" bands are straight horizontal; recurved rays with curved tips are largely replaced by a new straight-sided form; there are only rare survivals of a curvilinear line in fangs, parallel straight-sided fangs being much more common; trapezoids tend to disappear in other design features such as in chin whiskers on bottle feline faces; and gliding birds acquire more rectilinear features.

Another continuation of an earlier trend is the narrower spacing of the bands used to make the designs on the more advanced specimens in Phase 7. Most of the upper-valley bowls are decorated with bands 4-5 mm wide, with some as narrow as 3 mm; the Phase 6 band width of 6-7 or 8 mm continues in use on some of the more conservative specimens. The spacing of design bands on spouted bottles usually is 4-5 mm or 5-6 mm, in contrast to the regular width of 6 or 6-7 mm of bands on Phase 6 bottles. The narrower spacing is further emphasized in designs on spouted bottles and ellipsoid and spheroid bowls by an absolute or proportionate increase in the horizontal breadth of the designs in the respective panels.

There are some other general stylistic innovations in Phase 7. Stamped circles no longer have central dots, at least in the upper-valley substyle, and the circles have a slightly smaller size range. They vary between 5 mm and 8 mm in diameter, with one circle on one of the bottles as large as 9 mm. In contrast, circles in Phase 6 of the upper-valley substyle vary in diameter from 7 mm to 10 mm, and in the Callango Basin from 6 mm to 10 mm, with the majority falling between 8 and 10 mm. Partly in correlation with the reduction in average size of circle fillers and partly with the enlargement of some design areas, stamped circles, in such areas as the "shirt" of hawk bottles, the "forehead" of front-face feline heads on spouted bottles and the center of profile feline bodies, no longer occur in a single row but are scattered, or there are extra circles added outside the original row. Extra circles are also added in such areas as the side of chin whiskers on bottle feline head designs. One hawk-head bottle, which may be transitional between Phases 6 and 7, has fillers consisting of two concentric circles (Rosselló, 1960, Lám. XI, b), a design detail which has an antecedent in the body spots of the modeled amphisbaena in Phase 5, and which is also found in what are probably Phase 7 designs of the Callango Basin substyle (see below).

The trend towards the conversion of representational into purely ornamental, abstract features, which makes its appearance as early as Phase 3, is considerably amplified in Phase 7. Stamped circles originally meant to designate feline spots on profile bodies and on front-face head designs are converted on many specimens into ball bands, the latter being a traditional geometric device used primarily for the division and patterning of color areas. Chin whiskers, once simple trapezoids decorated with feline spots, are converted into ornamental bands with geometric designs. Other representational features which come to have more purely ornamental functions are fangs and noses on feline-face designs. On some specimens, three sets of fangs are used in place of two as a device to ornament the wider mouth area, and on some specimens noses have three or four nostril lines instead of two, some of them opposed in a ladder design arrangement.

There are two other general stylistic innovations that are found is association with incised resin-painted designs. For the first time a red slip is applied to the interior of bowls which have resin-painted designs on the outside. A red slip is also used on the new plain bowl form with inflected contours and on the traditional grater bowls. Also for the first time negative decoration is found in association with resin-painted designs on spouted and necked bottles as well as on bowls. Closely spaced negative circles from 1 to 1.5 cm in diameter, in part with very irregular outlines, cover the area of the parting in the design band on most bowls, sometimes part of the surface of ellipsoid bowls below the design band, and occasionally the body surface of bottles that is not covered by the resin-painted designs. Negative circles are also used as an exclusive over-all design on some bottles, a traditional feature found as early as Phase 3.

DESIGN FIGURES: DETAILS

The principal innovations in Phase 7 of the upper-valley substyle are in the geometric designs; the great majority of representational designs are modified derivations of Phase 6 motives. The only new representational design is the full-bodied profile figure of a stylized "fox." Profile feline heads are virtually out of style, except for specialized survivals on the circular ends of drum-shaped necked bottles. Other representational designs include the front-face feline head, used in panels of base-angled bowls (shape 5b) and on bird-spout bottles and occasionally secondarily on hawk-head or human-head bottles; the profile feline body, used exclusively in panels of base-angled bowls (shape 5b); and gliding birds, used in panels on various bowl shapes, as bowl designs on complex spouted bottles, and in a unique, advanced bottle design. Continuous mouth bands, elaborated rectangular eyes and elaborated hand designs also persist from the preceding phase.

The usual design pattern on shape 5 and 5b bowls consists of a design band of traditional width subdivided into panels, most commonly with an alternation of front-face feline heads and profile feline bodies, front-face feline heads and gliding birds, or only feline-head designs (fig. 37, a; pl. 6, a). Rarer alternative patterns include gliding birds alternating with elaborated hand designs or other geometric motives. A few shape 5 and 5b bowls have panels with fox designs. Not infrequently, a shorter panel with one of two traditional geometric designs, either a vertical ball-band pattern or diagonal step dividers, is inserted to fill extra spaces in the representational design bands. The only traditional designs on base-angled bowls without panel subdivisions (bowl shape 5) are the pattern of large diamonds, alone or in alternation with angular figure-eight designs, and derivatives of the "opposing hook" design of Phase 6 (fig. 37, k, l).

Several new geometric designs that appear in Phase 7 are in very common use. The most common new Phase 7 designs are variations on a single-step pattern arranged in narrow bands, found predominantly on spheroid and horizontally ellipsoid bowls (shapes 12 and 19), on dippers, on necked bottles, and in chin-whisker bands on front-face feline heads in bottle design, that is, wherever narrow design bands are used. Continuous mouth-band designs, which lend themselves well to adaptation as narrow-band decoration, are also used as narrow-band designs on shape 12 and 19 bowls. The only representational design that is used in narrow bands is the gliding bird, which is also especially adapted for that use. One dipper design consists of a narrow band with panel subdivisions that contain the upper half of front-face feline heads, a unique adaptation. Otherwise, narrow bands do not have panel subdivisions except when gliding-bird designs are used.

FRONT-FACE FELINE HEADS

Patterning.-Although the patterning of feline heads continues to be essentially the same on base-angled bowls and spouted bottles, there are greater differences between bowl and bottle feline heads than before because of the increasing divergence in the shape and size of the panel; bowl panels continue to be about the same size as before or smaller (fig. 37, a; pl. 6, a), whereas bottle feline panels increase considerably in size over a curved surface (figs. 5, a, b; (6, a). As a result, bowl feline heads tend to have more conservative patterning features than those of bottle felines. All the bottle feline faces and most of those on bowls now have a separate horizontal division band between eyes and mouth, a patterning derived from an advanced feature in Phase 6. However, three of the bowl faces lack the division band (fig. 37, a), a conservative feature in the bowl designs that is the consequence of the restricted design area. Eight of the spouted bottles have slender trapezoidal arms and hands branching at right angles from the central division band and framing the lower part of the face (fig. 6, a), a Phase 7 innovation confined to bottle designs which is an analogy of the treatment of human-head bottles in Phase 6.

All but one of the feline heads on bottles now have a mouth which extends all the way to the sides of the panel, but only six of the ten bowls with front-face feline-head designs do. Of the other four bowls, three have a conservative patterning as in Phase 6, in which the mouth does not reach the sides of the panel, and in which the spaces between the mouth and sides of the panel and between the mouth and bottom of the panel are of even standard-band width and form a continuous three-quarter frame around the lower part of the mouth. The same effect is achieved on one bottle feline by means of a Phase 7 innovation, a white horizontal band of standard width adjoining the lower lip, which may be called a chin band and which forms a continuous frame with the spaces at the sides of the mouth. The new chin band is used on two thirds of the bottle feline heads in the sample, but in all but the specimen just referred to it accompanies a mouth which crosses the entire panel and lacks lip ends, the resulting effect being simply the proliferation of the horizontal banding of the lower half of the design panel into six white (or yellow) and red bands. This increase in the number of horizontal bands is part of the Phase 7 trend toward increased geometricizing of representational features. The greatly increased use of open lip ends is also part of this trend. However, four-sided lip frames continue in use on about a third of the bottles and about half of the bowls.

There are two additional Phase 7 innovations in the patterning of the design panel which reflect an adjustment to space problems. In six of the bowl panels, the lower lip ends at the base angle of the bowl, without the traditional band frame; and on two bottles, where the size of the panel area is reduced because of shape or patterning peculiarities, the mouth is left out altogether.

Nose.—Phase 7 marks the introduction of drawn rather than modeled noses on front-face feline heads in the upper-valley substyle (at Callango they are found in Phase 6). Modeled button noses survive on only one bowl and three bottle felines in the sample. Generally, the nose is indicated by a parabolic arch (figs. 5, b; 6, a; 37, a; pl. 6, a), as on a few of the most advanced Callango Basin bowls in Phase 6. Nostrils are indicated most commonly by one or two short lines with dot finials perpendicular to the base (fig. 6, a; pl. 6, a), but it is also common to find three or four "nostril" lines perpendicular to the base or the tip or in a ladder-design alternation (figs. 5, b; 37, a), all Phase 7 innovations. The Phase 6 use of a vertical dividing line to halve the nose is virtually out of style and survives only on one bowl. On four Phase 7 bottles the nose is only a straight bar between the brows (fig. 5, a), also an old surviving feature. In the more advanced Phase 7 specimens, the brow line forms a separate arch over the nose (figs. 5, b; 6, a; 37, a; pl. 6, a) a trait which is also found as an advanced feature on some Phase 6 bowls of the Callango Basin substyle. In the more conservative treatment, which also survives in Phase 7, the brows are separated by the nose, with or without a horizontal bridge line above the nose (fig. 5, a), or the brows meet over the nose in a point.

Front-face feline heads: eyes and brows.—By far the majority of Phase 7 feline heads have eyes and brows like the rare advanced form on Phase 6 bowls of the Callango Basin substyle. That is, the pupil is outlined by a parabolic or semicircular arch with the brow arch above it and with a straight, horizontal base which is continuous with the base of the brow (figs. 5, a, b; 6, a; pl. 6, a). What was once the white of the eye forms a separate horizontal band of standard width below the pupil and base of the brow end, to the sides of the panel. The "eye" band, always white (or yellow?) is the topmost band of the patterning of horizontal banding which decorates the lower part of the feline face, the rest of the bands being the division band (also white), top lip band (red),

tooth band (white), lower lip band (red), and chin band (white), in that order. Pupils with definitely curved bases survive on only two vessels (one bottle and one bowl), and pupils with slightly irregular, partly curved bases survive on two other vessels (fig. 37, a). Another old feature that survives on two bowls is a straight horizontal eye band which is confined to the interior of the eye arch and does not pass below the brow ends. Owing to the enlargement of the design panel on spouted bottles, the bases of the brow ends, together with the rest of the face banding, are very much elongated toward the side. This is not true of bowl designs.

Brow ends.—The great majority of brow ends terminate in rectangular loops with open centers and without dot fillers (figs. 5, a; 6, a; 37, a), a form that is also popular in Phase 6. The more conservative Phase 6 brow-tip ornaments, consisting of recurved rays, are rare, there being only two examples of them in the Phase 7 sample. One of the Phase 7 bottles in the sample has a brow with a triangular loop end (fig. 5, b), and two of the bowls have brow-tip ornaments consisting of a closed rectangular block with a short perpendicular filler line (pl. 6, a), both forms that are also found as rare advanced variants in Phase 6 of the Callango Basin substyle. In addition there is one new form in the Phase 7 sample which is not present in that of Phase 6, a closed triangular end consisting of a high narrow triangle with a short perpendicular line in the center.

Ornaments above the nose.—There is an increased divergence between ornaments above the nose in bowl designs and those characteristic of bottle designs; the bowl designs retaining the most conservative forms, whereas the bottle designs undergo alterations as a result of the increased space above the nose and brows on bottle feline panels. One innovation is the greatly increased length of the ornaments on most of the bottle felines (fig. 5, a, b). All bottle feline heads have nose ornaments, but only half of the bowl felines do. The principal innovation in the nose ornaments of bottle felines, aside from the length, is the insertion of a ladder design between the two recurved rays (fig. 5, a). About two thirds of the bottle felines have this feature. In other respects the nose ornaments are the same as before, with two recurved ray tips, which are almost always rectangular ones (figs. 5, a, b; 37, a), although two have curved sides (fig. 6, a). There are two Phase 7 bottle designs on which the nose ornaments are also conservative in being short, as in Phase 6 (fig. 6, a).

On bowls the majority of the feline faces that have ornaments above the nose have straight double or triple rays without recurved tips (pl. 6, a), and none have ladder designs in the center. In other words, they are unchanged from Phase 6.

Fangs.—Most Phase 7 fangs resemble the most advanced forms of Phase 6 fangs, and there is an increased trend towards parallel-sided ones. The majority of Phase 7 fangs taper slightly less than most Phase 6 fangs, to the point where some may be called almost vertical parallel sided, except for slight irregularities, such as one tapering side or an imperceptibly curved line (figs. 5, a, b; 6, a). Curved lines are virtually out of style, and there are no fangs in which all sides are curvilinear. There is only one Phase 7 vessel, a bottle, on which one

pair of fangs is definitely vertical, straight, and parallel sided (fig. 5, a), a feature that is new in Phase 7. Straight parallel-sided fangs that slant across the mouth at an angle are found on five of the Phase 7 vessels, two in association with a slightly tapering-sided second set of fangs. This is a feature which is introduced as a rare innovation in Phase 6 of the Callango Basin substyle and which evidently gains popularity in Phase 7. There are two examples of straight-sided fangs with strongly tapering, nearly triangular sides, the survival of an old feature (fig. 37, a).

Although the majority of the bottle felines have two sets of fangs, there are two especially wide-paneled bottle designs in which the mouth has three sets, thus converting it into a kind of continuous mouth band design. This multiplication of fangs is a Phase 7 innovation.

Side whiskers.—Side whiskers are found on only one of the feline-head designs, in a bowl panel. The design differs from those found in Phase 6 in consisting of two L-shaped bars instead of straight lines or bands. This innovation is of importance because it marks the beginning of a feature which increases considerably in popularity in the succeeding two phases.

FILLER DESIGNS ON BOTTLE FELINES

The traditional filler designs used for the spaces above the brows and below the mouth in bottle feline panels are amplified in Phase 7 as an adjustment to the larger design area, and the process of conversion of representational into purely ornamental abstract features goes considerably farther.

The chin whiskers below the mouth or below the new chin band are considerably amplified. In the most common Phase 7 variant two elaborated rectangular eye designs are used instead of one, outlined by only very slightly trapezoidal bands (fig. 5, a). The spaces between the elaborated eyes in the center and the panel border at the sides are no longer decorated with only a simple circle and dot, but with a horizontal ball band consisting of one, two, or three dotless circles (fig. 6, a), with two circles separated by an incised band in fields of contrasting colors (fig. 5, b), with a modified ladder design (fig. 5, a), or with an additional elaborated eye design which is adjusted to the slightly irregular outline of the space. A unique conservative Phase 7 specimen has a single eye in the center, as before, but the side spaces are ornamented with ladder designs, following the new patterning. The variants just named are the most conservative ones. A more advanced form, nearly as common, consists of a narrow design band which crosses the entire panel below the mouth or chin band and is decorated with variants of the new narrow-band step designs (fig. 37, b, c, e, h). On one bottle, the chin-whisker band is decorated with a band resembling the headress on human-head bottles, with rectangular subdivisions of a narrow band containing short perpendicular lines with dot finials. The latter design is the most advanced feature in chin whiskers of Phase 7, but it is not continuous and is terminated on each side by diagonal outlines, a conservative feature not found in the succeeding phase.

The ornamentation above the eye brows is also considerably elaborated. In
the most conservative innovations, there are from six to fifteen circle fillers on each side of the nose ornament, considerably more than in Phase 6, and they are scattered over the space and not lined up in a single row (fig. 5, a). Like all Phase 7 circle fillers, they lack dot centers. In a more advanced variant, the circle fillers are lined up in from two to four vertical or horizontal ball bands with from two to five circles in each band, and these ball bands are used to divide contrasting color areas (fig. 5, b). About one third of the bottle felines have an additional new adornment above the brows, consisting of a ray projection from the brow on each side of the nose ornament (figs. 5, b; 6, a). These ray projections resemble the ornament above the nose, but they are longer and more often consist of plain three-band rays without recurved tips (fig. 6, a). These projections also separate contrasting color areas, and ball bands and loose circles fill the intervening spaces as on the other specimens.

PROFILE FELINES

Heads.—The only two survivals of profile feline heads in the Phase 7 sample are both found on the circular ends of barrel-shaped necked bottles. The design is evidently nearly out of style; it is not found in succeeding phases. The Phase 7 variants are distinguished from those of Phase 6 in the general treatment of features such as fangs, circle fillers, brow ornaments, and other details, which they share with front-face feline heads of this phase. Like the Phase 6 profile head from Teojate, the Phase 7 heads lack the paw in front of the face, a peculiarity which distinguishes them from those of Callango.

Bodies .--- This design is used exclusively in design bands on base angled bowls of shape theme 5b (fig. 37, a; pl. 6, a). Only one rubbing and two photographs of feline bodies in the sample show the bodies sufficiently for comparative study. The main features which distinguish these specimens from profile feline bodies of Phase 6 concern the feline spots. On one specimen there is a horizontal line of nine spots, with a tenth spot above and outside the line (fig. 37, a), in contrast to the Phase 6 use of from four to six spots aligned in a single row. On this specimen the body is divided vertically into three color zones, alternating red and white, a feature that is also found on a few advanced specimens in Callango Basin Phase 6. A second specimen has an irregular scattering of body spots, not lined up in a single line (pl. 6, a). The specimen is also distinct in showing the legs bent at the knees with the lower parts projecting horizontally front and back, a feature adapted from fox designs (see below), and in having a concave curvature in the back, the hollow space being filled with a modified elaborated eye design. The third specimen is unique in having unusually high legs and being foreshortened, with only two spots on the body and one in the tail. The feline spots on all three specimens are of about the same size as in Phase 6 (i.e., 7-8 mm in diameter), but all lack central dots, like other Phase 7 circles. The increased number of spots on one of the specimens and the irregularity of their distribution on all specimens are also general stylistic features of Phase 7 which the feline body designs share with other designs.

GLIDING BIRDS

There are sixteen designs of gliding birds in the sample; ten are derived from the clothespin bird of Phase 6 origin (fig. 37, i), and six belong to the older tradition of gliding birds with regular beaks (fig. 37, f). This represents a considerable increase in popularity of the clothespin bird in the upper-valley substyle.

The great majority of Phase 7 birds are different from any found in Phase 6, and most of them have much longer and narrower proportions. The innovations in body features of traditional and clothespin bird designs tend to converge in Phase 7, and the traditional distinctions between the two types are lessened. In Phase 7 the body features are converted into a pattern of horizontal parallel bands of approximately even width, in accordance with the general patterning trend of Phase 7. The trapezoidal tail sections and tapering wings characteristic of Phase 6 are virtually out of style and survive only on a few unusually conservative specimens. The most common new patterning involves a system of five paralled bands in which the central one, the core of the tail, is slightly broader than the other four, or even as much as twice as broad, the other four being bands of standard width (fig. 37, f, i). The two outermost bands at the top and bottom, respectively, represent the wings, and may or may not be segmented. On one very narrow design band the wings are omitted. The erstwhile tail outline band remains as a dividing band of standard width between wing and tail core, and has an innovating feature in the form of a rectangular or triangular recurved tip at the front, and sometimes the back, of the body. The effect of the recurved tip is achieved by making the incised line that divides the segmented wing band from the unsegmented body dividing band a floating one with free ends tipped with dot finials, causing the first, and sometimes also the last, segments of the wings to act as recurved tips. The end of the tail is segmented as before.

The vertical cross bar at the front end of the T-shaped body of traditional birds is generally omitted, in a transference from the tradition started in clothespin bird designs of Phase 6 (fig. 37, i), but in one specimen a narrow vertical T bar is inserted between the recurved ray "shoulders" and the beak rectangle, as a kind of double "shoulder," in a special combination of the traditional and the new (fig. 37, f). The rounded shoulders of the Phase 6 clothespin bird survive on only three specimens.

As we noted in the previous section, the beaks of Phase 6 gliding birds have curved outlines, and some of them are hooked downward. In Phase 7 the beaks of stylistically advanced gliding birds in the upper-valley sample have straight sides and are not hooked. The beaks are either triangular or trapezoidal in shape, the trapezoidal ones having sides that approach being parallel, like fangs in feline designs (fig. 37, f). Slightly more conservative beaks have a straight horizontal bottom outline and a slightly arched top outline. There is only one conservative Phase 7 bird with a beak with two arched outlines. Another Phase 7 innovation, found on several specimens, is the overlapping of the outlines of the beak and the rectangle enclosing it.

The beaks of clothespin-headed birds differ from the Phase 6 antecedent in being formed of parallel instead of converging bands, and in having, in addition to the traditional rounded forms, triangular recurved tips with straight diagonal sides which reach from the front panel border back to the circle representing the head (fig. 37, i). This beak form is a Phase 7 innovation which is adapted to the new stylistic trend of preference for straight-sided designs.

FOXES

Eight base-angled bowls in the sample have a new panel design, a profile animal which may represent a fox, to judge by the later derivatives of the figure (pl. 5, b). The body and head are articulated in a single panel, unlike the feline designs. The body is a slightly modified and abbreviated variant of the profile feline body, and the head has features of traditional bodiless profile heads. Both body and head are smaller than in the feline designs. The head is further distinguished in having an eye and brow of the framed rectangular eye tradition, the front of the brow end being elongated into a long snout with a recurved tip, features found in Phase 5 on part front-face and part profile heads with human and feline features. The pupils are either rectangular or trapezoidal and approximately as high as they are wide, characteristics which they share with Phase 6 pupils of the rectangular eye tradition. On five of the eight specimens the base line of the pupils overlaps the sides, and on one of these the base line has dot finials. Both overlapping base lines and dot finials are found as rare features in Phase 6 of the Callango Basin substyle. The tail of the fox design is distinguished from that on feline bodies in being longer, generally with a horizontal base line and a diagonal top and sometimes composed entirely of horizontal bands, like the tails of gliding birds. Like bird tails, the fox tails have recurved tips. The feet differ from traditional feline designs in extending horizontally toward the front and back, at right angles to the legs. Circle fillers in and around the body are a standard Phase 7 feature with the same appearance, size, and general distribution as in its other contexts. One specimen has a body marking consisting of a horizontal line with dot finials, a feature introduced as a rare space filler in Phase 6 and used for body spots on birds as well as in the fox design in Phase 7.

ABSTRACT AND GEOMETRIC DESIGNS

Of eighty-nine occurrences of abstract and geometric designs on all vessel categories definitely attributable to Phase 7, fifty-four are old traditional designs and thirty-five belong to various new categories. Of the fifty-four traditional designs, thirty-one are elaborated eyes, two elaborated hands, and three continuous mouth bands, figures adapted from representational features. The new designs are all purely geometric; they appear suddenly and are very popular. The abrupt popularity of the new designs is probably attributable to their specialized adaptation to the commonly used new narrow design bands on ellipsoid and spheroid bowls, on necked bottles, and in chin-whisker bands of feline heads on bird-spout bottles.

Thirty-one designs in the sample which were available for detailed study belong to the traditional elaborated eye designs of the rectangular eye tradition. They are used in the same contexts as in Phase 6, that is, in panels of bowl designs (fig. 37, d), the body of hawk-head bottles (Sawyer, 1961, fig. 4, o), chin whiskers of front-face feline designs on spouted bottles (figs. 5, a, b; 6, a), the space between the legs of profile feline bodies (fig. 37, a) and some of the new fox bodies, as unit designs on necked bottles, and in the base of one of the elaborated hand designs. The designs are virtually unchanged from their Phase 6 antecedents, but there are some modifications, mainly in the execution of the pupil. Twenty-five of the pupils have base lines that overlap the sides and, of these, seven have dot finials. In contrast, pupils with overlapping base lines are very scarce in Phase 6, and only a unique Callango design in the base of an elaborated hand has a base line with dot finials. The majority of the Phase 7 pupils are approximately as high as they are wide, or only slightly wider, a feature that appears first in Phase 4, but twelve of the Phase 7 pupils are wide and narrow rectangles or trapezoids of the older tradition, most of them without overlapping base lines (fig. 37, a, d). Rectangular and trapezoidal pupils are found in about the same frequency. Eyes with wide, narrow pupils are found predominantly in designs on necked bottles, while eyes in chin whiskers and between the legs of profile bodies have predominantly smaller pupils with approximately even sides. Three of the eyes have frames with tapering side arms, a feature surviving from Phase 6, but the outlines are straight rather than curved, in accordance with general Phase 7 techniques.

Rectangular "keyhole" designs survive from the preceding phase as occasional substitutes for the older elaborated eyes as body designs on hawk-head bottles. They are distinguished from the more common eye designs in having two-sided (L-shaped) interlocking frames, and traditionally a band center with short perpendicular line (the "keyhole"), in place of the eye and pupil. However, some Phase 7 designs with eye centers have L-shaped frames, a combination not found in the Phase 6 sample. The slotlike cores of the keyhole designs are used between the legs of some of the profile animal bodies in place of the more common elaborated eye, an adjustment to high, narrow spaces (pl. 6, a).

Lenticular eyes in vertical position continue to be used as rare substitutes for other nonrepresentational eye forms in the body of hawk-head bottles, a feature that survives from Phase 6.

The two elaborated hand designs in the sample are virtually unchanged from their Phase 6 antecedents. Both are found in panels of base-angled bowls, as before. Their presence in the upper-valley substyle is of interest, because the design is present in Phase 6 only in the Callango Basin sample.

Besides the continuous mouth band and the elaborated eye and hand, other traditional geometric designs include ball-band designs, rectangular panels with diagonal step designs and circle fillers in the opposing corners (fig. 37, j), a new variant of the diagonal steps in the form of a "step-block" design, the diamond

and figure-eight band, and a narrow panel with a horizontal serrated band. The majority of the traditional designs are used in traditional broad design bands on base-angled bowls, but the continuous mouth band is converted into a narrow-band design on ellipsoid bowls, and the use of the ball-band design is extended to decorate front-face feline designs on spouted bottles (fig. 5, b).

In traditional panels on base-angled bowls ball-band designs are always used in vertical columns, as before, but the circles always lack dot centers, in contrast to Phase 6. From one to five columns are used in each panel, and two or three circles make up each column, as before. However, on one bowl ball-band columns are separated by vertical incised lines into contrasting color areas which form a continuous design, a Phase 7 patterning innovation.

In diagonal step designs, three parallel step columns cross the center of a rectangular panel diagonally, as in the advanced Phase 6 variants, but the circle fillers in the opposing corners lack central dots, a Phase 7 innovation (fig. 37, j). On some specimens three circles fill each corner instead of one or two. An additional modification of this design on two of the Phase 7 bowls is that only two diagonal step columns are used in each panel, which are made to form step blocks with the vertical panel borders on each side, leaving a space between the step block and the panel border at the top and bottom of the panel.

Diamond and figure-eight bands and the horizontal serrated band are the same as in Phase 6 (fig. 35, d, e), except for general stylistic modifications such as narrower patterning and more careful execution in some cases.

A rare broad-band design in Phase 7 has the appearance of a large, irregular diagonal twined fret (fig. 37, k, l). This design is a modified derivative of the opposing hook design of Phase 6 (cf. fig. 36, k). There are two Phase 7 variants derived from the Phase 6 design. In the more conservative innovation, the trapezoidally converging frame bands of Phase 6 are transformed into adjoining triangles which form a continuous zigzag band, and the arms of the opposing hooks appear as a zigzagging counterband in units that are separated by the sections of the principal band and appear to pass under it (fig. 37, l). In the more advanced Phase 7 variant, this opposing band arrangement is modified into a diagonal twined-fret pattern composed of Z-shaped links (fig. 37, k). Both variants of the broad-band twined-fret designs of Phase 7 betray their derivation from the opposing hook design of Phase 6 by the fact that only some of the opposing links of the fret band meet on the same plane, whereas the rest of the links are placed in slightly offset positions, resembling the Phase 6 hooks in this respect.

Another band design consisting of continuous, horizontally stacked chevrons, an example of which is found in Phase 6 as a body design on a hawk bottle, continues in use in Phase 7, as a design in the body of hawk bottles as well as in occasional different contexts (cf. Rosselló, 1960, Lám. IX, b).

The great majority of the new geometric designs are narrow-band designs consisting of single adjoining steps arranged in varying patterns (fig. 37, b, c, e, g, h). The step designs are outlined with incised lines, and set off from each other by color zones in which the usual alternation consists of red steps separated by one or two adjoining white steps. The simplest variant of the step patterns consists of parallel, horizontal, single-step outlines drawn in a continuous series, in which the horizontal narrow-band borders form part of the design (fig. 37, b). The symmetry of this design is one of simple translation (cf. Shepard, 1956, p. 269, fig. 37-1). The horizontal single-step design is also found in the Chavín style (Tello, 1960, fig. 60), one of the indications that stylistic exchanges between the Chavín and Ocucaje styles continued to take place. An alternative Phase 7 step design is one in which the step outlines are drawn diagonally across the band, so that the color zones appear in the form of interlocking figures with triangular ends in a pattern of bifold rotational symmetry (fig. 37, h; cf. Shepard, 1956, p. 269, fig. 37-4). The latter design is a special adaptation which distinguishes Phase 7 pottery of the upper Ica Valley. On these designs the triangular spaces are usually further decorated with punched-dot fillers, as part of a general trend toward the increased use of such dot fillers in Phase 7. The simple interlocking step designs, both horizontal and diagonal ones, are reserved for the narrower bands which are 1.5 cm or less in width. In bands that are between 1.5 and 2 cm wide, both the vertical and diagonal zoned step units are separated by square spaces which add the extra 5 to 7 mm width in the center of the design band (fig. 37, c, e). These central spaces are also decorated with punched dots. In another variant, the diagonal zoned steps are amplified into a row of interlocking Z-shaped figures (fig. 37, g).

The horizontal-step design band with the band-wide spaces in the center gives the appearance of a rectangular twined-fret band (fig. 37, c). The diagonal variants of the step patterns do not have this appearance because of their position, which creates triangular zone spaces between the incised step outlines and the border of the band, instead of horizontal-band sections of even width (fig. 37, e).

A rarer new Phase 7 design consists of outlined crosses aligned in a horizontal row in narrow design bands. Other geometric designs are very rare, and appear to be unique variations of common standardized motives.

THE CALLANGO BASIN SUBSTYLE

There are no vessels or fragments of Callango Basin pottery in the present collections that definitely can be assigned to Phase 7, but there are three bowl fragments from Callango in the Carlos Soldi collection at Ocucaje and fragments of two bowls in the Lorenzo Rosselló collection in Lima that may belong to this phase. The fragments in the Soldi collection are from a site on the Pampa de las Animas in Callango which otherwise produced only Phase 6 and Phase 8 pottery. Two of the bowl fragments show sections of profile feline bodies in which the stamped circle feline markings are converted into a horizontal ball-band which divides color zones, a feature paralleling the general trend of stylistic innovations in Phase 7 of the upper-valley substyle. Another bowl fragment in the Soldi collection has a step-block design, a figure which is not present in the Phase 6 sample but which appears in the upper valley in Phase 7. It is possible, of course, that these fragments simply represent specially advanced features in Phase 6 of the Callango Basin substyle which do not appear in the upper valley until Phase 7, but there is also the possibility that they are contemporaneous with Phase 7 in the upper valley.

A similar problem of associations is presented by the bowl fragments from Callango in the Rosselló collection. On one bowl (Rosselló, 1960, Lám. X, a-c) the profile feline body has some double-circle spots, as well as an irregular scattering of simple ones without dot centers. Double-circle spots on feline bodies are a feature that otherwise does not appear in the Ocucaje style until Phase 8 of the Callango Basin substyle, although there is an antecedent in the double-circle body markings of the Phase 5 amphisbaena from Ocucaje. The irregular scattering of simple stamped circles without dot centers as feline body markings is a feature which is not known in Phase 6 vessels of the upper-valley substyle or the Callango Basin, but which appears in Phase 7 of the upper-valley substyle. The bowl in the Rosselló collection also has a narrow-band design consisting of a horizontal single-step pattern, another feature which does not appear before Phase 7 in the upper-valley substyle. On the other hand, panel-dividing bands and a gliding bird design on the same bowl are like conservative Phase 6 forms from the Callango Basin which are not represented in Phase 7 of the upper valley. In fact, one of the panel-dividing bands, a conservative ladder design consisting of bars (Rosselló, 1960, Lám. X, c) is out of style at least as early as Phase 6 in the uppervalley substyle, as is the twined-fret panel divider on another section of the same bowl (Rosselló, 1960, Lám. X, a). Both the gliding bird and panel-dividing bands therefore represent a traditionally conservative aspect of Callango Basin pottery compared to that of the upper valley. The second bowl fragment in the Rosselló collection (Rosselló, 1960, Lám. X, d) also has an irregular scattering of body markings, some with and some without dot centers, on a profile feline body. This fragment also has other features which would at best be unusually advanced in Callango Basin Phase 6.

The question of phase attribution for all these Callango fragments is between Phases 6 and 7, that is, whether they represent exceptionally advanced pieces contemporary with upper-valley Phase 6, or whether they are contemporary with upper-valley Phase 7 and include some unusually conservative features for that phase compared with the upper-valley substyle. In view of the slight temporal differences in the survival of some of the traditional features and the appearance of some of the new ones between the respective substyles of the upper and lower valley, there is a reasonable doubt about the specific attribution of these Callango pieces. However, since a number of them have features which belong to a general stylistic movement not otherwise known from Phase 6 at Callango or in the upper valley, but which are characteristic of Phase 7 in the upper valley, it is most likely that these Callango fragments belong to Phase 7 rather than to the earlier phase.

As we noted in the previous section, the beaks of Phase 6 gliding birds have curved outlines, and some of them are hooked downward. In Phase 7 the beaks of gliding birds in the upper-valley sample have straight sides and are not hooked. The beaks are either triangular or trapezoidal in shape, the trapezoidal ones having sides which approach being parallel, like fangs in feline designs.

PHASE 8

REGIONAL DIVERSIFICATION in the Ocucaje tradition reaches its peak in Phase 8, in which four different regional substyles can be recognized in the Ica Valley. The upper-valley substyle and the Callango Basin substyle continue to be distinct, being increasingly differentiated derivatives from their respective local Phase 6 and Phase 7 antecedents. Pottery of the upper-valley substyle is found in the Chacama Valley between Huamaní and the narrows at El Cerrillo, as well as along the receding foothills below El Cerrillo at Cordero Alto. In addition, there is for the first time a good pottery sample from the Ocucaje Basin, which shows this pottery to be another very distinctive local substyle. Phase 8 pottery of the middle Ica Valley between the modern city of Ica and the Ocucaje Basin is also distinct, representing a selection of features that also occur in the other substyles but are here combined in a different way.

The Callango Basin substyle is for the present indistinguishable from some ten vessels that have been found in various parts of the Nasca drainage, an indication that Callango Basin pottery of Phase 8 may be strongly influenced by the contemporary style phase at Nasca. The upper Ica Valley substyle of Phase 8, on the other hand, has a number of close resemblances to pottery found in the Pisco and Chincha valleys (cf. Menzel, MS, pp. 92-96, 98-101). The Ocucaje Basin substyle is more closely related to that of Callango than to any of the other Ica substyles, but it has a great many entirely original features which are not known from elsewhere. The Ocucaje Basin substyle of Phase 8 therefore appears to be the most original innovating style in the Ica Valley at this time. Its originality is the more striking, because it contrasts with the conservative character of the Callango Basin and upper Ica Valley substyles. In a number of respects the Callango Basin and upper-valley substyles are more similar to each other than either of them is to the Phase 8 substyle of the Ocucaje Basin. Furthermore, Ocucaje Basin Phase 8 pottery is the only one of the four Ocucaje substyles in which the distinguishing features appear to be confined to the Ica Valley, making Phase 8 of the Ocucaje Basin a truly native style of Ica.

In the Callango Basin substyle of Phase 8 there reappear a number of features that are characteristic of the earlier part of the Ocucaje tradition, most of them having gone out of style in the Ica Valley during Phase 4 or Phase 5. These features include smoked carbon-black surfaces on some vessels (in Phase 8 on bowls rather than bottles), incised unpainted designs on fancy ware, painted unincised line designs, the guilloche, stamped circle-and-dot designs on unpainted (or plain red-slipped) surfaces, and a bodiless front-face human-head design used in rectangular bowl design panels. All these features are typical of the Callango Basin substyle. Most of them also appear occasionally in the higher parts of the Ica Valley, but more rarely, their relative rarity increasing with the distance from the Callango Basin. This pattern of distribution indicates that in other parts of the Ica Valley these features represent Callango Basin influence rather than being of local origin there. Some of the Callango Basin features are not excessively rare elsewhere (especially the unpainted stamped circle designs found on grater bowls), whereas others are rare and appear in distinctive patterns that show them to be local imitations of the Callango Basin substyle.

At present there is not sufficient evidence to explain the reappearance of the older features in Phase 8 of the Callango Basin substyle. In view of the close relationship between Phase 8 pottery from Callango and similar pottery from the Nasca drainage, however, it is possible that what appear to be archaizing features may actually represent influences from the Nasca drainage, where these older features of the Paracas tradition could have been preserved longer than at Ica.

THE SAMPLE

There are three hundred seventy-one whole vessels in the Phase 8 sample, thirtysix of them from six legitimately excavated and documented burials, and ten vessels excavated by professional pot-hunters but purported to have burial associations. One hundred thirteen vessels in the sample are from the site of Teojate. all but six of them excavated under the direction of Pablo Soldi. Fifty-seven of these are in the Nathan Cummings collection, one is in the Museum of the American Indian (Cat. No. 22/8748), and fifty-five are in the Truel collection of Ocucaje. The rest of the vessels are from the lower Ica Valley, most of them from the Callango Basin (191 vessels) and the Ocucaje Basin and vicinity (67 vessels). One hundred thirty-nine of the vessels from Callango are in the Gonzalo del Solar collection of Lima, 28 are in the Nathan Cummings collection, and 24 are in the Carlos Soldi collection of Ocucaje. According to Rosselló, the Phase 8 vessels in the del Solar collection are reported to be from the area of Tomaluz in the Callango Basin (Rosselló, 1960, legends to Láms. I; II; V, a, b; VII, a). The Carlos Soldi collection specimens are known to be from the Pampa de las Animas, on the east side of the Ica River from three to eight kilometers south of the hacienda houses of Callango. Twenty-six of the unassociated vessels from Ocucaje are in the Truel collection, 11 are in the Nathan Cummings collection, and one is in the private collection of Pablo Soldi. The vessels with burial associations are in the Aldo Rubini collection of Ocucaje and the Columbia University collection in New York. There are also five Phase 8 vessels without provenience in the Callango and Ocucaje basin substyles at the Museo Regional de Ica.

In addition to the vessels definitely assigned to Phase 8, there are twenty-five vessels in the sample which belong either to Phase 8 or to a transition between Phases 7 and 8, eleven vessels in the Nathan Cummings collection purported to be from a grave lot from Ocucaje which probably belong to a phase transitional between Phases 8 and 9, and fourteen vessels from Teojate which are either advanced types in Phase 8 or conservative types in Phase 9.

Of the one hundred thirteen Teojate vessels definitely assigned to Phase 8, thirty-one are spouted bottles, two are necked bottles, seventy-five are bowls, two are graters, and three are spittoonlike bowls with broad, widely flaring collars. Not included in the count given above are two necked bottles which belong to the category of utility ware. In the Callango Basin sample there are fourteen spouted bottles, twenty necked bottles and jars, two collared jars, one handled jug, seventy bowls, eighty graters, three cups and one cooking olla, in addition to the fragments from surface collections. In the sample from Ocucaje and vicinity there are sixteen spouted bottles, nine necked bottles or jars, one collared jar, four handled jugs, one ocarina, three cooking ollas, thirty-two bowls, and an urn fragment. There are also fragments from Phase 8 refuse sites in the middle Ica Valley. Although the great majority of whole vessels in the various collections belong to the finest decorated ware, the contents of the documented burials and the collections of fragmentary pottery from sites in the middle and lower valley furnish supplementary evidence for the associated utility wares and the less elaborately decorated pottery, which are the most common vessel types.

Published illustrations of Phase 8 vessels in the upper-valley substyle include six vessels from a burial from Teojate (Strong, 1957, fig. 3, A-E), four vessels from Teojate in the Truel collection (ibid., fig. 3, F, G; Soldi, 1956, bottom row three last vessels on right), and two vessels in the Nathan Cummings collection (Sawyer, 1961, fig. 4, h, i). Published illustrations of Phase 8 vessels in the Ocucaje Basin substyle include five vessels from the Truel collection (Kroeber, 1944, pl. 13, D, F, G; Soldi, 1956, center row fourth figure from left, bottom row first and fifth figures from left; Tello, 1959, figs. 5, 6). In addition, illustrations of a very interesting pyroengraved gourd from Ocucaje with a Phase 8 design, also in the Truel collection, have been published by Tello (1959, figs. 31, 33) and Rowe (1962b, fig. 18). Illustrations of Phase 8 vessels or of designs on Phase 8 vessels from the Callango Basin have been published by Rosselló (1960, Láms. II; V, a, b; VI, a, b; VII, a) and by Amano (1961, fig. 9). Rosselló has also published the illustration of a very interesting soft stone tablet engraved with a number of Phase 8 design figures of the Callango Basin substyle (Rosselló, 1960, Lám. I). This specimen appears to have been a sampler of some kind. A bowl from the Pampa de Socos in the Nasca drainage, illustrated by Tello (1959, figs. 1, 2), is indistinguishable from Phase 8 specimens which have been found in the Callango Basin at Ica.

EVIDENCE OF ASSOCIATIONS, PROVENIENCE, AND STRATIGRAPHY

The principal evidence of burial and site associations concerns the pottery of the middle and lower valley, but the only published information on burial associations and the only evidence of stratigraphic superposition involving Phase 8 pottery comes from the upper valley. The only reliably documented burial from the upper valley was excavated at the site of Teojate (i.e., "Juan Pablo") by the Columbia University Expedition of 1952 (Strong, 1957, p. 11). The burial contained ten vessels, six of which have been illustrated (*ibid.*, fig. 3, A-E). The stratigraphic evidence comes from the site of Cerrillos (Wallace, 1962; cf. section on Phase 3). At this site, investigations by Rowe and Menzel of exposed strata on the slopes of the hill, and subsequent excavations by Dwight T. Wallace, revealed a mixture of Phase 5, Phase 7, Phase 8, and Phase 9 pottery in the upper levels, isolated from Phase 3 pottery in the lower levels of the refuse by a thick clay floor. The value of this stratification lies in the fact that it furnishes evidence independent of the seriation that Phase 3 precedes Phases 5 to 9 in time, thus verifying in a different way the direction of the process of stylistic change in the Ocucaje tradition. Surface surveys in the upper valley also revealed other sites with Phase 8 pottery, notably on the hill slopes bordering the valley east of the Hacienda Cordero Alto just below Cerrillos. However, no site has yet been found in the upper valley at which Phase 8 pottery is isolated physically in the surface collections or excavation strata from other similar, temporally close pottery phases.

Evidence of associations for the lower valley is much more detailed and abundant. Aldo Rubini of the Hacienda Ocucaje has detailed notes on five Phase 8 burials. Three of these, together containing eighteen vessels, were excavated in the narrow Paraya sector just above the Ocucaje narrows, on the west side of the lower middle valley. One of the other burials is probably also from the Paraya sector (notes incomplete), and another one is from the Hacienda Ocucaje proper. There also is another whole vessel from a one-phase site (PV62-137) in the Paraya sector.

In site surveys in 1954, 1958, and 1959, Rowe, Dawson, and Menzel found four occupation sites in the lower and middle valley which contained Phase 8 refuse to the exclusion of other styles, and several other sites which contained Phase 8 refuse and refuse of one or more other phases that varied widely in style. When used together, both types of sites furnish evidence of associations by which Phase 8 pottery can be isolated effectively from other Ocucaje phases. One of the onephase sites (PV62-137) is a small refuse site located in the Paraya sector southwest of the hacienda houses of La Venta, on the lower slopes of the hills bordering the west side of the valley. A small stratigraphic excavation conducted here revealed only Phase 8 pottery throughout the approximately one-meter-thick refuse. Another small refuse and construction site on the left bank of the river between Santa Lucía and Hacienda Tronquitos, the Huaca Pantaleón (PV62-7), also contained only Phase 8 pottery. The richest site, in refuse and looted burials as well as in constructions, is an occupation site 1.5 kilometers long located by Dawson and Aldo Rubini on the Pampa de las Animas, Callango, approximately three kilometers southeast of the hacienda houses of Callango, and about one kilometer from the river on its left side (PV62-154). Abundant Phase 8 refuse covers the entire area of the site. Although various earlier and later pottery types appear in small amounts in certain spots, there are several sections of the site where thorough surveying turned up only Phase 8 pottery. There is a large fortified hilltop site several kilometers long containing Phase 8 pottery in great abundance which is located on the hills bordering the Ica Valley west of the Hacienda Santa Lucía.

TECHNOLOGY

There is a definite change in firing technique between Phases 7 and 8. The majority of Phase 8 fragments of decorated ware which could be examined for this purpose (mainly those of the upper-valley substyle) are noticeably harder than those of Phase 7 (Grades $4\frac{1}{2}-5\frac{1}{2}$ on the Mohs scale of hardness), and the gray,

pink, and orange shades of the paste are brighter. Most of the fragments have a gray core, sometimes a very clear gray unlike any found in Phase 7, and the outer shell is a dull to bright orange or pink. There are a few fragments which are bright orange or pink throughout, another Phase 8 innovation. There are also greater variations in the appearance of the unpainted surface of decorated vessels. Many vessels, especially those in the upper-valley substyle, have predominantly pink to orange surfaces which are only slightly mottled with gray, whereas others, notably in the lower-valley substyles, have dark mottled or charcoal-black surfaces on top of the orange-hued shell of the paste. In some vessels the charcoal black is a fugitive coating, evidently of an organic substance scorched into the surface, the same technique used in the immediately preceding phases, but on some vessels from the lower valley the black surface is smoked in, a feature which represents the reappearance of an old technique used in Phases 2, 3, and 4 of the Ocucaje style.⁴ However, while the innovating features predominate, there are some Phase 8 specimens which have a medium gray to pinkish surface and an evenly colored gray to pinkish paste which resembles that of Phase 7. The surface finish of the unpainted surfaces of Phase 8 pottery is much the same as in Phase 7, as is the temper. However, most Phase 8 vessels are somewhat thinner walled than those of Phase 7, the range being from 2 to 5 mm, with the majority varying between 3 and 4.5 mm in thickness. The thickness of the walls also varies on individual vessels.

THE UPPER-VALLEY SUBSTYLE

Vessel Shapes

TRADITIONAL TYPES

The great majority of vessel types in the sample are derived from Phase 7 antecedents, and includes bird-spout bottles, hawk-head bottles, human-head bottles, barrel-shaped necked bottles, decorated bowls, plain red-slipped bowls, and grater bowls. Dippers, dipper-shaped bowls, and whistling bottles are not found in the sample. Since the latter two types are also missing from the samples for the succeeding phases, these two are probably out of style by Phase 8. Decorated necked bottles are very scarce, in marked contrast to the Phase 7 sample, and the only forms identified as belonging definitely to Phase 8 are two barrel-shaped bottles, a rare type in Phase 7. A few other bottles which may belong to Phase 8 are plain-slipped ones, some of them with an over-all pattern of negative dots. It is possible that in Phase 8 necked bottles with simple shapes are no longer decorated with resin-painted designs.

NEW VESSEL TYPES AND GENERAL STYLISTIC INNOVATIONS

There are two new vessel types in Phase 8. One is a spouted bottle type which resembles the spouted bottles with human or hawk heads, but which has a modeled

⁴ It was not possible to make detailed examinations of many of the vessels with smoked surfaces, but at least one, not included in the sample because it is from Nasca, has a smoked black surface over a completely reduced, bright gray paste core, the first appearance of evenly reduced fired pottery in the Paracas tradition.

fox head instead. One vessel in this category is stylistically transitional between Phases 7 and 8, so that the type evidently first appears slightly before the beginning of Phase 8 proper. Its point of origin in the sequence, and its relative frequency in Phase 8, represent an increased interest in fox representations which is also manifested in Phase 8 bowl designs. The other new vessel type, evidently a rare one, is a spittoonlike bowl with a broad, straight, nearly horizontally flaring rim or "collar" and one vertical strap handle.

There is much greater diversity in shapes than in any of the preceding phases, a distinguishing mark of Phase 8. Bird-spout bottles, the most conservative Phase 8 vessel type, tend to be smaller and proportionately slightly lower and broader than in Phase 7, still in continuation of the old pattern sequence, but there is a much greater variety of proportions in other bottle types and in bowls; some bowls are shallower and wider than in Phase 7, but the majority are larger and deeper. Although both the spouted bottles and the bowls are derived from Phase 7 antecedents, there is a major resorting in the compositions of features in which, on the one hand, some derivatives of antecedent shape types divide to become two or more subtypes, and, on the other hand, derivatives of two different Phase 7 types tend sometimes to merge into a single new type. As a result, Phase 8 vessels, particularly the bowls, can no longer be classified strictly in terms of traditional categories, although they need to be referred to traditional types if the new ones are to be understood. In many of the bowl and bottle forms base angles tend to go out of style and are replaced by rounded low "hips" or higher "shoulders." There is also a trend toward deeper bottoms and higher base angles or hips in some bowl and bottle categories, and an opposite trend towards shallower, nearly flat bottoms among a few other bowl and bottle types.

SPOUTED BOTTLES IN GENERAL

Bird-spout bottles outnumber all other bottle types by a wide margin, there being twenty as against only two hawk-head bottles and two human-head bottles of the traditional types (figs. 7, a; 15, b, e; pl. 7, a). The new fox-head bottles are more popular than the older human- and hawk-headed ones, with six of them in the collection. Both the hawk-head and human-head bottles have bodies with complex contours (figs. 7, b; 15, g), and one of the bird-spout bottles does also, suggesting an increased use of this body form as well as an extension of it to the bird-spout bottle category. Four of the fox-head bottles also have this body type. None of the Teojate bottles have the enlarged body shape so common among hawk-head bottles of Phase 7. The use of this shape appears to have gone out of style, a development paralleling the greatly diminished use of the hawk-head bottles themselves.

TRADITIONAL SPOUTED BOTTLES

Both in total height and in body height Phase 8 shape 4 bird-spout bottles are like shape 4 bottles in Phase 7, but they are smaller and vary much more in contours, and some are proportionately broader than any Phase 7 specimens⁵ (figs.

 $^{^5}$ Two earlier bird-spout bottles which have comparably broad proportions are very advanced for Phase 7 and may be transitional between Phases 7 and 8.

7, a; 15, b, e; pl. 7, a). A few conservative Phase 8 body shapes are indistinguishable from the advanced Phase 7 forms. There are only four such conservatively shaped specimens which could definitely be assigned to Phase 8. They have a shallow-curved bottom with a base angle at 10–21 per cent of body height, a shoulder at 41–47 per cent of body height, and a height/diameter ratio of 54–61 per cent. The contours also resemble those of Phase 7 in the broad spheroid bottom and the nearly straight, or only slightly curved, flaring sides between the base angle and shoulder. There are a few other conservative variants which differ from Phase 7 bottles in having a virtually flat bottom. These latter vessels are for the most part stylistically transitional between Phases 7 and 8 in their decoration, and most of them may be slightly earlier than Phase 8 proper.

Other Phase 8 bottles differ more definitely from those of Phase 7. In one advanced form the bottom is deeper and often paraboloid rather than spheroid, the base angle being at 22–35 per cent of body height (fig. 15, b). The contours of the entire upper part of the body are ellipsoid or spheroid, differing from Phase 7 bottles in that the lower sides rise from the base angle in a smooth curve rather than a straight flare, thus forming a simple continuation at the base of the spheroid or ellipsoid top; the top curves in a comparatively shallow arch. The rest of the proportions are about the same as in the more conservative Phase 8 specimens, but one of the vessels has a height/diameter ratio of 65 per cent, showing the beginning of a reversal in the pattern sequence. Another shape variant, also comparatively common, has a conservatively shallow bottom and low base angle, but the top of the body is contoured like the more advanced Phase 8 variant with the deeper bottom. There are two even more advanced shape types which occur more rarely among bird-spout bottles. In one, the spheroid top of the vessel forms an even shallower, lower arch, without a shoulder, and the bottom tends to be deeper, so that the base angle at times may be nearly at middle height of the body (it varies between 22 per cent and nearly 50 per cent of body height). Finally, the most advanced form resembles this last type, but the base angle is rounded off into a prominent hip or shoulder just below middle height of the body (fig. 15, e). On the last two shape types, the raised "base angle" or "hip" tends to become a replacement for the erstwhile shoulder with the result that some of the vessels resemble complex bottles because of the high position of the hip and its nearly angular appearance, a process of convergence between the two shape categories that is also reflected in the design patterning on some of the specimens.

There is also greater variety in the shape of bodies with complex contours. Of the ten specimens in the sample, only one retains the earlier conservative shelf between the bowl-shaped bottom and arched top. It differs from the Phase 7 antecedents in having slightly concave "bowl" sides which flare more than in Phase 7 and in having a shallower arched top. Five other Phase 8 specimens resemble the advanced Phase 7 variants in lacking the shelf between bottom and top, but the sides of the bowl-shaped section flare a little more widely, and on four of the specimens the sides have a slight convex curve as well, in contrast to the Phase 7 vessels, which are straight sided. The four remaining specimens are considerably larger (as much as $17-17\frac{1}{2}$ cm high and $19-19\frac{1}{2}$ cm in diameter), the "bowl" sides are widely flaring and concavely curved, and the top arch of the body is very high (figs. 7, b; 15, g), all features which are not found in the Phase 7 sample. Altogether, complex Phase 8 bottles are much more variable in size and proportions, as well as in contours, than are those of Phase 7.

There are also some innovations in the shape of spouts and bridges. Some of the hollow spouts and bird-spout bases of Phase 8 are indistinguishable from Phase 7 ones (figs. 7, b; 15, g), but the majority differs from those of Phase 7 in having irregular, more slender and more variable contours, and in tapering less between the spout base and the bridge, to the point where some are tubular, or nearly so (figs. 7, a; 15, b, e; pl. 7, a). Although most bridges continue to be straight or only slightly arched, as in Phase 7, one specimen has a bridge with a pronounced arch, an innovation which represents influence from the lower-valley substyles. The great majority of the bird spouts differ from all but a few advanced Phase 7 specimens in lacking an incised line at the base of the head.

The modeled heads on the two human-head bottles belong to the knob-shaped tradition and resemble those of the preceding phases, except for being slightly taller and more slender (fig. 15, g). The eyes are the circular ones with straight-based eccentric pupils which originate in Phase 7, and the headdress is decorated only with stamped circles, the traditional head band apparently being in the process of going out of style. One of the heads on the hawk-head bottles is like Phase 7 hawk heads, except for being taller and more slender (fig. 7, b), but the other is unique in lacking a mouth line and in having stamped circle fillers on the lower part of the face, in a breakdown of the old tradition.

SPOUTED BOTTLES WITH FOX HEADS

The modeled fox heads which replace the hawk or human heads on six of the Phase 8 bottles consist of elongated conical knobs, longer and more slender than the other modeled heads. The head is represented as looking up, with the snout at the top and the under side of the pointed face towards the bridge and hollow spout (Sawyer, 1961, fig. 9, b). The features consist of eyes in the lenticular tradition, like feline eyes, which are drawn vertically on either side of the conical knob and end in recurved brow tips or open ends at the base. The eyes generally lack pupils, in contrast to feline eyes, but in one specimen pupils are indicated by floating filler lines with dot finials. At the top of the head the eyes are connected by a cross bar just below the snout. The snout is indicated either by a separate modeled knob, or simply by the tip of the conical head. One one specimen a lipless mouth showing tooth subdivisions crosses over the top of the knob below the snout. Most of the specimens have a small hole between the eyes.

The body shapes of the fox-head bottles tend to be more advanced than those of bird-spout bottles. Of two fox-head bottles with the shape 4 body form, one resembles the most advanced bird-spout shapes in having the former base angle transformed into a rounded, prominent shoulder just below middle height of the body. The design on this specimen is very advanced, a fact which suggests that the vessel may be transitional between Phases 8 and 9. The second of the two foxhead bottles has a more advanced shape than any of the bird-spout bottles in having a simple, nearly spherical body, the logical end of the process of change which leads to the disappearance of the shoulder and the raising and rounding of the base angle. In contrast to the other advanced body form, the design on this specimen belongs to the more conservative Phase 8 patterning, so there is no reason to assign the vessel to a point in the development later than Phase 8 proper. One fox-head bottle has a conservative body shape and a type of design patterning which marks it as stylistically transitional between Phases 7 and 8.

TRADITIONAL BOWLS

The majority of the Phase 8 bowl shapes in fancy ware belong to five shape categories, derived from three types of Phase 7 base-angled bowls (shapes 5, 5b, and 17), and from Phase 7 spheroid and ellipsoid bowls with simple contours (shapes 12 and 19). The derivatives from base-angled bowls are the more common (52 specimens). Shape 5b bowls are the most common, there being 37 in the sample (fig. 16, a-d). Shape 5b bowls of Phase 8 have an obtuse base angle or rounded hip and convex sides which are either slightly flaring, vertical, or slightly tapering. The convexity of the sides is always slight, but it varies somewhat from distinctly curved to nearly or partly straight. Most shape 5b bowls of Phase 8 are larger and proportionately deeper than shape 5b bowls of Phase 7, with both higher sides and a more deeply curved bottom. As a consequence of the deeper curvature of the bottom, the angle between bottom and sides is more obtuse, a feature which tends to transform the former base angle into a rounded hip. On the great majority of Phase 8 bowls an attempt is made to retain a slightly edged line of division on the outside, and sometimes on the inside as well, but there are 13 bowls on which this line is absent and the division between the bottom and side is a smooth curve (fig. 16, d). The term "hip" is reserved for this latter form, while the term "gambrel" is used for the wide-angled separations with edged lines of division which are indicated in the illustrations by a dotted line (fig. 16, a-c). The traditional sharply defined base angle accompanying shallowcurved bottoms is virtually out of style in this bowl category, but it still survives on three shape 5b bowls in the sample.

Shape 5b bowls vary from 14.7 cm to 21.8 cm in top diameter and 6 cm to 9.5 cm in height, and the majority are deeper than any Phase 7 bowls, with a range in height/diameter ratio between 35 and 44 per cent for the typical shape 5b vessels. There are, however, two shallower shape 5b bowls with Phase 8 designs but very conservative contours which have a height/diameter ratio of 29 and 30 per cent, respectively. In addition, a few especially advanced bowls with convex flaring sides are included in this group on which the angle between bottom and sides is almost gone, so that these specimens resemble the spheroid bowls with simple contours. They can be distinguished from the spheroid bowls proper by a slight gambrel between bottom and side which shows them to be variants of the derivatives of base-angled bowls. Bowls in this group have a slightly greater variation in proportions, with a height/diameter ratio ranging between 36 and 46 per cent.

Shape 17 bowls (fig. 16, e, f) are more common than in Phase 7, there being 16 in the sample. In Phase 8, shape 17 bowls are very similar to shape 5b bowls, being distinguished from the latter only by their more tapering and consistently tapering sides, by their generally greater depth, and by a tendency toward decoration with certain preferred designs (notably twined frets). The bowls in this group have a height/diameter ratio between 44 and 51 per cent. One of the bowls with this shape has a vertical collar, the continuation of a rare Phase 7 feature (shape 18).

In contrast to the shape 17 bowls (which resemble shape 5b bowls in Phase 8 more than those in Phase 7), shape 5 bowls are more distinct (fig. 15, f, h, i). There are 15 shape 5 bowls in the sample. They differ from shape 5b bowls in having flaring sides only, either straight or, rarely, very slightly concave, which usually flare more widely than shape 5b bowls. Shape 5 bowls also differ in that most of them have a very shallow, though curved, bottom, and all have a sharp base angle between bottom and side, both conservative features. Two bowls with more deeply curved, paraboloid bottoms represent Callango Basin influence.⁶ The Phase 7 bowls from which the Phase 8 shape 5 bowls are derived differ from the latter in more often having slightly convex and less widely flaring sides (cf. fig. 14, a, b). Six of the Phase 8 bowls are further distinct from their antecedents in having proportionately higher sides than any found in the preceding phase (fig. 15, h, i). The more conservatively proportioned Phase 8 bowls have a height/ diameter ratio varying between 31 and 37 per cent, and the more advanced, deeper ones have a height/diameter ratio varying between 40 and 46 per cent. In absolute measurements, the Phase 8 bowls vary between 14.7 cm and 18 cm in diameter and 4.6 cm and 7.8 cm in height.

Eleven of the Phase 8 bowls in the sample are derived from the horizontally ellipsoid bowls of Phase 7 (fig. 15, a, c; pl. 7, b; shape 19). They differ from the Phase 7 bowls in having composite rather than simple contours, in Shepard's terminology (cf. Shepard, 1956, fig. 23, column e). Unlike the simple geometric forms of Phase 7, which end approximately at the equator of the projected ellipsis, the sides of most of the Phase 8 bowls project vertically above the equator for a short distance. They also differ from their Phase 7 antecedents in having a shallower curved bottom and more abruptly upcurving sides. In general size and depth, however, shape 19 bowls of Phase 8 are within the range of their Phase 7 antecedents. They have a height/diameter ratio which varies between 27 and 36 per cent.

Seven of the Phase 8 bowls are derived from the simple spheroid bowls of Phase 7, but in Phase 8 they differ more from the ellipsoid bowls and form a more distinctive subtype (fig. 15, d; shape 12). Most of them are deeper than any of the ellipsoid bowls, with a height/diameter ratio between 38 and 39 per cent. Although three of these bowls have approximately the same shape as Phase 7 bowls, the rest are composite in the sense that only the lower half is spheroid whereas the upper part of the sides ends in a straight flare rather than a curved

⁶ One of the shape 5 bowls has very slightly convex sides. This combination is either unique or very rare.

projection of a sphere. This change is analogous to the one which affects shape 19 bowls.

Plain red-slipped inflected bowls with concave flaring sides are another Phase 8 bowl category derived from Phase 7 antecedents (shape 21; cf. Strong, 1957, fig. 3, C, E). The sample is not big enough to show to what extent the Phase 8 bowls differ from those of Phase 7, but one of the bowls illustrated by Strong lacks a base angle (*ibid.*, fig. 3, E), a general stylistic feature of Phase 8 which is not found on the red-slipped bowls assigned to Phase 7.

Some bowl rims and rim edges of Phase 8 bowls are unthinned and plain rounded, as in Phase 7, while others are thinned from the inside at the tip. The latter feature is a Phase 8 innovation.

A NEW BOWL TYPE

Three specimens from Teojate with Phase 8 designs are peculiar base-angled bowls having a rim or collar 4-5 cm wide with a nearly horizontal flare, and a vertical strap handle extending from the bottom of the horizontal rim to the lower part of the body. This spittoonlike vessel type is a Phase 8 innovation which is also found in Phase 9 in modified form.

GRATERS

One of the two graters in the Teojate sample definitely attributable to Phase 8 was found by the Columbia University Expedition in burial association (Strong, 1957, fig. 3, D). The illustrated specimen appears to be a bowl with simple contours not too different from the grater fragments probably attributable to Phase 7. An unassociated specimen in the Nathan Cummings collection resembles the one in the burial, but wedge-shaped sections of the incised center are patterned decoratively into simple contrasting line arrangements, a Phase 8 innovation. The incisions are very shallow and partly worn away.

BARREL-SHAPED NECKED BOTTLES

The two specimens in the sample, both in the Nathan Cummings collection, are assigned to Phase 8 on the basis of design and do not appear to differ from the Phase 7 bottles in shape.

Associations of Shapes and Designs bottles with bird spouts

Twelve of the bird-spout bottles assigned to Phase 8 continue to be decorated with front-face feline-head designs in the by now ancient tradition (fig. 7, a; Sawyer, 1961, fig. 4, h, i). The rest of the bird-spout bottles which are definitely attributable to Phase 8 or which probably belong to that phase are decorated with an over-all pattern of negative dots, including the area on the top of the bridge and the surface of the spouts; six of the latter bottles have in addition a painted design consisting of two narrow panels, one on each side of the bottle on the upper part of the body, parallel to the bridge (pl. 7, a; Strong, 1957, fig. 3, G). Each narrow panel is usually filled with a gliding bird design, but one contains a twined-fret band and another a horizontal single-step design, both Phase 7 "narrow-band" designs used in this new context through a process of analogy.

The area covered with design on bottles with front-face feline heads is even larger than in Phase 7, usually including the front three fourths of the vessel surface (fig. 7, a). There are only two specimens with very conservative patterning in which only half or slightly less than half of the bottle surface is covered with design.

SPOUTED BOTTLES WITH HUMAN HEADS

There is a new anthropomorphic body design used for human-head bottles, starting a new tradition and introducing a new interest in human-head bottles, which gains ground in succeeding phases (Soldi, 1956, bottom row, last on right). The new anthropomorphic design is a slender vertical full-bodied headless figure below the modeled head, which is placed in the center of a panel shaped like the traditional feline-head panels on bird-spout bottles, a new type of association. The design differs from the anthropomorphic body design on human-head bottles of Phase 6 in showing legs as well as arms, and in lacking nonrepresentational body features such as elaborated eyes or geometric bands. The body hugs the base of the modeled head with slender arms which extend upward on either side of the head toward the upper part of the vessel body. The legs are slender vertical bars or trapezoids with ankle bands and from one to three short perpendicular toe lines. The body is slender and contoured, painted red or brown, and covered with a great many small stamped circle fillers painted white or yellow. The space between the body and the panel border on either side is filled with elements like those in the "forehead" area of front-face feline designs, or with horizontal bands of geometric bowl designs. The rest of the decoration on human-head bottles follows the conventions that apply to all bottles with complex bodies (see below).

SPOUTED BOTTLES WITH HAWK HEADS

The traditional hawk-head bottle designs appear to be entirely out of style in the upper-valley substyle, and the only two remaining examples of the hawk-head bottle tradition in the sample are decorated with designs borrowed from other vessel types, one with a bird-spout bottle design (fig. 7, b), the other with a human-head bottle design (Soldi, 1956, bottom row, second from right), and both with additional designs appropriate to complex bottles.

SPOUTED BOTTLES WITH FOX HEADS

The majority of the fox-head bottles are decorated with the same new design pattern as human-head bottles, except for the substitution of a fox body for the human one (Sawyer, 1961, fig. 9, b). The fox body differs from the anthropomorphic one in being shown in top view, as if it were sprawling belly down, and in having the legs bent at an angle at the "knee," just as in the fox figures in bowl designs. On one fox-head bottle, the panel contains a front-face feline head instead. On the bottles with complex bodies, there are additional designs which follow their own conventions. One of the fox-head bottles is decorated exclusively with bowl designs, the most advanced form of a new patterning trend which is developed in the tradition of complex bottle shapes, and which is transferred to the more traditional bottle forms through a process of convergence in shape features (see above). The last specimen may be transitional between Phases 8 and 9.

SPOUTED BOTTLES WITH COMPLEX CONTOURS

There is only one complex bottle in the Phase 8 sample with the conservative Phase 7 patterning, in which the lower "bowl" portion is decorated with a traditional bowl band while the upper portion is decorated exclusively with a standard bottle design. This specimen is also unique in being a bird-spout bottle, and the conservatism of the patterning is probably the result of the greater conservatism of bird-spout bottles in general. Three other complex bottles in Phase 8, two with traditional human heads and one with a hawk head, have the advanced Phase 7 patterning in which the lower "bowl" portion is undecorated, and the traditional bowl design is transferred to the lower border of the upper half of the vessel, in back of the standard bottle design panel (fig. 7, b; Soldi, 1956, bottom row, last two on right). In contrast, fox-head bottles with complex vessel bodies are decorated with a new advanced type of design patterning not found in Phase 7, in which bowl designs decorate both the lower "bowl" portion of the vessel and the section of the upper body adjoining the standard bottle design. The bowl designs on these bottles are advanced Phase 8 designs not used on the more conservatively decorated bottles; they consist of unit designs as well as bands which cover the entire side of the bottle top and sometimes the area below the bridge as well. On one hawk-head bottle, the back of the top is decorated with a duplicate of the front bottle design panel instead of a bowl design, in a unique compromise between the old and new patterning conventions.

The patterning trend in the decoration of complex bottles indicates an increasing use of bowl designs on all parts of the vessel, especially the more advanced forms. This process of change in patterning reaches its logical end on two advanced bottle shapes, on which bottle designs proper are entirely absent and only bowl designs are used. One of these vessels has another unique advanced design feature in the form of small unoutlined geometric designs on top of the bridge, an innovation which is the antecedent of an important Phase 9 feature. Both the patterning innovation in the body decoration and the decoration of the bridge probably represent Ocucaje Basin influence.

BOWLS

Partly as a consequence of the resorting of shape features, the older distinctions between the use of broad design bands for shape 5 and 5b bowls and narrow bands for spheroid and ellipsoid bowls of shapes 12 and 19 are in the process of breaking down. The traditional distinctions are maintained most consistently on shape 5 bowls and on shape 19 bowls. Shape 5 bowls are decorated with a broad design band which covers the entire side from the rim edge to the base angle, whereas shape 19 bowls are decorated with a narrower design band, about 3-4 cm wide. Most of these "narrow bands" are about 1 cm broader on the average than they are in Phase 7. The narrow bands on shape 19 bowls also give an appearance of covering a larger part of the vessel than they do in Phase 7, because the bottom of the bowls is shallower, with the result that all or most of the profile view of the bowl is covered with design (pl. 7, b).

Most of the remaining Phase 8 bowls have an ambiguous, variable design coverage which usually appears to be an uncertain compromise between the older broad-band and narrow-band categories. On about one third of the shape 5b and shape 17 bowls the design is a broad band extending approximately to the gambreled edge or hip in the traditional way, but on the other two thirds the design area ends at varying distances above the gambreled edge or hip, resulting in bands that vary in width between 3 cm and 5 cm, depending on the height of the sides as well as on the proportion of the area covered with design. On simple and composite spheroid bowls (shape 12) there is no natural division line in the structure of the vessel to serve as guide for the design border, but the design band also varies in width between 3 cm and 5 cm, being from 1 to 2 cm wider than the corresponding bands on shape 12 bowls of Phase 7 (Strong, 1957, fig. 3, F).

As a consequence of the changes in width and patterning of design bands, there are also some changes in the association between shapes and specific design figures. The old narrow-band designs are largely out of style, some new designs come in, and some of the rigid distinctions between narrow-band and broad-band designs disappear. Shape 12 and shape 19 bowls are no longer decorated with the narrowband geometric designs of Phase 7, because the design bands are wider. The only traditionally associated design found on them is the gliding bird (design area from 2.1 to 2.8 cm wide), which is also used on slightly broader bands in Phase 7. The other band designs on ellipsoid bowls of Phase 8 are transfers from traditional broad-band designs and include fox figures (design area ca. 2.75 cm wide) and geometric multiple parallel-step designs (design area 2.5 to 3 cm wide; pl. 7, b). The bands on shape 12 bowls are decorated with old geometric broad-band designs or new geometric designs (Strong, 1957, fig. 3, F).

Representational designs, other than gliding birds and foxes, are used only for the broadest design bands, in which the actual design area (not counting outline banding) varies between 3 cm and 5 cm in width. Thus they are usually found on shape 5 bowls, and occasionally on shape 5b ones. The majority of shape 5b and shape 17 bowls are decorated with geometric designs, both new and traditional.

There are some additional innovations in the over-all patterning of bowl designs that involve the omission of design bands and the reduction and simplification of the decoration. About half the shape 19 bowls are decorated only with incised outline bands around the rim and a single narrow panel containing a gliding bird design pendent from one point of the rim band. On two shape 5b bowls the only decoration consists of a single figure, a representational feline pendent from the rim edge. There are five other shape 5b and shape 17 bowls, on which the only decoration consists of outline bands at the rim. One imitation Callango Basin bowl shape and two shape 19 bowls are decorated with rim band and floating unit designs consisting of unincised painted guilloche figures.

Most Phase 8 bowls from the upper valley continue to have a wide parting in the design band, much as in Phase 7, but on a few specimens the parting is narrower, as in Callango Basin pottery, and there are also some bowls on which the parting is omitted altogether and the design band is continuous around the side of the bowl. Another rare innovation in Phase 8 pottery of the upper-valley substyle is the use of continuous top outline banding around the rim, even when the rest of the design band is parted to leave a space between the ends, the rim bands crossing over the gap.

Negative dots continue in use on resin-painted bowls in the area of the parting of the band and on the sides below the band if the band does not reach the gambreled edge or hip on shape 5b bowls. However, the negative dots are usually more widely spaced and smaller than in Phase 7, with more even outlines. On a few specimens they are arranged in even rows rather than in an irregular scattering (fig. 39, c; pl. 7, b). They usually vary from 5 to 8 mm in diameter. However, on some conservative Phase 8 specimens the dots are large, irregular, and closely spaced, as in Phase 7. Most of the decorated bowls the interior of which could be examined have a red-slipped interior, a continuation of a Phase 7 feature.

Four shape 5 bowls have another important patterning innovation, being decorated inside as well as out. Painted decoration on the inside of bowls is a rare feature in the upper-valley substyle, but it is the standard pattern of the Callango Basin substyle, so that its occurrence in the upper-valley sample must represent a borrowing from the contemporary style of the lower valley. In further support of this observation, three of the interior bowl designs in the upper-valley sample are Callango Basin designs not found in other contexts in pottery from the upper valley.

SPITTOON-SHAPED BOWLS

The only decoration on these bowls is a design band on the upper side of the flaring rim.

BARREL-SHAPED NECKED BOTTLES

The over-all patterning of the design is the same as on the Phase 7 bottles, including a broad bowl-design band over the top of the barrel-shaped body, and a design unit on each of the circular barrel ends. However, the design figures used on the barrel ends are not profile feline heads as in Phase 7, but a front-face feline head on one of the specimens and a radial recurved ray figure on the other.

PAINTED DECORATION

GENERAL FEATURES AND THE USES OF COLORS

In addition to the predominant use of resin-painted designs outlined by incision ("zoned" designs), there is a reappearance of painted line designs not outlined by incision ("unzoned" designs). Unzoned painting is confined to special geo-

metric line designs, mainly guilloches and other small, rare geometric figures; in one design it consists of painted dot fillers. The technique is used only rarely in the upper-valley substyle and always appears in association with loan traits from the Callango Basin. Since unzoned painting is a standard device in the Callango Basin substyle, it evidently appears to be at home in the Callango Basin and to represent lower-valley influence in the upper valley. The use of the technique in Phase 8 is not a continuation of its earlier use, which disappeared during Phase 5; the Phase 8 designs and design contexts for which it is used are quite distinct.

Although the preservation of the resin pigments on pottery from the site of Teojate is poor, the paint is sufficiently preserved on a number of vessels to indicate the general use of colors. The colors noted are for the most part the same shades also found in Phase 6, including white, black, red, orange, yellow, and brown. In Phase 6 a pink shade is also in relatively common use, whereas in Phase 8 the seventh color is a light pastel shade varying between a cream and a lavender or pinkish hue. The elaborately decorated spouted bottles have from five to six colors in their designs, whereas bowl designs are generally painted in from two to four colors.

The color patterning is less uniform than in the two preceding phases, and on a few vessels orange, cream, brown, and black dominate the designs. However, red and white are still the colors most frequently used on most vessels and appear in large part in their traditional uses. Red is used for representational features such as lips, evebrows, the bodies of anthropomorphic or theriomorphic figures, the tops of modeled heads, the space between the zoned outline band and the rim edge in bowl designs, one of the zoned outline bands in many bottle designs, and is usually a prominent color in geometric designs. However, there are some vessels on which brown or black is used in place of red as the principal color. White is used in the traditional way for eye bands, teeth, paws and ankle bands, and almost universally as a background color (along with an occasional lightcolored substitute, either a light yellow, pinkish, or light cream). Since the background area in most Phase 8 designs is much larger than in the preceding phases. white is the most prominent color on most vessels, especially on bowls. Another peculiarity of the use of white is its frequent appearance on several adjoining areas separated by incised outlines, including adjoining outline bands, background spaces, and representational features. This failure to paint adjoining zoned areas in contrasting colors is the continuation of a feature first observed in Phase 6, but in Phase 8 it is used much more extensively, both on wider areas and on more than two adjoining design zones. This peculiarity of color patterning is confined to the use of white or an equivalent. Black continues to be used for representational features such as eye pupils and ankle bands, and with slightly increased frequency for a variety of nonrepresentational design details.

OUTLINING TECHNIQUES AND DESIGN AREAS

More than 70 per cent of the decorated Phase 8 bowls have innovations in the outlining of design bands, and only the advanced outlining forms of Phase 7

survive on the rest. The most conservative survivals are found on only six bowls and consist of one zoned white band framing the design band on three sides, at the top and at each side of the parting of the band, with a simple incised line terminating the design area at the bottom. A much more common feature, found also as a rare advanced feature in Phase 7, is a zoned white band framing the bottom of the design area as well as the top and sides. In all these designs, a space the width of an outline band is left between the rim edge and the design area; as in earlier phases, this space is painted red and functions as a second outline band. On many of the shape 5 bowls, including three which have conservative outlining in other respects, there is a white outline band at the bottom of the design area that is not terminated by an incised line, allowing the base angle to function as an incised border in analogy with the patterning at the top of the bowl. This feature is a Phase 8 innovation.

By far the most common innovation in the outlining of Phase 8 bowl designs is the addition of a second zoned unsegmented white band at the top, below the band-wide red space. Twelve bowls have a rarer new form of outlining in which the top border of the design area consists of what may be called "fancy triple banding," that is, two zoned white bands enclosing a slightly wider central band (usually about 8 mm wide) decorated with a special small design motif, either a small-toothed serrated band (fig. 39, c), a segmented band with alternating black and white sections, or a double segmented band with black and white checks. Although the segments in the latter two designs may have incised outlines, the majority of the segments are unzoned. In Phase 8 of the uppervalley substyle, segmented outline bands occur only in this specialized context. On one advanced bowl, the center of a fancy triple outline band consists of parallel single-step designs. The segmented and step design centers are painted in contrasting color zones, but the serrated band is all white, like the rest of the banding. In a few of these innovating outlines even the band-wide space at the top is white instead of the traditional red. On all but the shape 5 bowls, the banding innovations described above are associated with a complete white band frame on all four sides of the design area. Only shape 5 bowls with sharply defined base angles may lack a bottom border band altogether or may have one that is bounded by the base angle rather than by an incised line.

One bowl assigned to Phase 8 has three simple zoned white bands at the top of the design area, the most advanced outlining feature in this phase.

The multiplication and elaboration of horizontal outlining in Phase 8 bowl designs evidently represents one of several adaptations to shape changes (i.e., the increased height of the sides of most bowls) and the consequent need for devising means for distributing traditional designs in larger areas. The number and width of horizontal outlines permit greater freedom to control the width of the design area proper than was possible under the more rigid outlining conventions of the earlier phases. The actual width of the design area in Phase 8 is thus determined as much by the choice of outline banding as by the size and shape of the vessel or the area of the vessel covered by design. Though the elaborations in outlining are therefore probably primarily a device to take up space, they tend to acquire significance as designs in their own right, with resulting additional innovations. Thus, on some bowls multiple outline banding is the only, or the main, design, either used simply or proliferated into a broader band.

Whereas horizontal outline bands in bowl designs are elaborated in Phase 8, the use of vertical division bands to mark off design panels is in the process of going out of style, in continuation of a trend beginning in Phase 7 with the increased simplification of panel-dividing bands. In Phase 8, fewer than one third of the geometric design bands have panel subdivisions, and 14 of the 34 design bands with representational designs also lack such division. This is the first phase in the Ocucaje sequence in which representational figures are not separated by panel divisions. A secondary consequence of this innovation is the articulation of front-face feline heads and profile feline bodies into a single figure, a Phase 8 innovation that starts a new trend in representational design. When panel divisions are used, they consist most often of a single plain band (fig. 38, b); traditional triple bands are used only rarely, and the more elaborate ladder division bands appear to be out of style in bowl designs of the uppervalley substyle. The square subdivisions of broad vertical frame bands in bottle designs are the only contexts in which panel divisions continue to be usually triple bands (or even, on one vessel, ladder designs) (fig. 7, a; see below).

Bodiless front-face feline heads not only continue as a special bottle design, primarily on bird-spout bottles (fig. 7, a, b; Sawyer, 1961, fig. 4, h, i), but the use of the specialized panel in which they are contained is extended further to human- and fox-head bottles, where it encloses an anthropomorphic or thereomorphic figure in place of the feline head (Soldi, 1956, bottom row, two on right). On one advanced bird-spout bottle, the same panel shape is used to contain a bowl design. In all, the position, shape, and outlining of the panel is independent of the designs it contains.

The vessel surface covered by the front panel itself generally does not extend back of the bird spout or modeled head in Phase 8, unlike the panels on some of the Phase 7 and transitional Phase 7-8 vessels (fig. 7, a, b). Instead, the design area is extended by means of a broad vertical design band that frames the front panel on each side and extends back to the hollow spout (fig. 7, a). On some vessels the band passes over the top of the bottle as well. This broad frame is the principal Phase 8 innovation in panel outlining. It is based on an antecedent narrow-band frame found first on bird-spout bottles that are stylistically transitional between Phases 7 and 8 (fig. 6, b). The earlier form differs from that of Phase 8 proper in consisting of a narrower band that extends only a short distance behind the bird spout. Like those in the earlier frame bands, the designs in the frame bands on Phase 8 bottles are usually either derivatives of the broad-band twined-fret designs, or they are new broad-band designs (geometricized clothespin birds) adapted specially for use in the bottle bands, and arranged in square panel subdivisions. In the latter bands, there are generally two square panels on each side of the vessel, leaving a narrow rectangular gap

at the top below the bridge which is usually left undecorated. The great majority of front-face feline panels are bordered by a vertical frame band, but there are a few Phase 8 specimens on which it is omitted (Sawyer, 1961, fig. 4, i).

The shapes and outlining techniques of the front-face feline panels proper are for the most part like the more advanced Phase 7 ones, and there are only minor changes. The conservative Phase 7 ear lobes inside the panel are out of style, but the more conservative Phase 8 panels have a slight lobing of the outlines at the top, the last surviving traces of the old ear design (fig. 7, b). The majority of the Phase 8 panels have straight, unlobed outlines which pass vertically up the sides and over the top of the bottle, as in the most advanced Phase 7 form. On some specimens the outline bands do not quite meet at the top, being separated slightly by the back end of the spout base; on other specimens the back outline band is continuous, while the front outline band ends on either side of the back end of the spout base; and on some specimens, both outline bands pass in back of the spout base, the inner one usually skirting the base of the spout.

Most front bottle panels have two outline bands, usually a red one and a white one, as in Phase 7, but some have two white bands, and one has three white bands. These Phase 8 coloring and outlining innovations are also found in bowl designs.

DESIGN FIGURES: GENERAL STYLISTIC CHARACTERISTICS

Phase 8 is a much less homogeneous style than the preceding phases, and there is much more leeway in the choice of contouring, patterning, and spacing of any given design figure. This greater variability among contemporaneous vessels is the result of some innovations, mainly in the shape of bowls and the over-all patterning of design areas, that reverse old stylistic trends of long standing, whereas other traditional trends, notably in the increasingly narrow spacing of parallel incised lines forming the designs and the reduction in the over-all size of some designs, continue in the same general direction as before. The partial reversal of traditional trends presents a problem of stylistic integration that has no precedent in the Ocucaje tradition, because in the earlier phases the stylistic trends in shape and design features parallel each other in such ways that no major revisions in traditional patterning rules are required.

Traditional methods of stylistic adjustments in the integration of bowl designs were adapted to the horizontal widening of design areas, but only in front-face feline panels on spouted bottles were there existing traditional techniques to accomodate the vertical expansion of the design field. In Phase 8, there is an unprecedented vertical expansion of bowl design areas that makes it impossible to adjust the narrower bowl designs and traditionally narrow modal widths to the vertically expanded frame so that they will fill it and be outlined by its contours, as in Phase 7. Several alternative adjustments are possible, and all of them are used in varying ways. In by far the most common adjustment, designs are no longer made to fill the rectangular frame but are made smaller, with distinct background spaces around them (figs. 38, b, d, g, h, j; 39, b, c, e, f, i, k, l). This patterning innovation has several other con-

sequences. The outlines of design figures, especially the representational ones, are no longer guided by the rectangular frame of the design panel and show much more freedom and a greater variety in contouring, including even some new curvilinear contours that make the representational design figures in particular more easily distinguishable at first glance. The combination of narrower spacing of the design lines with larger, irregularly shaped background spaces makes it impossible to create design figures of evenly spaced bands of matching width that will also fit into the outlined rectangular space; as a result, the attempt is given up altogether in many of the new bowl designs, and there are increasing contrasts in the width and shape of design details, particularly in the body features of some representational designs. Since the old adjustments between space and designs often are no longer feasible, the old rules of associations between design areas and design figures are replaced by new ones in a variety of ways based in part on different analogies with older patterns of associations. The enlargement of background spaces also appears to carry a new appeal of its own, because filler designs are frequently reduced in number or omitted altogether, in a new trend towards more freestanding, less cluttered designs.

Although the contouring and spacing of many Phase 8 designs thus is launched in a new stylistic direction, there is no such need for a change of trend in the internal features of design figures, which are not affected by the changes in spacing and contouring. As a result, many design details continue to change in the same direction as before. For example, the preference for rectilinear, parallelsided, and right-angled design details continues and is extended even further whenever it is not affected by innovations in contouring. Thus, some feline eye pupils in bowl designs have straight-sided, triangular tops instead of arched ones, a very useful Phase 8 diagnostic found most commonly in the Callango Basin substyle; the occasional remnants of curved lines in fangs are eliminated; vertical parallel-sided fangs are preferred to diagonal ones; and the trapezoidal outlines in chin-whisker designs of front-face feline heads are eliminated.

Most of the bands used to make the designs in bowl decoration are narrower on the average than in Phase 7 (3-4 mm wide), although bands 5 mm in width continue in use in some bowl designs, more often as outline bands, and in the majority of designs on spouted bottles. Equally, stamped circles in bowl designs are smaller than before and vary between 3 mm and 5 mm in diameter, in contrast to Phase 7 circles, which have a usual diameter range of 5 mm to 8 mm. In bottle designs, the most common diameter of stamped circles is 5 mm, but smaller ones are also used. Stamped circles smaller than 5 mm in diameter are a reliable Phase 8 diagnostic.

Another old stylistic trend that is continued is the increasing "geometricizing" of design features of a representational origin. To this category of changes belong such features as the conversion of some of the formerly all-white feline tooth bands in bottle feline heads into alternating black and white segments, in analogy with outline bands, and, in one design, into a double band of black and white checks. A number of the front-face feline heads in bottle designs have more than two sets of fangs (one has as many as six sets), and the specimen with the checkerboard "teeth" has the upper "fangs" in the brow band instead of the supposed "tooth" band, in a purely ornamental gesture (Sawyer, 1961, fig. 4, i). Another aspect of this trend is the use of geometricized abbreviations of representational designs, including clothespin birds, fox heads, feline heads, and feline bodies.

Another Phase 8 feature that represents the continuation of an old Ocucaje traditional trend is the increased elaboration and proliferation of recurved ray designs, especially in the decoration of spouted bottles with front-face feline panels (fig. 7, a, b; Sawyer, 1961, fig. 4, h). On these vessels proliferated recurved rays are used in the form of geometricized derivatives of clothespin birds in the broad frame bands (fig. 7, a) and in the "forehead" ornamentation above the face of the feline head itself, in the form of multiple stacked tiers of paired recurved rays (fig. 7, b; Sawyer, 1961, fig. 4, h). This latter feature in particular, is a peculiarity of Phase 8 of the upper-valley substyle. It deserves special attention because it is one of several features which Phase 8 shares with Phase EF of the stone-carving style at Chavín (cf. Rowe, 1962b, p. 12).

The most conservative designs of Phase 8 are the front-face feline head panels on spouted bottles, because the changes in the panel area proper are so slight that they offer no major new problems in stylistic integration.

Design motives.—The principal new design figures are geometric ones, mainly small diamonds and rectangles, which reflect an innovating movement centering in the Ocucaje Basin. In bowl designs there also appears rarely a painted frontface human head, out of style since Phase 5, and apparently introduced to the upper valley from the Callango Basin substyle. Fox and gliding bird designs are more common and varied than in Phase 7, and are used in some new contexts. The old front-face feline head designs are comparatively rare in bowl decoration, and profile feline bodies are even rarer and are unlike the old traditional ones. Abbreviated and geometricized clothespin birds, fox heads, and profile feline heads are Phase 8 innovations. The old elaborated eye, continuous mouth band, and elaborated hand designs, so popular in Phase 7, are virtually out of style; there are only two very much modified and abbreviated remnants of the elaborated eye design in the sample. Narrow-band designs of Phase 7, principally the single-step patterns, are very rare in Phase 8, but modified variants of the large diagonal twined fret, a rare broad-band design in Phase 7, are among the most common Phase 8 designs.

On bowls with broad design bands the design figures are the same as those used for broad-band designs in Phase 7. Standard patterns include front-face feline-head panels alternating with some smaller traditional geometric design panels, mainly vertical ball-band designs, or with front-face human-head panels; or traditional geometric designs such as large angular figure-eight bands or diagonal step designs. Broad design bands are also decorated with diagonal twined-fret bands and with new geometric designs, including geometricized derivatives of representational figures. The frequent use of twined frets as broad-band designs is a Phase 8 innovation. Diagonal twined-fret designs are preferred for the decoration of shape 17 bowls and vertical panel frame bands on spouted bottles, but they are also used on shape 5 and 5b bowls. Narrower design bands on shape 19 bowls are usually decorated with conservative gliding bird designs, a traditional use. By analogy with this association, conservative gliding birds (including conservative clothespin-headed ones) are also used in new solitary "floating" narrow panels on shape 19 bowls and bird-spout bottles (pl. 7, a; Strong, 1957, fig. 3, G). Occasionally the comparatively narrow design bands on shape 12 and shape 19 bowls are decorated with fox designs, in contrast to Phase 7, in which fox figures are used only for design bands of standard width on shape 5 bowls. Bands of medium width on shape 5b bowls in Phase 8 are very frequently decorated with diagonal step design panels and "step-block" designs.

FRONT-FACE FELINE HEADS

Patterning.—Front-face feline heads in bowl designs are much more varied than those on bottles and include some entirely new types of Callango Basin origin, as well as conservative survivals (figs. 7, a, b; 38, a, b; Sawyer, 1961, fig. 4, h, i). Feline faces on spouted bottles are among the most conservative Phase 8 designs and show only moderate changes from Phase 7. Although there is no change in the area of the feline-face panel proper relative to the shape of the vessel, the top of the bottle is often smaller than in Phase 7 because of the various changes in shape features. As a result, the actual area of the panel available for the design is either approximately the same as in Phase 7, or, more often, slightly reduced in height. Different adjustments are made to these differences in available space. On most of the vessels, there is evidence of a continued interest in further elaboration and proliferation of the geometric ornamentation of the face above the eyes. In order to provide adequate space for this purpose, the representational features of the face from the brows down are narrowed and compressed into the lower half or lower third of the vessel, and the chin-whisker band below the mouth is omitted, though the narrow white chin band below the lower lip is usually maintained (Sawyer, 1961, fig. 4, h, i). On these bottles the horizontal banding of the face features is especially narrow. On the more conservative specimens, the face extends into the upper half of the panel or is in approximately central position, as in Phase 7, and there is a narrow chin-whisker band, about 1 cm wide, usually with short perpendicular line subdivisions derived from a rare Phase 7 antecedent (fig. 7, a). On these vessels, the geometric ornamentation above the eyes is reduced, for lack of space, and is sometimes replaced by new filler designs consisting of outlined crosses. Only two bottles definitely attributable to Phase 8 have chin-whisker bands approximately as broad as the more advanced Phase 7 bands and are decorated with modified variants of the more common Phase 7 designs, in one a much narrowed version of the elaborated eye (fig. 7, b), and in the other a partially incomplete twined fret. The slender trapezoidal arms on the sides of the lower face are out of style in Phase 8. In other respects, the patterning of bottle feline faces is little changed from Phase 7.

There are ten bowls with front-face feline-head designs in the sample, and

one such design, found on the flat end of a barrel-shaped necked bottle, shares features with both bottle and bowl designs. The majority are derived with relatively few modifications from the traditional Phase 7 types (fig. 38, a; Strong, 1957, fig. 3, B), but three such designs are more drastically modified by features that are more common in the lower valley (fig. 38, b), and one is an outright down-valley type used to decorate the interior of a shape 5 bowl. The principal modification in patterning of the more conservative specimens is the use of stamped circle or line fillers and nose ornaments in the space above the eyes on most of the bowl feline heads, in contrast to Phase 7 in which such ornamentations are rare in bowl designs. In two specimens a number of face (and body) details are left out altogether in a geometricized abbreviation of the design.

In the four more innovating bowl designs the face does not fill the design area, leaving space below the lower lip or chin band for an entirely new type of chin whiskers which consists of two sets of from one to three parallel zoned bands which project diagonally or vertically from both sides of the lower mouth, like the projecting rays above the face of bottle felines, and possibly in analogy to them (fig. 38, b). On two of the specimens without panel frames the face is much smaller than before. In one advanced bowl design in which the feline faces are not separated by panel subdivisions, the mouth is half as wide as the upper part of the face, occupying only a narrow central section below the nose and eyes, another break in patterning tradition. All these innovations represent borrowings from the Ocucaje and Callango basin substyles.

Nose.—The great majority of feline faces have the same kinds of noses as in Phase 7, the most common one being a parabolic arch with one, two, or three short lines with dot finials perpendicular to the top or bottom of the outline (fig. 7, b). One unusually conservative bottle has a modeled button nose, the only survival of this old feature, and one bowl face has a three-quarter-circle nose (fig. 38, a), another conservative feature. However, three bowls and one bottle have new nose forms not found in the preceding phases, including a small stamped circle nose, a small square nose (fig. 38, b), and a triangular nose. The last three innovations all represent influence from the lower-valley substyles.

Eyes and brows.—Only the most advanced forms of eye bands, pupils, and brow bands of Phase 7 survive in Phase 8, and such old conservative features as curved or irregular bases of pupils are not present in the sample and appear to be out of style altogether. All the bottle feline faces have pupils arched at the top, as in Phase 7, but on most of the specimens the arch is much shallower and wider (fig. 7, b), and on a few specimens the pupils are only low slightly arched slits (Sawyer, 1961, fig. 4, h). A few of the feline faces in bowl designs also have such slitlike pupils (fig. 38, a), but four of the bowl feline faces have triangular pupils (Strong, 1957, fig. 3, B), a new form in Phase 8 that is more popular in the Callango Basin substyle. On the smaller new bowl faces representing Ocucaje Basin influence the brow ends adjoin the eyes and lack the intervening "stem." On these vessels the brow arch tends to curve into the base of the brow end, instead of joining it in a sharp angle. Brow ends.—The most popular Phase 7 brow-end form, the rectangular loop end, is found only on one bottle and four bowl designs in Phase 8, and on the bottle and one of the bowls the loops are very small, much smaller than Phase 7 ones (Sawyer, 1961, fig. 4, h). The great majority of Phase 8 feline heads have triangular-loop brow ends (figs. 7, b; 38, a), like the rare advanced type found on one Phase 7 specimen of the upper-valley substyle and one Phase 6 specimen of the Callango Basin substyle. About half the Phase 8 examples are smaller loops than any found in the preceding phases. There is a somewhat greater variety of brow-end forms in bowl designs, one being a closed vertical bar with a pendent line center, the survival of a form also present in Phase 7. Two of the narrower feline heads with brow ends close to the eye have closed triangular or arched-triangular tip ornaments (fig. 38, b), a form with one antecedent in the Phase 7 sample. Their shape and their closer proximity to the eyes cause them to resemble feline ears. Conservative Phase 7 brow ends such as plain recurved ray ends appear to be out of style.

Ornaments above the nose.—An important difference between the nose ornaments on bottle feline heads of Phases 7 and 8 is the omission of the central ladder design in Phase 8 (fig. 7, b; Sawyer, 1961, fig. 4, h, i). Some of the Phase 8 ornaments are also much longer and narrower than any in Phase 7, and six consist of three plain bands with open ends, a form used only rarely as a nose ornament in Phase 7. Another important innovation on some of the vessels is the use of two or three vertically stacked sets of recurved ray projections instead of a single one (fig. 7, b; Sawyer, 1961, fig. 4, h). All recurved ray tips are rectangular.

As in Phase 7, there is greater conservatism in the nose ornaments of bowl designs, with three of the bowl ornaments consisting of closed rectangular bars with pendent line centers, a conservative Phase 7 feature as well.

Fangs.—There are no curved lines in Phase 8 fangs, and traditional trapezoidal straight-sided fangs are comparatively rare. Most Phase 8 fangs are either vertical, straight, and parallel sided (fig. 7, a, a form with rare antecedents in Phase 7), or they are inverted trapezoids or triangles, in the sense that the broad base of the fang is at the outer lip and the narrow end or point at the inner lip, the reverse of the traditional trapezoidal and triangular forms (figs. 7, b; 38, a). The inverted trapezoids or triangles are not found in the earlier phases and are thus a useful diagnostic feature for Phase 8. Diagonal parallel-sided fangs, a popular Phase 7 form, are found on only one conservative bottle. Two of the most advanced innovating feline heads in bowl designs lack fangs altogether, another Phase 8 innovation that is a standard feature of the Ocucaje Basin substyle.

FILLER DESIGNS ON BOTTLE FELINES

The gradual disappearance of chin whiskers in bottle feline heads is discussed in the earlier section on patterning.

In Phase 8 the amount of space above the brows in bottle feline faces depends in part on the shape of the bottle, and in part on the degree to which the face features are compressed into the lower portion of the design field. The ornamental elaborations above the eyes vary according to the available space. Whenever space permits there are ray projections above the arches or side arms of the brows as well as above the nose, a feature found on only about one third of the Phase 7 bottles (fig. 7, a, b; Sawyer, 1961, fig. 4, h, i). The side projections are usually longer than in Phase 7, and consist either of plain three-banded rays with open ends (fig. 7, a) or, more commonly, of sets of two- or three-tiered recurved rays (fig. 7, b), a feature having its earliest occurrence on a bottle that is transitional between Phases 7 and 8. The spaces between ray projections are decorated with vertical ball-bands and some loose circle fillers, as in Phase 7, but sometimes the ball-bands contain from six to eight circles, more than in any one column in Phase 7 (Sawyer, 1961, fig. 4, h). The feline panels with more restricted space above the brows have fewer filler designs than in Phase 7 (fig. 7, a), and some lack ray projections from the side of the brows. On two bottles, a new filler design, an outlined cross, is used to fill the restricted space above each side of the brow.

As part of the general stylistic trend in the use of color, the geometric ornaments above the brows no longer separate color zones except on the more conservative specimens. Usually, the entire area above the brows is white, and the detailed decoration is confined to the incised outlines of the design elements.

PROFILE FELINES

Heads.—The only survival of this traditional representational design is a small, geometricized, billaterally symmetrical unit placed on end, and patterned like nonrepresentational geometric designs in a bowl design band.

Bodies.—The traditional form of profile feline bodies is going out of style in Phase 8, and there is a great deal of variability among the three specimens representing the remnants of this tradition in the upper-valley substyle. In one of the examples, the body is separated from the head by a single band panel divider (fig. 38, b), but in the other two examples the body and head are not placed in separate panels. On the latter two bowls, the designs are full-bodied felines that form a single unit in the upper part of two convex-sided bowls, and both the body and head are much abbreviated. The tail and back feet are merged into a wedgelike, triangular projection, and the body is a narrow band. The third, a more elaborate profile feline body, is contained in a design band of standard width, but most of its features are derived from the profile bodies of fox figures rather than the felines of Phase 7 (fig. 38, b). It is distinct from profile bodies of Phase 7 in some details, including the much larger background space around the tail and the use of a feline spot consisting of two concentric circles, a Phase 8 feature especially popular in the lower valley.

There is a fourth, entirely different feline body design used on the interior of a straight-sided bowl and representing an imitation of a Callango Basin design. The feline representation is fully articulated and freestanding, without panel divisions, and the body is attached to the bottom of the face rather than the side, so that the figure is in vertical rather than horizontal position. The contours of the body are broad and simple, with an arched back, but traditional features such as vertical paws, ankle bands, feline spots, and zoned color areas in the body are carried over from the earlier phases.

GLIDING BIRDS

Experimentation with gliding bird designs is a special feature of the uppervalley substyle, in Phase 8 as well as in Phase 7, and such designs continue to be popular (there are twenty-six Phase 8 vessels with gliding bird designs or their derivatives). Designs of gliding birds with clothespin heads, a tradition that is a special development of the upper-valley substyle originating in Phase 6, continue to gain in popularity at the expense of the much older beaked-bird tradition. However, the beaked birds continue in use, especially in narrow-panel designs on bowls. The most conservative gliding bird designs in both the beaked and clothespin-headed categories resemble each other in body shape, and they also resemble the most advanced Phase 7 variants (fig. 38, c, e, f; pl. 7, a). There are five examples of each type. The bottle designs are always the clothespinbird variants, whereas the bowl designs are for the most part the older beakedbird variants. Both types differ from the respective Phase 7 antecedents primarily in the form of the head and in the shape of the recurved tips of the bands framing the tail and the clothespin head. The elongated triangular or neartriangular recurved tips with long diagonal sides are out of style and are replaced by irregular, four-sided recurved tips with a short diagonal base (fig. 38, c, f). In some designs the angle between the diagonal and adjoining straight side of the ray end is rounded off, producing a curvilinear ray tip, in a coincidental reversion to the older type. Straight-sided rectangular recurved tips also continue to be popular (fig. 38, e). The division line between the head and body of the older beaked-bird figures is always in the center of the eye, unlike the more flexible variations in position of division lines in the preceding phases. In some specimens, a narrow vertical T-bar is used in addition to bodies with recurved ray "shoulders" (fig. 38, c, f), a feature that also has a Phase 7 antecedent.

The principal Phase 8 innovations in the conservative beaked and clothespinheaded gliding bird figures are in the heads. On the beaked figures, the beak is horizontal, with straight, parallel sides forming a band of standard width, a form that is the end product of the stylistic trend towards increasingly horizontal, parallel-sided types. The most conservative clothespin heads differ from those of Phase 7 in having much longer front projections and shorter recurved tips, so that the tips have no contact with the eye and are separated from the eye by a long-stemmed, double-sided ray appendage like the recurved ray appendages above the face of bottle feline heads (fig. 38, c, e, f).

The rest of the upper-valley derivations of gliding birds are all new geometricized variations on the clothespin-headed type, which are adapted for use in the new broader design bands and panels and which differ from the more conservative forms in not being framed by a narrow rectangular outline but standing free on the background space. Several stages of increasing geometriciza-

tion are found among the Phase 8 variants. There are two major subdivisions which converge in appearance, one consisting of modifications of the complete bird figure (fig. 38, d), and the other consisting of a multiplication of head projections only (fig. 38, g, h). In the modification of complete bird figures, the principal change is one of contouring and the omission of wing bands. In the older forms, the wing bands are the segmented spaces between the unsegmented body-dividing bands with recurved tips and the panel border. The disappearance of the panel border brings with it the automatic disappearance of the wing bands. The result is a pair of double-ended recurved rays enclosing a central "tail" which continues to be decorated with the traditional segmentations (fig. 38, d). The omission of the rectangular panel frame also removes the need for strictly rectangular contouring, and the body contours begin to taper towards the back, the body core forming an elongated triangle with the point at the "tail" end. The more conservative variants preserve the original contrast between a long body and short head, but the more advanced and geometricized variants start a trend towards bilateral symmetry in which the "body" section is foreshortened to match the proportions of the newly elongated "head" more closely. In another step in this increasing trend towards geometricization and symmetry, the "beak" acquires recurved ray tips at the back or "eye" end as well as at the front end, to match the double-ended rays bordering the body, and on some specimens a plain horizontal band is introduced between the two "head" rays, which causes the "head" to resemble the "body" section even more closely. This last form has nearly bilateral symmetry, except for the slightly tapered and segmented "tail." In one broad vertical bottle band with square panel subdivisions, the panel-dividing line separates the "beak" and the "body," as if the two were identical geometric figures.

In the second geometricizing derivative of clothespin birds, the body is omitted and is replaced by a second "beak" projection, resulting in a bilaterally symmetrical figure (fig. 38, h). This form has a rare Phase 7 antecedent. The erstwhile eye forms the center of the figure, but the outer "iris" circle is sometimes modified into a bulging joint merging with the ray bands of the beaks on either side, leaving only a small stamped circle at the center of the design. In the final modification of this figure, two such double-sided "beaks" are made to cross each other at right angles in a purely geometric, radially symmetrical design which lends itself especially well to the decoration of the square panel subdivisions of broad vertical bands in bottle designs and the flat surface of the "barrel" end on a necked bottle, and which is confined to these uses (figs. 7, a; 38, g). In all the bottle designs and some of the bowl designs, geometricized clothespin-bird figures are surrounded by stamped circle fillers. The abundant use of fillers is a traditional specialization of bottle decoration.

There are three different bird designs definitely attributable to Phase 8 which are derived from the old beaked-bird tradition, but they represent Callango Basin influence and do not belong to the upper-valley substyle proper. Two specimens represent a more conservative form and are found on bowl design bands of medium width (fig. 38, j). They are peculiar in that one of the bands consists of two distinct sections separated vertically by old-fashioned panel subdivisions. The front section contains a foreshortened and simplified, wingless variant of the old bird form, with a T-shaped body and an arched beak. The beak is joined directly to the body without the traditional rectangular enclosure. The body and tail are represented by a short, unsegmented stump, and the entire T form is framed by a light-colored band, on one of the specimens with a crestlike, recurved ray top. Attached to the back of this complete, though abbreviated bird is a second body with a T-bar top ornamented with stamped circle or square filler elements, long, slender, tapering, segmented wings, and a slightly broader trapezoidal body and tail ornamented with a row of stacked chevrons. The body is closely related to the old traditional type, last seen in Phase 6 of the upper-valley substyle but surviving into the later phases at Callango.

The most advanced Phase 8 bird is a freestanding form used for broad surfaces in the upper-valley substyle. Only one example is definitely attributable to Phase 8, but there are two others that are stylistically very advanced and may be transitional between Phases 8 and 9. The body of this advanced gliding bird resembles the separate rear body of the crested bird figure in the panel design, with a short, trapezoidal segmented body and tail or a longer, chevronshaped, forked tail end, long, segmented wings and circle fillers in the front of the body. However, the crested bird head is omitted, and there is a simple substitute consisting of one or two triangles which protrude from the front of the body and recall a beak. These birds lack all profile features, unlike the old gliding bird designs, and are seen in top view only. They represent the antecedent for a common Phase 9 form.

There is one other bird design among vessels from the site of Teojate, found in the center of the inside bottom of a straight, flaring-sided base-angled bowl, that represents Callango Basin influence (fig. 38, i). This figure has a combination of features of the crested and triangular-headed gliding birds just described, with a crested bird head and a body with long, slender, tapering, segmented wings. However, the body is attached to the bottom of the head rather than the back, a Callango Basin innovation reserved for freestanding figures in large design fields. The figure also has other Callango Basin features, such as rounded "shoulders," two tails separated by a division band, and concentric circle filler designs.

FOXES

There are twelve fox designs in the sample, all in bowl bands as in Phase 7 (fig. 39, a, d). Eight are in broad bands on shape 5 and shape 5b bowls, and four are in narrower bands on shape 19 and shape 12 bowls. There is a great deal of variety in detail, but all the designs follow the same general pattern as in Phase 7 and are on the whole very similar to Phase 7 designs. Because of their great variability in detail, Phase 8 fox designs are distinguished in this study from those of Phase 7 on the basis of general stylistic innovations rather than on special standardized features. As examples, aside from their association

with Phase 8 shapes and over-all design patterning, fox designs are identified as belonging to Phase 8 on the basis of any of the following criteria: if the spacing of the lines forming the design is narrower than in Phase 7; if the snouts are more elongated; if the top of the body does not reach the panel border and is arched rather than angular (fig. 39, d); if a vertical ray tuft projects from the top of the body; if the background space above and below the snout and tail is larger; if the ends of the base line of the pupil are turned up at right angles; if the circle fillers around the snout are smaller than 5 mm in diameter; or if the fillers are rectangles. Several of the associated features occur only once and so cannot be interpreted. One of the fox designs has body features of profile feline bodies, a unique association.

BODILESS FRONT-FACE HUMAN HEADS

Bodiless front-face human head panels are reintroduced to the upper-valley substyle in Phase 8 as a rare painted design and represent Callango Basin influence. The painted human-head designs of upper-valley Phase 8 are found on vessel shapes similar to those of Phase 8 of the Callango Basin, and some of them show Callango Basin influence in other design features as well as in shape. They include two straight, flaring-sided base-angled bowls with interior decoration (Callango Basin shape 5) and two tapering-sided bowls, one with a low collar (Callango Basin shape 18). Each of the human faces fills a rectangular panel and has unframed rectangular eyes with eccentric pupils, hawk markings which cross vertically under the eye from the top of the panel to the bottom, a small modeled button nose, and a small lipless mouth band segmented to show teeth, features which are like those of Phase 8 in the Callango Basin substyle (see below). Two of the faces on the vessels from Teojate are also decorated with a headdress band at the top of the face which is the equivalent of the headdress of modeled human heads on spouted bottles and on painted human heads of Phase 3.

GEOMETRIC DESIGNS

Geometric designs continue to be popular bowl designs in Phase 8, and they are used more frequently than before in bottle decoration. The majority are derived from designs already present in Phase 7. Almost all the Phase 8 designs differ from those of Phase 7 in detail, and a great many differ in the size, patterning, and associations of the elements. The most conservative survivals from Phase 7 are three traditional broad-band designs, including panels halved by diagonal steps (figs. 7, b; 39, g, j) and the related diagonal step-block designs, large figure-eight design bands (fig. 39, c), and small panels containing from one to three vertical columns of ball-bands (fig. 39, h).

Most of the diagonal step designs in panels and in step-block patterns differ from those of Phase 7 in being simplified, smaller, and either without stamped circle fillers or with a reduced number of fillers (fig. 39, g, j). The panels, which are halved diagonally by the step design, differ from their Phase 7 antecedents in having approximately square proportions instead of oblong rectangular ones,
in lacking filler circles, and in containing two diagonal step columns instead of three. The steps are small and short and are often executed at careless oblique angles instead of right angles; on many specimens small gaps are left between the lines forming the risers and treads, a distinctive Phase 8 innovation. On one specimen these innovating details combine in an advanced extreme, in which the diagonal steps are reduced to two straight lines of dashes. In the step-block pattern, in which the diagonal steps form one side of separate blocks, each block continues to have a stamped circle filler. Two or more stamped circle fillers are not present in any of the bowl designs proper. However, multiple circle fillers are used in diagonal step and step-block bands on three conservative complex spouted bottles on which the bands are very broad and the design elements very small (fig. 7, b). On these specimens, the step-blocks contain as many as eight stamped circle fillers, a proliferation of filler elements not found in Phase 7.

Another diagonal step design, found on three Phase 8 bowls, is derived from a continuous band design without panel subdivisions and consists of parallel diagonal columns of multiple steps (pl. 7, b). The only known antecedent for it is found on a bowl in the Phase 6 sample from Callango. The upper-valley Phase 8 design differs from the earlier one in the details of execution, which are like those of other Phase 8 step designs, and in its use in narrower bands with panel subdivisions.

Most of the angular figure-eight bands differ from those of Phase 7 in lacking the special outline bands and cross-bar fillers in the irregular diamond-shaped spaces between them (fig. 39, c). The spaces between the figure-eight designs thus cease to be designs in their own right and become mere background areas decorated with small stamped circle fillers. Sometimes a continuous horizontal band passing under the center of the figure-eight designs represents the modified survival of the cross-bars in the earlier diamond figures. Since the spaces between figure-eight elements are no longer designs in their own right, the spacing of the principal figures is much more variable; on some vessels they are spaced farther apart and on others closer together than in Phase 7. The Phase 7 design proper, with its distinctive diamond figures, survives only in one band on one of the conservative complex bottles.

Diagonal twined-fret bands are very popular Phase 8 designs (fig. 39, b, e, i) derived from a rare Phase 7 broad-band design (cf. fig. 37, k). In Phase 8 they continue to be used in broad bands, but they are usually formed of smaller "twine" segments that do not reach the borders of the design area, leaving varying amounts of background space around them. Another innovation is in the reduction of filler elements (i.e, punched dots); on many specimens the filler dots are omitted altogether. It is a special Phase 8 technique to broaden the design by making it a three-ply one, evidently in order to take up some of the extra design space resulting from the smaller units (fig. 39, i). Rarely, twined-fret designs are treated as narrow-band designs which are framed by the outlines of a narrow band, once in a unique conservative chin-whisker band on a bottle feline, once in a new narrow panel paralleling the bridge on a spouted bottle, and once on the rim of a spittoon-shaped bowl.

The standard narrow-band designs of Phase 7, the single-step designs, together with the narrow design bands themselves, are virtually out of style in Phase 8 of the upper-valley substyle, but they are used in rare instances in new contexts which are treated as analogues of the old. Thus, horizontal single-step designs are used in rare instances in such odd spaces as in the center of a new fancy triple-border band, in a narrow-band design on a bird-spout bottle, and as decoration for the central band between recurved ray appendages in the "forehead" area of a front-face feline design on a spouted bottle (fig. 7, b). In two designs the step elements are converted from parallel units into opposing ones in a pattern of bifold rotational symmetry (fig. 7, b; cf. Shepard, 1956, fig. 37-4). The diagonal single-step design of Phase 7 survives on only one specimen, an unusually narrow vertical band framing the front-face feline design on a spouted bottle.

Another traditional upper-valley design, the horizontal serrated band, survives only as an ornament in the fancy triple-outline banding and its related uses (fig. 39, c).

In addition to the more or less traditionally used designs just described, there are new Phase 8 bowl design compositions in which elements of Phase 7 are used in different patterns. For example, small stamped circles are sometimes used as principal designs, either in two horizontal rows or in the form of a single horizontal ball-band. A much larger form of the latter feature is also present in Phase 3, but the similarity of the Phase 8 variant to the older form is evidently entirely coincidental. Outlined crosses, a rare Phase 7 design, are in more common use in Phase 8 (fig. 39, k). Like other geometric designs of Phase 8, they do not reach the band border, and are smaller and more widely spaced than in Phase 7. They are used in two different ways, either in a horizontal row as a principal bowl design, or as filler elements above the face of front-face feline designs on spouted bottles.

The only new geometric designs are two small simple figures; one is a rectangle and the other is a diamond with a smaller diamond, a plain horizontal line, or a dot in the center. These elements probably represent influence of the Phase 8 substyle of the Ocucaje Basin. Both are used in bowl design bands in the same way as are the stamped circles and crosses, either in one or two horizontal rows consisting of independent units, or, in the case of diamonds, in one horizontal row joined by incised lines like a ball-band design (fig. 39, l). The use of two horizontal rows of small geometric units on an open undivided surface is a Phase 8 patterning innovation of the upper-valley substyle. The small rectangles are also used as filler designs and body spots on one fox design.

Painted guilloches, either in chains of many units or in the form of a figure eight, are an old traditional design in the Ocucaje style found as early as Phase 3, and perhaps earlier. The Phase 8 forms represent Callango Basin influence in the upper valley. They differ from all earlier ones in being much smaller and in lacking incised outlines. Further, the segments are composed of individual S-shaped curves which are not quite joined, leaving small open spaces between. This feature is analogous to the treatment of the incised outlines in Phase 8 step designs. Vertical or horizontal figure-eight guilloche segments are used as spaced unit designs on the outside of two shape 19 bowls and one shape 5 bowl of the Callango Basin shape type. On one shape 5 bowl with a Callango Basin shape, purported to be from Teojate, two long guilloche chains cross at right angles on the interior, also a Callango Basin feature.

Unpainted guilloches made with stamped circles and circle segments appear occasionally at upper-valley sites on the interior rim of fragments of plain redslipped bowls and grater bowls. Since both the vessel shapes and design type are much more common in the lower sections of the Ica Valley, and most common in the Callango Basin, we must assume that their rare appearance at up-valley sites also represents Callango Basin influence.

THE MIDDLE- AND LOWER-VALLEY SUBSTYLES

The pottery substyles of the middle valley, Ocucaje Basin, and Callango Basin are described together because they share a number of features which are not present in the upper-valley substyle. However, as noted earlier, there are also regional differences within this section of the valley, and in a number of respects the pottery of the middle valley (between Ica and the narrows of Ocucaje), the Ocucaje Basin proper, and the Callango Basin, forms three distinct substyles in Phase 8. The regional differences between the different substyles of Phase 8 are much stronger than in the preceding phases, the contrast being especially pronounced between upper-valley vessels and those of the Ocucaje and Callango basins. Vessels from the middle valley share more features with those of the upper-valley substyle than do vessels from the lower valley, but the sample from the middle valley is too small to make a complete comparison.

Although regional differences among sections of the Ica Valley are relatively strong during Phase 8, there is no difficulty in establishing the essential contemporaneity of the respective substyles, because they all share a number of features distinguishing them as a single phase from all other Ocucaje-style phases in all parts of the valley. The designation of "contemporaneity" of the different substyles is intended to mean co-occurrence at a single time, in its absolute sense, with the minor reservation that the most conservative vessels from Callango could conceivably, though not necessarily, be of slightly earlier date than the rest of the Ica Valley vessels assigned to Phase 8. While such a possibility always exists when a seriation is made, it deserves special attention in this instance, because so far we have very few specimens assignable to the Callango Basin phase that corresponds to Phase 7 of the upper valley (see sections on Phases 6 and 7).

A great deal of selective borrowing must have taken place between the different regional substyles of the valley, because all the substyles share some of the general trends in patterning innovations, as well as in stylistic details. It is possible to infer the region of origin of the innovating features and trends only if the feature or trend in question has a greater frequency of occurrence and a greater degree of standardization in one area than in the others, a type of inference which can be made for some, but not all, of the Phase 8 innovations on the basis of the present sample. Thus, the trend in patterning changes leading to freestanding unpaneled designs on large surfaces is present to the same degree in all the substyles of Phase 8, but the innovations are applied in part in different contexts and on different shapes in each substyle. It is not possible to determine from present evidence how the same general trend in design patterning came to be shared by all the substyles and to have such varied applications. On the other hand, it is generally possible to pinpoint the origin of specific designs or design details. Many of the details of shape and design that distinguish the different substyles represent increasingly diverging local developments from Ocucaje-style antecedents, in which some of the traditional themes have much more conservative features in one substyle than in the others. Probably the most conservative survivals from local Phase 6 and 7 antecedents in some bottle and bowl shapes and in many design details are found in the Callango Basin, whereas Ocucaje Basin pottery has some of the most radical innovations in representational figures and geometric designs, and upper-valley changes show the most consistent advancement along lines prescribed by old developmental trends. This does not mean that there is no originality in the substyles outside the Ocucaje Basin. Innovations in bowl shapes and radical innovations in patterning and design of the upper-valley substyle are described in the preceding section. Likewise, some of the most ingenious and spectacular innovations in design patterning and composition originate in the Callango Basin substyle (or its Nasca equivalent), where they are unmatched in originality by the other substyles.

Upper-valley Phase 8 vessel types not found in the Callango and Ocucaje basins include plain red-slipped bowls with inflected contours (shape 21) and the old tradition of bird-spout bottles. Traditional front-face feline panel designs on spouted bottles are also entirely out of style in the lower valley. Fox representations are for practical purposes absent from the lower valley, with the exception of a unique spouted bottle from Callango which has a modeled fox head, evidently a loan trait from the upper-valley substyle, here found in association with a unique locally adapted body design (Rosselló, 1960, Lám. VI, b). Both bowl and bottle shapes of the Ocucaje and Callango basins differ in detail from those of the upper valley, and shape 17 bowls (one of the more common decorated types in the upper valley) are very rare and generally undecorated in the lower valley. The decoration on bowls and bottles of the lower valley consists for the most part of entirely different combinations of features, although many of the individual features are shared by both areas. The combination of negative dots and resin-painted designs, a standard upper-valley feature, is rare in the lower valley, and is known only from the Callango Basin, where it is found in different patterns of association.

Phase 8 features of the lower valley not found in the upper-valley substyle include true double-spout bottles (primarily an Ocucaje type), handled jugs, red cooking ollas, elaborately decorated base-angled graters, pattern burnished bowls, and a separate category of negative-decorated bowls. Feline representations derived from traditional bowl designs are used with much greater frequency in the lower valley than in the upper-valley substyle. Other very common downvalley features are found only as rare loan traits in the upper valley, including unzoned painted line designs and small dots, bowls with rows of unpainted stamped circles and dots or guilloche designs on the interior, interior decorated bowls (primarily a Callango Basin feature), small whiskered feline heads (primarily an Ocucaje Basin feature), front-face human heads (primarily a Callango feature), and double-circle filler elements. Other special Callango vessel types not found in the upper-valley substyle include bowls, cups, and vases with shallow-curved bottoms (shape 26), and anthropomorphic necked bottles (shape 11). Additional Ocucaje Basin features not found in the upper valley include representations of the Oculate Being and the amphisbaena, and a variety of geometric figures. Unlike upper-valley pottery, the great majority of the decorated vessels from the lower valley have mottled dark gray, dark brown, or black surfaces, and some of the more elaborately decorated vessels have evenly coated, glossy charcoal-black surfaces, which are smoke blackened rather than coated with a thin organic material and scorched.

The collections from the middle valley between the city of Ica and the Ocucaje narrows include for the most part only more simply decorated and plain vessel types. This difference in the sample is no doubt partly due to the difference in methods of collection, since the entire middle-valley sample consists either of fragments collected by Rowe, Dawson, and Menzel at refuse sites, or of whole vessels in burials excavated under the direction of Aldo Rubini and not selected for their sales value or public appeal. There are no spouted bottles in the sample from the middle valley. Red cooking ollas of the lower-valley type are common at middle-valley sites, but the majority of the bowl shapes resemble the shapes of decorated bowls of the upper-valley substyle rather than bowl shapes from the Callango and Ocucaje basins. On the other hand, the designs on the middle-valley bowls are for the most part the simpler designs of the lowervalley substyles, which are either not present in the upper valley, or are found there only as rare loan traits. One of the bowl fragments from a middle-valley site has an elaborate upper-valley bowl design on the outside and a simple Callango Basin design on the inside. The middle-valley substyle of Phase 8 thus appears to be a special mixture of features of the upper and lower valley.

UTILITY POTTERY

Thanks to surface investigations and some refuse excavations at sites in the middle and lower valley, more information is available on Phase 8 utility ware from this area than on utility ware of the preceding phases and of Phase 8 of the upper-valley substyle. The utility types proper include low-collared, red ollas with lugs (fig. 16, l; shape 23), which almost always show signs of having been used for cooking over a fire, and simple incised graters (figs. 19, i, j; 40, c, e; 50, c). The utilitarian purposes of these two vessel types are evident. There is no specific indication of the function of other comparably plain vessel types having the same general surface appearance, paste, and temper, which include large incurving vessels without collars or lugs (fig. 50, f, k, l), necked or collared bottles and jars with or without lugs (figs. 16, k; 40, g; 50, g-j, m-o),

and unpigmented gray- or red-slipped bowls with or without stamped circle decoration in the inner surface of the sides (figs. 16, j; 40, h; 50, d).

Phase 8 utility pottery of the middle and lower valley is distinguished by its unusually fine, even, surface finish and finely selected sand temper of medium density, which helps to add additional smoothness to the surface appearance. These are features generally reserved for fancy ware in Peruvian pottery styles because, although they contribute to attractive appearance, they create structural weaknesses which are disadvantageous in utilitarian pottery. Dawson has observed that the fine Phase 8 utility ollas that were used for cooking over a fire are generally cracked in a radiating pattern from the center of the sooted bottom, or are broken in that section only. Dawson has not observed a comparable pattern of fragmentation in the coarse tempered utility wares of other Ocucaje phases. Modern potters of the highlands near Pucará still reserve fine sand temper for exclusive use in ornamental pottery, and go to great trouble to import special crushed stone from considerable distances for making cooking ollas. They say the imported temper prevents breakage of pottery exposed to fire (information collected from a potter on the plain of Llallahua, south of Pucará, 1954).

The peculiarity of sacrificing functional advantages of utility pottery to attractive appearance is a special feature confined to Phase 8. As a secondary consequence of this preference, it is not possible to draw a sharp dividing line between utility ware and fancy ware. Although the red cooking ollas and plain graters definitely can be assigned to a utility category, other forms, notably the fancy decorated base-angled graters, which are most common in the Callango Basin (figs. 19, h; 50, a, b), share features with fancy interior-decorated bowls and actually form a special type of fancy ware.

LOW-COLLARED RED COOKING OLLAS

Fragments of this vessel category are among the most common types in collections from refuse sites of the middle valley and Callango Basin, and some complete vessels were found in burials (fig. 16, l_j ; shape 23). Red cooking ollas are from 30 to 60 cm high and about 40 cm in diameter, with a globular body, or an inverted ovoid one with a high shoulder and a tapering bottom. The surface is smooth, slipped, and polished to a low gloss. The surface color varies from reddish orange to a bright red. The bright red color is the result of a pigmented slip, whereas the orange hue is the natural color of the unpigmented slip. However, many of the ollas vary in surface color between the orange and red hues, and it is not clear whether the slip is pigmented or unpigmented on these specimens. The mouth of the ollas varies between 12 and 19 cm in diameter, and is terminated by a straight vertical or slightly flaring collar about 1 cm high.

All the collared ollas are furnished with lugs in the upper part of the body, near the base of the collar. There are two principal types of lugs, vertical ones and horizontal ones. The vertical lugs are small rings from 3 to 4 cm long, made of a cylindrical coil of clay or of two such coils twisted like a rope. The horizontal lugs are "pinch-lugs," in the sense that they consist of a lump of clay pinched into a flat disk segment with a straight base and an arched top (fig. 16, l). These pinch-lugs are generally larger than the vertical lugs, and are of two types, a smaller solid disk segment from 3 to 8 cm long, and a larger disk segment from 4 to 15 cm long with a hole in the center. The pinch-lugs usually stand up nearly vertically from the side of the vessel.

Some of the collared ollas are decorated with large bumps pressed out from the inside near the base of the collar, or with triangles pendent from the base of the collar, made by shallow incised outlines filled with incised dashes or with punctations.

OTHER PLAIN SLIPPED CLOSED VESSEL TYPES

Some fragments found in Callango Basin refuse sites belong to large incurving ollas without collars and without handles (fig. 50, f). This is an old utility vessel form in the Ocucaje tradition, but the Phase 8 fragments are like the red cooking ollas in surface treatment and manufacture.

The collared cooking ollas and the neckless incurving ollas are never decorated with painted or negative designs. However, there are a number of other vessel types, both closed forms and open bowls, which are usually plain-slipped like the cooking ollas, but which are also sometimes decorated with negative or resin-painted designs. There is a variety of necked bottles and jars that appear to be derived from necked bottles like those of Phase 7 of the upper-valley substyle (cf. fig. 13, e, g). The Phase 8 bottles are usually either unpigmented or plain red slipped, and are much more variable in size and shape than those of Phase 7 (figs. 16, k; 50, g-j). Body contours are often either spheroid or vertically ellipsoid, as in Phase 7, but some have ovoid bodies with low shoulders and a tapering top, some have horizontally ellipsoid bodies, and some have almost rectangular bodies with a rounded shoulder near the top and a hip near the bottom of the vessel. Necks also vary greatly in size and shape. Some necks are high and narrow, either straight cylindrical, except for a slight flare at the top, or irregularly hyperboloid with concave sides. Some are low hyperboloid or cylindrical slightly wider than they are high (ca. 4 by 5 cm), like Phase 7 necks. Some are low hyperboloid or cylindrical from two to four times wider than they are high, and so properly speaking are "jar" necks. Vessels with jar necks sometimes have vertical lugs on the body, unlike the other necked vessels. Occasionally jar or bottle necks are slightly tapering, but this form is comparatively rare.

A few of the bottles have negative decoration on the plain red surface, usually consisting of large dots on the body and vertical stripes on the neck. One bottle is decorated with a more elaborate pattern of columns of dots alternating with long triangular wedges, an elaboration of negative decoration that is a Phase 8 innovation.

A handled jug from one of the burials in the Paraya sector above Ocucaje and two handled jugs from Callango are also plain-slipped vessels, two with dark gray mottled surfaces and one with an over-all red slip. However, vessels in this shape category in the collections from the Ocucaje Basin are finely decorated smoked blackware (see below).

GRATERS

Grater fragments are very common in surface collections at Phase 8 refuse sites, both in the middle valley and in the Callango Basin, and a great number of whole specimens from Callango are included in the del Solar collection. There are also some complete graters in the Carlos Soldi collection from Callango and in the Nathan Cummings collection.

In Phase 8, grater bowls may be divided into two categories, one a plainer, strictly utilitarian category (figs. 19, i, j; 40, c; 50, c) and the other a more ornamental, elaborate one (figs. 19, h; 50, a, b). Many of the fancier graters in the second category show no evidence of having been used for grating, but the simpler graters in the first category all show evidence of such use. The division between purely ornamental and utilitarian graters is not strict, however, because a number of the more elaborate ones have been used for grating, and most of the simpler ones have some ornamental elaborations in the patterning of the incisions not found in graters of earlier phases (fig. 40, c). The attempts to make utilitarian graters ornamental as well as useful are peculiar to Phase 8 of the Ocucaje tradition, and are part of the same effort which affects the manufacture of cooking ollas.

The simpler utilitarian graters are most abundant in surface collections. They have simple shapes that are derived from those of earlier graters, either spheroid, ending below the equator of the projected sphere (fig. 16, j), or paraboloid forms with straight diverging sides (fig. 19, i, j). These graters vary greatly in size (from 16 to 43 cm in diameter). The surface firing of grater bowls is always a light-to-bright orange, the outside usually mottled slightly with fire clouding. Most graters have a red-slipped band approximately 4 cm wide around the inner rim (figs. 40, c; 50, c), and sometimes a corresponding band on the outer rim as well. The incised grating surface on the inner side is unslipped, and the pattern of incisions is more complex than in preceding phases. The most common pattern consists of a central cross consisting of two bands of parallel incisions that vary in breadth (fig. 40, c). The wedge-shaped spaces left by the crossbands in the upper part of the incised surface are decorated with incised lines placed at contrasting angles, usually parallel horizontal lines with a short fringe of vertical lines at the top, or diagonals. This patterning is also found on some grater fragments from sites in the upper valley. The central crossbanding is sometimes also effected by a more complicated pattern of interlocking lines. On many graters a broader space is left in the center of each crossband which is decorated with plain incised variants of painted narrow-band designs derived from Phase 7 motives, including chevrons, parallel horizontal single-step designs, and horizontal twined-fret bands. On some graters the parallel incisions are patterned in closely spaced sets of three or four lines separated by slightly wider unincised spaces.

Some of the smaller graters in this category (not exceeding 27 cm in diameter) have finer, more carefully executed incisions, and are decorated further with a

horizontal row of stamped circles, with or without central dots, in the center of the red-slipped inner rim band. The stamped circles are usually from 7 to 8 mm in diameter. About half of these specimens have a plain incised guilloche enclosing the stamped circle centers. This design is a simplified analogue to the designs on the inside of fancy interior-decorated bowls of the Callango Basin.

The more elaborately decorated grater bowls are base angled or gambreled bowls with straight flaring or slightly convex sides (figs. 19, h; 40, e; 50, a, b). The base-angled variant with straight flaring sides is a shape category also used for other interior decorated bowls (shape theme 5). Some of these grater bowls have, in addition, three or four ornamental luglike projections above the rim in the form of pyramidal steps. Grater bowls in this category have a smaller average size than the plainer bowls, not exceeding 22 cm in diameter. Many of these graters differ from the plainer, simpler ones in having the entire interior, including the incised surface, covered by the red slip and in showing no evidence of having been used for grating. They also differ from the simpler graters in being decorated with finer, sometimes very shallow incisions, sometimes in the same patterns as the simpler bowls, but often in more elaborate patterns of geometric and representational designs which are in part copies of resin-painted designs on interior-decorated bowls of the Callango Basin substyle. Twined-fret and other narrow-band designs are used with greater frequency and in more diversified patterns than on the plainer grater bowls. The great majority of bowls in this category are further decorated with two horizontal rows of complete or incomplete stamped circles on the inner rim band (fig. 50, a), though occasionally only one row is used. On a few specimens the stamped circles are enclosed by an incised guilloche (fig. 50, b), but the majority of the base-angled grater bowls lack this further adornment.

PLAIN SLIPPED BOWLS COMMONLY DECORATED WITH STAMPED CIRCLES

There are also a number of Phase 8 bowls in the collection from Callango which are like the fancy graters in shape but which lack the grating incisions (figs. 19, k; 50, d). Some of these bowls are decorated with one or two rows of stamped circles on the inner rim, like the grater bowls (fig. 40, h), but others are entirely plain, except for the slipped surface. Unlike grater bowls proper, some of the plain or stamped circle bowls have a dark gray to black mottled surface, while others have a red-slipped surface like graters. In the sample from the Paraya sector burials above Ocucaje there are also some plain-slipped bowls with different shapes, including deep, convex-sided and shallow spheroid bowls (shape themes 5b and 12), which have stamped circle designs on the inside.

It is a characteristic of the great majority of stamped circles used on the interior of plain bowls or grater bowls in Phase 8 that the circles are stamped in with uneven pressure, so that some parts of the outline are fainter and shallower than others. In some designs, parts of the outline are missing altogether (fig. 50, a). Equally, a number of the plain incised guilloches are either incomplete, with spaces between the incised curves, or they have overlapping outlines. These irregularities are reminiscent of the gaps left between units of diagonal step designs in the upper-valley substyle and unzoned guilloches in the Callango Basin substyle, and appear to be part of a general stylistic trend toward more casual geometric design execution which manifests itself in several of the smaller design motives of Phase 8.

OTHER PLAIN SLIPPED BOWLS WITHOUT DECORATION

In collections from both the middle valley and the Callango Basin there are a few plain gray-surfaced bowls with shapes that are used more commonly for fancy ware.

VESSEL SHAPES OF FANCY WARE SPOUTED BOTTLES

All the spouted bottles in the Ocucaje Basin sample, with the exception of two forms with complete modeled feline bodies, have two hollow spouts, a Phase 8 innovation which evidently originates at Ocucaje (figs. 8, a; 17, a-c; pls. 8, b; 9, a). In the sample from the Callango Basin, only six of the fourteen spouted bottles have two hollow spouts, the rest being conservative forms with one modeled head and one hollow spout. The modeled heads from Callango are human or hawk heads, plus one fox head which represents a loan trait from the upper valley. The old traditional bird spouts are entirely out of style in Phase 8 of the lower-valley substyles, as well as in all succeeding phases.

True double-spout bottles represent a modification of spout and bridge to hawk-head bottles. This derivation is evidenced by the fact that on eight of the whole double-spout bottles and fragments in the Phase 8 sample at least one of the spouts, and sometimes both, have a modeled hawk head at the base that is a modified variant of the modeled hawk bottle heads of the preceding phases (figs. 8, a; 17, a; 18, a, b; pl. 11, a). Human-head bases instead of the hawk-head ones are found only in the sample from Callango. Since traditional modeled humanhead bottles without spout tops are also confined to the Callango Basin sample, it appears that the use of modeled human-head bases in place of the hawk-headed ones is a conservative specialization of Callango Basin pottery which is either rare or absent at Ocucaje. The modeled head bases of hollow spouts resemble the knoblike forms of the closed modeled heads of the preceding phases, but in place of the closed head there is a shelflike recess at the top of the head out of which projects a slender, tubular spout. If only one of the spouts has a modeled head base, the second plain spout is often slender and tubular both above and below the bridge (fig. 17, b, c), although it may also taper from an expanded base, as before (fig. 18, a, b; pl. 11, a). In the sample from Ocucaje, the shelf between the head base and tubular spout top is at the same level as the top of the bridge (figs. 8, a; 17, a), but on the bottles from the Callango Basin and Nasca the bridge is attached below the spout shelf (fig. 18, a, b; pl. 11, a; Rosselló, 1960, Lám. VI, a).⁷ The rest of the bottles in the Ocucaje Basin sample have two plain spouts without a modeled-head base (fig. 17, b, c).

⁷ In the illustrations for the Callango Basin substyle, we have used a spouted bottle from Nasca (fig. 18, a; pl. 11, a) and one without provenience in the Regional Museum of Ica (fig. 18, b) instead of those that have documented Callango Basin provenience. We did so

The markings on hawk heads differ somewhat from those of preceding phases (figs. 8, a; 17, a; 49, d; pl. 11, a). The modeled features consist of a small, knoblike beak with a small horizontal slit, often without the arched incised line that marks hawk beaks of preceding phases. Some, but not all of the spout base heads have modeled "ears" of various types. The eye is most commonly either a small stamped circle or a double circle without dot center, unlike the larger single-circle eyes with a dot center of the preceding phases. The hawk markings are modifications of those of preceding phases, consisting of two forked, slender, open-ended bands below the eye and sometimes a vertical band above the eye. The features of the modeled human heads from Callango are more conservative, more or less like those of upper-valley Phase 7, but with broad parabolic or rectangular eyes instead of the circular ones of the upper-valley substyle, a type evidently derived in a separate line of development from modeled heads of Phase 6 (fig. 49, b, c).

Bridges of the spouted bottles from the Callango and Ocucaje basins differ from those of preceding phases and the more conservative upper-valley ones in being arched rather than straight (figs. 8, a; 17, a-c; 18, a, b; pl. 11, a).

In body shape, shape 4 bottles from both the Ocucaje and Callango basins resemble some of the more advanced upper-valley forms in having a slightly deeper bottom than in the preceding phases, the bottom often having paraboloid rather than spheroid contours (figs. 8, a; 17, a; 18, a). Most of the double-spout bottles from the Ocucaje Basin have composite bodies with a very homogeneous shape that differs from shape 4 bottles of the upper-valley substyle in having a higher, dome-shaped spheroid top with an evenly rounded shoulder just below middle height of the body, and a height/diameter ratio between 65 and 71 per cent (figs. 8, a; 17, a). There is only one shape 4 bottle from Ocucaje with a height/diameter ratio as low as 59 per cent, apparently a conservative shape resembling Phase 7 bottles of the upper-valley substyle. A second, unusually small bottle from Ocucaje has a shallow arched top, like some of the Phase 8 bottles from the Callango Basin and Nasca.

In contrast to the Ocucaje Basin bottles, only seven (half) of the spouted bottles from Callango have shape 4 bodies, and, except for three standard shaped specimens, no two are exactly alike. The three homogeneous Callango Basin shape 4 bottles have a shape also found on comparable bottles from the Nasca drainage, with a paraboloid or spheroid base, a relatively high base angle, and a shallow arched top usually lacking a shoulder, that is, with the widest diameter at the base angle (fig. 18, a; pl. 11, a; see also Bushnell, 1957, pl. 15). Of the remaining four bottles, one has the shape and proportions of the standard Phase 8 type from the Ocucaje Basin, whereas the rest are much more variable and resemble the different types of advanced Phase 8 shape 4 bottles from the upper valley

because our photographic records of bottles from the Callango Basin were not good enough for publication. Since we are unable to distinguish the bottle from Nasca from Phase 8 shape 4 bottles of the Callango Basin substyle, the bottle from Nasca illustrates our argument. The bottle without provenience in the Ica Museum also has the stylistic characteristics of comparable Phase 8 bottles that have documented Callango Basin provenience. Bottles from the Callango Basin with shape and design features like the one from Nasca are illustrated by Rosselló (1960, Lám. VI, a, b). Another shape 4 bottle in the Callango Basin substyle, without provenience, has been illustrated by Bushnell (1957, pl. 15).

(cf. fig. 15, b, e). One of the Callango Basin bottles has a simple, near-spherical shape, like the most advanced upper valley type in Phase 8.

Four bottles in the sample from the Callango Basin, one bottle of Callango Basin type without provenience in the Regional Museum of Ica, and one bottle from Ocucaje, have complex bodies with a bowl-shaped bottom and an arched top (figs. 17, b; 18, b; shape 4a). The shapes of the Callango Basin specimens are in most respects like those of the most advanced complex Phase 8 bottles of the upper-valley substyle, but the Callango Basin ones are proportionately higher than those of the upper valley (fig. 18, b; compare with fig. 15, g). The body of the shape 4a bottle from Ocucaje (fig. 17, b) resembles some of the more conservative Phase 8 shape 4a bottles from the upper valley.

One unique human-head bottle from the Callango Basin has an enlarged body shape and a thick hyperboloid spout, a common bottle type of Phase 7 of the upper-valley substyle. Evidently this specimen represents a Callango Basin survival from an earlier form.

Six spouted bottles from Ocucaje and two from Callango have bodies consisting of complete modeled figures, and there are two additional modeled bottles in the lower-valley substyles in the collection of the Regional Museum of Ica. Three of the vessels from Ocucaje and the two from Callango, as well as one of the ones in the Regional Museum of Ica, are representations of the amphisbaena. The specimens from Ocucaje have two hollow spouts in the top of the figure (fig. 17. c), while the specimens from Callango have a traditional modeled hawk head in place of one of the hollow spouts. The rest of the modeled forms with provenience are all from Ocucaje, and include two full-bodied felines (Kroeber, 1944, pl. 13, D; Tello, 1959, fig. 6; Soldi, 1956, middle row fourth from left, bottom row left) and a representation of the Oculate Being (fig. 43, c). One of the modeled spouted bottles in the Regional Museum of Ica is a pornographic representation of a full-bodied, seated human. The distribution of modeled forms in the sample (including three additional necked bottles from Ocucaje) suggests that the increase and elaboration of modeled bottles may be a special development of the Ocucaje Basin substyle.

BOWLS

Lower- and middle-valley bowl types of Phase 8 share most of their features with Phase 8 bowls from the upper valley, but the features are arranged in differently patterned combinations. These differences in the combination of shape features result in bowl forms that are easily distinguished from their up-valley counterparts. In general, Callango and Ocucaje basin bowls are shallower than uppervalley ones, in continuation of regional differences already present in Phase 6 of the Callango Basin and upper-valley substyles, but there is a new Callango Basin bowl type which includes deeper vessels (shape 26).

The most elaborately decorated and most carefully formed vessel type of the lower valley, besides spouted bottles and shape 26 bowls, is the shape 5 bowl, which appears predominantly in the Callango Basin (fig. 19, a, b, d, f, h, k), and which is also found in much the same form in the Nasca region (pl. 10, b; Tello,

1959, fig. 1). Callango Basin shape 5 is a shallow composite bowl with a sharply defined base angle or sometimes a less sharply defined basal gambrel on the outside, invariably a sharp base angle on the inside, and low, relatively widely flaring sides which are usually straight and sometimes slightly convex. This bowl category is derived directly from Callango Basin shape 5 bowls of Phases 6 and 7, and a few of the Phase 8 bowls are virtually indistinguishable from their Phase 6 and Phase 7 antecedents in shape (compare fig. 19, a and fig. 12, b). However, the Phase 8 bowls have a much greater range of variation in diameter, degree of flare, and height of sides, so that the majority of the Phase 8 shape 5 bowls differ from their more homogeneous Phase 6 antecedents. Most of the Phase 8 shape 5 bowls have a smaller diameter than their Phase 6 and 7 antecedents, which makes them proportionately deeper; a few are shallower than in Phase 6. The Phase 8 bowls have a height/diameter ratio usually ranging from 23 to 33 per cent, with one as deep as 37 per cent, as against the Phase 6 range from 26 to 29 per cent. Although some of the Phase 8 bowls are as much as 22 cm or possibly more in diameter, the majority are smaller, many about 14 or 15 cm in diameter. The Callango Basin shape 5 bowls in this category differ from the Phase 8 shape 5 bowls of the upper-valley substyle in having a more deeply curved, often paraboloid bottom, and shorter, more flaring sides. The great majority of bowls in this group are decorated inside on the bottom and sides, as well as on the outside of the sides (a Phase 8 innovation of the Callango Basin), but there are a few specimens which have conservative designs on the outer sides only and which resemble bowl designs of Phases 6 and 7.

Shape 5 bowls of the Callango Basin substyle, or modified imitations of such bowls, are found occasionally in the other parts of the Ica Valley. It is very rare, however, to find specimens from the Ica Valley outside the Callango Basin that are indistinguishable in both shape and design from Callango Basin bowls proper. Among the imitations, no two are exactly alike, except for a pair of bowls with identical decoration from Ocucaje in the Truel collection (fig. 17, f). The latter two bowls differ from the Callango Basin ones proper in having a shallower bottom and proportionately slightly higher, very straight, sides, all features in which the Ocucaje Basin bowls resemble shape 5 bowls of the upper-valley substyle more than they do the Callango Basin ones.

Other shape 5 bowls from the Ocucaje Basin, as well as a few specimens from Callango, represent a different variant more closely related to the shape 5 type of the upper-valley substyle (fig. 17, i). These bowls are deeper than the most common shape 5 bowl in the Callango Basin substyle, with higher sides and a proportionately smaller diameter (the height/diameter ratio varies between 35 and 45 per cent; compare with upper-valley shapes in fig. 15, f, h, i). Like the related upper-valley shape 5 bowls, the Ocucaje Basin bowls are decorated on the outside only, and the designs are identical with or similar to the innovating geometric designs of Phase 8 of the upper-valley substyle, in which the same designs are used for the decoration of this bowl category.

Just as the Callango Basin shape 5 bowl is the most distinctive bowl type in that substyle, so are shape 5d bowls most characteristic of the Ocucaje Basin substyle, although a few specimens in the form of fragments have also turned up at Callango Basin sites (fig. 17, h). Unlike Callango Basin shape 5 bowls, shape 5d bowls are decorated on the outside only. The shape theme number, 5d, represents an interpretation of the stylistic relationships of the form. The bowl shape is a distinctive one, hence it is put into a separate subgroup designated by the letter d. However, the features that make up the shape are also found in shape 5b bowls of the upper-valley substyle, and shape 5d bowls thus probably represent an Ocucaje Basin variant of the same vessel form as upper-valley shape 5b. Shape 5d bowls have convex, usually vertical sides, a low rounded hip and a relatively deeply curved spheroid or paraboloid bottom, features in which they resemble shape 5b bowls of the upper-valley substyle (compare with fig. 16, c). However, unlike the latter, shape 5d bowls of the lower valley are usually proportionately shallower, with lower sides, and they always have a rounded hip, never a basal gambrel. Occasionally shape 5d bowls are slightly flaring or tapering sided, also like shape 5b bowls in the upper-valley substyle. A few specimens from the lower valley are deeper, higher sided bowls, more nearly like shape 5b vessels.

Shape 26 bowls are a special Callango Basin vessel type in Phase 8 (fig. 19, c, e, g; pls. 9, b; 10, a). Unlike shape 5 bowls and bowls of related shape, shape 26 ones do not have any specific Ica Valley antecedents, hence the new theme number. In contrast to bowls of other categories, shape 26 bowls are highly variable in height. The features marking them as belonging to a single distinct vessel type include the combination of a very shallow, slightly curved bottom and a tightly curved basal hip between bottom and sides. Most of the bowls in this group are deep bowls, some cuplike (fig. 19, e), and one deep enough to be called a vase (fig. 19, c; pl. 9, b), but there are also lower sided, shallow bowls that belong in this category (fig. 19, g; pl. 10, a). The majority of the shape 26 bowls have slightly convex sides which are either vertical or very slightly flaring, features in which they resemble other Phase 8 bowls of the upper and lower valley. In addition to the shape features which distinguish shape 26 bowls as a separate vessel category, these bowls are decorated with special designs which show them to have been distinguished as a single, distinct vessel type by the Phase 8 potters. Although the shallowest shape 26 bowls resemble some of the Callango Basin shape 5 bowls in shape (compare fig. 19, g with fig. 19, d), the shape 26 bowls are distinguished from the latter by having shallower spheroid bottoms, by lacking a base angle or gambrel, and, some at least, by being decorated over the entire outside, including the outside bottom, as well as on the entire inside, with designs that differ from those on shape 5 bowls (pl. 10, a). Higher sided shape 26 bowls, cups, and vases are decorated on the outside only, generally not including the outside bottom. Shape 26 bowls are among the most highly decorated vessels in the entire Ica Valley, and a number of them are additionally distinguished by having smoked carbon-black surfaces under the painted decoration, a technique reserved for the finest fancy ware in Phase 8 of the Callango and Ocucaje basin substyles.

Except for the Callango Basin, the Ocucaje Basin is the only place where a

slightly modified variant of a shape 26 bowl has been found (fig. 17, g). The specimen from Ocucaje (Rubini Burial 80-3) differs from shape 26 bowls from Callango in having a more open curvature between bottom and sides (compare fig. 17, g with fig. 19, g). While the patterning of the interior decoration is like that on the shallow shape 26 bowls from the Callango Basin, the design figure has features of the Ocucaje Basin substyle that are not found at Callango (cf. fig. 44). The Ocucaje Basin bowl is also decorated on the outer sides, but it is not decorated on the outside bottom, unlike the shallow Callango Basin shape 26 bowls. The distinguishing features of the Ocucaje Basin shape 26 bowls. The distinguishing features of the Ocucaje Basin shape 26 bowl from Ocucaje, described above, there is an Ocucaje Basin shape 5 bowl in the Truel collection that has interior decoration patterned after shape 26 bowl designs from Callango (fig. 17, i), the design figures being in the Ocucaje Basin substyle (again like the imitation shape 26 bowl).

Bowls with simple contours (shapes 12 and 19) are relatively scarce in the sample of complete decorated vessels from the lower valley (exclusive of grater bowls with simple contours belonging in a different shape category). The reason for the relative scarcity of shape 12 and shape 19 bowls in the sample is probably that bowls in these shape types are generally undecorated or have only simple decoration and so are not as attractive to collectors as some of the other types. There are eight specimens of such bowls in the sample for the middle and lower valley, five of them from a burial in the Paraya sector of the lower-middle valley just above Ocucaje, and three from the Callango Basin. Seven of these bowls are spheroid ones (figs. 16, j; 19, l; shape 12), and one is horizontally ellipsoid (shape 19). The middle- and lower-valley bowls differ from the spheroid and ellipsoid Phase 8 bowls of the upper-valley substyle in being shallower and in lacking the straight-sided extensions which convert the upper-valley bowls from simple to composite shapes. The spheroid bowls from the middle and lower valley also differ from spheroid bowls of Phase 7 in the upper-valley substyle in being shallower and in ending in a flare, well below the equator of the projected sphere. The single shape 19 vessel from Callango, on the other hand, is not distinguishable from shape 19 bowls of Phase 7 of the upper-valley substyle, unlike the shape 19 bowls of Phase 8 in the upper valley.

In the Callango Basin sample there are a few slightly flaring, straight- or irregular-sided cups with a base angle and a spheroid or paraboloid bottom which represent the survival of the shape 8 bowl tradition dating back to Phase 3 (fig. 18, d).

There are also a few deep, tapering-sided bowls with low, vertical collars in the collections from Callango which belong to the shape 18 tradition (figs. 18, e; 50, e).

The bowl shapes in the sample from the middle valley all resemble Phase 8 bowls from other parts of the valley, but the majority resemble bowls of the upper-valley substyle more than bowls from the lower valley. Several of the middle-valley bowls are identical in shape to upper-valley shape 5b bowls (fig.

16, g). Most of the rest of the middle-valley bowls resemble shape 5b bowls, but they tend to have straighter sides, and some have a shallower bottom, resulting in slightly different contours (fig. 16, h, i). Since the latter bowls appear to form a special middle-valley subtype, we have given them a separate theme designation (shape 5c). Shape 5b and shape 5c bowls of the middle valley share the same type of decoration, one which differs from that on corresponding up-valley bowls. Rim fragments of decorated bowls from the middle valley cannot always be assigned to a specific shape subtype, since most or all of the bottom section is usually missing. However, all but some stamped circle bowls and the grater bowls appear to belong either to shape theme 5b or 5c (fig. 40, b, d).

HANDLED JUGS

Handled jugs are a new vessel type in Phase 8 in the lower-valley substyles, a type not found in the upper valley. There are examples from Callango and Ocucaje, as well as one from a burial from the Paraya sector in the lower middle valley (fig. 17, d; Kroeber, 1944, pl. 13, F, G). The bodies of these vessels resemble the bodies of shape 4 spouted bottles, with a similar range of variation. However, in place of the spouts the handled jugs usually have a relatively broad neck, either straight-sided vertical or slightly hyperboloid, approximately from 3 to 4 cm high and from 5 to 6 cm in diameter. The specimen from the middle valley has a lower, broader, slightly flaring collar. All the vessels in this category have a broad vertical strap handle from the neck to just above middle height or to middle height of the body. On the higher necks the handle is attached a little below the rim edge, and on the lower necks and collar it is attached directly to the rim edge. The specimens from Callango and the Paraya sector are plain redslipped or gray, but the specimens from Ocucaje have a glossy, highly polished carbon-black surface and a special type of decoration, either unpainted incised, painted incised, or incised with only small highlights of painted areas.

NONANTHROPOMORPHIC NECKED BOTTLES

Decorated necked bottles are rare in the sample but there are three such vessels in the collection from Ocucaje and two from Callango (not counting modeled and anthropomorphic bottles and jars). No two of the decorated bottles are exactly alike. Two in the collection from Ocucaje resemble each other in having a body shape and type of decoration similar to those found on handled jugs, but they lack a handle and the neck is a regular high, slightly tapering bottle neck (fig. 17, e). The third decorated necked bottle from Ocucaje belongs to a different category, related to nonanthropomorphic necked bottles (shape 14) of Phase 7 of the upper-valley substyle, with an inverted ovoid shape, a high, slightly hyperboloid neck, and a narrow design band around the base of the neck. One of the bottles from Callango is a football-shaped one indistinguishable in shape from the Phase 7 shape 15 forms of the upper-valley substyle (cf. fig. 13, f). The second bottle from Callango has an approximately globular body and a high, hyperboloid neck, with an elaborate design of a type found otherwise only on the interior of Callango Basin shape 5 bowls. The scarcity of decorated necked bottles in the lower-valley substyles and their lack of standardization suggest that these bottles represent rare unique shape and design combinations adapted from other vessel types rather than regular standardized forms.

ANTHROPOMORPHIC NECKED BOTTLES AND JARS

There are nine anthropomorphic necked vessels in the sample, all from Callango, and fragments of this vessel type have been found in surface collections at Phase 8 sites in the Callango Basin (fig. 18, c). They are approximately like the Phase 6 antecedent in shape and size, but there is a good deal of variation in proportions. However, all have a vertically ellipsoid body with a constricted waist in the upper third of the body. The variation in neck forms includes the entire inventory of jar and bottle neck types already described for the plainer vessels. The anthropomorphic features are distinguished from those of the earlier phases in both the face and hands. The face is a narrower rectangle or trapezoid confined to the upper part of the upper bulge of the body, bordering the base of the neck, the ears are modeled lugs, the arms are narrow bands that project into the lower half of the vessel, and the hands are large, three-fingered appendages with broad, straight bases, a projecting middle finger, and specially marked-off rectangular white nails. The eyes are the same rectangular or parabolic forms used for modeled human heads on Phase 8 spouted bottles from Callango (cf. fig. 49, b, c). The mouth is also distinctive in being abbreviated and merged with the bottom outline of the face. It consists of a small white section of tooth subdivisions in the center of the red border band. On one specimen, a feline face is used instead of the human one.

Association of Shapes and Designs decoration on spouted bottles

All the double-spout bottles from Ocucaje (not counting those with modeled bodies) are decorated with a standard pattern of design (fig. 8, a; pl. 8, b). The entire upper body, to the base angle, is covered with zoned painted decoration, and the patterning differs from all previous ones or any found in the upper valley. Around the base there is a band derived from bowl designs which is analogous to the narrow-band designs used in chin-whisker bands on bird-spout bottles of the upper-valley substyle (fig. 6, b), and in basal bands on shape 4 bottles from the Callango Basin and Nasca (pl. 11, a). Unlike the exclusively narrow basal bands on spouted bottles of the other Phase 8 substyles, the basal band on Ocucaje bottles may be either narrow, medium width, or wide (the range in width being from $1\frac{1}{2}$ to 4 or 5 cm, outline bands included), and, like the analogous bands in the other substyles, it is decorated with special designs. Narrow bands are decorated with a diagonal twined-fret design, like the corresponding Callango Basin and Nasca bottles (pls. 8, b; 11, a). Bands of medium width are decorated with a modified step-block design (a traditional bowl design band), and broad bands are decorated with a "bull's eye" design, a special new Ocucaje bowl design not found outside the Ocucaje Basin (figs. 8, a; 42, c). Outlines and panel dividers are either simple incised lines or single zoned bands.

The bottle surface above the basal band is halved by two large, free-standing representational figures, one on each side of the body parallel to the bridge. The representation is usually a full-bodied feline, but also at times some other design; on one vessel this is a double-sided head (pl. 8, b), and on another a representation of the Oculate Being. Two other bottles from Ocucaje which may be transitional between Phases 8 and 9 also have different designs, one a modified form of the amphisbaena, the other crested gliding birds. The space around the principal figures is almost always filled with a scattering of individual units of space fillers, a patterning which is analogous to space fillers in upper-valley bowl designs and differs from the ray and ball-band space fillers in the "forehead" area of traditional bird-spout bottle decoration. The space fillers on Ocucaje bottles include very small stamped circles (smaller than 5 mm in diameter), concentric double circles, small rectangular bars, longer single or paired bars, concentric rectangles, lozenge-shaped figures, and long S-shaped wormlike bands. Most of these elements are not found in preceding phases or in the upper-valley substyle in this phase. Larger spaces below each spout are usually filled with one of several down-valley variants of the clothespin bird of the upper-valley substyle, or, more rarely, the Callango crested bird. A zoned space at the top of the body below the bridge, and parallel to it, is painted red, without further decoration, and recalls the unpainted spaces below the bridge of many of the uppervalley Phase 8 bird-spout bottles (pl. 8, b). The tops of the spouts and bridge are usually left undecorated and are either a glossy charcoal black or a mottled gray. On one vessel, the top of the bridge is decorated with unzoned dots, a design form used ordinarily in the decoration of Callango Basin shape 5 bowls.

Only one of the double-spout bottles from the Callango Basin conforms in every way to the Ocucaje patterning standards (fig. 47, c; Rosselló, 1960, Lám. VI, a). Three other spouted shape 4 bottles from Callango have different, unique individual modifications of the standard Ocucaje pattern, an observation which suggests that Callango Basin potters are imitating the Ocucaje Basin bottle decoration. On the other hand, four of the spouted bottles (shape 4 and shape 4a) from Callango have over-all negative decoration and painted narrow-panel designs on each side of the vessel parallel to the bridge, the same patterning found on bird-spout bottles of the upper-valley substyle (cf. pl. 7, a), which represents a standardized form at Callango not found in the Ocucaje Basin sample. This is the only standardized bottle decoration of the Callango Basin sample, since all the rest of the bottles in the sample have unique combinations of design features. In the patterning of bottle decoration, as in several other stylistic aspects, Phase 8 bottles from Callango often resemble the upper-valley substyle of Phase 8 more than they do the Ocucaje Basin one. This is a curious pattern of distribution.

Bottles from the Callango Basin with human-head spouts or modeled human heads have a "necklace" of triangles pendent from the base of the modeled neck (fig. 49, b, c), or a single triangular "pendant" in front, conservative survivals of very old features. Panel designs having full human bodies below the modeled heads, which characterize modeled-head bottles of the upper-valley substyle in Phase 8, are not present on the Callango Basin bottles. Complex shape 4a bottles from the lower valley are either undecorated, or they are decorated with bowl band designs similar to those used to decorate complex shape 4a bottles of Phase 8 of the upper-valley substyle. Two of the complex bottles from Callango are decorated with unique modified survivals of hawkbottle designs of Phases 6 and 7.

INTERIOR AND EXTERIOR DECORATED BOWLS

The decoration of the interior of shallow bowls is a Phase 8 innovation, the earlier use of interior bowl decoration having gone out of style in the Ica Valley after Phase 3. The Phase 8 innovation centers in the Callango Basin and evidently at Nasca, and is used for two bowl types, Callango Basin (and Nasca) shape 5 bowls and shallow Callango Basin shape 26 bowls. The designs and patterning used for the two bowl categories are distinct. Both Callango Basin bowl types follow standard conventions of design as well as shape at Callango, whereas the rare interior decorated bowls found in other parts of the valley represent unique imitations of the Callango Basin types.

There are fifteen elaborately decorated shape 5 bowls and about fifteen less elaborately decorated ones in the sample of complete bowls from the Callango Basin. In Phase 8 the greatest effort and the greatest artistic ingenuity of the entire Ica Valley went into the decoration of this bowl category. The patterning is of special interest, for it specializes on intricate symmetries of design. The principal design is on the interior bottom of the bowl, covering the entire surface, with important secondary designs on the interior and exterior of the sides. The outside bottom is plain. The unpainted surface of these bowls is either a glossy charcoal black, or a mottled dark brown to gray.

The central design on the bottom inside of Callango Basin shape 5 bowls is always a representational figure, a full-bodied feline (fig. 45, a), a crested gliding bird (fig. 49, e), a full-bodied human figure (fig. 48, c), a monkey (pl. 10, b), or a double-sided head (fig. 45, b-1). On one bowl from the Nasca region the design on the inside bottom consists of three profile feline bodies placed in rotational symmetry below three front-face feline heads painted on the side of the bowl (fig. 46, b). The most commonly used designs are the double-sided head and the full-bodied feline. Double-sided heads are usually bilaterally symmetrical (fig. 45, b-1; Rosselló, 1960, Lám. II), but one head has radial symmetry. The interior sides of bowls having a symmetrical design on the bottom are decorated with a broad design band subdivided into panels, in a traditional patterning, but the number of the panels and the design alternation are matched, whenever possible, to the symmetry of the design on the bottom (figs. 45, b; 46, b). The panels on the inside of the bowl usually contain front-face feline heads alternating with narrower panels containing vertical ball-band designs, in the traditional manner. If the bottom design has radial symmetry, the side band contains four panels of one kind alternating with four panels of another. If the bottom design has bilateral symmetry, the side is decorated with various individual modifications of this pattern in which there are either two panels of one kind alternating with two panels of another, or four panels of one kind alternating with two sets of two

different panel designs. There is only one bowl in which the bottom design has bilateral symmetry and the side is divided into three matching sections, the result of the use of a very conservative design patterning on the sides in which profile bodies adjoin front-face feline heads in separate panels, leaving no room for the usual flexible adjustments in the width of the panels (Rosselló, 1960, Lám. II).

The full-bodied felines, monkeys, birds, and human figures are not bilaterally or radially symmetrical, and on bowls with these designs the interior of the sides is usually decorated with a simple horizontal guilloche, either zoned or unzoned, or with columns of small, closely spaced unzoned dots in blocks of contrasting colors, which cover the entire surface (figs. 45, a; 48, c; 49, e).

It is a special characteristic of designs on the interior bottom of Callango Basin shape 5 bowls that the decoration of the space surrounding the principal design is patterned in analogy with the "forehead" area in front-face feline panels of traditional bird-spout bottles (figs. 45, a, b-1; 48, c; 49, e). The patterning adaptation is a reapplication of the only traditional Ocucaje style technique of dealing with vertically expanding space, here to a very much expanded new circular surface. The patterning feature which Callango Basin bowl designs share with front-face feline panels of Phase 7 and Phase 8 bird-spout bottles is the use of long paired rays, with plain or recurved tips and with or without ladder designs in the center, which, in Callango bowl designs, project radially from the central figure to the circular base angle which borders the bottom. The spaces between the ray projections are further divided by long chains of ball-bands which separate color zones (fig. 48, c), and by other filler designs such as individual stamped circles or rows of small, closely spaced unzoned dots in contrasting colors. The entire space is tightly packed with decoration, just as in front-face feline panels of the bird-spout bottle designs.

There are three types of designs used on the outside of Callango Basin shape 5 bowls, two elaborate and one simpler one. However, all of them share with upper-valley bowl designs of Phase 8 the double, triple, or fancy triple outline banding at the top of the rim. In one variant, the area below the rim banding is decorated with a parted banding containing a three-ply diagonal twined-fret design which, unlike the similar Phase 8 twined-fret bands of the upper-valley substyle, is always enclosed by the outline bands of the design area (fig. 45, b-2). The parted space in the design band is usually decorated with unzoned guilloche units in place of the negative dots used for this purpose in the upper-valley substyle. In a second variant, the outside is divided into alternating panels matching the symmetry of the interior design, the most common panel designs being bodiless front-face human heads or bodiless front-face feline heads (figs. 46, a; 49, a). The simpler outside decoration consists of horizontal or vertical units of unzoned guilloche segments.

Many Callango Basin shape 5 bowls are decorated with various simplified versions of the elaborate decorative patterns described above, or they are decorated with other simpler designs. The bottom center is often decorated with one or two narrow panels containing conservative gliding bird designs, with a cross of two unzoned guilloches (fig. 40, f), or with small zoned or unzoned design units of various types. The interior sides are plain or decorated with a horizontal guilloche. The exterior sides are decorated with plain rim banding, zoned or unzoned guilloche units (figs. 45, b-2; 46, a-2; 49, a-2), or one or two gliding birds in narrow panels (fig. 49, f, g). The unpainted surfaces on these bowls are usually a slightly mottled black or dark brown, but on some specimens the interior is red slipped.

A pair of two bowls, identical in shape and design, from Ocucaje in the Truel collection represents an Ocucaje Basin imitation of Callango Basin shape 5 bowls (fig. 17, f). The two bowls have elaborate interior decoration, but the decoration differs from Callango Basin shape 5 bowls in some patterning and design features. As in some Callango Basin (and Nasca) bowls, the principal figure in the center represents a monkey (cf. fig. 47, b; pl. 10, b). However, unlike the patterning in Callango Basin bowls proper, the central monkey figure is smaller than the interior bottom and is framed by a circular band from which radiate wavy, snakelike band fillers. The wavy band fillers represent a special feature of the Ocucaje Basin substyle. The outside of this pair of bowls is decorated with an incised, painted checkerboard design derived from an old exterior bowl design on shape 5 bowls dating back to Phase 6.

In the middle valley, fragments of a bowl belonging to an upper-valley shape 5 or shape 5b form are also decorated with a unique combination of design features, part of which represent the influence of Callango Basin shape 5 bowl design patterning (fig. 40, d, f). Callango Basin influence of shape 5 bowls is present in the form of interior decoration consisting of two unzoned, painted guilloches which cross each other on the interior bottom, and a horizontal guilloche encircling the interior rim. The latter is a special middle-valley adaptation. In other respects the middle-valley bowl has features of the upper-valley substyle, including a red-slipped interior and exterior patterning of a type characteristic of Phases 8 and 9 of the upper-valley substyle. The Huaca Pantaleón (PV62-7) in the central middle valley, where these bowl fragments were found, is the southernmost site at which this type of upper-valley bowl design patterning has turned up.

Shape 26 bowls follow a different pattern of decoration from those of Callango Basin shape 5, and only the shallowest bowls in this category are decorated on the inside. Unlike Callango Basin shape 5 bowls, the shallow shape 26 bowls from Callango are decorated over the entire outside as well as the inside (pl. 10, a). The patterning of the decoration is of special interest because it, and some of the design details also, represents adaptations from patterning innovations in Ocucaje Basin shape 4 bottle designs, as well as from some aspects of Callango (and Nasca) shape 4 bottle decoration. Unlike the interior of Callango Basin shape 5 bowls, the inner surface of shape 26 bowls is treated as a single curved design area, instead of the bottom and sides being treated as separate design areas (fig. 48, a). The absence of the base angle and the approximately even curvature of the bottom and sides of shape 26 bowls makes this treatment of the design surface the more convenient one. The principal design figures used in the center of these design fields on shape 26 bowls are felines and hu-

mans, as in shape 5 bowl designs, but the shape 26 designs have some features that represent borrowings from Ocucaje Basin shape 4 bottle decoration (see below, fig. 48, a, b; pl. 10, a; Rosselló, 1960, Lám. V, b). At or just below the rim edge on the interior of the shallow shape 26 bowls there is a narrow band containing a twined-fret design in analogy with Ocucaje and Callango Basin bottle decoration (compare figs. 43, b and 48, a with pls. 8, b and 11, a; Bushnell, 1957, pl. 15; Rosselló, 1960, Lám. VI, a).

Although shape 26 bowl decoration contrasts with Callango Basin shape 5 bowl designs in the above respects, it also has some features that represent adaptations from shape 5 bowl design patterning. The outside of shallow shape 26 bowls is decorated with designs like the corresponding designs on shape 5 bowls, including the treatment of the sides and bottom as separate design areas. the parting of the design band on the sides, and the use of the three-ply, diagonal twined-fret and proliferated rim banding in the decoration of the outer sides (figs. 44, a; 48, b-1; pl. 10, a). Unlike the shape 5 bowls, however, the parting in the design band is covered with a solid coating of resin paint. Another feature of design patterning that shape 26 bowls share with Callango Basin shape 5 bowls is the use as space fillers of recurved ray projections, radiating from the central figure on the interior bottom of the bowl to the terminal rim band (figs. 44, b; 48, a). However, in comparison with shape 5 bowl designs, the shape 26 filler designs are simplified and less cluttered, some consist of wavy bands exhibiting the influence of the Ocucaje Basin substyle, and the background is painted with a single colored over-all background coating of resin paint instead of with different design units in contrasting colors.

Higher sided shape 26 bowls, cups, and vases are decorated on the outer sides only, with felines, monkeys, and probably other figures such as humans (the latter not present in the sample), the patterning also representing a combination of features of Callango Basin shape 5 bowl designs and Ocucaje Basin shape 4 bottle designs, adapted in individual ways to the new shapes (fig. 47, a, b, d; pl. 9, b).

The unpainted surfaces of the more elaborately decorated shape 26 bowls are glossy and smooth, either smoked charcoal black (pl. 9, b) or red slipped. The less elaborately decorated shape 26 bowls have mottled gray or orange fired surfaces.

One bowl with an imitation shape 26 form from the Ocucaje Basin (fig. 17, g) and one Ocucaje Basin shape 5 bowl (fig. 17, i) have interior decoration patterned in imitation of Callango Basin shape 26 bowls (figs. 43, b; 44, b). Each has designs with features of the Ocucaje Basin substyle mixed with those of Callango Basin shape 26 bowl designs, further marking them as imitations of the Callango Basin type rather than authentic Callango Basin vessels. On both specimens, the principal design figure either represents the Oculate Being (fig. 43, b-2) or has attributes of the Oculate Being (fig. 44, b), a local Ocucaje Basin representation (see below). The shape 5 bowl has additional design elements of zoned diamond units on the interior sides which are generally used to decorate the outside of Ocucaje Basin shape 5 bowls (fig. 43, b-1).

It is clear from the remarkable new patterning and design combinations in the decoration of shape 26 bowls that Callango Basin potters were trying to solve new problems in design patterning presented by an unprecedented shape category newly introduced to the Callango Basin. The much higher sides on many of the shape 26 bowls, as well as the absence of base angles or gambrels, presented problems in design spacing and patterning for which no precedent existed in the Ocucaje tradition. The Callango Basin potters therefore had to look to other vessel shapes for inspiration, shapes in which problems of vertically expanded space and curved design areas had already been dealt with. One of the models to which they referred was the shape 4 bottle of the lower-valley substyles. The reason that the Callango Basin potters adapted a great many features from the Ocucaje Basin bottle variant is no doubt because the Ocucaje Basin shape 4 bottle was a highly standardized prestige item in the Ica Valley, whereas most other Ica Valley shape 4 bottles of Phase 8 represented much more variable and unoriginal remnants of the older bottle tradition. Insofar as some of the new patterning devices in the decoration of Callango Basin shape 5 bowls were useful, they were also adapted to the decoration of shape 26 bowls. However, the combination of patterning and design features in shape 26 bowl decoration is distinctively different from all earlier designs and forms an important basis for the patterning innovations of the succeeding phase in Ocucaje.

EXTERIOR DECORATED BOWLS

Bowls decorated on the exterior only, in the traditional Ocucaje style manner, include the more conservative Ocucaje Basin shape 5 bowls (also found rarely at Callango), Ocucaje Basin shape 5d bowls, some of the shape 5b, shape 5c and related bowls and bowl fragments from the middle valley, some shape 12 bowls, collared shape 18 bowls from the Callango Basin, and old traditional shape 8 bowls, also from Callango.

Relatively conservative shape 5 bowls of the Ocucaje Basin substyle (fig. 17, i) are usually decorated with a continuous or a parted design band on the outside, with a single outline band at the top which crosses over the parted space, unlike earlier bowl designs. The decoration generally consists of a single row of geometric units, either zoned diamonds (a design also found on comparable bowls in the upper-valley substyle), or of single segments of diagonal twined frets, a Phase 8 innovation of the Ocucaje Basin (fig. 42, g, h).

Shape 5d bowls from Ocucaje (fig. 17, h) are usually decorated with a design consisting of zoned, painted "bull's eye" units separated by panel dividers (fig. 42, c), a row of zoned diamonds like those on Ocucaje Basin shape 5 bowls, or an incised unpainted band of S-shaped units resembling some of the space fillers in bottle designs. In the Callango Basin substyle, bowl fragments probably belonging to shape 5d are decorated with painted or unpainted incised designs, either zigzag or undulating bands with space fillers in the opposing spaces, the space fillers being the type also used on Ocucaje Basin shape 4 bottles. Other designs which appear on Callango Basin fragments include incised crosshatching and guilloches. Some of the shape 5b and shape 5c bowls and bowl fragments from the burials and a refuse site in the Paraya sector of the lower middle valley are decorated with simple incised unpainted or painted unincised designs on the outside. The incised unpainted design consists of crosshatching, and the painted designs consist of zigzag lines or of a row of dots around the rim and unzoned guilloche segments or circles on the rest of the side. One of the shape 5c bowls is decorated with a crosshatch pattern done with negative technique (figs. 16, h; 41, c). A bowl fragment from the Huaca Pantaleón (PV62-7) in the central middle valley that probably belongs to a shape 5b or shape 5c bowl is decorated with plain triple rim banding on a mottled dark gray surface (fig. 40, b).

Tapering-sided collared bowls and bowl fragments from Callango (shape 18, figs. 18, e; 50, e) are decorated either with a band of front-face human head panels (fig. 49, a-1), or with simple designs consisting of unzoned guilloches painted around small stamped circle cores. On some the decoration is confined to simple triple rim banding below the collar (as on fig. 40, b), and some are plain altogether. One finely painted shape 18 bowl has a smoked charcoal-black surface, but the rest are mottled gray.

Shape 8 bowls from the Callango Basin are either plain or are decorated with a conservative zoned painted design which recalls the older design forms.

PLAIN BOWLS AND BOWLS WITH SIMPLE INCISED NEGATIVE, AND PATTERN-BURNISHED DECORATION

Shape 12 bowls from the middle and lower valley and the shape 19 bowl from the Callango Basin are either plain red slipped, or they have a gray fired surface, and they are decorated either with stamped circles on the inner rim or with negative dots on the outside. One of the shape 12 bowls with a row of stamped circles on the interior rim has a pattern burnished design on the interior bottom (fig. 19, l).

Some of the shape 5b and shape 5c bowls from the Paraya sector in the lower middle valley are plain slipped, with a mottled gray surface, and some are decorated with a row of stamped circle designs on the inner rim. Red-slipped bowl fragments with stamped circle designs on the interior rim have also turned up at other middle-valley sites, and may belong to some of the shape 5b and shape 5c bowls or to some of the grater bowls and plain slipped bowls described under "utility ware" above (fig. 40, h). One of the shape 5b bowls also has a pattern burnished design on the interior bottom, in addition to the row of stamped circles on the side (fig. 41, a).

HANDLED JUGS AND RELATED NECKED BOTTLES

The decorated handled jugs from Ocucaje (shape 25) have glossy smoked charcoal-black surfaces. On all these vessels much of the surface is unpainted. The principal design is either an amphisbaena which circles the middle of the vessel like a band (fig. 42, b, d; Kroeber, 1944, pl. 13, F), or a band of finely incised unpainted designs which, in the available sample, consist of enlarged forms of some of the geometric space fillers in bottle designs (Kroeber, 1944, pl. 13, G). Necked bottles from Ocucaje with body shapes similar to the handled jugs (shape 24) are also decorated with the circling amphisbaena band, but the design is placed in a panel with painted background, the background containing the same filler elements also found on spouted bottles.

DECORATION

GENERAL FEATURES

The principal middle- and lower-valley designs in Phase 8 continue to be zoned painted ones (i.e., with incised outlines), as in the upper-valley substyle, but there is a reappearance of old decorative techniques common in Phase 3 but not found in the samples for Phases 5, 6, and 7, which include incision without painting and painting without incision. In addition, there are differences between the upper- and lower-valley pottery in the use of negative decoration, and there is a new design technique, pattern burnishing, which apparently originates in the lower valley. The special use of unpainted stamped circles on the interior of many red-slipped and gray fired bowls in the middle and lower valley, as against their use in upper-valley pottery, is discussed under Utility Pottery, above.

NEGATIVE DECORATION

Almost all the examples of negative decoration are from the Callango Basin, where they are used for the most part in the same contexts as in the upper-valley substyle. However, unlike the upper-valley substyle, negative dots are not used to fill the parted space in resin-painted bowl design bands of the lower-valley substyles. There are five spouted bottles, one football-shaped (shape 15) necked bottle and a few bowl fragments from the Callango Basin on which negative decoration continues to be combined with resin-painted designs. The negative decoration dominates on these vessels, the resin-painted designs being simple minor ones, usually unzoned, which are enclosed by the negative-decorated design field. On the spouted bottles and the football-shaped necked one, the upper surface of the vessel is covered with negative-painted dots on a red-slip base, much as in the upper-valley substyle, and, as on upper-valley Phase 8 bird-spout bottles, there is an elongated narrow-panel design parallel to the bridge on either side of the upper body (or, in an extension of this patterning principle, along the long axis of the football-shaped bottle). However, the Callango Basin narrowpanel designs consist of unzoned or zoned guilloches instead of the gliding birds or other narrow-panel designs used in the upper-valley substyle. A few fragments of convex-sided bowls collected at Callango Basin sites are also covered with negative dots on a red slip, with additional simple zoned painted rim banding on the outside and unzoned guilloches on the bottom inside.

Some of the Callango Basin negative decoration consists of more complex decorative patterns than the simple dots and occasional line designs used in the preceding phases. On one of the complex spouted bottles the negative technique is used to create a traditional step-block design, a design which is used in resinpainted form in the upper-valley substyle to decorate the same bottle type.

Besides the traditional patterning of negative designs together with painted

decoration described above, the Callango Basin substyle also includes a number of necked bottles and two spheroid shape 12 bowls decorated exclusively with negative dots on a red-slipped surface on the upper outside of the body. In addition, a shape 5c bowl from the Paraya sector in the lower middle valley is decorated with an entirely new negative patterning on the outside, consisting of crosshatched lines unassociated with other types of decoration (figs. 16, h; 41, c; pl. 8, a). The latter bowl represents the beginning of a new tradition of negativedecorated bowls unassociated with painted decoration, which becomes especially common in Phases 9 and 10 and in Nasca Phase 1.

None of the Phase 8 vessels in the sample from the Ocucaje Basin have negative decoration.

PATTERN BURNISHING

The use of pattern burnishing, which originates in Phase 8 of the middle- and lower-valley substyles also represents the beginning of a new decorative tradition in south coast pottery that persists into the early part of the Nasca tradition. In addition to fragments from Phase 8 sites in the Callango Basin, there are two complete gray-black fired bowls with this type of decoration in the sample, one from a Phase 8 burial in the Paraya sector and one from one of the Phase 8 sites at Callango. The bowl from Callango is a spheroid bowl (shape 12; fig. 19, l), the one from Paraya a gambreled (shape 5b) one. Both are decorated with a row of stamped circles on the interior rim, like other Phase 8 bowls of the lower-valley substyles, but with a burnished design pattern on the inside bottom that is the same as the standard incised designs on Phase 8 graters (fig. 41, a). It is a peculiarity of Phase 8 graters that many of them have very shallow incisions which are no more than the equivalent of deep polishing marks, and it is evident that the pattern-burnished bowls proper are simply an extension of this Phase 8 trend to its logical conclusion. Thus, the pattern burnishing of the late Ocucaje and early Nasca tradition originates in Phase 8 as a derivative of the trend towards shallow incisions on decorative graters.

UNZONED PAINTED DECORATION

Decoration in this category is confined to certain simple designs, as in Phases 3 and 4, but the designs themselves are quite different. Their center of greatest use in the Ica Valley is the Callango Basin. In Callango Basin pottery, the most common unzoned design consists of guilloche segments or guilloche chains which are much smaller than those of earlier phases and which are used in the parting of design bands on elaborately decorated bowls, as unit or band designs on bowls with interior decoration and as narrow-panel designs on bottles with negative decoration (figs. 46, a-2; 49, a-2; pl. 9, b). Another standard Callango Basin use of unzoned elements is in the form of closely spaced rows or columns of painted dots used as space fillers in designs on interior decorated bowls (figs. 45, a; 48, c; 49, e). In the sample from Ocucaje, small unzoned dots are used on the top of the bridge of a spouted bottle, and guilloche segments are used in a narrow-band design on a necked bottle. Unzoned guilloche segments and guilloche chains are also used in bowl decoration on specimens from sites of the middle valley (fig. 40, d, f), and appear as occasional influences in the upper valley. Bowls and bowl fragments from the middle-valley sites and from Ocucaje are sometimes decorated with an unzoned zigzag band or a row of unzoned dots around the outside rim of otherwise plain bowls, and in the Ocucaje sample there are two necked bottles that have unzoned zigzag bands around the base of the neck. No comparable design is present in the sample from Callango.

INCISED UNPAINTED DESIGNS

There are two general categories of such designs in the lower- and middle-valley substyles, those used on simple decorated bowls and those used on more elaborately decorated bowls and handled jugs. The simpler designs consist of incised crosshatching on the outside of dark-fired convex-sided bowls from middlevalley and Callango Basin sites. The design differs from the analogous Phase 3 design in having the lines more closely spaced, with narrower, deeper incisions. Convex-sided bowls and bowl fragments in large numbers from Callango are also decorated on the outside with incised guilloche segments or guilloche chains, many of which apparently were never painted, although some were.

The more elaborate incised unpainted designs are found on glossy smoked black vessels from Ocucaje, either handled jugs or convex-sided (shape 5d) bowls, and on convex-sided bowl fragments from Callango (Kroeber, 1944, pl. 13, G). They consist of horizontal, outlined design bands containing enlarged variants of what are ordinarily space fillers in painted designs of the Ocucaje Basin substyle, such as concentric rectangles, bars, or S-shaped outlined bands. The designs on the bowl fragments from Callango include undulating or zigzag bands enclosing rows and units of space fillers.

THE USES OF COLORS IN PAINTED DESIGNS

In principle, color uses of the lower-valley substyles follow the same trend as in Phase 8 of the upper-valley substyle, but there are some regional differences. As in the upper-valley substyle, the dominant color in down-valley designs is usually white, which covers the background and other adjoining color zones, but white is much more often replaced by some other light color. In the sample from Callango, cream or light tan often replaces white, and in a number of designs, cream, white, and tan are used in adjoining zones to give a minimum of contrast. In the Ocucaje Basin, either yellow or light orange appears to be at least as common a background color in bottle designs as white, and yellow, orange and red rather than white and red are often the dominant design colors.

OUTLINING TECHNIQUES AND DESIGN AREAS

Outlining techniques in bowl designs are the same in principle as in Phase 8 of the upper-valley substyle. Elaborately decorated design bands on the outside of bowls are invariably bordered by multiple light-colored rim banding consisting of two or three plain bands with a red space at the top, or fancy double or triple banding. The fancy banding differs from the fancy upper-valley rim banding only in that the segmented or checkerboard band is the topmost zoned band, adjoining the red space, instead of being enclosed by plain white bands (pl. 9, b). In lower-valley pottery, the rim banding invariably crosses the parting of the design band, if there is one (pls. 9, b; 10, a). Design bands with simpler geometric designs on shape 5d bowls or the more traditional Ocucaje Basin shape 5 bowls are more commonly bordered by a single zoned band (fig. 42, g, h) or a plain incised line at the top (fig. 42, c). However, many bowls which are otherwise undecorated, or decorated with the smaller and simpler designs, nevertheless have double or triple zoned bands at the rim.

The principle of panel division in the lower-valley substyles also tends to follow the same trend as in Phase 8 of the upper valley, but here too there are some regional differences. Although panel divisions tend to become minimized or dispensed with in many of the design categories, especially in the Ocucaje Basin, panel divisions in some of the elaborately decorated shape 5 and shape 26 bowls of the Callango Basin undergo special elaborations of their own. These elaborations are adaptations of the long double or triple ray projections with recurved tips which are used mainly for the bottom inside of bowl designs, where they serve to divide color zones decorated with ball-bands or other small designs (figs. 45, a; 48, c; 49, e). Sometimes these rays are also especially adapted as panel dividers in the decoration of high-sided shape 26 bowls (fig. 47, d). In some designs, the recurved ray panel dividers have segmented or checkerboard centers, like the fancy triple rim bands. Ladder-design panel dividers also continue in occasional use in the Callango Basin. In human-head panel designs, anthropomorphic arms are sometimes used as panel dividers (cf. fig. 49, a-1).

DESIGN FIGURES: GENERAL STYLISTIC CHARACTERISTICS

Lower-valley pottery shares with the upper-valley substyle the new trend in design patterning toward free-standing, unpaneled designs on larger open backgrounds. As in the upper-valley substyle, most of these patterning innovations involve designs derived from traditional bowl decoration rather than traditional bottle designs, as well as new designs that originate in Phase 8. However, while the same principles of adjustment to new space problems are used in all areas. they are modified in each locality in terms of the special problems of design fields and patterning which distinguish local substyles. Representational figures on the large open surfaces of Ocucaje Basin shape 4 bottles, on the bottom interior of Callango Basin shape 5 bowls, and on Callango Basin shape 26 bowls, undergo special modifications of contouring and patterning, in the same way that gliding birds and other representational and geometric designs acquire freer contours in the upper-valley substyle. The surfaces surrounding the principal figures on Ocucaje Basin shape 4 bottles and on Callango Basin shape 26 bowls are treated like some of the upper-valley bowl band designs in being decorated with filler elements that do not dominate the background or obscure the outlines of the principal designs.

In addition to the same general patterning trend which affects all substyles of Phase 8, there are also a great many shared features in design detail, particularly in details of features of feline designs (notably eyes and noses), clothespin birds, crested birds, and some geometric designs, which occur in the same or similar forms in Phase 8 of the upper-valley substyle and the substyles of the lower valley. Equally, such general stylistic features as the size of stamped circles and the modal width of design bands are shared by all Phase 8 substyles of the Ica Valley and serve to distinguish Phase 8 pottery in all parts of the valley from the earlier and later phases.

Although shared features form a consistent link between all the Phase 8 substyles, there are also some very distinctive local differences. Some of the locally developed features of each substyle have enough prestige to appear in the other substyles in the form of imitations varying in faithfulness, standardization, and frequency, depending in part on the degree of prestige they possess outside the area of their origin and in part on the geographical distances between the areas involved. Some of the local innovations of each substyle appear as influences in all parts of the valley, whereas others are not found outside their center of origin. Examples of important Phase 8 prestige items that appear as loan traits in other areas include the clothespin bird of the uppervalley substyle, the whiskered bottle feline of the Ocucaje Basin, and the shape 5 bowls and bowl decoration of Callango. Not unnaturally, exchanges in some features (both more and less prestigious ones) are more common between Ocucaje and Callango Basin pottery on the one hand, and between Ocucaje Basin and middle-valley and upper-valley pottery on the other, than between the Callango and upper-valley substyles. In view of this natural diffusion pattern which affects many aspects of the Phase 8 substyles, it is especially surprising that in a number of other features there are greater similarities between the Callango Basin and upper-valley substyles than between either of these substyles and the pottery from Ocucaje. This unusual pattern of distribution probably occurs because some of the most original innovations of Phase 8 first appear at Ocucaje, possibly making Ocucaje Basin potters less receptive to the influence of those stylistic features of the other substyles that belonged to vessel types and design forms which were homologous with or analogous to their own prestige types, such as the shape 4 spouted bottles and the associated bottle decoration. In some respects the Ocucaje Basin substyle thus forms a kind of island of innovations in the middle of a more traditional and conservative style area of the Ica Valley.

In the Ocucaje Basin substyle, the transference of feline representations of the bowl design tradition to the decoration of shape 4 spouted bottles represents a new step in a patterning trend dating back to Phase 6, when bowl designs are first used in the decoration of complex shape 4a spouted bottles. Influences of the Ocucaje innovation appear in a variety of forms outside of the Ocucaje Basin, mainly in the decoration of spouted shape 4 bottles and shape 26 bowls of the Callango Basin substyle, and occasionally, in even more modified form, in bottle and bowl decoration of the upper-valley substyle. Ocucaje Basin bowl designs involve to a large extent new design elements evidently of local origin. The new designs are simple, individual geometric elements that are expandable in size and lend themselves to very flexible patterning, as band or panel designs, as space fillers of open surfaces, or even as representational features such as eyes. Some of these designs are occasionally borrowed for bowl decoration in the upper-valley substyle as well as in the Callango Basin substyle, but for the most part bowl designs outside the Ocucaje Basin follow their own locally derived and locally modified conventions. Another innovation of the Ocucaje Basin is the use of new representational figures, including the Oculate Being, the amphisbaena (see below), and some of the innovations in the feline representations, notably whiskers and the fangless mouth. Features of the amphisbaena and the whiskered feline appear as influences in the Callango Basin, especially in the decoration of shape 26 bowls, and attributes of the whiskered feline also appear on occasion in the upper-valley substyle. Representations of the Oculate Being, on the other hand, so far have not been found outside the Ocucaje Basin. The new representational figures at Ocucaje, especially the Oculate Being, are not purely stylistic innovations, because they express unusual representational concepts which are independent of style as such. The most distinctive developments in the Callango Basin substyle are the decoration of the interior of shape 5 bowls, the outside of high-sided shape 26 bowls, and the exterior and interior of shallow bowls. These developments have been discussed above. Of special interest is the preoccupation of Callango Basin artists with the intricate problems of symmetry raised by the approach taken to the decoration of the interiors of shape 5 bowls. This Callango Basin specialization evidently contributes to the considerable prestige of this bowl type, a prestige that can be judged by the fact that imitations of such bowls or bowl designs are found in all other parts of the Ica Valley. However, although some of the imitations, especially those of the Ocucaje area, contain elaborate designs, none of them recreate the complex symmetrical permutations of true Callango Basin bowls, possibly because the principles of symmetry followed by the Callango potters are not clearly understood elsewhere.

Most other Callango Basin bowl and bottle designs follow much more conservative patterning conventions than do those in other parts of the valley, because they are used in traditional design fields on conservative shapes. There is also exceptional conservatism in many design details of the Callango Basin substyle, notably in the features of paneled gliding bird designs and in the mouth, fangs, and brow ends of front-face feline heads. The conservative local peculiarities of the Callango Basin substyle exert no influence on the other Phase 8 substyles, and their only outside resemblance is to the survivals of the older features in the other areas, primarily in the upper valley. Of the two innovating representational figures of the Callango Basin substyle only one, the double-sided head, is a true innovation, but it is a purely stylistic one, unlike the new Ocucaje Basin figures, and it may reflect contacts with the Chavín style, with which it shares some features. The other new Callango Basin figure is a human one which represents the reappearance of an old Ocucaje tradition theme, possibly as a result of influences from Nasca.

DESIGN FIGURES: DETAILS

The principal new representational designs of the lower valley are bodiless front-face human-head panels and full-bodied front-face human figures in bowl designs (primarily Callango Basin), double-sided bodiless heads (primarily Callango Basin), bodiless features of the Oculate Being (exclusively Ocucaje Basin), and a full-bodied human figure with mythical feline attributes (Callango Basin) or mythical attributes of the Oculate Being (Ocucaje Basin). The amphisbaena, found at Ocucaje as early as Phase 5, is a common figure in the Ocucaje Basin sample, both in modeled and flat painted form, but it is found only exceptionally in the Callango Basin. With the exception of front-face human head panels, found in the upper-valley sample on two imitation Callango Basin shape 18 bowls, these representations of the lower-valley are not found in the upper-valley sample. In addition, traditional designs such as felines and some gliding birds acquire entirely new free-standing full-bodied forms in the lower-valley substyles, and conservative paneled variants survive only in design bands on the conservatively low-sided shape 5 bowls of the Callango Basin substyle. Feline representations of the bowl design tradition are much more common than they are in the upper-valley substyle, and the common uppervalley fox representations are not present in the lower-valley substyles, except for a modeled head on a unique bottle from Callango (Rosselló, 1960, Lám. VI, b). Traditional gliding bird designs survive as unit designs in narrow panels on Callango Basin shape 5 bowls and are much more conservative survivals from earlier phases than the corresponding upper-valley variants. Clothespinbird designs are used as space fillers on spouted bottles and some bowls of the Ocucaje and Callango basins. No two of the clothespin-bird designs are exactly alike, and as a group they evidently represent slightly modified imitations and derivations of upper-valley types.

FELINE REPRESENTATIONS: TYPES AND PATTERNING

There are four principal types of feline representations in lower-valley pottery, three of them in the Callango Basin substyle and one in the Ocucaje Basin substyle. Each of these types represents a special adaptation to a particular vessel category.

The most conservative form is the bodiless front-face feline head fitted into rectangular panel subdivisions of design bands on the traditionally low-sided shape 5 bowls of the Callango Basin (and Nasca) substyle (figs. 45, b-1; 46, a-c). They are found on interior decorated bowls, either on the interior or exterior of the sides, usually in alternation with vertical ball-bands (fig. 46, a, b; pl. 10, b) or human-head panels (fig. 49, a). On two rare conservative bowls, with outside decoration only, they are adjoined by rectangular panels containing conservative profile feline bodies in the old tradition (fig. 46, c). On two other, more advanced, shape 5 bowls with interior decoration, advanced profile feline bodies with many innovating features are used both in paneled and free-standing form to set off traditional paneled front-face feline heads (figs. 45, b-1; 46, b). Both the detailed and over-all patterning of the paneled heads and the conservative paneled bodies in the design bands on the sides of shape 5 bowls are unchanged from many of the Phase 6 and Phase 7 forms, and the only changes are in details of features. An even more conservative bodiless front-face feline design is found in panel subdivisions of a horizontally ellipsoid (shape 19) bowl from Callango (fig. 46, d). No example of these conservative front-face feline heads appears in the sample from Ocucaje.

Most of the rest of the feline representations from the lower valley are fullbodied, free-standing figures not enclosed in panels or bands. There are two principal independent adaptations of free-standing felines, one belonging to the Callango Basin substyle, the other to that of the Ocucaje Basin. The Callango figure represents a special adaptation to the large circular space of the inside bottom of interior decorated shape 5 bowls (fig. 45, a; Rosselló, 1960, Lám. VII, a). It consists of a small front-face head and a small arched profile body attached to the base of the head rather than the side. The articulation of the body to the base of the head is an innovation of the Callango Basin substyle, made to accommodate the figure to vertically expanded space. The individual features are smaller than those of paneled felines, and the head is more nearly square and is often slightly trapezoidal, tapering from top to bottom. However, the patterning of the head features and most of the design details are the same as in the traditional paneled heads, and the principal difference is in the arched curve of the border at the top of the head (formed by the curve of the base angle of the bowl), which creates a special space usually filled with decoration analogous to the "forehead" ornaments on traditional front-face feline heads on bird-spout bottles. The body of the new feline figure resembles in many details the fox bodies of the upper-valley substyle rather than the traditional paneled feline bodies, including the long, straight, slightly tapering, banded tail, the small arched body, the high slotlike space with rectangular fillers between the legs, and occasionally the position of the feet, which on some of the specimens are at right angles to the body.

The third principal feline representation is found on the majority of shape 4 spouted bottles from Ocucaje and, in modified form, on two imitation Ocucaje Basin bottles from Callango (figs. 8, a; 41, b, d; 42, a; 47, c). It is a fully articulated, free-standing figure, similar in size, contours, and patterning to the Callango Basin type, but the body is joined to the side of the head, in the more traditional manner, instead of to the base. The reason for the difference is that the Ocucaje feline is viewed from each side of the bottle in a space parallel to the bridge, which is seen as wider than it is high (fig. 8, a). Besides the difference in patterning, there are other differences in detail distinguishing the free-standing Ocucaje bottle felines from the Callango bowl figures. The Ocucaje felines have (with one exception) a small mouth without fangs, special new side and chin whiskers, and new kinds of brow ends and nose ornaments. The body is a narrower, simpler arch merging with the legs, and the legs are always straight continuations of the body arch which diverge more widely than those of Callango Basin felines and have no decoration in

the space between them. The tail is either arched or wavy, unlike the straight tails of the Callango Basin felines. The feline design on one of the imitation Ocucaje bottles from Callango (fig 47, c) differs from the Ocucaje felines proper in having a fringe of small disks projecting from the back and tail, like the advanced feline bodies in shape 5 bowl designs from the Callango Basin and Nasca (figs. 45, b-1; 46, b).

The fourth category of feline representations appears only on shape 26 bowls of the Callango Basin substyle, and represents a special Callango Basin adaptation of the Ocucaje bottle feline to a new bowl category in which unprecedented problems of vertically expanded space arise (figs. 47, a, d; 48, b; pls. 9, b; 10, a). The feline representations are in most details like the Ocucaje shape 4 bottle felines and not like the Callango Basin shape 5 bowl felines, but with some local adjustments in patterning and design detail that they share with Callango Basin shape 5 bowl designs. The fully articulated, free-standing figure is used on the side of the tallest vase (fig. 47, d; pl. 9, b) and on the bottom surfaces of the shallowest bowls (fig. 48, b; pl. 10, a) in this shape group; in other words, whenever the design area has the greatest vertical expansion. The Callango variant differs from the Ocucaje bottle feline proper primarily in having the body joined to the base of the head rather than to the side. As a consequence, the chin whiskers belonging to this feline category at Ocucaje are omitted in the Callango shape 26 bowl designs, and only the side whiskers appear. Other differences involve an exaggeration of Ocucaje Basin techniques, evidently in an attempt to be overly correct in imitating stylistic conventions foreign to Callango potters. Thus, in addition to having a curvilinear tail, several of the Callango versions of Ocucaje felines also have arching heads and curved or wavy-line legs, an extension of the Ocucaje stylistic conventions to features for which they are not used by Ocucaje potters. In some designs, there are additional unique combinations of Ocucaje Basin and Callango Basin features (cf. Bushnell, 1957, pl. 15).

A separate patterning adjustment is made in feline designs on the sides of cups of medium height in Callango shape 26 bowls (fig. 47, a). The design area is decorated with a conventional design band divided into panels, and the feline head and profile body are placed in separate panels in the traditional manner. However, there are some special patterning adjustments to the increased height of the design panels, with the result that the feline heads and bodies in these panels are larger and higher than the traditional paneled feline representations, with special vertical elongations of the features in the upper parts of the head and body. Other details of head and body features are like those of the rest of the shape 26 feline designs.

FELINE REPRESENTATIONS: DETAILS

Noses.—The nose treatment of Ocucaje and Callango Basin felines is more advanced than that of most upper-valley Phase 8 feline noses. All the Ocucaje bottle felines and the great majority of the Callango bowl felines have a small stamped circle nose (figs. 41, b, d; 42, a; 45, b-1; 46, b, c; 47, a, c; 48, b), a Phase 8 innovation of the lower valley appearing only rarely in upper-valley bowl designs. The more traditional parabolic arch and the large stamped circle noses with line fillers, such as are found in the upper-valley substyle, survive only on some of the Callango Basin designs (figs. 45, a; 46, a, d; 47, d).

Eyes and brows.—Innovating triangular pupils and brows are the standard eye form of Callango Basin shape 5 bowl felines, and they are also used on many of the Ocucaje Basin bottle felines (figs. 41, d; 42, a; 45, a, b-1; 46, a-c). However, one of the bottle felines from Ocucaje and the majority of the feline designs on spouted bottles and shape 26 bowls from Callango have more traditional pupils with shallow arched tops like the Phase 8 bottle felines of the upper-valley substyle (figs. 41, b; 47, a, c; 48, b). One conservative shape 19 bowl has an even more conservative high parabolic pupil (fig. 46, d), and there are also two conservative survivals of a lenticular pupil, one on a spouted bottle from Callango and one on a unique collared jar from Ocucaje, an old feature which does not survive after Phase 6 in the upper-valley substyle.

Brow ends.-In some of the traditional paneled front-face feline heads on shape 5 bowls from Callango the brow ends are separated from the eyes by sections of the horizontal stems, to fill the width of the panel, as in Phase 8 of the upper-valley substyle (fig. 46, a-c). However, some of the paneled heads and the innovating free-standing feline heads are narrow enough to have very short stems, so that the brow-tip ornaments either overlap the brow arches above the eyes or are close to them, a conservative feature also found on feline designs in less wide bowl panels of the preceding phases (figs. 45, b-1; 46, d). The brow-tip ornaments of the Callango Basin felines in shape 5 bowl designs differ from the Ocucaje bottle feline and Callango Basin shape 26 bowl feline representations and are more conservative. All the brow-tip ornaments on Callango shape 5 felines represent the continuation or only slight modification of earlier forms. The most common brow-tip ornament is a closed vertical rectangular bar with a short perpendicular line with a dot finial in the center, a traditional Callango Basin form also found on one Phase 8 specimen of the upper-valley substyle (fig. 46, a, b). Some elongated bars in this brow-tip category have a center consisting of a ladder design, a Phase 8 innovation found only at Callango (fig. 45, a). Triangular loops, the most common upper-valley form, are a little less common on Callango Basin feline heads (fig. 45, b-1), and the old traditional rectangular loops also occur (fig. 46, c, d). In contrast to these Callango Basin forms, the only brow-tip ornament used on Ocucaje Basin felines and on those of Callango Basin shape 26 bowls is a closed triangular or asymmetrically arched end with or without line center, which in the Ocucaje designs invariably adjoins the eye or overlaps it at the top like an erect feline ear (fig. 41, b, d; 42, a). In Callango Basin shape 26 bowl designs the "ear" tends to be farther away from the eye arch, like the brow ends in the more advanced Callango Basin shape 5 bowl designs (figs. 47, a, d; 48, b).

Ornaments above the nose.—All the Callango bowl feline heads, both paneled and free-standing ones, have ornaments above the nose, unlike bowl felines of Phases 6 and 7. In this feature too, there are consistent differences between Ocucaje and Callango Basin felines in Phase 8. The feline designs on an imitation Ocucaje bottle design from Callango has a Callango style nose ornament (fig. 47, c), one of the features distinguishing this vessel from Ocucaje bottles proper. Feline heads on Callango Basin shape 5 bowls usually have nose ornaments consisting of paired recurved ray projections with rectangular tips, like one of the common feline nose ornaments in the uppervalley substyle (figs. 45, b-1; 46, a, c). Other Callango Basin felines have other traditional nose ornaments which survive from earlier phases, including short open ends with short perpendicular line centers and asymmetrically arched recurved ray tips (figs. 45, a; 46, b, d). Only on one Callango Basin bowl is there a nose ornament with a long triangular recurved tip, a form otherwise found only on feline designs from Ocucaje.

Two of the Ocucaje bottle felines have traditional nose ornaments consisting of rectangular recurved ray tips, like the Callango Basin bowl felines (fig. 42, a), but the rays on one of them are divided by a segmented central band, one of the peculiarities of the Ocucaje Basin forms. The majority of the Ocucaje Basin bottle felines have segmented nose ornaments, either a segmented band framed by recurved rays (fig. 41, b), or a plain unframed tapering triangular projection which suggests a stinger (fig. 41, d). Recurved ray tips in the Ocucaje Basin substyle are most typically large triangular ones with long diagonal sides, much like the beaks of clothespin birds in Phase 7 of the upper-valley substyle, a feature which gives the top a shovel-shaped appearance (fig. 41, b). Occasionally Ocucaje feline nose ornaments have horizontally projecting rectangular tips, also a characteristic Ocucaje Basin feature. Both the segmented centers and the shovel-shaped ray tips are features which are also used to represent the tails of gliding birds and tails of felines in the Ocucaje Basin substyle. They appear to be adaptations from traditional clothespin-bird features borrowed from the upper-valley substyle.

Some of the nose ornaments in feline designs on shape 26 bowls from Callango differ from other nose ornaments at Callango and Ocucaje in being open ended, without recurved tips or segmented centers, like some of the long ray appendages in the decoration of the interior bottom of Callango Basin shape 5 bowls or the "forehead" area on front-face feline panels in the upper-valley substyle (figs. 47, a; 48, b).

Ornaments above the eyes.—Free-standing felines on Ocucaje shape 4 bottles and on Callango shape 26 bowls have no ornaments above the eyes, unlike the front-face feline heads on bird-spout bottles of the upper-valley substyle. However, some of the paneled feline heads and most of the free-standing fullbodied forms on Callango shape 5 bowls do have such decoration (figs. 45, b-1; 46, a-1, b). Paneled front-face feline heads may have a single small stamped circle above each eye or brow end (fig. 46, a-1), a feature already present in earlier phases. On other specimens the stamped circle has a vertical incised line through it, making it a ball-band which divides color zones (figs. 45, b-1; 46, b), Ball-band designs in the "forehead" area of bowl felines are a Phase 8 innovation at Callango. In full-bodied free-standing felines on the interior of shape 5 bowls, the space above the eyes (and sometimes above the nose ornament as well) is enclosed on the side by the brow ends and at the top by the arch of the base angle, constituting an irregularly shaped panel area which is decorated, in analogy with the "forehead" area of traditional bottle felines, either with several columns of vertical ball-bands or with vertical color zones (fig. 45, a).

Mouth, fangs, and whiskers.—Callango Basin shape 5 bowl feline representations have traditional feline mouths the same width as the upper part of the head, with the traditional frame bands (fig. 45, a; Rosselló, 1960, Lám. VII, a). In contrast, Ocucaje bottle felines and Callango shape 26 bowl felines usually have a much smaller mouth framed only by the lips, and lacking fangs (figs. 41, b, d; 47, a, c, d; 48, b). The rest of the space between the side of the lips and the side of the head is taken up with side whiskers, which at Ocucaje consist most commonly of a horseshoe shaped three-sided band frame (fig. 41, d), whereas in the most common Callango Basin form the space is subdivided horizontally into three parallel bands by means of short perpendicular lines ending in dot finials (fig. 47, a, c, d). Other forms are rare (figs. 41, b; 48, b). In addition, Ocucaje bottle felines have a new form of chin whiskers consisting of a pendent banded appendage on either side of the mouth below the lip, either straight vertical (fig. 41, d), diverging (fig. 41, b), or curved (fig. 42, a). There is only one bottle from Ocucaje and one of the bottles from Callango on which the feline has a traditional wide feline mouth with fangs and without side whiskers (fig. 42, a).

The forms of the fangs in the lower valley (for practical purposes those of the Callango Basin) are much more conservative than contemporary fang types of the upper valley. The great majority are irregular trapezoidal-triangular, or partly curvilinear, like the fangs of Phase 6 (figs. 42, a; 45, a, b-1; 46, c). There are only two examples of vertical parallel-sided fangs in the entire sample of regular feline designs (fig. 46, a-1, b). However, feline mouths are also used occasionally on other design forms, mainly the double-sided head, and in these designs fangs are often straight, vertical, and parallel sided. In a special rare fang form, vertical parallel-sided fangs project through the inner lip line, with the outer lip forming a protruding rectangular loop around it (Rosselló, 1960, Lám. I, top). This lip "curl" represents the reappearance of an early Ocucaje tradition feature which disappeared from the Ica Valley style after Phase 2.

Profile bodies.—In addition to the description given earlier of the patterning of full-bodied designs, there are some special details characterizing Phase 8 feline bodies. In Phase 8 designs, feline bodies usually have thick, irregularly humped centers enclosed by a narrow band shell, a Phase 8 derivation from the earlier tradition (figs. 41, b, d; 42, a; 45, a; 46, b; 47, a, c, d). Both the tail and the body are encased in a single band shell which is usually either white or a light-colored substitute. Some of the advanced feline bodies from Callango and Nasca have a fringe of small semicircular, triangular, or rectangular disks forming a border on the back and tail (figs. 45, b-1; 46, b; 47, c). One of the Ocucaje felines has a single disk projection at the back which may be an imita-
tion of the Callango Basin and Nasca feature (fig. 41, b). The disk border evidently represents a modification of the recurved ray border on the back of traditional feline bodies. Another occasional feature, this one confined to Ocucaje felines, is a shovel-shaped tail tip consisting of two broad triangular recurved rays, a feature also used on nose ornaments of Ocucaje felines (see above; fig. 42, a). The body of Ocucaje felines is uniformly red, whereas the body of Callango Basin shape 5 bowl felines is generally divided into three vertical color zones, the outer two red and the central one white, the latter pattern being a feature derived from Phase 7. The body of Callango Basin shape 26 bowl felines is a single color, like that of Ocucaje felines, but it is as often white (or a light-colored substitute) as red.

There are also differences in the patterns of feline spots among the different substyles. The two most conservative paneled bodies in Callango shape 5 bowl designs have a single horizontal row of stamped circle spots without dot centers (ca. 5 mm in diameter), a conservative survival from preceding phases (fig. 46, c). The bodies of Ocucaje felines generally also have a single row of stamped circles, but the circles are smaller and the row follows the curved outlines of the body (fig. 41, b). On some feline bodies of the Ocucaje Basin substyles there is a scattering of such spots, a feature derived from Phase 7 (fig. 41, d). One of the Ocucaje felines has rectangular spots, a Phase 8 innovation (fig. 42, a). The bodies of full-bodied Callango shape 5 bowl felines generally have a multiple scattering of very small stamped circle spots, and two or three large spots consisting of two concentric circles which form a horizontal row in the center (fig. 45, a). On two shape 5 bowls on which feline body designs are used in unique patterning arrangements, the spot pattern is more variable, and on one of these designs the spots are represented by lenticular lozenges (fig. 46, b). Shape 26 bowl felines at Callango have a variety of different spots, some like those of Ocucaje Basin felines (fig. 47, c, d), some like those of Callango Basin shape 5 bowl felines (fig. 47, a), and some different ones, including incised line dashes with dot finials (fig. 48, b).

GLIDING BIRDS

There are three types of gliding bird designs in the sample from the lower valley. One is the traditional paneled form, which is found in narrow-panel units on the inside or outside of Callango shape 5 bowls (and one on a traditional Callango shape 8 bowl), and which is not present in the Ocucaje Basin sample (fig. 49, f, g). The patterning and use of these birds is derived very conservatively from local Phase 6 and Phase 7 forms of the Callango Basin substyle (compare with figs. 32, d-3; 33, a-3, b-3, c-2; 34, c-1; Rosselló, 1960, Lám. X, b). Paneled gliding birds from Callango differ from those of the upper-valley substyle in never having clothespin heads, and in having such old-fashioned features as trapezoidal or concave-sided expanding tails and concave-sided beaks. There is even the occasional survival of the old rectangular body and wing outline originating in Phase 5 and not found in the upper-valley

substyle from Phase 6 on. Arched beaks are another old survival in the Callango Basin bird designs. Unlike the traditional gliding birds of the upper valley, the body of Callango Basin birds is not framed by rays with recurved ends.

The second group of gliding bird designs belongs to the category of clothespin birds that originate in the upper valley. The forms in the lower valley are free-standing variants not enclosed in panels, and they are invariably used as space fillers, both in the Ocucaje and Callango basin substyles (and at Nasca; figs. 42, e; 47, c; pls. 8, b; 10, b; Bushnell, 1957, pl. 15; Rosselló, 1960, Lám. II). No two of the down-valley forms are exactly alike, but all of them have specific resemblances to the upper-valley forms of Phase 8. This situation suggests that the down-valley forms represent upper-valley influence. Some of the down-valley designs have conservative features that are confined to Phase 7 of the upper-valley substyle, notably in the shape of the recurved tips, so that there is also evidence of some lag in the pattern of diffusion and persistence, some of the influences evidently having been transmitted during the preceding phase (fig. 42, e; Bushnell, 1957, pl. 15). The majority of the down-valley forms are abbreviated geometricized variants. The geometricized forms include both the double-beak figure (fig. 47, c) and the beak-and-body variants (fig. 42, e). In a special down-valley variant, the head is reduced to a stingerlike projection, and the body is indicated by two overlapping arches which cross at the base of the forked "tail" and enclose a segmented lenticular center (fig. 43, b-2; pls. 8, b; 10, b).

The third gliding bird form is an entirely new "crested" bird, a type found primarily in shape 5 bowl designs of the Callango Basin (and Nasca) and occurring only rarely as a loan feature in the rest of the valley (fig. 49, e; Tello, 1959, figs. 1, 2). The new "head" of this bird is really a foreshortened and abbreviated form of the old T-shaped body, with a simplified arched beak in front. The top of the head is formed by the upper T bar of the former body, which is at times converted into a crest with recurved tips. Following Callango patterning conventions, a new and much more elaborate body is attached to the bottom of this converted "head," and this design is used as a free-standing figure in the decoration of the interior bottom of shape 5 bowls, and occasionally on other large open areas, for example on the side of a necked bottle from Callango. The new elaborated body generally has long segmented wings, either straight or curved, tapering- or parallel-sided, which diverge more widely than before. The space between the wings and the central tail band is filled with wedgelike "paws," a technique derived from old-fashioned Phase 6 and Phase 7 hawk-body designs on spouted bottles. The shoulders of the new bird body are either round or angular, and the body is decorated with various patterns of filler designs and color zones derived secondarily from feline body designs. On one Callango shape 5 bowl, the crested "head" without the new body is used as panel decoration in a band on the inside of the bowl. An abbreviated variant of the crested bird is also found as a filler design on a shape 4 bottle from Ocucaje (figs. 8, a; 42, e).

HUMAN REPRESENTATIONS

There is a special new efflorescence of human-head representations which centers in the Callango Basin and is found only occasionally elsewhere, occurring in the upper valley on two imitation Callango Basin shape 18 bowls. We noted earlier that human-head representations survive in the Callango Basin from earlier phases, both in the form of modeled heads on spouted bottles (fig. 49, b, c) and as partly modeled and partly drawn heads on anthropomorphic necked bottles. The latter form is particularly common at Callango and is not found elsewhere in the Ica Valley. In addition, bodiless front-face human heads reappear as rectangular panel designs in bowl decoration (on base-angled shape 5 bowls and tapering-sided collared shape 18 bowls). This is an old feature dating back to Phases 2 to 5, which is not present in the samples for Phases 6 and 7 and which may represent a reintroduction from Nasca (fig. 49, a). There is a fourth form, in which full-bodied front-face human figures are represented on large surfaces such as the bottom of interior-decorated bowls (fig. 48, a, c). The full-bodied human representations are analogous to new Phase 8 designs of the upper-valley substyle in which front-face human bodies are painted below the modeled human heads on spouted bottles (see above). It is possible that the full-bodied human representations in lower-valley bowl designs represent simplified and less ceremonially significant variants of the elaborate Staff God found depicted on a pyroengraved gourd from the lower valley in the Truel collection, which also belongs to Phase 8 (Rowe, 1962, fig. 18; Tello, 1959, figs. 31, 33). The Staff God in this design has some close stylistic resemblances to Phase EF stone carvings at Chavín, including the Raimondi stone (cf. Bennett, 1954, fig. 20). Like the Staff God, the full-bodied human figures in bowl designs usually have some mythical attributes.

Features which distinguish human heads in all categories from feline ones include the shape of the eye and mouth, the presence of hawk markings, and a head band consisting of parabolic arches on modeled heads and rectangular subdivisions of a band on paneled heads, both with short perpendicular lines with dot finials in the center. These distinguishing features of human-head representations are all variants of human-head features dating back to Phases 2 and 3. Human-head designs sometimes have the additional distinction of having small modeled noses, unlike the feline heads.

Human eyes on modeled spouts and anthropomorphic necked bottles and jars are parabolic, with a straight-based eccentric pupil (figs. 18, c; 49, b, c). The eyes on painted bowl designs are unframed rectangular, with rectangular eccentric pupils (figs. 48, a, c; 49, a). Hawk markings usually consist of a vertical band above and below the eye, crossing the entire panel. On one specimen the banding is diagonal, paired, and does not touch the bottom of the panel (fig. 48, a). The mouth is either a simple horizontal incised line with dot finials or a short white band with tooth subdivisions and no fangs. However, a feline mouth is used on one specimen, indicating a mythical character like the Staff God. In panel subdivisions rectangular heads are framed on each side by slender trapezoidal arms with the hands at the top of the panel (fig. 49, a). The special features of human representations on anthropomorphic necked bottles are explained in an earlier section (cf. fig. 18, c). Of the full-bodied figures in bowl designs, one has a headdress consisting of a feline head (fig. 48, c), and one has a feline head in place of the human one (pl. 10, a right). In the Ocucaje Basin sample, the same body appears with head features of the Oculate Being instead of feline features, a representation confined to the Ocucaje Basin substyle (fig. 44).

There are four full-bodied figures in the sample, all found on the bottom surfaces of Callango Basin shape 5 bowls and shallow shape 26 bowls. Although no two are exactly alike, there are certain features which recur on two or more (figs. 44; 48, a, c; pl. 10, a, right). The hands are usually three fingered, either in line with the arm or at right angles to it, and on two specimens they have triangular caps above the fingers (figs. 44, 48, c). The body is framed by two vertical, parallel bands ending in feet. On all but one of the specimens the feet are represented by three long stepped bars representing toes which project toward the side. Two of the bodies have representations of triangular pendants at the neck and similar pendants suspended from the elbows (figs. 44; 48, a). Two of the figures have a dart adjoining each hand, a feature recalling the staves in the hands of the Staff God (fig. 48, a; pl. 10, a, right).

The associations of some of the full-bodied human figures from the Callango as well as the Ocucaje Basin with mythical head features suggests that the figures had mythical significance related to that of the Chavín Staff God. The bowl designs from the lower Ica Valley may have represented human impersonations of mythical beings. It is of especial significance, however, that the mythical features of the Callango Basin figures are traditional feline ones such as are also found at Chavín, while those of the Ocucaje Basin figure represent an entirely new mythical figure, that of the Oculate Being

DOUBLE-SIDED MYTHICAL HEADS

Double-sided mythical heads are a new design form confined to Phase 8 which represents a special development of the Callango Basin substyle and which may be related to the other mythical human representations at Callango. The double-sided head designs are found on the interior bottom of five shape 5 bowls from the Callango Basin, as well as on a bowl without provenience at the Museum of Primitive Art, and on the soft stone "sampler" in the Rosselló collection (fig. 45, b-1; Rosselló, 1960, Láms. I, II). The only other example is a unique variant on a spouted bottle from the Ocucaje Basin (in the collection of Pablo Soldi) which probably represents an imitation of the Callango form (pl. 8, b). The face of the double-sided heads consists of a central feline mouth accompanied by two sets of human eyes, one set above and one set below the mouth. This double-sided patterning of facial features of a representation with both feline and human attributes is another trait which Ocucaje Phase 8 shares with Phase EF of the Chavín style, exemplified by the Raimondi stone and other carvings (cf. Tello, 1960, fig. 33; Bennett, 1954, fig. 20).

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The double-sided heads on the Callango bowls have unique contouring. Unlike other human eyes in Phase 8, the eyes on double-sided heads are framed rather than unframed ones, with long-stemmed brow ends which diverge upward from the eye base at a sharp angle and extend to the edge of the design field. The elongated brow ends create a zigzag frame at the top and bottom of the face, with a triangular peak in the center. The frame of the face is terminated on each side in various ways, either with an arched border band that creates a long lenticular space between the face and the border of the circular design field, by an arched band that parallels the border of the design field, or by a rectangular band border. There is one unique specimen on which this pattern is more modified, in that the eyes proper are small unframed triangles, while the frame bands form a separate circular outline with four ray projections around the central face features, creating a radially symmetrical frame. The interior brow ends, and sometimes the outer ones as well, are terminated by recurved ray tips, either rectangular, rounded, or long triangular ones. On two of the specimens, the central brow ends have a second set of recurved rays stacked above the first, a pattern which recalls the front-face feline head designs on upper-valley Phase 8 spouted bottles as well as the stacked and multiple ray head appendages in Chavín Phase EF carvings. In the double-sided heads from Callango, intervening ray projections and ballband or stamped circle fillers are like those on other interior decorated Callango Basin shape 5 bowls, though there is much individual variation of detail.

Unlike the fangs on feline heads proper, the fangs of the double-sided heads are usually straight sided and much more evenly shaped than the more traditional feline fangs, being either triangular or vertical parallel sided. Irregular trapezoidal fangs are found on only one of the specimens. On some of the double-sided heads the lip bands form rectangular lip curls around projecting fangs, an early feature in the Ocucaje tradition not in use in the Ica Valley after Phase 2 until it reappears in Phase 8 at Callango (Rosselló, 1960, Lám. I, top).

MONKEYS

Representations of monkeylike figures with long tails are a special Phase 8 bowl design of the lower Ica Valley (and Nasca). This design is found on the bottom interior of a shape 5 bowl from Nasca (pl. 10, b), the bottom interior of two imitation Callango shape 5 bowls from Ocucaje, and the side of a shape 26 bowl from Callango (fig. 47, b).

THE AMPHISBAENA

The amphisbaena or two-headed worm is a special Ocucaje Basin figure found as early as Phase 5 at Ocucaje. In Phase 8 it is found as a painted representation on handled jugs and necked bottles (fig. 42, b, d), and also in modeled form with the addition of a double-spout top (fig. 17, c; Tello, 1959, fig. 3). There are two modeled amphisbaena bottles from Callango with special Callango Basin style modeled heads distinguishing them from the Ocucaje amphisbaena bottles, and one painted adaptation which has unique features and represents a local interpretation of the amphisbaena design (Rosselló, 1960, Lám. VI, b). Characteristics of the amphisbaena are a long, wormlike, curved or wavy-line body with a blunt, arched head at each end. In other respects the amphisbaena has feline features, though in an abbreviated and slightly modified form. The amphisbaena representations from Ocucaje have a small, fangless mouth, framed lenticular eyes with long brow ends, occasionally nose ornaments, and various nose forms, including modeled ones, which belong to the feline tradition. The modeled amphisbaenas generally also have side whiskers and chin whiskers like the Phase 8 feline designs of the Ocucaje Basin. The body is decorated with various feline spots, including small stamped circles, large double circles, concentric rectangles and concentric diamonds. The rare modeled amphisbaena variants from the Callango Basin differ from the Ocucaje ones proper in having fanged feline mouths and other conservative feline features not found on feline representations from Ocucaje, and in lacking the side and chin whiskers.

One of the painted amphisbaena representations from Ocucaje has long slender spiny elements projecting at intervals from the body and a protruding tongue, a feature borrowed from representations of the Oculate Being (see below; fig. 42, b).

THE OCULATE BEING

The Oculate Being is an entirely new mythical representation confined to the Ocucaje Basin substyle, occurring in our sample on six vessels in different bowl and bottle shape categories. Five of these vessels are decorated with representations of the Oculate Being proper, which consists of bodiless front-face features without a head outline (fig. 43, a-c; pl. 9, a). The sixth example consists of a front-face human body of the Callango Basin type with a head which has attributes of the Oculate Being (fig. 44). The latter design may represent a human impersonation of the mythical figure (see above). Like the amphisbaena, representations of the Oculate Being are found in both modeled and painted form and have some features of Ocucaje Basin feline designs proper. The Oculate Being differs from the feline representations in having large, unframed circular eyes consisting of from three to five concentric circles separated by contrasting color zones. The mouth usually lacks fangs, like most Ocucaje feline mouths, but it has a variety of shapes which differ from those of the feline designs. The most distinctive mouth shape of the Oculate Being is an elongated, straight or slightly arched, sausage-like red loop representing the lips, with a white toothed center (fig. 43, b-2, c; pl. 9, a). In almost all the examples, the mouth of the Oculate Being is upturned, as if smiling (figs. 43, a, b; 44). The mouth of the Oculate Being is further decorated with individually varying versions of the side and chin whiskers of the Ocucaje feline proper. The Oculate Being is also adorned with projections above the nose which resemble Ocucaje feline nose ornaments, sometimes in a general way only (figs. 43, a, c; 44), and sometimes specifically (fig. 43, b). Typically, the Oculate Being has curved, taillike appendages projecting from the tops of the eyes (fig. 43, a, b) or from a horizontal band above the eyes probably representing a forehead ornament (figs. 43, c; 44). The eye appendages on one of the figures have shovel-shaped recurved tips, like feline nose ornaments and other design details in the Ocucaje Basin substyle (fig. 44). On two other figures, the tips of the eye appendages are decorated with small faces (fig. 43, b, c). Two of the figures have red, tonguelike appendages projecting from the lower lip (fig. 43, a, b).

Two of the representations of the Oculate Being have a contoured band between the mouth and eyes ending in small faces which project beyond the face features on each side (fig. 43, b, c). These contoured bands appear to represent mouth masks, which are analogous to the forehead ornament on one of the figures (fig. 43, c). It is probable that both these features represent antecedents for the forehead ornaments and mouth masks of beaten sheet gold found in burials of Ocucaje Phase 10 and the early phases of the Nasca tradition and also represented in pottery designs of the latter phases.

GEOMETRIC DESIGNS

The great majority of innovating forms of geometric designs appear in pottery of the Ocucaje Basin, and some of them do not appear elsewhere. The innovating movement consists of a proliferation of a variety of simple geometric elements used as discrete units rather than as parts of special band designs. They lend themselves to very flexible use, as background fillers on Ocucaje bottle designs (figs. 8, a; 41, b, d; 42, a), as representations of feline spots on Ocucaje animal figures with feline attributes (fig. 42, a, b, d), and as discrete units in traditional bowl band designs on Ocucaje Basin bowls and handled jugs (fig. 42, c, g, h; Kroeber, 1944, pl. 13, G). One of these elements is amplified to represent the eye of the Oculate Being. Although some of the same elements are also used on Callango Basin vessels, both as feline spots or other animal spots and in the decoration of a few bowls, the selection is much smaller and is ordinarily confined to the more conservative stamped circle and double circle designs.

The principal innovating elements include simple or concentric rectangles (fig. 42, a, b), multiple concentric circles (figs. 8, a; 42, c), simple or concentric diamonds (fig. 42, a, d, g, h), and simple or concentric lozenges with or without segmented centers (figs. 8, a; 41, d; 42, f). Although double concentric circles have antecedents dating back to Phase 5, their popularity is very much increased in Phase 8, and they are used in a variety of new contexts (fig. 41, b). The elements described above are used alternatively as animal body markings or as space fillers in bottle designs. Other design elements used only as space fillers and occasionally in bowl band designs, include curved or S-shaped bands and bars (fig. 42, a). All these design elements are used in bowl band decoration and sometimes in the decoration of handled jugs, either simply or in some elaborated or enlarged form. In addition, single units of twined-fret elements are also used in the bowl band designs, a Phase 8 innovation of the Occucaje Basin that is part of the pattern of use of individual geometric elements (fig. 42, g, h). Multiple concentric circles bracketed by arcs with or without vertical extensions

(the "bull's eye" design) are used as band designs on Ocucaje Basin vessels, either in broad basal bands on spouted bottles (fig. 8, a) or as a broad-band design on shape 5d bowls (fig. 42, c). The only traditional design element used as a space filler or for feline spots on Ocucaje Basin pottery, besides the double circle, is the small stamped circle. The latter differs from the stamped circles of preceding phases in being usually smaller than 5 mm in diameter, like the corresponding design in the upper-valley substyle.

In the Callango Basin, space fillers and feline spots follow a much more conservative pattern, as stated earlier. The great majority of the space fillers are traditional small stamped circles, and the only other element used regularly to represent feline spots is the double circle. One of the most popular design forms of the Callango Basin is the old traditional guilloche, used in every way possible in a new burst of popularity, either in the form of horizontal chains, both zoned and unzoned, painted and unpainted, on the bottom interior or sides of various bowl types, or as discrete two or three element units, either vertically or horizontally. Outside the Callango Basin guilloche designs are comparatively rare, and when they occur they are usually associated with other Callango Basin features. On a few fragments of convex-sided bowls from Callango some of the new geometric units of the Ocucaje Basin substyle are used as space fillers in association with large zigzagging or wavy band designs.

A conservative feature which survives with frequency in the Callango Basin and also in the upper valley, but not in the Ocucaje Basin, is the vertical ballband. In Callango pottery it is used in the traditional manner as a panel design alternating with representational figures in bowl bands. Long and short ball-bands are also used as space fillers on the interior bottom of shape 5 bowls, in a patterning transfer from their traditional use in front-face feline designs on bird-spout bottles.

Diagonal and horizontal twined-fret bands are another important geometric design category in Phase 8 of the lower-valley substyles. These designs probably represent influence of the upper-valley substyle in the lower valley. At Ocucaje, twined-fret bands are used almost exclusively as narrow-band designs at the bottom of the design area on spouted shape 4 bottles, always without filler dots (pl. 8, b). The same designs are also used in basal bands on most of the shape 4 spouted bottles from the Callango Basin and Nasca (fig. 47, c; pl. 11, a), and as incised narrow-band designs on fancy Callango Basin graters. In a secondary adaptation, the same band design is also used in the decoration of the interior of shallow shape 26 bowls, on which the patterning is modeled after shape 4 bottle designs (figs. 43, b; 48, a). In addition, a diagonal three-ply twinedfret band with or without dot fillers, like the contemporary upper-valley designs, is used as a broad-band design on the outer side of Callango Basin shape 5 and shallow shape 26 bowls (fig. 45, b-2; pl. 10, a, right). In contrast to the diagonal twined-fret designs in the upper-valley substyle, however, those from Callango are almost invariably framed by the outlines of the design band. There is only a single occurrence in the lower valley of a free-standing two-ply diagonal twined-fret band used as a broad-band design that is indistinguishable from Phase 8 designs of the upper-valley substyle. It is found on the lower section of a complex spouted bottle from Ocucaje which resembles some of the more conservative shape 4a bottles of Phase 8 in the upper-valley substyle (fig. 17, b). Thus, although twined-fret designs appear in all sections of the Ica Valley during Phase 8, they are used in different ways in each area. Insofar as the Ocucaje and Callango Basin variants differ, those from Ocucaje resemble those of the upper-valley substyle more than the Callango Basin ones do.

Other traditional geometric designs are used only rarely. A small modified form of the step-block design is used in basal bands of medium width on Ocucaje spouted bottles and on a traditional bowl from Callango, and another variant of it, consisting of opposing step-blocks, is found as a traditional bowl band design on a shape 5 bowl from Ocucaje. The checkerboard design and the serrated band are other geometric designs which survive rarely as bowl designs in the Ocucaje Basin.

PHASE 9

UNLIKE PHASE 8, only two major regional substyles can be identified for Phase 9, one being the upper-valley substyle, and the other a substyle found in much the same form in the middle valley, the Ocucaje Basin, and the Callango Basin. Although there is some indication that there may be minor stylistic differences between Phase 9 pottery of the Callango Basin on the one hand, and the Ocucaje Basin and middle valley on the other, these differences appear to be very slight, much smaller than the differences between regional substyles in Phase 8, or between Phase 9 pottery of the middle and lower valley as a unit and the contemporary pottery of the upper valley. We have not attempted to analyze the differences between the Ocucaje and Callango Basin Phase 9 pottery in the present study.

The features characterizing the Phase 9 substyle of the middle and lower valley represent a combination of derivatives of all four Phase 8 substyles, many in new combinations of features that at times make it difficult to trace their exact antecedents. In this mixture, derivatives of Phase 8 of the Ocucaje Basin substyle predominate, especially in the very much increased frequency and wider distribution of representations of the Oculate Being and its attributes. The dominance of features of Ocucaje Basin origin in Phase 9 pottery, together with their wider distribution, suggests the possibility that the much greater stylistic homogeneity in pottery of the middle and lower valley may reflect a change in political relationships, in which the Ocucaje Basin played a dominant part. The large one-phase urban centers on the Peña de Tajahuana in the middle valley (PV62-92) and the Pampa Media Luna in the Callango Basin (PV62-148), which belong to Phase 9, support the inference that there may have been political unification of the middle and lower valley at this time.

In contrast to the sample for the middle and lower valley, which is good, the information on Phase 9 pottery of the upper valley is based on only a small sample of fragments and whole vessels without associations other than site provenience, the fragments having been collected at the site of Cerrillos (PV62-63), and the whole vessels being from the cemetery at Teojate. Because of the limitations of the sample, no detailed analysis of Phase 9 of the upper-valley substyle can yet be made. The few fragments and whole vessels can be identified as belonging to Phase 9 on the basis of their contrasts with Phase 8 vessel types of the upper valley, as well as by a number of features that they share with Phase 9 pottery of the middle and lower valley. These stylistic distinctions show the upper-valley substyle of Phase 9 to be a conservatively modified derivative of upper-valley Phase 8, without exhibiting much, if any, influence of the middle- and lower-valley substyle.

THE SAMPLE

There are 125 whole vessels in the Phase 9 sample from the middle and lower Ica Valley, and 20 whole vessels probably belonging to Phase 9 from the site of Teojate in the upper valley. The great majority of whole vessels are known to be from the Ocucaje Basin or are probably from there. There are only nine whole vessels with fully documented provenience from Callango sites, and two additional ones in the Gonzalo del Solar collection that are probably from Callango. Eleven whole vessels are from a site west of the Hacienda Santa Lucía in the middle valley. Nineteen vessels (including the eleven from the middle valley) are in the Carlos Soldi collection of Ocucaje, twenty vessels are in the Aldo Rubini collection of Ocucaje, fifty-four vessels are in the Truel collection of Ocucaje, thirteen are in the Nathan Cummings collection, one is in the Museo Regional de Ica, two are in the collections at Columbia University in New York, six are at the Museum of Archaeology of the University of San Marcos in Lima, and eight are at the Robert H. Lowie Museum of Anthropology of the University of California at Berkeley. There is also a Phase 9 bottle without provenience in the Milwaukee Public Museum.

In the sample from the middle and lower Ica Valley there are forty-one resinpainted bowls, cups or vases, twenty-four negative painted bowls, fourteen pattern burnished ones, three plain bowls, three incised decorated "nicked" bowls, one spittoon-shaped vessel, three handled jugs, twenty necked bottles, six spouted bottles (plus a seventh one without provenience), six jars, one dipper, and three cooking ollas. In the sample from Teojate probably attributable to Phase 9 there are fifteen bowls, three spouted bottles, and one jar.

In addition to the vessels mentioned above, which are definitely attributable to Phase 9, there are others, mainly bowls with the simpler resin-painted decoration, large jars, and tapering-sided vases, which belong either to Phase 9 or to Phase 10. Further research in seriation and additional data on site associations are needed to make the necessary distinctions.

Published illustrations of Phase 9 vessels include eleven in the Truel collection (Kroeber, 1944, pls. 13, A; 14, A, B, D, E; 15, B, C, F, G; 16, E, G, I; Tello, 1959, Lám. I, B; V, A; Ubbelohde-Doering, 1959, pls. 20, 21). Three Phase 9 vessels from burials excavated at Ocucaje by the Columbia University Expedition of 1952 have been illustrated by Strong (1957, fig. 3, I-L). One Phase 9 negative decorated bowl collected at Ocucaje by Max Uhle has been illustrated by Kroeber and Strong (1924, pl. 29, f), and a utility vessel illustrated in the same publication probably also belongs to this phase (ibid., pl. 29, d). The design on a large ovoid Phase 9 neckless jar at the Textile Museum in Washington has been published by Sawyer (1961, fig. 10, a). Sawyer has also published the drawing of a Phase 9 bowl design copied from a vessel in the Nathan Cummings collection (Sawyer, 1961, fig. 10, b). A Phase 9 vessel without provenience at the University Museum in Philadelphia has been illustrated by Bennett (1954, fig. 35) and Bushnell (1957, pl. 16). There are also illustrations of two pyroengraved gourds from the Truel collection, published by Tello, which belong to phase (Tello, 1959, figs. 32, 34, 35).

Tello and others have published a number of illustrations of vessels from the "Cavernas" site on the Paracas Peninsula which must be contemporary with Ocucaje Phase 9 and which belong to a closely related, though not identical style (Tello, 1959, Láms. I, A, C; II, A; III, B; IV, A, B; V, B; VIII, A-C; X, A, B; figs. 10–13, 15–21).

EVIDENCE OF ASSOCIATIONS

Physical evidence which helps to isolate Phase 9 as a unit of contemporaneity is furnished primarily by pottery associations in four burials, two from Callango Basin and two from Ocucaje, and by two large one-phase sites, one in the Callango Basin and one in the middle valley.

Dwight T. Wallace witnessed the excavation of a Phase 9 burial in the area of Toma Luz, below the Hacienda Callango. The burial contained three vessels, which are deposited at the University of San Marcos. Dawson recorded the excavation of a burial (Rubini Burial 76) at site PV62-148 (Media Luna), Callango, that also contained three vessels subsequently deposited at the University of San Marcos. There are two additional recorded burials from Ocucaje in the Rubini collection (Burials 61 and 70), one containing five vessels, the other two. Also at Ocucaje, Max Uhle excavated a burial at the southern end of the Cerro Max Uhle (Ocucaje Site A, Burial 1) that contained four Phase 9 vessels, now deposited at the Robert H. Lowie Museum of the University of California at Berkeley (Nos. 4/4492, 4493, 4494, 4496; cf. Kroeber and Strong, 1924, pl. 29, d, f). Unfortunately, among the vessels that Uhle claims to have found in the same burial there are three that belong to the much later Nasca Phase 3 (Nos. 4/4490, 4491, 4789; cf. Kroeber and Strong, 1924, pl. 29, c, g). Either the burial Uhle excavated was a disturbed one, or he made an error in the cataloguing. Whatever the explanation, the lot reported by Uhle evidently represents the contents of two separate burials, one of which belonged to Phase 9.

In his preliminary report on the Columbia University Expedition to Peru of 1952, Strong reports the excavation of nine burials in the Pinilla sector of Ocucaje, which he assigns to his Late Paracas style. Strong reports that of these burials only four contained pottery, three of them containing negative-decorated bowls and one a pair of identical anthropomorphic resin-painted jars (Strong, 1957, p. 16). The two jars and one of the negative-decorated bowls are illustrated (Strong, 1957, fig. 3, I-L). All three of these vessels belong to Phase 9. However, they do not furnish additional evidence of associations, because they involve a single vessel in one burial and a pair of identical vessels in the other. Equally, another burial excavated by Uhle in 1901 at the southern end of the Cerro Max Uhle at Ocucaje (Site H, Burial 2) contained only a single pottery vessel (Cat. No. 4-4802), another negative-painted bowl, which therefore also fails to furnish additional evidence of associations between pottery and other kinds of remains.

The most important evidence of associations comes from two large one-phase occupation sites. One of these is PV62-148 in the Callango Basin. The site covers an area one kilometer across, on a low sandy rise in a flood plain $1\frac{1}{2}$ kilometers east of the Ica River, on the Pampa Media Luna, 1 kilometer north of the Phase 8 site PV62-154, and about 2 kilometers southeast of the hacienda houses of Callango. The refuse on this site is very dense, and extensive surface collections produced only Phase 9 pottery fragments. Dawson made a small excavation in

which he also encountered only Phase 9 fragments. The second large occupation site is PV62-92, situated on top of a plateau called the Peña de Tajahuana, on the western border of the middle Ica Valley. Surface refuse at this site is a little less abundant than at site PV62-148, but repeated surface collections in all parts of the site turned up a considerable number of sherds, all of which belong to Phase 9. Another small excavation made by Dawson in refuse at site PV62-92 also produced only Phase 9 pottery fragments.

Other refuse and looted burial sites with Phase 9 pottery are abundant in the Ica Valley, especially in the Ocucaje Basin and along the western border of the middle Ica Valley between the area of the Hacienda Tajahuana and the Ocucaje narrows. However, at all these sites Phase 9 pottery fragments are mixed with those of other phases, usually with pottery of Ocucaje Phase 10 and Nasca Phase 1, but also at times with any number of other styles, both earlier and later. Some Phase 9 refuse, mixed with refuse of other phases, also turned up at occupation sites in the upper valley, at the site of Cerrillos (PV62-63) and along the eastern border of the Hacienda Cordero Alto.

GENERAL COMMENTS ON PHASE 9

There is ample evidence to make precise distinctions between Phases 8 and 9, because there is a great deal of evidence of associations which isolates each of these phases as a separate unit of contemporaneity. The separation of features and vessel types has not been worked out to the same degree between Phases 9 and 10, because the evidence of associations for Phase 10 is more limited. It is confined to burials that contain some but not all the vessel types present in the phase. All our sherd collections had to be deposited in Peru, and time did not permit an analysis of pottery fragments from sites containing Phase 10 refuse in sufficient detail to supply the evidence for all the necessary stylistic distinctions. Many additional stylistic distinctions between Phases 9 and 10 can be worked out on the basis of the association of features on individual vessels, but this research has not been completed, even on the basis of the available sample. As a result there are some vessel types and features, especially among the larger jars, which at present can be identified only as belonging either to Phase 9 or to Phase 10.

TECHNOLOGY

Very little information is available on technological details of Phase 9 pottery. The few vessels and fragments that could be checked for this purpose reveal considerable variety, and there appear to be some distinctions between decorated vessels of the middle and lower valley on the one hand, and of the upper valley on the other. Vessels and fragments in the middle- and lower-valley sample show a great variety in wall thickness, even among vessels of comparable size in the same shape categories, and there also appears to be considerable variation in firing. Some are fired light to dull orange throughout, some have a gray core and orange outer shell as in Phase 8, some are dark gray throughout, and some are gray to brown throughout. The fine resin-painted vessels of the lower valley all have a glossy, deep charcoal-black pottery surface created by smoking, which causes them to resemble fine decorated pottery of the earlier Ocucaje tradition and differentiates them from the gray-surfaced vessels of Phases 5, 6, and 7 and the majority of the decorated vessels of Phase 8. Most of the less elaborately decorated Phase 9 vessels have a less carefully finished, unsmoked dark gray to brown surface. Fugitive organic black applied by scorching is restricted to negative-decorated bowls. There appear to be no significant changes in the use of sand temper for decorated ware. Middle- and lower-valley decorated vessels and fragments that could be tested for hardness measure between Grades 3 and 4, or at Grade 4, on the Mohs Scale of Hardness, whereas three thin, orange fired decorated Phase 9 bowl fragments from the upper valley, the only ones available for testing, have a hardness between Grades 4 and 5, and 5 and 6, respectively.

THE SUBSTYLE OF THE MIDDLE AND LOWER VALLEY

UTILITY POTTERY

The brief eccentricity of making utility ware decorative, which is peculiar to Phase 8 of the middle- and lower-valley substyles, is for practical purposes out of style in Phase 9. Although derivations of the ornamental red cooking ollas survive in modified form, there is a new type of utility ware which is more common at refuse sites and which is used for cooking ollas as well as other utility types. The new ware is designed for practical usefulness rather than beauty. It is brown or red, with an unpolished surface and coarse, dense sand temper. Unlike the red cooking ollas, the remains of cooking vessels made of the coarser red or brown ware do not show the radiating pattern of cracking in the area exposed to fire that characterizes the red cooking ollas.

COOKING OLLAS

Cooking ollas made of the new red or brown ware are more common in Phase 9 refuse than are the remnants of the old red polished ones (shape 40; figs. 22, h; 55, a). The new ollas have a rough surface, a curved, everted rim or low neck, and vertical strap handles on the upper part of the body. The handle straps have a concave back.

The older, polished red cooking ollas with sparse, fine sand temper also continue in use along with the new type, but they are somewhat less common, particularly at site PV62-92 in the middle valley (shape 23; fig. 22, e). They differ from the Phase 8 cooking ollas in having even shorter collars, less than a centimeter in height, so that some of the collars look like mere thickened ridges at the rim. Red cooking ollas of Phase 9 also lack the large disk lugs of Phase 8, and only the smaller disk lugs and coil handles are in use.

OTHER PLAIN CLOSED VESSEL TYPES

Fine, polished redware is also much scarcer among other utility types. Large neckless incurving ollas with thickened rims are usually made of heavily tem-

pered, sandy paste with gray to brown surfaces. Red and gray fired low-necked jars and incurving neckless jars with everted rims are also present (fig. 55, b).

GRATERS

Grater fragments are abundant in Phase 9 refuse (fig. 54, f-j, l, m). The ornamental base-angled grater bowls of Phase 8 are entirely out of style, and only the simplest of the Phase 8 types survive as rare, occasional remnants. The great majority of Phase 9 graters are thicker walled (5-10 mm in wall thickness) and coarser tempered than in Phase 8, with a light, dull orange or buff surface. The forms are slightly modified derivations of the simplest Phase 8 types, consisting of large, spheroid or paraboloid shapes. The rim edge is either plain rounded or thinned. On many specimens, the rim just below the edge is slightly everted with a small concavity in the profile, a distinctive Phase 9 innovation which is a useful phase marker (fig. 54, f-h, j). The majority of the Phase 9 graters also differ from those of Phase 8 in lacking red-slipped banding around the rim, and on many the plain slipped rim section is narrower than before, as narrow as 1 cm (fig. 54, l). A few graters continue to have narrow or broader red slipped bands, 1-4 cm wide, around the rim. None of the Phase 9 graters have stamped circle decoration. The pattern of grating incisions on many of the new graters differs greatly from that of Phase 8, but some specimens continue with the simpler parallel-line designs of Phase 8 (fig. 54, l). The ornamental Phase 8 incised patterns are entirely out of style. Phase 9 incisions are deeper and coarser, and usually consist of short isolated units, usually short groups of parallel hachures and wedge-shaped punch marks, and sometimes small, star-shaped figures in the center of the bowl. A few of the incised patterns consist of sets of three or four undulating lines in groups that look as if they had been made with some sort of comb, a pattern which becomes exceedingly common in Phase 10.

OTHER PLAIN BOWLS

Plain dark gray bowls and cups with shallow curved bottoms and slightly convex, high, slightly flaring sides are found both at site PV62-148 at Callango and at site PV62-92 at the Peña de Tajahuana (fig. 22, a). In addition, negative-decorated bowls, pattern-burnished bowls, and dark gray bowls with small nicks on the inner rim are also relatively plain, and where the negative decoration has disappeared the bowls appear to be undecorated (fig. 22, b, c; 54, a-e). The "nicked" bowls are derivatives of the plain stamped-circle bowls of Phase 8.

VESSEL SHAPES OF FANCY WARE

The great majority of the vessel shapes are derived from Phase 8 forms, but in the process of change there appears to have been a great deal of exchange of features between the areas that mark the four Phase 8 substyles of the Ica Valley, and in the middle and lower valley there appear to be relatively few regional differences. In all parts of the middle and lower valley an important innovation appears in the form of very large decorated vessels, much larger than any decorated forms known previously. Shapes included among the large forms are ovoid, tapering-sided vases, face-neck jars, and necked jars with smaller side spouts (pl. 12, b). Fragments of these enlarged vessels are very common in Phase 9 refuse sites as well as cemetery areas, but none have been found complete in burials. Another important Phase 9 innovation is the appearance of four types of musical instruments made of pottery, a large drum, a small panpipe, a small modeled whistle, and a trumpet.

Among traditional vessel shapes, base angles are rare in most bowl categories as well as in spouted bottles and jars and are in the process of going out of style, and rounded basal hips predominate. Very shallow-curved bottoms are common, and flat bottoms combined with basal hips appear as a Phase 9 innovation. Flat bottoms are found most commonly in bowl forms, but occasionally also among necked and spouted bottles and jars. The great majority of the fancy decorated Phase 9 bowls are derived from Phase 8 shape 26 bowls of the Callango Basin substyle, and the more traditional earlier bowl types are largely out of style. However, some traditional bowl shapes survive among the less elaborately decorated types. Among bowls with simpler decoration there is a trend toward spheroid and ellipsoid shapes and away from angular or gambreled contours, and a similar trend affects the shapes of spouted bottles. Most bowl rims are thinned at the edge, though a few bowls continue to have unthinned rim edges. In addition, a great many Phase 9 bowls in all categories, but especially among the plainer bowls, have a small concavity in the outside of the rim just below the edge, so that the top of the rim is very slightly everted (figs. 21, c, h; 22, a, c; 54, a-e). This feature is confined to Phase 9. Some Phase 9 bowl rims are also distinct in being slightly thickened on the inside, just below the edge (fig. 54, a, c-e; see also graters, fig. 54, g, j, l, m).

SPOUTED BOTTLES

Spouted bottles appear to be much scarcer than in preceding phases, and there is a great deal of variety in shape and design, no two vessels being exactly alike (figs. 8, b; 20, a-c). There are only seven specimens in the sample, six of them from the Ocucaje Basin and vicinity and one without provenience. One of the bottles may be a slightly earlier vessel, transitional between Phases 8 and 9. Only five of the bottles are double spouted; the other two are spout-and-bridge to human-head bottles. The human-head bottles are unlike the corresponding Phase 8 bottles, but in their body design they have some resemblance to the anthropomorphic spouted bottles of Phase 8 of the upper-valley substyle, and in their shape they resemble some of the most advanced Phase 8 shape 4 bottles of the upper valley (fig. 20, c; pl. 11, b; Kroeber, 1944, pl. 14, A).

Only two of the spouted bottles have the high-domed, composite body shape with a low, paraboloid or spheroid bottom and a base angle, which is the standard shape 4 form of Phase 8 of the Ocucaje Basin substyle, and one of these specimens may be transitional between Phases 8 and 9 (figs. 8, b; 20, a, b). Most of the rest of the shapes represent various stages of advancement which resemble the most advanced deep-bottomed, ellipsoid and spheroid Phase 8 shape 4 bottles of the upper-valley substyle. The human-head bottles have a deep, paraboloid bottom and a paraboloid or spheroid top separated from the bottom by a brief, prominent shoulder at approximately middle height (fig. 20, c). One of the other bottles is nearly spherical with a very shallow, curved bottom, one is a transitional shape with a high, dome-shaped top, but with a hip rather than a base angle between bottom and side, and one has a deep paraboloid bottom and a very high base angle or angular shoulder just below middle height.

None of the hollow spouts have hawk- or human-head bases, but on some specimens an irregular thickening below the bridge attachment represents the survival of the modeled heads (fig. 20, c; pl. 11, b). The thickened section below the bridge is covered with a plain coating of resin paint, whereas the spout above the bridge attachment is generally unpainted, charcoal black, another survival of the earlier modeled head spouts. The spout section above the bridge is either slightly tapering or nearly cylindrical, and relatively broad. The entire spout is proportionately broader than in preceding phases. A new spout form is also present on one of the bottles from Ocucaje, a long, nearly tubular spout flaring slightly at the top (as in Tello, 1959, Lám. X, B; fig. 11). On this specimen the bridge is attached near the base of the spout rather than at middle height. The bridges continue to be arched, as in Phase 8 of the lower-valley substyles.

The modeled human heads of Phase 9 are unlike any of the preceding phases, having a number of innovations lacking antecedents in the Ocucaje tradition. The most distinctive innovation is an entirely new eye form without known antecedents, the "coffee bean" eye, represented by a raised oval lump with a horizontal gash in the center (fig. 20, c; pl. 11, b; Kroeber, 1944, pl. 14, A). Other distinctive Phase 9 innovations include a triangular zoned peak which projects down the forehead, ending in a point above the nose, a short, slightly curved mouth line without dot finials, and abbreviated hawk markings which are confined to the area below the eye and do not extend above the eye, unlike the earlier forms. The head is slightly tapering toward the top and has a simple pointed modeled nose and luglike modeled ears.

BOWLS

In Phase 9, the antecedents of bowl shapes are more difficult to trace than in the earlier phases. There are several reasons for this. Perhaps the most important one is that by Phase 9 a great deal of mingling of features derived from all four substyles of the preceding phase has taken place, forming a relatively homogeneous single substyle, with some minor variations only, in the middle and lower valley. Features of bowl shapes of all four Phase 8 substyles are sometimes mingled in entirely new ways. There is also a great deal of analogic change affecting shapes of bowls as well as of vessels of other categories, so that features traditionally belonging to one bowl category are often found applied not only to bowls of that category but also to specimens in several other shape categories. (For example, shallow-curved or flat bottoms and bowl rims with a slight concavity below the rim edge are used for a number of vessel types in addition to the one on which they appear originally or most commonly.) Finally, a great many of the most popular bowl forms of Phase 8 are largely or entirely out of style in Phase 9, whereas derivatives of some Phase 8 minority types are very popular. These factors make taking into account the association of shapes and designs as a guide to classifying some shape types even more necessary for an analysis of Phase 9 than for that of the preceding phases.

By far the most common fancy decorated bowl category represented in Phase 9 consists of derivatives of Phase 8 shape 26 bowls, an elaborately decorated minority type in Phase 8 (fig. 21, c-h; pl. 13, a). Phase 9 shape 26 bowls differ from their antecedents mainly in having frequently a flat or nearly flat bottom instead of the shallow-curved bottom that is always used in the preceding phase (fig. 21, c, f-h), and in usually having straight or nearly straight sides instead of convex ones (fig. 21, d-h). However, the older shallow-curved bottom and slightly convex sides also survive on some specimens in varying combinations (fig. 21, c-f). Occasionally, the Phase 9 bowls have the slight concavity on the outside of the rim below the rim edge that we noted as a distinguishing Phase 9 bowl feature found commonly in the plainer bowl categories (fig. 21, c, h). As in Phase 8, the deeper Phase 9 shape 26 bowls and cups have painted decoration on the outside only, whereas the shallower ones have elaborate decoration inside as well as out. The outside bottom is not usually decorated on the specimens with a flat or nearly flat bottom, which represent the great majority of the bowls.

Survivals of base-angled Phase 8 shape 5 bowls are rare in Phase 9, and when they occur they are very variable in size and proportions (fig. 21, a, b). The most conservative specimen (fig. 21, a) is a small bowl which retains the base angle of the earlier forms (compare with fig. 17, f). A second specimen is more modified in having a basal hip, like the much more common derivatives of shape 26 bowls, and in being much larger (fig. 21, b). Similar enlarged bowls are typical of Phase 9 of the upper-valley substyle (cf. fig. 22, j).

Another category of fancy resin-painted bowls in Phase 9 is a rare minority type consisting of three bowls with uncertain antecedents (fig. 21, i, j; shape 28). One of the specimens (Truel 79) has bottom contours and a curved hip like an imitation shape 26 bowl of Phase 8 from the Ocucaje Basin (cf. fig. 17, g), but with vertical, convex sides like Phase 8 shape 5d bowls (cf. fig. 17, h). The other two Phase 9 bowls are very similar to this specimen in the contours of the bottom, hip, and sides, but they have higher sides, one slightly flaring and the other slightly tapering (fig. 21, i, j). Since their ancestry is unclear, these bowls are given a new theme number. Though they are a minority type in Phase 9, they are important because they represent the antecedents of an important fancy decorated vessel type in Phase 10.

The majority of the bowls in the three shape categories described above have fancy, careful resin-painted decoration and glossy, smoked charcoal-black surfaces, but a few have simpler decoration and smooth, dark gray, unsmoked surfaces with a low gloss.

The only other elaborately decorated bowl in the Truel collection has a unique shape, with an angular shoulder at middle height, straight, tapering sides, and a flat bottom (fig. 22, i).

There is another common bowl type with shapes which vary from simple and

composite spheroid to slightly hipped flaring sided (fig. 21, k-m). The specific ancestry of this bowl category is at present uncertain, so a new theme number has been assigned to it (shape 29). Bowls in this category are relatively large, deep, and thick walled. The composite shapes are most common. Usually they have a spheroid bottom with a straight, flaring extension of the side at the top (fig. 21, l). Bowls with these shapes are usually decorated only with simple resin-painted geometric bands around the outside of the rim. Although a few have smooth, glossy, charcoal-black surfaces, the majority have a less carefully polished surface finish and a mottled black, gray, or gray to brown surface color.

There are two simple spheroid bowls in the sample which differ from other spheroid bowls in being incurving ones that end above the equator of the projected sphere. While they therefore belong to a slightly different shape type, the design and surface finish are like those on shape 29 bowls.

Bowls with shapes similar to shape 29 bowls but with slightly different proportions, representing a separate vessel category, are decorated with patternburnished or negative designs and some with small stamped-circle designs or tiny nicks on the inner rim (figs. 21, o, p; 22, a-c; 54, a-e; pl. 12, a). Both in shape and design, these bowls resemble Phase 8 shape 5c bowls, from which they are evidently derived (compare with fig. 16, h, i). In general, shape 5c bowls of Phase 9 are smaller and thinner walled than their Phase 8 antecedents. They differ from Phase 9 shape 29 bowls in being slightly smaller and less flaring, and in having a proportionately deeper bottom and shorter-sided top. As in shape 29, the bottom and top sections are separated by a basal hip. Not uncommonly, shape 5c bowls have the slight concavity below the rim edge that characterizes some Phase 9 bowls in all shape categories (figs. 22, a, c; 54, a-e). Some of the shape 5c bowls have a bright orange fired surface (especially those with negative decoration), whereas others are dark gray or mottled gray to brown (especially those with interior nicks and pattern-burnished decoration). With a few exceptions, the surface finish is smoother and glossier than on the resin-painted shape 29 bowls. The negative-decorated bowls and some of the pattern-burnished bowls have a red-slipped band 1-3 cm wide on the outer rim, and some of the negativedecorated bowls have a red slip covering the entire inside as well.

There is another, rare bowl shape in Phase 9 which is derived from shape 5b and shape 5c bowls of Phase 8 of the middle-valley substyle (fig. 22, d; compare with fig. 16, g, h). We are assigning them the shape theme designation 5b to distinguish them from the shape 5c bowls described earlier. Like many of the shape 5c bowls, the shape 5b bowls are gray fired bowls with derived stamped-circle designs on the interior rim. This type of firing and decoration is also associated with shape 5b and shape 5c bowls in Phase 8 of the middle-valley substyle. Like all shape 5b and some shape 5c bowls of Phase 8, the Phase 9 specimens have a paraboloid bottom, a rounded hip, and slightly convex sides. They differ from their Phase 8 antecedents in that the bottom is proportionately much deeper and more nearly conical, while the sides are much shorter, so that the "'hip'' is in the upper part of the vessel. Like shape 28 bowls, this minority type is the antecedent for an important Phase 10 bowl category.

Among negative-decorated bowls, there are two other shape types the ancestry of which is at present unclear. One is a bowl with relatively high, slightly convex, flaring sides and a flat or nearly flat bottom (Strong, 1957, fig. 3, K, L), and the other is a simple, vertically ellipsoid form (fig. 21, n).

Fragments of spittoon-shaped bowls with negative vertical stripes on the flaring collar are relatively common in surface collections at Phase 9 refuse sites at Callango, Ocucaje, and the middle valley (fig. 22, f; shape 31). These bowls are derived from similar handled bowls of Phase 8.

DIPPERS

There is one dipper with Phase 9 decoration and surface finish in the Truel collection. Its body shape resembles that of Phase 7 (and possibly Phase 8) dippers of the upper-valley substyle. The handle differs from the earlier dipper handles in being tapering, with an open end, resembling Phase 9 bottle spouts.

HANDLED JUGS

Handled jugs are not common, but two specimens from burials in the Callango Basin and one vessel from the Ocucaje Basin represent survivals of the Phase 8 forms (fig. 20, d). In addition there are two necked bottles without handles from Ocucaje which are in other respects like the handled jugs and so are included in this category. The Phase 9 forms differ from those of Phase 8 in having a proportionately higher body, two with a low spheroid or paraboloid bottom and a base angle as in Phase 8, but two others with a basal hip, a Phase 9 innovation which also affects other vessel shapes. One specimen has a simple, horizontally ellipsoid body with a shoulder at middle height, in analogy with changes in the body contours of spouted bottles.

NONANTHROPOMORPHIC NECKED BOTTLES AND JARS

The necked bottles and jars of Phase 9 are derived from Phase 8 and transitional Phase 8-9 forms, and finely decorated vessels are once more relatively common in this shape category (fig. 20, e, f; pl. 12, b; Kroeber, 1944, pls. 14, E; 15, F, G). There are two principal shape types among bottles of standard small size averaging about 12 or 13 cm in height (shape theme 27), and a new enlarged form which is 20-30 cm high (shape theme 27a). Among the smaller vessels, some have spheroid or horizontally ellipsoid bodies (fig. 20, e), and another group has high-shouldered, inverted ovoid bodies. The inverted ovoid shapes resemble advanced Phase 8 forms, but they are proportionately slightly broader and squatter, and instead of a tapered, near-conical bottom they have a shallow-curved or flat one with a basal hip between it and the sides, like Phase 9 shape 26 bowls (fig. 20, f). One of the spheroid vessels also has a flat bottom and basal hip (Kroeber, 1944, pl. 15, F).

Both the shape 27 and shape 27a bottles have the same kinds of necks in forms that are much more standardized than in Phase 8. The most common neck form resembles the hyperboloid necks of Phase 8, but the necks are proportionately slightly broader, and the rim is more everted, with an abrupt angle starting a short distance below the rim edge (fig. 20, e). A few more conservative specimens lack the prominent rim eversion (fig. 20, f). Most of the necks are about 2½ cm high and 3-3¼ cm in diameter, the top diameter being slightly wider than the basal one. One neck specimen 3¼ cm high recalls the taller Phase 8 necks. One of the vessels in this shape category is a jar with a wide, low, slightly everted collar instead of a neck.

The body features of the enlarged vessels are the same as those of the smaller jars or are similar to them.

All the enlarged jars and one of the smaller ones have a peculiar Phase 9 innovation in the form of a narrow, hyperboloid side spout on one side of the shoulder (fig. 20, f; pl. 12, b; Kroeber, 1944, pl. 14, E). This feature appears to be confined to Phase 9.

All the necked bottles and jars in this group that are present in the sample have a glossy charcoal-black surface. Some have no other decoration, whereas others are decorated with zoned resin-painted designs on the upper part of the body.

One necked bottle from the area of the Hacienda Santa Lucía in the middle valley has a football-shaped body of irregular proportions which represents the survival of an earlier type (shape 15). The design on it recalls the upper-valley rather than the lower-valley tradition. Another necked bottle from Ocucaje has a laterally compressed, flask-shaped body.

ANTHROPOMORPHIC AND THERIOMORPHIC NECKED BOTTLES AND JARS

There are various anthropomorphic bodies with hyperboloid jar or bottle necks like those on other necked bottles and jars. Most of them, however, are entirely unlike those anthropomorphic jars in the sample that have sufficient general resemblance to the anthropomorphic jars of Phase 8 to demonstrate their historical connection clearly (Strong, 1957, fig. 3, I, J). The principal resemblance to Phase 8 jars is in the body shape, in which a waistlike constriction in the upper third of the vessel separates the head from the body. In other respects, the Phase 9 vessels resemble those of Phase 8 only insofar as they are not face-neck jars but have a separate plain jar neck above the head.

The Columbia University jars also resemble the Phase 8 ones in having hawk markings crossing the face vertically above and below the eye and arms and hands painted on the body. In other respects the features are entirely different. New anthropomorphic features include a lenticular eye with a horizontal floating line at the center representing the pupil, a mouth represented by the same design, lug ears like those on human-head spouted bottles, hands with four-pointed, spreading fingers, and thick arms. Another important innovation is a head adornment, evidently representing hair, which projects like a pony fringe down the forehead.

Other anthropomorphic jars of Phase 9 have some of the same new features, as well as additional or alternative ones. The eyes are sometimes lunate, with a straight top outline. On some specimens, the pupil is represented by a second lenticular figure (Kroeber, 1944, pl. 13, A), or it is omitted, and the mouth may

be a plain slit or a lenticular half-section with vertical subdivisions representing teeth. Hawk markings are not present on all the specimens. One specimen has eye features and appendages marking it as a representation of the Oculate Being (Kroeber, 1944, pl. 14, B; Tello, 1959, Lám. I, B; compare with Phase 8 fig. 44). On two figures, legs as well as arms are indicated, the legs being shown as drawn up at the knees. Both the arms and legs are modeled rather than drawn, also a Phase 9 innovation, the modeling consisting of thin simplified fillets with blunt rounded ends divided by incised lines indicating fingers and toes. On two specimens from Santa Lucía in the middle valley (Carlos Soldi collection) the faces have simplified features without modeling, and the body features are omitted.

Although no two anthropomorphic vessels are exactly alike in the Phase 9 sample, they all share a number of features identifying them as human representations and distinguishing them from human representations of all preceding phases.

Theriomorphic vessels are represented by three specimens in the sample having a general resemblance to the Phase 8 amphisbaena, and by a modeled feline jar, all with jar necks rather than spouts at the top, which represent unique, modified derivations of Phase 8 forms. Their lack of standardization suggests that they are in the process of going out of style.

ENLARGED VESSEL FORMS

Vessels as high as 30 cm or more occur in the form of jars with smaller side necks mentioned above (shape 27a), face-neck jars, and large ovoid vases with tapering sides. Fragments of these vessel forms are common at Phase 9 refuse sites, but since the ovoid vases and face-neck jars also appear at sites with Phase 10 refuse and often have distinctive Phase 10 features, they are not exclusive to Phase 9. A few vessels, of both Phases 9 and 10, can be assigned to one or the other phase on the basis of some feature or features which are known to be confined to that phase, but the seriation of most vessels has not been worked out in sufficient detail to make the necessary distinctions between the two phases.

MUSICAL INSTRUMENTS

Fragments of large cylindrical pottery drums have been found at Phase 9 refuse sites, including many fragments of a nearly complete one, which was found at the large Phase 9 site at Callango (PV62-148) and which has been reconstructed. At the Phase 9 site on the Peña de Tajahuana in the middle valley (PV62-92), the fragment of a panpipe with a reddish gray surface turned up in the refuse. There are two similar complete panpipes in the Truel collection. They differ from the panpipes of Phase 10 and all succeeding phases in having small, straight, gracile tubes and a thickened band just below the mouthpiece that resembles the lashing of the tubes on reed panpipes. The tubes are oval in cross section. A small pottery whistle was found at the one-phase site PV62-148 at Callango, and a trumpet which looks like the pottery trumpets of Phase 10 is depicted on a pyroengraved gourd of Phase 9.

Associations of Shapes and Designs

SPOUTED BOTTLES

Both in over-all patterning and design associations there are innovations in the bottle decoration of Phase 9, and there is a great deal of variety. The basal band characterizing Phase 8 shape 4 bottle decoration of the lower-valley substyles appears on only two of the Phase 9 bottles, both specimens with relatively conservative shapes (fig. 20, a). Unlike Phase 8 bottles, one of these bottles lacks further decoration. It has a glossy charcoal-black surface covering the entire rest of the body and evidently functioning as a color area. On the second specimen, the decoration is unpainted but incised, in a combination of shape and design features not found in Phase 8. On the rest of the bottles, resin-painted decoration covers the entire upper part of the body to the base angle, hip, or shoulder, as in Phase 8. However, the full-bodied feline design derived from the Ocucaje Basin Phase 8 bottle feline is present on only three of the vessels (figs. 8, b; 51, a). One of the Phase 9 bottles has large gliding bird designs instead of the felines, a new association in lower-valley pottery. Bottle decoration also differs from the comparable Phase 8 bottle decoration in lacking background filler elements (cf. fig. 8, b with fig. 8, a).

The two human-head bottles have anthropomorphic body decoration (pl. 11, b; Kroeber, 1944, pl. 14, A). Although this decoration differs in most respects from preceding anthropomorphic body designs on spouted bottles, it has a general resemblance to the body design on human-head bottles of Phase 8 of the upper-valley substyle (cf. Soldi, 1956, bottom row right). The similarity lies principally in the fact that a full human body is drawn under the head spout. The body design differs from the Phase 8 ones of the upper-valley substyle in being thicker, with feet at right angles to thick legs, and with thick, downcurving arms. The surface in back of the body design is covered on both Phase 9 specimens with arching bands.

One of the most distinctive Phase 9 innovations is the use of incised, resinpainted geometric motives on top of the bridge of the spouted bottles (fig. 51, a-2; Tello, 1959, Lám. V, A). Some, but not all, of the bottles have a zoned area under the bridge representing the continuation of a Phase 8 feature. Unlike the Phase 8 examples, it is painted in brown or some other color, as well as in the traditional red.

BOWLS

The interior of shallow shape 26 bowls and the exterior of taller shape 26 bowls, cups, and vases have a decorative patterning similar to that of Phase 8 shape 26 bowls from which they are derived. Furthermore, shape 5 bowls have the same decorative patterning in Phase 9, a design transference also based on a Phase 8 antecedent in the Ocucaje Basin substyle. As in Phase 8, the patterning is also analogous to the decoration on some spouted and necked bottles, as well as jars, with innovations in keeping with the general stylistic changes of Phase 9. A narrow band derived from the basal band on Phase 8 shape 4 bottles of the lower-

valley substyles is usually found at the rim of bowl designs, with the principal design area below (pl. 13, a; Kroeber, 1944, pl. 14, D). On the taller, exterior decorated vessels the rim band is usually 2-3 cm wide, whereas the interior bands are narrower, often consisting of a narrow outline band only (Kroeber, 1944, pl. 15, C; Ubbelohde-Doering, 1959, pl. 21). In some bowls, the rim bands are left out altogether in interior decoration (Kroeber, 1944, pl. 15, B). The designs most commonly used in the rim bands are derived from the designs of basal bands on Phase 8 spouted bottles and the analogous rim bands in Phase 8 shape 26 bowl designs, the majority being derivatives of the twined-fret designs of Phase 8 (fig. 53, i-k). Stamped circle designs on resin-painted ground and bands cut by plain diagonals (fig. 53, d) are also common. The diagonal step designs and some of the twined-fret designs section the rim-band area into vertical panel subdivisions in which alternating panels are sometimes plain color areas or are decorated with a single-unit design in the center, usually a diamond or a single element of a twined fret (fig. 53, d, g; pl. 13, a).

The surface of the shape 26 and shape 5 bowls below the rim band is the principal design area, which is covered completely with a coating of resin paint, in continuation of the decorative patterning on Phase 8 shape 26 bowls. In a further elaboration of this technique, and in keeping with general stylistic innovations of Phase 9, the emphasis is on color contrasts rather than design, and sometimes there is no further decoration on these pigmented surfaces. More commonly, however, there are widely spaced unit designs, notably twined-fret or diamond units and free-floating gliding birds (pl. 13, a; Kroeber, 1944, pl. 15, C; Ubbelohde-Doering, 1959, pl. 21). In exterior decoration the area below the rim band is rarely decorated with any other design. On one tall cup, however, the patterning is reversed, the rim band being plain and the broad band below it being decorated with an elaborated and enlarged diagonal step-block design with opposing serpent-like heads (fig. 53, a).

Interior designs in shallow bowls tend to be somewhat more varied, and include representations of the Oculate Being derived from corresponding Phase 8 bowl designs of the Ocucaje Basin substyle (Kroeber, 1944, pl. 15, B), widely spaced geometric-unit designs or gliding birds (Kroeber, 1944, pl. 15, C), plain color surfaces, and, in one bowl, a unique radial geometric design resembling a Maltese cross which appears to be composed of modified tail sections of gliding birds in continuation of a Phase 8 patterning technique of upper-valley origin (Kroeber, 1944, pl. 14, D).

HANDLED JUGS AND RELATED NECKED BOTTLES

Two handled jugs in the sample are decorated with derivatives of elaborate incised unpainted designs that are also used for this vessel category in Phase 8. The two decorated handleless vessels in the same shape group are decorated with standard geometric designs of Phase 9. The amphisbaena design, which is found on the majority of both the handled and handleless vessels in this category in Phase 8, does not appear on the Phase 9 specimens.

NONANTHROPOMORPHIC NECKED BOTTLES AND JARS

Fancy necked bottles and jars in the smaller standard size (shape 27) are almost invariably decorated with a geometric band of varying widths in the upper part of the body, from the base of the neck down to varying distances above the shoulder (Kroeber, 1944, pl. 15, F, G). The band decoration is a slightly modified version of the rim bands on fancy decorated shape 26 bowls. The area of the band is subdivided into vertical or diagonal panels of varying widths, either plain, or decorated with carefully executed diagonal step designs, single geometric-unit designs, or variants of the twined fret (fig. 53, f). The latter differ from the corresponding rim-band designs in bowls in being placed vertically in narrow zones of contrasting colors, or as free-standing unit designs on a uniform color field.

The enlarged necked jars with side spouts (shape 27a) have a much larger design surface, which is treated in analogy with the large surfaces in interior bowl decoration and on the outside of tall cups and vases (pl. 12, b; Kroeber, 1944, pl. 14, E). The entire upper surface of the vessel is decorated down to the middle of the shoulder or below. The principal design area is a broad, unsegmented field of color covered with widely spaced design units. This area is bordered at the base by a twined-fret band. Of the two complete specimens in the sample (not counting fragments in refuse collections), one has a single basal band at the shoulder area (Kroeber, 1944, pl. 14, E), whereas the other has two "basal" bands, one at the base of the design area below the shoulder, and one in the center of the design area (pl. 12, b). The large intervening surfaces are treated as separate design fields, evidently in an adjustment to the enlarged surface of the vessel.

LARGE OVOID VASES AND FACE-NECK JARS

The anthropomorphic features on the face-necks of the large jars are like those of modeled human heads on smaller Phase 9 spouted bottles and necked jars. The body design on the large jars usually consists of anthropomorphic features that are enlarged variations of the corresponding designs on the smaller vessels. The back of the body is usually covered with wavy bands designating hair locks. However, on one of the specimens from Ocucaje in the Rubini collection, probably attributable to Phase 9, a much modified derivative of the Phase 8 amphisbaena, with attributes of the Oculate Being, replaces the anthropomorphic features. The only complete large tapering sided vase included in the sample which is definitely attributable to Phase 9 has two large profile feline designs, one on each side of the vessel. All the enlarged vessel fragments from Phase 9 sites at Callango and the middle valley have parts of large representations of the Oculate Being or serpentine figures with attributes of the Oculate Being, fragments of feline designs, or sections of anthropomorphic body features, indicating a great deal of standardization (fig. 52, a, b, d, e, g). Junius B. Bird has noted the presence of an ovoid vase with two complete Phase 9 representations of the Oculate Being among the collections at the Textile Museum in Washington. The drawing of one half of this design, made by Nicholas Amorosi of the American Museum of Natural History, has been published by Sawyer (1961, fig. 10, a). The decoration on the enlarged vessels covers the upper part of the body only.

DECORATION

GENERAL FEATURES

The most important designs of Phase 9 are zoned resin-painted ones, as in the preceding phases, though the patterning is much modified. Other decorative techniques which originated in Phase 8 of the Callango Basin substyle also persist, but some of them occur only rarely in Phase 9 and are not present in succeeding phases. Among the features that are once more in the process of going out of style are incised designs without painting (on other than utility ware) and resinpainted designs without incised outlines. On the other hand, the use of negative decoration for special bowl designs and the use of pattern burnishing are much more common than in Phase 8, and these techniques persist in common and increasingly elaborated use through the succeeding phase and into the early part of the Nasca tradition.

NEGATIVE DECORATION

In Phase 9 of the middle and lower valley, negative decoration is used exclusively on special bowl shapes and spittoon-shaped vessels (see the section on vessel shapes; pl. 12, a; fig. 21, n-p; Kroeber and Strong, 1924, pl. 29, f; Kroeber, 1944, pl. 16, E, G, I; Strong, 1957, fig. 3, K, L). There are no other vessel categories with negative designs, either among the whole vessels or among the fragments from refuse sites. One of the most important innovations in Phase 9 is the use of negative designs on the inside as well as the outside of the bowls. However, some of the bowls continue to be decorated on the outside only. As a general rule, the area of the bowl decorated with negative designs is covered with a red slip, and the rest of the bowl surface lacks slip pigment. The scorched black organic pigment used for the negative designs also covers the plain part of the bowl surface. Usually only spotty remnants of the scorched black pigment are preserved. Both lines and dots are used for designs. The lines on most of the bowls are notably thinner than in Phase 8 (2-3 mm wide) and more closely spaced, and the dots are also smaller (2-3 mm in diameter; pl. 12, a; fig. 54, n; compare with fig. 41, c). However, there is one Phase 9 bowl from the Callango Basin decorated with thick lines (4-5 mm wide) and large dots (4-5 mm in diameter), as in Phase 8 (fig. 54, k).

The decoration is very standardized. On the outside of the bowl there is a redslipped band (1-4 cm wide) painted from the rim edge down and covered with vertical lines in the negative technique. The vertical striping extends to the middle or lower half of the bowl, and the stripes almost invariably extend onto the unpigmented surface (fig. 54, k, n). On the inner rim, in analogy with the patterning on resin-painted bowls, there is a much narrower band, which is usually less than 1 cm wide and which is decorated with short vertical lines or a brief X-mark crosshatching in the negative technique. The rest of the interior is either plain or covered with dots. When dots are used, they may cover the entire interior surface or only segments of it. One specimen has a broad crossbanding over the interior created by patterned negative dots in imitation of designs in pattern-burnished bowls of Phase 9. Although the dot-and-line patterning is the normal Phase 9 negative decoration, one Phase 9 bowl from Ocucaje has a more elaborate negative design on the bottom interior with representational figures, including a froglike figure and a serpentlike figure. This decoration is antecedent to common elaborations in negative bowl designs of Phase 10. On another Phase 9 bowl from Ocucaje, the outer and inner rim sections are decorated with pendent triangle designs that are also antecedent to a common Phase 10 design on negative-decorated bowls (Kroeber, 1944, pl. 16, G).

PATTERN BURNISHING

As in Phase 8, pattern burnishing is used almost exclusively on the bottom interior of bowl shapes similar to those used for negative decorated bowls (fig. 22, b, c). Although the majority of the pattern-burnished bowls have dark gray surfaces, some have an oxidized bright orange surface and narrow red-slipped bands around the inner and outer rim. The pattern-burnished designs are simplified derivations of Phase 8 pattern-burnished decoration and are very uniform (fig. 54, a, b). The basic design consists of two single glossy lines or two broader glossy bands (1-4 cm wide) which cross each other at right angles in the bottom center of the bowl and quarter the interior surface. Narrow secondary lines, straight, wavy, or zigzag, further section the intervening spaces, either by crossing radially through the center, like the guide lines, or by sectioning each quarter in oblique parallels, in continuation of Phase 8 patterning. In all designs the lines are spaced much more widely than in Phase 8.

UNZONED PAINTED DECORATION

Unzoned painted decoration is not common. The principal form in which it is found is a simple derivative of the rim banding found on Phase 8 bowls of the middle valley. The four Phase 9 examples we have are all from the Ocucaje area. All are tall shape 26 cups, and have either glossy charcoal-black or dark gray surfaces. The design consists either of an irregular zigzag line or a horizontal band composed of small, horizontal, S-shaped figures encircling the outer rim of the vessel below the rim edge. Small unzoned spots of paint are also used to decorate the rim edges of some of the Phase 9 bowls. The use of guilloche designs appears to have gone entirely out of style. No fragments with this type of decoration were found at Phase 9 refuse sites.

INCISED UNPAINTED DESIGNS

The only derivatives of the simpler incised unpainted designs of Phase 8 that survive in Phase 9 are modified stamped circle designs on the interiors of simple bowls, the guilloche designs and crosshatching having gone out of style (fig. 54, a-e). The great majority of the bowl fragments with this type of decoration are from Phase 9 site PV62-148 at Callango. There are also some bowl fragments with this type of decoration in collections from refuse sites in the Ocucaje Basin and one complete bowl from one of the Phase 9 burials from Ocucaje. No fragments of this type were found in refuse collections from Phase 9 sites in the middle valley.

Derivatives of the Phase 8 stamped circle designs are found on bowls having the same shapes as do some of the negative-decorated bowls and the patternburnished bowls (figs. 22, a-c; 54, a-e). They differ from the Phase 8 designs in consisting invariably of a single row only, and the circles are usually much smaller and less complete. In most of the bowls the design consists simply of a row of tiny wedgelike nicks representing the remnants of the incomplete stamped circles. Larger segments of incomplete stamped circles are more rarely found. Complete stamped circle designs also occur occasionally, but they are only 2 or 3 mm in diameter, much smaller than those of Phase 8. Unlike the situation in Phase 8, stamped circle design derivatives in Phase 9 are never found on grater bowls.

Derivatives of more elaborate incised designs without resin paint are found on two handled jugs, one from Ocucaje and one from Callango, and on a bowl fragment from Callango. The designs are in principle the same ones as in Phase 8, consisting of rectangular banded bars or S-shaped curves, either alone in a horizontal row or used to fill spaces above and below a deeply waved horizontal band. The figures differ from the Phase 8 ones in being larger, with deeper and more irregular waves.

THE USES OF COLORS IN PAINTED DESIGNS

The style of Phase 9 is distinguished by a new emphasis on color arrangements and color combinations which enhance the beauty of the designs; this emphasis is carried to the point where large fields of color are often used for decorative effects without other designs. It is also a stylistic peculiarity of Phase 9 that the glossy charcoal-black surfaces often function as color areas together with or in place of plain resin-painted surfaces. The types of colors and color combinations preferred also differ from preceding phases, although some of them are based on Phase 8 innovations of the Ocucaje Basin substyle. In addition, an old color is reintroduced, a yellowish, grayish, or deep grassy green that is found in Phase 3 but is not present in the samples for Phases 4-8. The commonest Phase 9 colors are dark shades, primarily browns, colors with brownish tones such as maroon, and a deep, golden yellow. Black paint is used much more than before, often as a principal design color. The only other colors used with any frequency are a dusky orange-red and a cream or light tan that appears to be simply the lightest shade of the browns. Among the browns, the principal shades are a dark chocolate brown, a medium brown, a lighter brown, and the light tan or cream. White is used very rarely.

The most common color used for design backgrounds is the deep, golden yellow. Medium brown and dark brown are also common background colors. The traditional light backgrounds are virtually out of style, except on one human-head bottle on which cream and light tan dominate the design. In this respect the color patterns of Phase 9 resemble those of the earlier Ocucaje tradition phases before Phase 6. Also in contrast to Phases 6-8, there is once more a strict adherence to the principle that incised lines must separate zones of contrasting colors, another reversion to the earlier conventions of color use and evidently a byproduct of the abandonment of white as a background color. The only exception is in the occasional survivals of horizontal outline bands that are the same color as the background of the design field that they border. The emphasis in the designs is on dark, dusky colors with small dabs of red, yellow, cream or-rarely -white, used as highlights. Sometimes the entire design of a vessel is done in dark brown, medium brown, black, and maroon, in shades providing very little color contrast. More popular are dark, graceful designs, such as gliding birds, floating on a deep vellow ground, with small light design details forming startling contrasts. The new green is used either as a plain color field or for some design details. Eyes and teeth of representational figures are usually some color other than white, and lips are painted in various colors besides red. These innovations are part of the dominant Phase 9 trend in which colors are no longer used to symbolize representational features or other conventional designs, but purely for artistic effect.

OUTLINING TECHNIQUES

In keeping with the general Phase 9 trend towards the emphasis on unsegmented fields of color, the traditional outlining techniques are almost entirely out of style, and unoutlined design areas predominate. Design fields are most often bordered by a simple incised line separating the painted from the unpainted area as if it were any other color zone. When vertical subdivisions of design fields occur, for example on small, necked bottles and some bowls, they are usually simple color zones separated by plain incised lines (fig. 53, f). The alternative is a single outline band used at the base of the geometric bands on some necked bottles and composite spheroid bowls, and, rarely, as a vertical panel divider in traditional bowl design bands (fig. 53, a, d, g, h).

The only context in which more traditional bowl design banding persists on occasion is on the outside of low-sided, elaborately decorated bowls. On these bowls, one or two horizontal, zoned outline bands are drawn below the painted band-wide space below the rim edge at the top of the design area. Triple banding and segmented banding appear to be entirely out of style. When there is a parting in the design band, the top outline bands pass across the parted space, as in Phase 8.

Plain single or double zoned outline banding is also used around the outside of the rim of bowls without other painted decoration, in continuation of a Phase 8 usage.

DESIGN FIGURES: GENERAL STYLISTIC CHARACTERISTICS

One of the distinguishing characteristics of Phase 9 decoration is its homogeneity. There are only three basic design patterns, with minor variations adapted to different vessel shapes. The commonest pattern consists of a narrow basal band or rim band adjoining a large color area which may have design figures on it (fig. 53, g, k; pls. 12, b; 13, a; Kroeber, 1944, pls. 14, D, E; 15 C). The designs used in this patterning are confined for the most part to a few geometric motives, gliding birds, and, occasionally, full-bodied felines. The design units are placed at wider intervals than before, leaving a great deal of open background space. Background space fillers are for the most part out of style, though there are occasional survivals. The only crowded design surfaces are basal bands, rim bands, and some of the interior bowl designs. The use of free-standing designs on unsegmented surfaces is the continuation of a trend started in Phase 8. In Phase 9 it is enhanced and emphasized by the new uses of colors. The other design patterns used in Phase 9 are anthropomorphic designs on human-head bottles and jars and feline designs or variations of the Oculate Being and the amphisbaena on enlarged vases and jars. The designs on the enlarged ovoid vases and face-neck jars are more crowded than on the rest of the vessels, usually leaving relatively little background space, but the figures are free standing, with curvilinear contours.

DESIGN FIGURES: DETAILS

The most important Phase 9 innovations are an increased and diversified use of the theme of the Oculate Being, associated for the first time with depictions of trophy heads and hafted knives, and a new "serpent" head which is adapted to a great variety of uses. Gliding bird designs continue to be very popular, but feline designs proper are relatively rare, and the amphisbaena motive survives only rarely in much modified form. Anthropomorphic designs have entirely new features, and strictly human faces are once more out of style as drawn designs. Geometric designs are very common, but they are confined to a small number of figures, mainly diagonal steps and twined frets derived from common Phase 8 designs. Diamond and rectangle design units also continue from the preceding phase. There is a single example of a survival of the Phase 8 "bull's eye" design of the Ocucaje Basin substyle, in modified form. Other Phase 8 designs appear to have gone entirely out of style. A painted band decorated with stamped circles and a plain rim band cut by narrow diagonal bands are distinctive Phase 9 innovations.

FELINE REPRESENTATIONS

There are five complete feline representations in the Phase 9 sample, and no two are exactly alike. Three are on double-spouted bottles in the Ocucaje Basin tradition (figs. 8, b; 51, a), one is on a tall cup, and one is on a large ovoid vase. The most conservative specimen is found on a double-spouted bottle from Ocucaje and may be transitional between Phases 8 and 9. It does not differ from Phase 8 feline designs in any significant respect. A second bottle feline is more advanced, having carelessly curved brow arcs of irregular thickness. The brow-tip ornaments are simplified triangles without central line fillers, and the body lacks a band shell. Although the arched Phase 9 pupils resemble pupils of feline eyes of the preceding phases, they have higher and narrower proportions than any of the earlier ones. The third bottle feline in the Phase 9 sample has eye, brow, and brow-tip features similar to the second one, with the additional innovation that the outline of the brow-tip ornaments merges with the topmost brow arch over the eyes, and that the top band of the brow is much thicker and more uneven than the traditional brow bands and does not follow the contours of the eye exactly (fig. 51, a). The change in position of the altered brow-tip ornaments appears to be associated with a change in meaning, either in Phase 9 or in the antecedent Phase 8 of the Ocucaje Basin substyle. The former brow-tip ornaments now resemble erect feline ears at the top of the head. The body on this specimen has a traditional band shell which encases the entire body, but it differs from the band shells on Phase 8 felines in being thicker and of irregular width, with more rounded contours, which do not parallel the outline of the body proper exactly. The body lacks feline spots, and the color patterning differs from the corresponding Phase 8 feline designs in that the eye bands, teeth, and toes are light brown rather than white and the top brow arch and body shell are black. The feline design on the tall cup is a unique, much more modified and simplified figure with a small trapezoidal head, a lipless mouth, and a slender, elongated body without a band shell or feline spots.

The feline design on the enlarged vase (RU27, Rubini collection) differs in additional details from the Phase 8 bottle felines of Ocucaje. Its features are more advanced in the sense that they resemble Phase 10 feline designs, and this specimen is probably of a later date than the rest, transitional between Phases 9 and 10. The outline of the head is oval, the brows and pupils are pendent arches below the "eye" band rather than above it, and the brow-tip ornaments are large, simplified triangles above the erstwhile eye band. The mouth is lipless like human mouths and lacks feline side whiskers. The body too is much modified, but a large serrated frame band at the top of the body appears to represent the continuation of the disklike body fringe on Phase 8 felines from the Callango Basin, and the body has rectangular feline spots as in Phase 8.

THE OCULATE BEING

In Phase 9, representations of the Oculate Being appear in much greater numbers than in Phase 8. There are also examples of human representations with attributes of the Oculate Being, in continuation of a theme also present in Phase 8 of the Ocucaje Basin substyle.

As in Phase 8, features which characterize the Oculate Being include large concentric-circle eyes, long curved appendages projecting from the head and sometimes from parts of the body, an arched, sausage-shaped "smiling" mouth, and a protruding tongue (fig. 52, a-d; Sawyer, 1961, fig. 10, a). The Oculate Being also has side or chin whiskers which vary somewhat from those of feline representations, and which are derived from the corresponding Phase 8 antecedents.

In Phase 9, representations of the Oculate Being proper are found primarily on the large vessel forms, mainly on ovoid vases (fig. 52, a, b, d, e, g). There is a complete ovoid vase with a very fine example of a complete representation of the Oculate Being in the Textile Museum in Washington (Sawyer, 1961, fig. 10, a). Fragments of large vessels with different sections of identical or virtually identi-

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cal designs are common at Phase 9 refuse sites, especially at site PV62-148 at Callango, at various sites at Ocucaje, and at site PV62-92 in the middle valley. These representations of the Oculate Being have a new body which resembles both feline and human bodies in some respects. The Being is now shown carrying in his hands a trophy head or hafted triangular knife, or both. The body is a profile body attached to the side of the head by a short, thick neck. It may or may not be decorated with rectangular body markings or other fillers. The arms and legs usually have a slight, angular bend at the knees (fig. 52, b, e; Sawyer, 1961, fig. 10, a). The hands at the wrist, a traditional form (fig. 52, e), or they are represented by triangular projections like the fingers of human hands in Phase 9 (fig. 52, b). The feet are plain triangles at right angles to the legs, a new form in Phase 9 (Sawyer, 1961, fig. 10, a; see also fig. 56).

The head of the Oculate Being in Phase 9 differs from its Phase 8 antecedent in having acquired a head outline of near-ovoid shape, with a slightly flattened top (fig. 52, b; Sawyer, 1961, fig. 10, a). The mouth is more arched than in Phase 8, and the tongue is always present. The tongue is also much longer than in Phase 8 and further differs from its Phase 8 antecedent in usually projecting from the teeth instead of the lower lip and in being encased in a band shell formed by the continuation of the head outline (fig. 52, a) or the lip band (fig. 52, d). There is also a special new nose consisting of a vertical band with slightly concave sides extending from the upper part of the forehead into the lower part of the face and ending in a forked, triangular, or rounded "serpent" head with small rectangular "eyes" in the center (fig. 52, a, d). The forked and simple triangular nose tips are joined to the nose bar by a sharp angle, which distinguishes them from succeeding forms. The long appendages projecting from the top of the head usually consist either of three parallel bands or a thick, tapering band with a narrow band shell (like the tongue). The appendages terminate in three alternative ways: in broad triangular recurved tips (the most common form, a traditional one), which give the end a shovel-shaped appearance (fig. 52, f); in serpent heads, a Phase 9 feature which may represent a variation on the small faces shown at the tips of some of the Phase 8 appendages; or in plain squared or pointed ends (fig. 52, c, f). Side whiskers are short straight or wavy triple bands with plain or shovel-shaped ends (fig. 52, a-c, d). One of the figures has hafted triangular knives projecting from the top of the head (Sawyer, 1961, fig. 10, a).

There is a second figure with attributes of the Oculate Being, found on the interior of two elaborately decorated shape 5 bowls in the sample from Ocucaje, which differs from the first in having additional human attributes (Kroeber, 1944, pl. 15, B). The principal human attributes are lunate eyes with a straight horizontal top and a small lenticular pupil in the center, hawk markings below the eyes, a pony fringe on the forehead indicating hair, and a lipless mouth. Attributes of the Oculate Being include long appendages which project from the top of the head, a long bar nose, an upcurved "smiling" mouth, a protruding tongue, side or chin whiskers, and associated designs of hafted knives and trophy heads. One of these figures is bodiless, unlike the usual large representations of

the Oculate Being, but the other has a small body like that of the Oculate Being on large ovoid vases. On both bowls the face of the Oculate Being fills the interior bottom, while the appendages and other accompanying designs extend onto the interior sides of the bowl. An elaborately decorated bowl fragment found at the Peña de Tajahuana site (PV62-92) belongs to a bowl with the same shape, and remnants of the decoration show that it was decorated with the same design figure (fig. 52, f; for exterior design see fig. 53, g).

The Phase 9 sample also includes a full-bodied human impersonation of the Oculate Being drawn on the side of a flask from Ocucaje in the Rubini collection (fig. 52, c). This figure represents the derivative from the corresponding Ocucaje Basin Phase 8 antecedent (cf. fig. 44). The body and head are simplified and more angular variants of the earlier form, whereas the nose, side whiskers, and head appendages represent simplified variants of the corresponding Phase 9 features of the Oculate Being proper. Unlike the Phase 8 figure, the Phase 9 one is shown carrying a hafted triangular knife in one hand and a trophy head in the other. These two items are regularly associated with the Oculate Being from Phase 9 on, and their position in the hands of the human impersonation form an important contrast to the darts held in the hands of the antecedent impersonations of the Staff God in Phase 8 of the Callango Basin substyle (cf. fig. 48, a). The hafted knife and trophy head serve further to point to the difference in character between the earlier mythical representations of the Ocucaje tradition and the Oculate Being.

THE AMPHISBAENA

Amphisbaena representations are rare and much modified in Phase 9. As in Phase 8, they are found in both modeled and painted form. They differ from the Phase 8 figure in having some attributes of the Oculate Being as well as feline and amphisbaena features proper, and in having acquired small legs which make them resemble double headed lizards. The body of the painted figures has spiny projections derived from a rare Phase 8 antecedent, and it is decorated with feline spots, as in Phase 8. The Phase 9 spots are invariably rectangular, circular ones having gone out of style. The head differs from Phase 8 heads in having large eyes, proper to the Oculate Being, as well as side whiskers and, in one representation, a tonguelike appendage below the face. However, other attributes of the Oculate Being are lacking, notably the appendages projecting from the head, the trophy heads, and the hafted knives, so that the amphisbaena design belongs to a different category of representations despite the presence of some attributes of the Oculate Being. The drawn design is found on the body of a large face-neck jar from Ocucaje without associations, and fragments of closed vessels with similar designs were found in the large Phase 9 refuse site at Callango (PV62-148).

In addition to the design described above, there also appear small abbreviated double-headed serpents or worms, or simple headless worms, which are used as space fillers on large anthropomorphic face-neck jars and ovoid vases (Sawyer, 1961, fig. 10, a).

TROPHY HEADS

The appearance of trophy heads in association with the Oculate Being is a very important Phase 9 innovation which represents the beginning of a long continuous tradition of trophy-head representations in pottery design, persisting to the end of the Nasca tradition (fig. 52, c, g). Simultaneously, actual trophy heads buried in caches occur for the first time in Phase 9 associations, corroborating the impression that the new design, probably together with the associated Oculate Being itself, is not merely ornamental but represents an important functional concept of Phase 9 culture as well. The trophy heads have human attributes only, including eyes represented by a simple line or a lunate form with a horizontal top line and a small line pupil in the center, long hair locks showing some separate strands of hair, a triangular peak of hair over the forehead like the forehead feature on modeled human heads associated with spouted bottles, and a lipless toothed or plain line mouth.

SERPENT HEADS

The appearance of a peculiar forked or triangular head, usually shown with small rectangular, circle, or double-circle eyes but sometimes appearing without eyes, is a peculiar Phase 9 innovation which has no antecedents in pottery designs of the Ocucaje tradition (figs. 52, a, d; 53, a-c; Bennett, 1954, fig. 35). Its appearance is of importance, because it is exceedingly common in Phase 9 despite its not having earlier antecedents at Ica and because it reappears from time to time in subsequent phases of the Ocucaje and Nasca traditions. It also has importance because there have been a great many speculations by archaeologists about its possible origins, especially since similar designs have a wide distribution in Peru with an irregular scattering both in space and in time, appearing on textiles and other archaeological monuments as well as on pottery.

In Phase 9 these "serpent" heads have a great diversity of uses; they are used as appendages to ray designs and nose bands in representations of the Oculate Being (fig. 52, a, d), as appendages on hair locks on the back of anthropomorphic jars, as heads on lizardlike bodies, as heads on abbreviated gliding bird bodies, and in various combinations of geometric designs (fig. 53, a-c; Bennett, 1954, fig. 35). In the geometric designs the figure is used in opposing units, either in the form of simple heads opposing each other vertically in a geometric rim band, or as a slight modification in an elaborated step-block design. Thus, it is evident that these new heads are used to enhance the decoration whenever there is the slightest opportunity for doing so.

GLIDING BIRDS

Gliding bird designs are used in the form of widely spaced, free-standing figures on large, unsegmented color areas of the most finely decorated vessels (fig. 51, b, c; Kroeber, 1944, pls. 14, E; 15, C; Ubbelohde-Doering, 1959, figs. 20, 21). Sometimes one bird fills most of the interior of a finely decorated bowl, in continuation of a Phase 8 design of the Callango Basin substyle (Sawyer, 1961, fig. 10, b). The birds are painted in black, dark red, or dark brown, usually on a golden yellow background, with small, lighter color spots in the wing and tail segments and the eyes. Their sizes vary with the size of the background area. There are two principal gliding bird variants in the sample. The most common form has angular shoulders containing two rectangular filler elements, long, spreading, tapering wings which are either straight sided or slightly curved, and a trapezoidal segmented tail (fig. 51, b). The "head" or "beak" consists of two plain triangular projections in front of the body. This bird is derived from a form which appears to originate late in Phase 8 of the uppervalley substyle, and is not found in the Phase 8 sample from the middle and lower valley. The second gliding bird of Phase 9 is derived from the crested bird of Phase 8 of the Callango Basin substyle (fig. 51, c; Sawyer, 1961, fig. 10, b). It differs from the Phase 8 form in several respects. The crested head is enclosed by a circular outline forming a new, round head; on two of the heads the "crest" at the top is omitted altogether; and on some of the heads the two remaining arms of the former T-bar are shifted slightly so that they appear to be hawk markings below the eye. The more conservative crested T-bar also continues in use, however. The body continues to be attached to the base of the head, as in Phase 8 of the Callango Basin substyle, but it differs in proportions, and on some specimens the wings spread out more widely, leaving a much wider space between them and the tail. Filler designs between wings and tail are omitted.

The rim band on a less elaborately decorated spheroid bowl has a unique design consisting of small, much abbreviated gliding bird bodies with serpent heads.

PEPPERS

One small, necked jar in the Truel collection has large, realistic representations of Capsicum peppers as the principal design. The appearance of representations of plants in pottery design is an important innovation, for it marks the beginning of a long tradition of such representations, lasting to the end of the Nasca tradition.

GEOMETRIC DESIGNS

The most common geometric designs of Phase 9 are derived from the diagonal step designs and the twined-fret designs of Phase 8. Other Phase 8 derivatives in common use are diamond units and rectangle units.

Diagonal step designs are used exclusively in rim bands on the outside of bowls, sometimes in narrower rim bands on the inside of bowls, in one of the basal bands that survives on a double-spout bottle, and in the geometric bands on the upper body of small necked bottles and jars (fig. 53, a, b, d, h; pl. 13, a; Kroeber, 1944, pl. 15, G). There are three principal variants. The first one consists of a single-stepped incised line dividing an approximately square subdivision of a band (Kroeber, 1944, pl. 15, G). This variant is usually found on the more finely decorated vessels, and the steps tend to be small and carefully drawn. They differ from the corresponding designs of preceding phases in lacking

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filler elements and in having some of the steps drawn at slightly acute angles, sometimes with irregular spacing. The second design in this category is the step-block design (fig. 53, d; pl. 13, a). The great majority of the Phase 8 variants lack the stamped circle fillers used in the corresponding designs of the preceding phases, and the steps are drawn at very acute angles, a distinctive Phase 9 innovation. The majority of this form of step-block designs is found in rim bands of the less carefully decorated spheroid, composite spheroid, and gambreled bowls, but they can also be found on the fancier decorated types. Sometimes step-block designs are modified into opposing-step designs with forked "serpent" headed ends (fig. 53, a, b). The third step design in Phase 9 is the step-fret design, a new variation of the step-block in which a rectangular hooked band is added to one side of the step-block figure (fig. 53, h).

Twined-fret designs derived from Phase 8 antecedents are very abundant, and several forms in different stages of advancement occur (fig. 53, e-g, i-k; pls. 12, b; 13, a; Kroeber, 1944, pls. 14, D, E; 15, F). Basal bands on finely decorated jars and rim bands on both the outside and inside of the finely decorated bowls usually contain variants of the twined-fret design (fig. 53, i, j, k). The most conservative one is a complete, continuous single-row twined fret (fig. 53, g; Kroeber, 1944, pl. 14, E). It resembles diagonal twined-fret designs of Phase 8 of the upper-valley substyle in not filling the width of the band, so that there is free space between the outlines of the band and the design itself. The rest of the twined-fret derivatives in rim bands and basal bands are more advanced and abbreviated Phase 9 innovations. One variant is a continuous horizontal band in which the outer incised lines of the twined-fret band proper are omitted and which may therefore be called an "incomplete" twined-fret design (fig. 53, i). As an alternative to the continuous horizontal band, one or two links of the incomplete twined fret are often used to subdivide the band into diagonal color zones (fig. 53, f, j, k; pl. 12, b). In another alternative, horizontal chain sections of several complete or incomplete twined-fret links are placed at intervals in the band (Kroeber, 1944, pl. 14, D).

Both complete and incomplete twined-fret elements are also used as unit designs on principal color areas (fig. 53, e, k; pls. 12, b; 13, a). They are usually more widely spaced than the corresponding Phase 8 unit designs, and several new variants occur. Two, three, or more links are often used, instead of just one as in Phase 8, in the complete twined-fret category. In addition, units of smaller, incomplete twined frets are used on the more finely decorated vessels. There also is a special complete twined-fret variant used on fine vessels which is very small, and in which the terminal links are closed diamonds without the traditional open ends (fig. 53, e; pl. 13, a).

Distinctive Phase 9 innovations include a plain band or panel with plain diagonal subdivisions which is usually used as a rim band in bowl designs (fig. 53, d). Another new design is a resin-painted rim band covered with stamped circles with dot centers.

Single diamond units continue in use as principal designs on the outside and inside of bowls and on jars and other vessels, but they are much more widely
spaced than in Phase 8 (fig. 53, e, f). They are also used at times as units in alternating panels of bowl rim bands (pl. 13, a).

Small rectangle units continue in use as occasional filler designs and as feline spots. Other survivals of Phase 8 designs are very rare.

One Phase 9 bowl has a unique design on the interior which looks like a Maltese cross (Kroeber, 1944, pl. 14, D). It is a radial geometricized figure which appears to be composed of the tail sections of gliding bird designs. The idea of using body or head features of gliding bird designs in creating symmetric design figures dates back to Phase 8 of the upper-valley substyle.

THE UPPER-VALLEY SUBSTYLE

Most of the twenty complete vessels from Teojate, and the fragments in surface collections from Teojate and Cerrillos (PV62-63) that can be identified as belonging to Phase 9, represent relatively conservative derivatives from Phase 8 types of the upper-valley substyle, which differ considerably from the Phase 9 pottery of the middle and lower valley. However, there are also three whole vessels and a few fragments from the up-valley sites that belong to the lowervalley substyle. Since no Phase 9 vessels or vessel fragments in the upper-valley substyle have turned up in collections from the middle and lower valley, it appears that although the region of the middle and lower valley exerted some influence on the upper valley during Phase 9, no comparable influence went from the upper valley to the lower. Seventeen of the upper-valley vessels assigned to Phase 9 are in the Nathan Cummings collection and three are in the Truel collection at Ocucaje. The fragments from surface collections are deposited at the Regional Museum of Ica and the Museum of Archaeology of the University of San Marcos in Lima.

The specimens attributed to the upper-valley substyle of Phase 9 are assigned to it in part on the basis of a number of shape and design features shared with Phase 9 of the middle- and lower-valley substyle, and in part on the basis of a seriation of features peculiar to the upper-valley substyle in previous phases. The principal features which Phase 9 of the upper-valley substyle shares with Phase 9 of the middle- and lower-valley include some shape features of bowls and spouted bottles, smoked glossy charcoal-black surfaces on some of the fancy decorated vessels, narrow twined-fret design bands on the interior or exterior rim of bowls, both complete and incomplete twined frets as they are found in the middle and lower valley, one form of gliding bird, small, unzoned painted dots in the parting of some design bands in bowl decoration, and very small dots on a negative-decorated bowl.

VESSEL SHAPES

SPOUTED BOTTLES

There are five spouled bottles in the sample from Teojate which are assigned to Phase 9. Four of them are shape 4 bottles with composite contours which resemble the Phase 9 bottles from the lower valley in body shape; one has a complex shape 4a body derived from the corresponding Phase 8 forms of the upper-valley substyle. All the bottles have hollow spouts and arched bridges like those of Phase 9 bottles from the lower valley. One of the bottles from Teojate is a true double-spout bottle, marking the first appearance of true double-spout bottles in the upper valley. The other four spouted bottles from Teojate have modeled heads which differ from those of the lower valley. Three are fox heads like those of Phase 8 in the upper valley, and one is a new ducklike bird head unique in the Ica Valley sample but also found on a vessel belonging to a contemporary or slightly later style phase on the Paracas peninsula (Tello, 1959, fig. 27). It differs from modeled hawk heads primarily in having a big, ducklike beak and different head markings.

The body shape of the shape 4 spouted bottles is very variable, as in Phase 9 of the lower valley. These bottles resemble the most advanced Phase 8 forms of the upper-valley substyle as well as Phase 9 shapes of the lower valley, with a brief, rounded shoulder at or just below middle height and varyingly curved top and bottom sections. All the bottles have arched bridges, a feature which is introduced from the lower valley and contrasts with the straight bridges on most of the Phase 8 bottles of the upper-valley substyle. On two of the Phase 9 bottles from Teojate the hollow spout is more or less evenly tapering and proportionately broad and short, like the most popular Phase 9 form of the lower valley. Another spout has a thick, tapering lower section separated from the narrower top of the spout by a shelf, a relatively conservative Phase 9 variant also found in the lower valley. On these three forms the bridge is attached at middle height of the spout. On the other two vessels the bridge is attached near the base of the spout. Although the upper portion of the spouts is broken off on both vessels, the contours of the lower section on one of the specimens are sufficiently preserved to indicate that the spout belongs to the form with a narrow cylindrical base and a slightly flaring top, a third variant of Phase 9 spouts which is also present in the substyle of the middle and lower valley.

BOWLS

There are 12 bowls from Teojate in the Phase 9 sample, and fragments of several additional ones from Teojate and the site of Cerrillos were available for study. Six of the whole vessels and some of the fragments from the Cerrillos site belong to derivatives of shape 5 bowls of the preceding phase (figs. 22, j; 55, d, e). They resemble some shape 5 as well as shape 26 bowls of Phase 9 from the lower valley in having straight or very slightly convex, flaring sides, a shallow-curved bottom, and a basal hip rather than a base angle. At least some of the upper-valley bowls are much larger than earlier forms (as much as 32 cm in diameter), like one of the Phase 9 shape 5 bowls from Ocucaje (cf. fig. 21, b). Other features which the upper-valley Phase 9 bowls share with Phase 9 bowls of the lower valley include a slight concavity on the outside of the rim below the rim edge on many of the specimens (figs. 22, j; 55, c-e) and smoked carbon-black surfaces which appear for the first time on some of the bowls in the upper-valley substyle.

Most of the rest of the upper-valley bowls that could be assigned to Phase 9 are derived from various other Phase 8 antecedents of the upper-valley substyle and do not resemble Phase 9 bowls of the lower valley except for the similarity in rim profiles and the occasional presence of the slight concavity in the outside of the rim below the edge. However, one fragment of a high-sided cup from the site of Cerrillos evidently represents a variant of high-sided Phase 9 shape 26 bowls of the lower-valley substyle (fig. 55, c). There are also several other fragments from the site of Cerrillos and two complete vessels from Teojate which belong to deep, composite spheroid bowls indistinguishable from Phase 9 shape 29 bowls of the middle- and lower-valley substyle in shape as well as design.

Three bowls in the Phase 9 sample from the upper valley are deep, tapering sided ones derived from Phase 8 shape 17 bowls of the upper-valley substyle (cf. fig. 16, e, f). The Phase 9 variants are much like those of Phase 8 in contours, except that they have straight, or nearly straight, rather than convex sides.

One bowl from Teojate with a Phase 9 design in the Truel collection is a deep-bottomed bowl with convex, vertical sides, indistinguishable in shape from Phase 8 shape 5b bowls of the upper valley. Another bowl from Teojate has a composite spheroid shape differing from Phase 8 shape 12 bowls of the upper-valley substyle primarily in being slightly shallower, with more flaring sides. Another traditional upper-valley form is a red-slipped bowl with concave flaring sides and a shallow curved bottom (shape theme 21). This vessel differs from Phase 8 bowls only in having the outside covered with widely spaced, very small negative dots.

The Phase 9 bowl fragments of the upper-valley substyle differ from those of the lower valley also in being more consistently thin walled (2.0-5.5 mm in) wall thickness; fig. 55, *c-e*, *l*), hard fired, and oxidized. The rim edge on all the upper-valley specimens is thinned from the inside like the most popular Phase 9 bowl rims of the lower valley.

Association of Shapes and Designs

SPOUTED BOTTLES

The design patterning on shape 4 spouted bottles of the upper-valley substyle is like that of Phase 9 bottles of the lower valley in principle. The ancient bottle design tradition which still prevails in Phase 8 of the upper-valley substyle appears to be out of style in Phase 9. Like the lower-valley bottle designs, those of Phase 9 of the upper valley resemble bowl designs and consist either of very widely spaced design units on an area without background filler elements or of a horizontal band with geometric designs which circles the circumference of the body. The designs consist either of the upper-valley form of gliding bird or of variants of the twined fret, both design categories which are also used as bottle designs in Phase 9 of the middle and lower valley. As on Phase 9 bottles of the lower valley, the top of the bridge is invariably decorated with geometric elements, but, unlike those of the lower valley, some of the upper valley ones continue to be unzoned painted designs. The bottle with the duckshaped head has a body design consisting of large, arching wings covered with rectangular body markings like those found in Phase 9 of the lower-valley substyle.

The complex shape 4a bottle with the bowl-shaped bottom half is decorated with traditional bowl design bands, specifically diagonal step designs, with modifications also found in step designs of Phase 9 of the lower-valley substyle.

BOWLS

Unlike the shallow bowls of Phase 9 of the middle and lower valley, those from the upper valley have no decoration on the bottom interior. The only interior decoration is a narrow band, either plain or with geometric designs, on the interior of the rim adjoining the rim edge, a Phase 9 feature that the lowerand upper-valley substyles share (fig. 55, d). The rim band designs are the same as those used in the lower valley.

Different bowl shapes no longer seem to be distinguished by different decoration in the upper-valley substyle. The decoration shares innovations in patterning with those of Phase 9 of the middle and lower valley. The most common decoration consists of widely spaced design units not separated by panel subdivisions and without background space fillers, as in the lower-valley substyle. On a few specimens plain vertical division bands continue in use, but they are not common.

One tapering sided bowl with Phase 9 contours is decorated with a twined-fret band like the twined-fret designs in Phase 8. Another bowl fragment from the Cerrillos site is decorated with a similar design, but the design has modifications not found in Phase 8 (fig. 55, l). The same new design also appears on one of the Phase 9 spouted bottles from the upper valley.

In some aspects of patterning and outlining techniques the upper-valley substyle is the more conservative in Phase 9. The parting in the design band persists on bowls in all shape categories, not just on low-sided bowls. On some specimens there is no decoration in the parted space, but on others the space is decorated with small, unzoned painted dots, a Phase 9 innovation also appearing in the lower valley. None of the Phase 9 specimens have the parted space decorated with negative dots such as are used in Phases 7 and 8. The use of relatively narrow geometric design bands on the outer rim of bowls, the most common lower-valley patterning technique in Phase 9, evidently appears only rarely on vessels of the upper-valley substyle, probably because the shape 26 bowls, with which such bands are associated in the lower valley, are rare (fig. 55, c). In place of such rim bands more conservative derivatives of Phase 8 outline banding persist in the upper-valley substyle (fig. 55, d-h, l).

DECORATION

NEGATIVE DECORATION

The only example of negative decoration is found on a plain red-slipped shape 21 bowl. The specimen is assigned to Phase 9, because red-slipped bowls of this type are not found with negative decoration in the preceding phases, and because the design consists of dots as small as Phase 9 dots on negative-decorated

bowls of the lower valley, much smaller and more widely spaced than any found in preceding phases. The appearance of a plain-slipped bowl decorated only with negative designs is a Phase 8 innovation of the lower valley which becomes popular in Phase 9. Thus, while the shape of the bowl from Teojate is a local up-valley one, the use of an over-all pattern of negative dots on it is probably the result of lower-valley influence.

THE USES OF COLORS IN PAINTED DESIGNS

Unlike Phase 9 designs of the middle and lower valley, those of the upper-valley substyle evidently continue to be painted predominantly on a white or other light-colored background, such as light orange or cream. Since the background is the largest design surface, and since white or another light color is also used for adjoining outline bands, a single light-colored pigment continues to be the dominant hue. Red and black also appear as design colors. We have no information on other colors in the sample.

OUTLINING TECHNIQUES

As stated above, in the upper-valley substyle relatively conservative derivatives of horizontal outline banding of Phase 8 are used in all the bowl designs in the sample, in contrast to Phase 9 bowl decoration of the middle and lower valley. The most common outline of bowl designs consists of two zoned white bands at the top and one zoned white band or a plain incised line at the bottom of the design area (fig. 55, d, f-h). However, the use of three adjoining, zoned white bands at the top of the design area is also relatively common (fig. 55, e), and is also found as a rare advanced feature in Phase 8 of the upper-valley substyle. One Phase 9 specimen has a single white outline band at the top (fig. 55, l). The zoned outline banding of Phase 9 of the upper-valley substyle is also distinguished by its narrow spacing, generally even width, and fine, even incisions. The category of "fancy triple outline banding" of Phase 8, in which a checkerbroad, step, or zigzag design is used as additional decoration, does not appear in the Phase 9 sample. However, the traditional red, band-wide space between the design area and the rim edge continues in regular use. The top outline bands usually cross over the parted space in the design band, as in the lowervalley substyle, but on a few specimens they do not.

DESIGN FIGURES: GENERAL STYLISTIC CHARACTERISTICS

Most of the Phase 9 designs of the upper-valley substyle are distinguished by fine, even, incised lines, narrow spacing of design bands, long, slender, gracile lines of the figures, and simplification and reduction in size of the representational designs, all features representing the continuation of an old trend which largely disappears in the middle and lower valley during Phase 8 (fig. 55, c-l). Upper-valley designs share such general stylistic characteristics with Phase 9 pottery of the lower valley as the wide spacing of design units, the larger areas of background space, and the absence of space fillers. Other shared features include the lack of distinction between bowl and bottle designs, and the use of narrow design bands on the inner rim of bowls, either plain or decorated with the same design elements as those used in Phase 9 bowl designs of the lower valley. One of the Phase 9 bowl fragments from the Cerrillos site which appears to belong to a higher sided vessel has a broader geometric band at the outer rim like the rim band designs on lower-valley shape 26 cups and vases (fig. 55, c). However, the design from the Cerrillos specimen differs from the designs on the lower-valley bowls in being divided from the principal design area below it by two zoned outline bands, a technique which evidently represents an uppervalley adaptation.

DESIGN FIGURES: DETAILS

Almost all the representational designs of Phase 9 of the upper-valley substyle differ significantly from the contemporary designs of the lower valley. The only representational figure that is similar in both substyles is one variant of the gliding bird, a square-shouldered form with triangular head projections which appears to have originated in the upper valley late in Phase 8 (fig. 55, j). The common round-headed gliding birds of Phase 9 of the lower valley, which are derived from the crested Phase 8 bird of the Callango Basin substyle, are not present in the upper-valley sample. Other important lower-valley representations that are absent from the upper-valley sample include the Oculate Being and its accompanying trophy head and hafted knife representations, as well as the traditional feline figure.

Unlike the representational designs, most of the geometric designs found in the upper-valley sample do not differ from the contemporary Phase 9 designs of the lower valley. However, one of the most common lower-valley designs, the diagonal step design with acute steps, is found on only one of the vessels in the upper-valley substyle, although it also appears on three vessels from the upper valley belonging to the lower-valley substyle.

GLIDING BIRDS

The most distinctive Phase 9 gliding birds of the upper-valley substyle are compact, simplified figures of reduced size, consisting primarily of a tail and a long "beak" composed of two rays, a form derived from the earlier clothespin birds of the upper valley (fig. 55, i, k). The wings are reduced to small, triangular, finlike projections. This form is not found in the Phase 9 sample from the lower valley.

In addition to the gliding bird with triangular head projections that the upper-valley substyle shares with Phase 9 of the lower valley, there is an illustration of a gliding bird design taken from a Phase 9 bowl in the Nathan Cummings collection which resembles a variant with widely spreading wings in the Phase 9 sample from Ocucaje but which has the simplified form and narrow, elongated proportions peculiar to the upper-valley substyle (Sawyer, 1960, fig. 1, b; compare with fig. 51, c).

FOXES

Fox designs are found on four of the bowls in the Phase 9 sample from the upper valley. They are much simplified and reduced in size, like the gliding birds (fig. 55, f, h). The body is slender and pointed, with curved contours and without body markings of any kind, and the heads are varying reductions and simplifications of the Phase 8 heads.

TENTACLED FIGURE

The tentacled figure is a new theme, a complete example of which is illustrated by Sawyer (1960, fig. 1, c); part of one like it appears on one of the bowl fragments from the site of Cerrillos (fig. 55, d). Another figure with tentaclelike projections has a general resemblance to Phase 10 forehead ornaments of the Oculate Being in the lower valley and may be as late as Phase 10 (Sawyer, 1960, fig. 1, d). A fragment from Cerrillos shows part of a similar design (fig. 55, e).

SERPENTINE

A double-headed serpentine design of the upper-valley substyle has features recalling both the amphisbaena and the lizard-like serpentines of the Phase 9 substyle of the middle and lower valley (fig. 55, g). It consists of a long, straight, slender band with a red center and a black shell framed by triangular, spinelike projections. The triangular projections are further set off by small stamped circles with projecting incised lines in the central band. The heads of the serpentine have features recalling the clothespin-bird tradition of the upper-valley substyle and are unlike the serpentine heads from the lower valley.

GEOMETRIC DESIGNS

Most of the geometric designs found in the sample of the upper-valley substyle are variants of the complete and incomplete twined fret (fig. 55, c, d) and widely spaced diamond units. Most of the designs in both categories are indistinguishable from those found in Phase 9 of the middle and lower valley. The only difference in the upper-valley sample lies in the presence of a simplified derivative of the complete diagonal twined-fret band not found in the sample for the middle and lower valley (fig. 55, l). The one example of a diagonal step design in the sample for the upper-valley substyle resembles the Phase 8 patterning of the upper valley rather than the patterning in the Phase 9 bowl designs of the middle and lower valley (on the lower portion of a complex shape 4a spouted bottle), but the steps are drawn at acute angles, a feature which also marks Phase 9 in the lower valley. The fine line incisions, outline banding and narrow spacing of the bands are like those of other Phase 9 designs in the upper-valley substyle.

PHASE 10

THERE IS much less evidence for local differences in style within the Ica Valley in Phase 10, but we have a relatively small sample representing the upper valley in this phase. Most of the specimens we do have from the upper valley are indistinguishable from lower-valley ones, but there is a bowl from Teojate at the Museum of the American Indian in New York which has a distinctive serpentine design (pl. 15, b). The greater stylistic uniformity characteristic of Phase 10 extends even beyond the Ica Valley, for the contemporary pottery found by the Columbia University Expedition in Nasca appears to be virtually identical with the pottery of Ica (cf. Strong, 1957, fig. 6, A-C, E).

THE SAMPLE

The sample used for the present study includes 279 complete Phase 10 vessels from the Ica Valley and a substantial number of fragments collected on the surface of Phase 10 sites. Most of the complete vessels are from the Ocucaje Basin, but there are fifteen from the Paraya sector above Ocucaje, one from Callango, and two from Teojate. A few of the vessels in the sample are documented as being from Ica but have no specific provenience data. One hundred ninety of the vessels are in the Aldo Rubini collection at Ocucaje; thirteen are in the Truel collection at Ocucaje; fifteen are at the Regional Museum of Ica; three are in the Graciela Laffi collection in Lima; one is in the Fred Olsen collection in Guilford, Connecticut; thirty-nine are in the Nathan Cummings collection; and two are at the American Museum of Natural History in New York. One vessel in a private collection is illustrated by Ubbelohde-Doering (1952, fig. 239).

Published illustrations of Phase 10 vessels, in addition to the one illustrated by Ubbelohde-Doering, include two fancy resin-painted bowls, two miniature double-spout bottles, five negative-decorated jars and bowls and one grater bowl in the Truel collection (Kroeber, 1944, pls. 15, D, E; 16, A-D, F, H, J, K; Tello, 1959, Lám. VI, B), a negative-decorated bowl and a pottery mask, both without provenience, in The Montreal Museum of Fine Arts (Bennett, 1954, figs. 14, 38), two figurines at the American Museum of Natural History in New York (Bennett, 1954, figs. 36, 37), a double-spout bottle without provenience in the Peabody Museum of Harvard University (Bennett, 1954, fig. 59; Bushnell, 1957, fig. 20), and a figurine without provenience at the Cambridge University Museum of Archaeology and Ethnology, in England (Bushnell, 1957, fig. 21). There are no doubt other published illustrations of Ocucaje Phase 10 vessels, but we have not attempted to trace them all.

EVIDENCE OF ASSOCIATIONS AND STRATIGRAPHY

The evidence of associations for Phase 10 pottery consists of forty-two burials, fragments of Phase 10 pottery in refuse sites, and a refuse stratum at Old Ica containing Phase 10 pottery which underlies refuse of the Chulpaca ("Middle Ica") style.

Thirty-nine of the burials were excavated by Aldo Rubini during 1955 and 1956, thirty-one of them in the Pinilla sector of the Hacienda Ocucaje (Rubini Burials A, D, E, F, G, H, J, K, M, R, and Nos. 1, 4, 6, 8, 9, 12, 13, 14, 18, 19, 20, 21, 22, 23, 46, 48, 58, 62, 67, 68, and 71), seven on the Peña de Ocucaje, the narrows of the river just above the hacienda grounds (Rubini Burials 25, 27, 28, 32, 33, 34, 35), and one on the Pampa Media Luna in the Callango Basin (Rubini Burial 36). Pot-hunters brought in the contents of two additional burials from the Paraya sector west of the river above the Ocucaje narrows (Rubini Burials 84, 85). Rubini and Dawson jointly excavated another burial in the Pinilla sector of Ocucaje. The contents of this last burial are deposited at the Regional Museum of Ica, and the rest are in the Aldo Rubini collection at Ocucaje. All the burials excavated by Rubini are accompanied by detailed excavation notes, diagrams, and data on associations. Together, the burials contain 175 pottery vessels of various kinds, in addition to a great number of other types of remains. Five of the burials contain only one pottery vessel each, but the rest contain anywhere between two and sixteen vessels each.

Many sites containing Phase 10 refuse have been located in the course of surface surveys conducted by Rowe, Dawson, and Menzel during 1954, 1955, 1958, and 1959. Phase 10 refuse is abundant in the area of Ocucaje, especially on the northern slopes of the Cerro Max Uhle, where it is found over most of the area, isolated from refuse of other phases. Another important area of Phase 10 occupation refuse is along the lower slopes of the hills bordering the western side of the valley from the Ocucaje narrows on up to the borders of the Hacienda Tajahuana, in some sections over nearly continuous stretches of several kilometers of low slopes covered with dense refuse. Large areas of Phase 10 refuse are found especially along the lower slopes on the western border of La Venta (Sites PV62-156, 141), west of Santa Lucía (PV62-74A-Q), and west of Tajahuana, on the lower part of the spurs below the large Phase 9 site PV62-92 (Sites PV62-118, 119, 127, 128). In these sections surface collections usually turn up refuse of Phases 8 and 9 as well as 10, and sometimes also refuse of the later Nasca tradition. There are large fortified hilltop sites above each one of the major sections of Phase 10 occupation at La Venta, Santa Lucía, and Tajahuana, but on the hilltop retreats the refuse is confined to either Phase 8 or Phase 9, or there is only a small admixture of Phase 10 refuse.

In the upper valley, some refuse that may belong to Phase 10 has been found along the base of the slopes bordering the eastern side of the valley, east of the grounds of the Haciendas Cordero Alto and Yancay Grande (Sites PV62-67, 69, 130, 91). However, the bulk of the refuse at these sites belongs to Phase 1 of the Nasca tradition and some to later Nasca phases, and the collections from this area have not been studied in sufficient detail to determine how much of the pottery actually belongs to Ocucaje Phase 10.

There is another important Phase 10 refuse deposit, which is found on the grounds of the Hacienda Tacaraca about 10 kilometers south of the town of Ica (Site PV62-1U). The deposit is part of a five-meter-high refuse heap located within the confines of the Late Ica capital of Old Ica. Bulldozing operations have

exposed a vertical cut through one side of the refuse mound, revealing a stratum of Ocucaje Phase 10 refuse underlying several different later refuse strata, including strata containing Chulpaca ("Middle Ica") and Late Ica refuse.

Negative decorated bowls are the most common vessel type in the Phase 10 burials, there being forty-eight such vessels in the forty-two burials. Bowls with smoked black interiors are also common (there are twenty-five in the burials). The majority of these bowls are plain, but five of them are pattern burnished on the inside. Other vessel types in the burials include eleven specimens of a new form of white-slipped, plain-slipped, or negative-decorated double-spout bottle, traditional spouted bottles (two of them miniatures), fourteen resinpainted bowls, two waisted bowls, fourteen waisted neckless jars (some with negative decoration), eleven plain-slipped bowls, one anthropomorphic jar, one dipper, three large ovoid vases, one large negative-painted jar, one elaborately decorated large hollow figurine, one modeled jar in the form of a fruit, six plain miniature vessels, two graters, thirteen utility vessels of various types, sixteen panpipes, two pottery whistles, and one pottery spindle whorl.

Decorated vessel types in refuse deposits appear to have approximately the same relative frequency as in the burials, but, as is to be expected, refuse sites contain a great deal more general utility ware, including cooking ollas and graters as well as other utility types. On the other hand, private and museum collections based on purchases contain primarily examples of fine or elaborately decorated vessel types, including fancy resin-painted bowls, fine white doublespout bottles, the finest negative-decorated specimens, large ovoid jars, and elaborately decorated drums and trumpets. The specimens in the Nathan Cummings collection also include a platelike support for rotating pottery during manufacture which is decorated with a Phase 10 design. This is the earliest known rotating plate found in Peru to date.

GENERAL COMMENTS

Phase 10 is a major innovating phase in which there occurs a prolific development of new features, many of which form the foundation of distinguishing features of the Nasca tradition. There also appear some technological innovations and a new bottle form which lack earlier antecedents at Ica and which probably represent influence of the Topará tradition of the Cañete and Chincha valleys and other parts of the south-central coast (cf. Lanning, MS, pp. 404-407, 426, 427). However, the great majority of features of shape and design are derived with only minor modifications from Phase 9 of the Ocucaje tradition.

Among the important characteristics of Phase 10 that anticipate the Nasca tradition is a great proliferation of musical instruments made of pottery, including panpipes, drums, whistles, and trumpets. All these musical instruments have rare antecedents in Phase 9. Another Phase 10 innovation anticipating the Nasca tradition is a great proliferation of naturalistic bird designs in which different kinds of birds are distinguished, accompanied by the virtual disappearance of the older tradition of highly abstract bird figures. Other naturalistic representations also appear for the first time, including a variety of identifiable kinds of fish, new human representations, new fruit representations, and the representation of artifacts such as slings and hafted knives as independent designs. Fruit is represented primarily in modeled form. Simultaneously with the greatly increased trend towards the naturalistic representation of specific plants, animals, and humans, there is also a greater elaboration and proliferation of representations of the Oculate Being, and human impersonators of the Oculate Being, in continuation of a trend going back to Phase 8 of the Ocucaje Basin substyle.

A number of other features and trends of long standing in the Ocucaje tradition reach their peak of development in Phase 10. For example, Phase 10 has the thinnest pottery of the entire Ocucaje-Nasca tradition thus climaxing a trend, a climax that is probably reinforced through Topará tradition influence. Phase 10 also marks the finest and most prolific development of negative decoration. Other old features, such as pattern burnishing, are also more elaborate than in preceding phases.

TECHNOLOGY

There are a number of innovations in the technology of Phase 10 pottery. To begin with, there is a greater contrast between fancy ware and utility ware than in any of the preceding phases. The contrast involves general appearance, paste, temper, firing, hardness, and wall thickness. The peculiarities of utility ware are described below. Most Phase 10 fancy ware is distinguished from Phase 9 pottery of the lower valley in being very thin and light, much of it as thin as some of the fine decorated Phase 9 pottery of the upper-valley substyle. Many vessels average only 2 mm or less in wall thickness, and many of these are further distinguished in maintaining a very even thickness throughout. Not until Nasca Phase 5 is there another pottery style of comparable thinness in the Ocucaje-Nasca tradition. Furthermore, not only decorated vessels but also a great many bowls and bottles without decoration are as thin as this. Phase 10 sites are distinguished by the abundance of such thin ware in the refuse, especially in contrast to Phase 9 sites in the middle and lower valley at which the pottery is considerably thicker on the average.

Another distinction of Phase 10 pottery is the attention to the effects of differences in firing atmosphere. Firing atmosphere is carefully controlled to create, on the one hand, fine, evenly gray surfaces for fancy resin-painted bowls, and, on the other, evenly oxidized vessels, many fragments being an even bright pink to orange red throughout. Both types of firing control contrast with the uniform Phase 8 technique in which most vessels have a gray core with an orangered outer shell, and with Phase 9 vessels of the lower valley which are distinguished by the uneven and unsystematic control of the firing atmosphere. However, there are some vessel categories in Phase 10, especially the less elaborately decorated open bowls with resin-painted rim-band designs, in which firing atmosphere is less carefully controlled and is much like that of Phase 9 of the middle and lower valley.

A distinctive Phase 10 innovation is a special firing technique, confined to certain bowl categories (shapes 5b, 5d, 28b, 35), in which the interior of the

bowl has a smoked glossy charcoal-black surface, and the outside has an irregularly clouded, oxidized tan to reddish surface. This technique is virtually confined to Phase 10 and survives only rarely in Nasca Phase 1. On some specimens the interior has a metallic, shiny black gloss which does not appear in earlier phases. The manipulation of the firing atmosphere to create decorative effects is a characteristic of the Topará tradition of the Cañete and Chincha valleys which flourishes especially at the time of Ocucaje Phase 10 and Nasca Phase 1 (in the phases designated by Lanning as Jahuay 3 and Chongos; Lanning, MS). Thus, the use of differential firing in black-interior bowls of Phase 10 probably represents influence from the Cañete-Chincha area.

There appears to be a wide range of differences in hardness of firing, even among fancy ware of Phase 10. Some fragments are as hard as fine Phase 9 pottery of the upper-valley substyle (between Grades 5 and 6 on the Mohs Scale of Hardness), while others are softer (between Grades 4 and 5 on the Mohs Scale of Hardness), like middle- and lower-valley pottery of Phase 9.

There also appear to be some contrasts in the amount and coarseness of sand temper, some fragments having very little temper and others a medium amount of fine, evenly selected temper. Some fragments have fine grained, smooth paste, while in others the paste appears moderately coarse-grained in cross section.

In surface treatment, smoked blackware in all but the special black-interior bowls is once more very rare, and the great majority of resin-painted vessels have evenly colored dark to pale gray surfaces.

In addition to the innovations listed above, there appears for the first time a white or cream-colored slip on certain new vessel forms (mainly bottle shape 33 and occasionally bowl shape 28), and sometimes the use of a white or cream colored paste as well. The use of a white slip has a very early origin in the Cañete and Chincha valleys, and is probably introduced to the Ica Valley as part of the expansion of the Topará tradition (the Jahuay 3 phase) at this time. The introduction of a white ceramic pigment is of importance, for it is a necessary antecedent to the techniques of polychrome slip painting which distinguish the Nasca tradition from that of Ocucaje. Along with the white slip, there appears for the first time a new use for the red slip, as a narrow rim design band on a white-slipped bowl in one of the Phase 10 burials, and as body markings on modeled figures on some of the new spouted bottles. These uses mark the first occurrence in the Ocucaje tradition of red slip as a design color rather than as a plain surface coating.

Another important Phase 10 technique deserving special attention is slip casting, which is reserved exclusively for the manufacture of the tubes of pottery panpipes. Actually, this technique has its first appearance in Phase 9, but it does not come into common use until Phase 10. The tubes are made individually and are then cemented together with clay. The tubes are extremely thin $(1-1\frac{1}{2} \text{ mm in wall thickness})$, and each tube is absolutely even, smooth, matte, unpolished, and without tool marks of any kind. The tubes are fired to an even gray on the inner surface, sometimes fading to a lighter gray or light tan on the outside.

UTILITY POTTERY

UTILITY OLLAS

A new type of utility ware appears in Phase 10, outnumbering all other types of ollas and utility jars and replacing the brown utility ware of Phase 9 (fig. 26, b-d). Fragments of the new ware are found in great abundance at Phase 10 sites and help to distinguish these sites from those of preceding phases. Many of the fragments are heavily sooted from use in cooking, but some ollas are not sooted and appear to have been used for other purposes. Some of the fragments found at Phase 10 sites represent large portions of vessels, and many of the ollas can be reconstructed in their entirety. In addition, several complete specimens have been found at Phase 10 sites, including five in Phase 10 burials from Ocucaje (Rubini Burials 13, A and K).

Most of the ollas of the new type are made of a new paste, a medium coarse, soft ware (between Grades 3 and 4 on the Mohs Scale of Hardness) which is an even, reddish chocolate-brown color on the surface, and either an even chocolate brown throughout or with a black to gray interior. This coloring contrasts markedly with the tan-brown hues of the brown utility ollas of Phase 9. The paste has medium coarse, unevenly selected sand temper of greatly varying density. Wall thickness varies between 5 and 9 or 10 mm.

The size of the ollas also varies greatly, some being quite small, and others being as much as 30 centimeters or more high. Some shape features resemble those of Phase 9 brownware ollas, whereas others are Phase 10 innovations. The most distinctive carry-over from Phase 9 is the curving, everted rim. The most distinctive shape innovations include the appearance of special necks below the everted rim on many of the specimens (fig. 26, d) and the use of fillet handles instead of strap handles. The new "necks" which appear between the everted rim and body are tapering bulges separated from the body by an angular or smoothly contoured waist. However, not all the ollas have bulging necks or everted rims. There are some specimens with everted rims but no necks (fig. 26, c), as in Phase 9, and others that have bulging necks with direct or only slightly outcurving rims (fig. 26, b). The new handles continue to be brief vertical ones as in Phase 9, some on the upper part of the body and some crossing the waist between the neck and the body. Occasionally handles are lacking. Unlike Phase 9 handles, the Phase 10 ones consist of two fillets, either parallel to each other or twisted like a rope.

The bodies of the new utility ollas are of varying, irregular shapes, some irregular spheroids, others slightly ovoid with a deep tapering bottom, and some of irregularly composite contours with a prominent shoulder.

The surface finish on the new brownware vessels is very rough and uneven, sometimes with deep scraping marks; some sections have shallow horizontal striations (so-called "brush" marks), and some are slightly smoothed without any marks. The outer surface and upper inside of the rim appear to have been covered with a plain, thin slip.

Some of the ollas with the same shape features as the brownware ones

described above are made of plain, oxidized ware with a spotty surface, like some of the plain and negative-decorated bowls (fig. 26, b). There are a few vessels, both of brownware and reddish-tan oxidized ware, in which the body is decorated with ridges or bumps pressed out from the inside, or pressed in from the outside. None of the vessels and fragments in the sample are decorated with incision, a type of decoration used for some utility ware of the earlier Ocucaje phases.

OTHER PLAIN CLOSED VESSEL TYPES

One vessel in one of the Phase 10 burials (Rubini Burial 33) represents a lone survival of the red cooking olla tradition of Phase 8, with an inverted ovoid body 34 cm high and a very short, slightly flaring collar, like the Phase 9 variants. Another vessel in one of the burials is a gray-surfaced, smooth-polished small jar with a slightly hyperboloid neck that may represent the survival of fine blackware jars of Phase 9. Another very large, oxidized, plain-surfaced jar about 75 cm high, with a small side spout, was found by Aldo Rubini at a Phase 10 site at Ocucaje and represents a survival of the large decorated jars with side spouts of Phase 9. These last two vessels are the only remnants of the Phase 9 jar tradition in the Phase 10 sample.

GRATERS

Grater fragments are very abundant in refuse of Phase 10 sites, as at earlier Ocucaje tradition sites, and two complete graters were found in Phase 10 burials, one in Rubini Burial 33 (pl. 15, a), the other in Rubini Burial 62 (fig. 25, k). Another complete Phase 10 grater is in the Truel collection (Kroeber, 1944, pl. 16, H). The great majority of Phase 10 graters differs from most of the Phase 9 ones primarily in the pattern of the incisions. They also tend to be thinner (many are 3-4 mm in wall thickness) and oxidized to a more reddish color than are the Phase 9 graters. The plain or red-slipped rim band above the grating surface is reduced to a narrow strip 1 cm or less in width, with a slightly broader red-slipped band surviving occasionally on the outer rim. The size range among the graters that could be measured for diameter is 15-29 cm. Some Phase 10 graters have slightly incurving sides, unlike Phase 9 graters, either with spheroid or horizontally ellipsoid contours, or with composite contours with a deep, tapering bottom and short sides, like some of the black interior bowls (fig. 25, l). The latter is a distinctive Phase 10 bowl shape derived from shape 5b bowls of Phase 9. Phase 10 graters do not have the slight concavity in the outer side below the rim edge that marks many of the Phase 9 graters.

The pattern of incisions differs from all but a few advanced Phase 9 graters, consisting almost invariably of long, undulating "combed" lines of from two to four parallel grooves forming a long, wavy band, arranged horizontally around the circumference of the bowl or in irregular arcs over the bowl interior (pl. 15, a). Shorter sections of combed bands are arranged in haphazard fashion on the interior surface, below or between the longer bands. The incisions are fairly deep, prominent grooves on a "brushed" or smoothed surface. The short, wedgelike punch marks and the older pattern of long, straight, parallel incisions,

which characterize Phase 9 graters, appear to be entirely out of style, but short sets of parallel hachures, another Phase 9 grater pattern, survive occasionally.

OTHER BOWLS

Nine bowls in eight burials are plain oxidized bowls without decoration other than a thin red slip on one of the specimens. In paste, firing, and shape features these bowls are like negative-decorated shape 5c bowls (fig. 25, a-g). Some may never have been decorated further, while others may have originally had negative decoration which has now disappeared.

VESSEL SHAPES FOR FANCY WARE

A number of the most typical Phase 9 vessel types are out of style in Phase 10, and some new types appear. The rest of the Phase 10 vessel forms are slightly modified derivations of Phase 9 ones. Phase 9 types that are largely out of style include fine blackware necked bottles, both standard sized ones and the enlarged form (shapes 27, 27a), as well as fine jars with an extra side spout. There is only one plain-slipped gray necked bottle and one large, plain-slipped jar with a side neck in the Phase 10 sample. Shape 5 bowls and shape 26 bowls, cups, and vases, which are the most common fancy decorated types in Phase 9, are also out of style in Phase 10. Flat bottoms of the Phase 9 type are not in use in Phase 10, though a new type of broad, flat, or nearly flat bottom appears, primarily in association with the new shape 33 bottles, and occasionally with a new subtype of fine negative-decorated bowls (figs. 23, a, b; 24, h; 25, m). Another important Phase 9 feature not present in Phase 10 is the concavity below the rim edge in the side of bowl profiles.

Important new features which make their appearance in Phase 10 include a new category of double-spouted bottles, either simple in shape or with various modeled modifications (shape 33). Modeled forms, both bottles and bowls, represent primarily squashes and gourds, through such features as vertical ribbing or fluting and indentations in the bottom of bowls and the top of bottles (figs. 23, a; 24, g). Other fruit is also occasionally modeled in jar form. Another general innovation is the appearance of waistlike constrictions in vessel forms other than anthropomorphic jars, including neckless jars (fig. 23, g), open bowls (fig. 23, h), and cooking ollas (see above). For the first time in the Ocucaje tradition miniature vessels appear as a significant minority type in burials.

Vessel types which continue with only minor modifications from Phase 9 forms include traditional spouted bottles (fig. 23, c-e), anthropomorphic jars (fig. 23, f), large ovoid vases (fig. 26, a), and all the Phase 10 bowl categories, including the shapes used for fancy resin-painted, rim-banded, negative-decorated, pattern-burnished, and black-interior bowls (especially shapes 28, 29, 5c, and 5b). Rim edges in bowls are usually evenly thinned to a narrow edge, and the internal thickening below the edge characterizing Phase 9 rims is either rare or out of style. However, graters and some decorated bowls retain plain unthinned rounded rim edges.

SPOUTED BOTTLES

There are twenty-five spouted bottles in the Phase 10 sample, seventeen of them from Phase 10 burials and the rest with Ocucaje provenience but without associations. Of these bottles, seven are traditional forms derived from Phase 9 antecedents, fourteen belong to a different type that has several innovating features without Phase 9 antecedents, and four represent a mixture of features of both categories. It is important to note that the innovating spouted bottles are far more common than the traditional ones in Phase 10, and that three of the seven traditional specimens are miniatures.

The new spouted bottles are for the most part double-spout ones which share a new spout form and bridge type and new features of body shape, paste, and slipping (shape 33, fig. 23, a, b). The eleven specimens with burial associations are found in Rubini Burials A, F, H, J, K, 1, 27, 28, 34, 35, and 71. The majority have a body with rounded sides and a broad, perfectly flat bottom only slightly smaller in diameter than the broadest diameter at the shoulder of the body (fig. 23, a). There is a rounded hip rather than a sharp base angle between bottom and sides. The bodies vary greatly in size, proportions, and contours. Some of the vessels are very broad and squat with a height/diameter ratio of about 40 per cent, whereas others are high and dome-shaped with a body height/diameter ratio of from 60 to 70 per cent. The great majority of the vessels are slightly modeled to imitate squashes with vertically fluted sides and a low, medium-broad raised shelf at the top possibly representing a lid (fig. 23, a), or with a small indentation in place of the "lid" representing the stem scar of a squash or gourd. The latter forms have incised lines radiating out from the depressed spot similar to the riblike ridges in a gourd. The majority of the vessels have the entire surface covered with a plain white or cream-colored slip, except for the tips of the spouts, which have a plain, unslipped surface of red fired clay. Some of the specimens have the entire vessel made of white or creamcolored clay except for the spout tips, which are made of red fired clay. The vessels are very light and thin, like other Phase 10 pottery, some of them averaging less than 2 mm in wall thickness. The spouts are distinctive, very thin, straight and tubular, either vertical or only slightly diverging, and spaced fairly close together at the top of the vessel. The tips of the spouts are usually contracted slightly in a rounded taper. The bridge differs from bottle bridges of other phases in having a leaf-shaped outline, broad in the middle and slightly tapered at either end when seen in top view (pl. 14, a). These bridges also have a peculiar cross section, with a flat or very slightly convex top surface and a more prominently convex bottom surface, which distinguishes them from bottle bridges of all other phases. They are thin and only slightly arched and are joined to the spouts very neatly at about middle height. There is a shallow groove on each spout opposite the bridge attachment.

There are a number of additional features and variations among the new spouted bottles assigned to this category. Three of the specimens (two of them in Rubini Burials H and 34) have small modeled figures attached to different parts of the body. On two of the specimens the figures are small frogs in low relief, four of which adorn the sides of one vessel, and the third bottle has two feline bodies in low relief with separate appliqué heads modeled on the top of the shelf (pl. 14, a). The frogs on one of the bottles and the felines are further decorated with red as well as white slip paint. Another vessel without associations has a new type of modeled head in place of one of the spouts, the modeled ornament representing a person with raised arms supporting a tump-line around the forehead. The body of one of the vessels is modeled to represent two tuber-like fruits joined in the middle.

Not all the vessels are white or cream slipped. Some have simply fired spotty gray to pink or even red surfaces, and two are decorated with negative designs, one with broad vertical stripes (Rubini Burial 35) and one with the remains of a checkerboard design (Rubini Burial H). Unlike most of the traditional spouted bottles, the new forms are never decorated with resin-painted designs. One vessel has a plain ellipsoid body (not counting the top shelf) with a rounded bottom, and two others have composite bodies with paraboloid bottoms and high hips (Rubini Burials A and 35). The latter features are shape 4 bottle features derived from the preceding Ocucaje phases (fig. 23, c).

The new bottles vary in total height from 11.3 to 16.7 cm, and in body diameter from 16.6 to 19 cm.

Of the more traditional spouted bottles, the four regular-sized specimens and two of the miniatures were found in Rubini Burials D, E, 8, 23, 1, and 19, respectively. Another miniature bottle without associations in the Nathan Cummings collection is also said to come from Ocucaje. One of the standard-sized vessels (Rubini Burial E) and all three miniatures are spout-and-bridge to human-head bottles derived from the corresponding Phase 9 antecedents (fig. 23, e). Two other bottles (in Rubini Burials D and 23) are double-spout bottles, and the fourth full-sized bottle is a spout-and-bridge to modeled bird-head bottle (Rubini Burial 8, fig. 23, d). It is significant that no two of the standardsized bottles are alike. The great amount of variation among traditional spouted bottles of Phase 10 and their relative scarcity form a contrast with the greater popularity and greater homogeneity of the innovating bottle forms.

The full-sized human-head bottle in Burial E resembles the corresponding Phase 9 bottles in shape features and in the anthropomorphic features of the head, but there are also some differences (fig. 23, e). The spout is shorter and more evenly tapering than analogous Phase 9 spouts, and the headdress is represented by a modeled turban with an elaborate side knot in place of the simple incision with a low knob-like projection used in Phase 9 (compare with fig. 20, c). Although the triangular hair peak over the forehead and the eye, mouth, and nose features of the modeled head are the same as the corresponding human-head features in Phase 9, the traditional hawk markings are replaced by a diamond-shaped frame with horizontal side arms around each eye. There is a similar frame around the mouth that appears to represent a mouth mask. Similar mouth ornaments appear on some of the other human representations in Phase 10, marking the first appearance of such ornaments in the Ocucaje-Nasca tradition.

There are additional variations in some of the features of the miniature humanhead bottles. Two of the miniatures (Rubini Burials 1 and 19) have new eye forms, one a composite paraboloid form characteristic of other human and feline representations of Phase 10 (cf. fig. 23, f), the other a round circle-and-dot eye which is also found in other Phase 10 representations. Both the miniatures in the burials have an elaborate headdress like the standard-sized Phase 10 bottle, but only the figure in Burial 1 has a "mouth mask" similar to the one on the standard-sized specimen, and none of them have the eye ornaments of the larger figure. Instead, one of the miniatures has traditional hawk markings below the eyes, and another has a conservative headdress like the modeled heads of Phase 9. All three have the traditional hair peaks over the forehead which are also associated with human representations of Phase 9.

The two double-spout bottles also have only a partial resemblance to the comparable bottles of Phase 9. One is a plain red-fired bottle with composite body contours within the traditional range of shape 4 body shapes, including a medium-deep spheroid bottom, rounded hip and shallow arched top (Rubini Burial 23). The other specimen is a resin-painted vessel with similar body features but with a shelflike inset at the top which evidently represents the influence of a shape feature of the innovating double-spout bottle type (Rubini Burial D). The spouts on both these specimens are approximately straight and tubular, like those of the new forms, but they have more irregular contours and are thicker and shorter on one of the bottles. The bridges are like those of Phase 9 bottles.

The bird-headed bottle has an irregularly ellipsoid body within the range of traditional body shapes, and the bridge is like some of the Phase 9 bridges, high arched and of the type that is attached at the base of the spouts (fig. 23, d). However, the modeled features are new, including a new type of naturalistic bird head representing a condor with a caruncle above the beak and appliqué bars representing wings and a tail on the body. Unlike earlier modeled-head spouted bottles, this specimen is gray fired and undecorated except for the modeled features.

One bottle from Ocucaje without associations in the Nathan Cummings collection has a complex body with a bowl-shaped bottom and an inset top (shape 4a), an old form in the Ocucaje tradition. The spouts are long and slightly hyperboloid with a slightly flaring top, like a rare Phase 9 form. However, the bridge is like the bridges on the innovating bottles of Phase 10, and the vessel appears to be white slipped, thus representing a special mixture of traditional and innovating features.

BOWLS

As in Phase 9, special shape types are reserved for special types of decoration. The principal shape categories which are distinguished are a type reserved for the finest broad-band resin-painted bowls (shape 28), variants reserved for less elaborately resin-painted rim-band bowls (shape 29), and shape categories used primarily for negative-decorated, black-interior, and pattern-burnished bowls. There are also a few rarer shape types used primarily for black-interior and negative-decorated bowls. Flat bottoms are virtually out of style among bowls, and smoked charcoal-black surfaces are very rare in all but the black-interior types.

There are twenty-nine bowls in the sample which have special shapes and broad-band resin-painted decoration belonging to the finest decorated bowl type (shape 28). Seven of the bowls were found in Rubini Burials A, G, H, J, M, 8, and 34 respectively, two are in the Truel collection (cf. Kroeber, 1944, pl. 15, D, E; Tello, 1959, Lám. VI, B; Soldi, 1956, figs. 7, 9), three are in the Regional Museum of Ica (MRI Nos. d19, 20, 21), two are unassociated specimens from Ocucaje in the Aldo Rubini collection, and fifteen are in the Nathan Cummings collection. Other bowls belonging to this category have been illustrated occasionally (cf. Stephan, 1948, fig. 79).

Typically, shape 28 vessels are deep bowls with composite shapes having a shallow to medium-shallow spheroid or paraboloid bottom merging in a smooth, open curve with high, convex sides which are either vertical, slightly tapering, or slightly flaring (fig. 24, a-e; pl. 13, b). This shape category is derived from a rare shape type among finely decorated Phase 9 bowls (cf. fig. 21, *i*, *j*). Phase 10 bowls in this group are usually very thin walled, averaging 2 mm or less in wall thickness, with finely thinned sharp rim edges and an even, dark to pale gray fired, finely smoothed and polished surface. The bowls that could be measured vary from 6.7 to 9 cm in height and from 13 to 17 cm in diameter. The majority of the bowls has a height/diameter ratio varying between 50 and 59 per cent, but three specimens in the sample are slightly shallower and two are slightly deeper. There is very little shape difference between the Phase 10 bowls and their Phase 9 antecedents except that two of the three bowls in the Phase 9 sample are slightly shallower than any of the Phase 10 specimens.

There are occasional variations from the most typical features in this category. A few bowls have tightly curved hips rather than smooth open curves between bottom and sides, and on a few specimens the sides are straight or nearly straight rather than convex. Specimens with straight flaring sides resemble some composite shape 29 bowls, except for having a somewhat shallower bottom. There are also occasional variations in firing, and two of the bowls that could be examined in detail have a paste with a red fired core and a thin, and in one case spotty, charcoal-black smoked surface. Three of the bowls have a slightly flattened rim.

Some shape 28 bowls are decorated with fancy, elaborate negative decoration instead of resin paint. Two of these fancy negative decorated bowls have shapes that are indistinguishable from the fine resin-painted forms (Rubini Burials M, 23). However, two other negative-decorated bowls included in this shape group have a somewhat deeper bottom, with more uneven sides and a slightly irregular rim, unlike the finer resin-painted bowls (Rubini Burials 4, 36; fig. 24, e).

Besides the fancy negative-decorated shape 28 bowls that are either like

the fancy resin-painted ones or appear to be irregular and aberrant variants of those shapes, there are two more distinctive high-sided shape types that are confined to fancy negative-decorated bowls. One of these negative-decorated bowls differs from fine resin-painted bowls in having a flat or nearly flat bottom (with a tightly curved hip) or an extra shallow, curved bottom (with a base angle) (Rubini Burials 28, 35; fig. 24, h, shape 28b). On all three of the specimens in this group the sides are convex and vertical, the walls are very thin, and the decoration is very fine. Two of these bowls have depressions in the center of the bottom like the vessels made to represent squashes or gourds. The second highsided negative bowl type resembles the first in having an extra shallow, curved bottom and a base angle inside and out, but the sides are flaring instead of vertical, and the vessels are less evenly constructed and slightly thicker walled (fig. 24, o, shape 29a). The latter type resembles the composite shape 29 bowls with simpler types of decoration.

As in Phase 9, there is a special shape group reserved for bowls decorated only with resin-painted rim-band designs (fig. 24, i-n, shape 29). This is a particularly conservative vessel type in Phase 10, and many of the specimens cannot be distinguished from Phase 9 ones. There are seven shape 29 bowls in Phase 10 burial associations (Rubini Burials K, R, 1, 14, and 67), and nine additional ones without burial associations from Ocucaje, four in the Rubini collection and five in the Nathan Cummings collection. A number of additional shape 29 bowls without associations may belong to either Phase 9 or Phase 10 and so are not included in the sample.

As in Phase 9, shape 29 bowls vary in shape from simple spheroids ending slightly below the equator of the projected sphere (fig. 24, i) or, rarely, slightly above the equator, to composite spheroids with straight or slightly convex flaring sides (fig. 24, j), to hipped flaring sided bowls (fig. 24, k-n). Some of the shapes, especially the simple spheroids, are identical to the corresponding Phase 9 forms, but many of the composite and hipped bowls have higher sides and deeper proportions than the corresponding Phase 9 antecedents (compare with fig. 21, l). Most composite spheroid and hipped shape 29 bowls are distinguished from some of the more flaring-sided variants among the shape 28 bowls in having a more deeply curved bottom and straighter, more flaring sides. However, there is an area of overlap of shape features between some shape 29 bowls and some of the more flaring-sided shape 28 ones (cf. fig. 24, e, j). As a result, there are some shape 28 bowls decorated with the simpler rim band designs (fig. 24, f) and some shape 29 bowls decorated with the more elaborate broadband designs (fig. 24, k, n). However, this interchange of design patterning between shape 28 and shape 29 bowls is not common.

As in Phase 9, the majority of negative-decorated bowls are composite spheroid and hipped shape 5c bowls which are derived from corresponding Phase 9 antecedents (fig. 25, a-g). These bowls differ from shape 29 bowls primarily in being shallower. Twenty-one of the negative-decorated shape 5c bowls were found in burial association (Rubini Burials A, K, M, 6, 20, 23, 25, 33, 36, 46, and 71), and there are fifteen additional specimens from Ocucaje without associations, six of them in the Truel collection (pl. 14, b; Kroeber, 1944, pl. 16, J, K; Tello, 1959, Lám. VI, B), one in the Rubini collection, and eight in the Nathan Cummings collection. One bowl without provenience in this category is illustrated by Bennett (1954, fig. 14). Fragments of bowls of this type are also relatively common in surface collections at Phase 10 refuse sites.

Phase 10 shape 5c bowls tend to have more widely flaring sides than the corresponding Phase 9 bowls (cf. fig. 21, o), but some of the Phase 10 bowls are identical in shape to some of the Phase 9 specimens. In contrast to Phase 9, in which spheriod and vertically ellipsoid negative-decorated bowls form a distinct shape group (shape 30), spheroid and composite spheroid bowls in Phase 10 form part of a continuous range of variation in features with shape 5c bowls and do not form a separate shape group. Generally, simple spheroids in Phase 10 are more widely flaring than spheroid bowls of Phase 9, ending farther below the equator of the projected sphere (Rubini Burials A, 20; fig. 25, f), and there are no vertically ellipsoid bowls in the Phase 10 sample such as are found in Phase 9 (cf. fig. 21, n). Instead, a number of Phase 10 bowls are composites with spheroid or ellipsoid bottoms and flaring straight or near-straight sides which may be the derivatives of the vertically ellipsoid forms of Phase 9 (fig. 25, g). By far the most common Phase 10 forms are composite bowls with a relatively shallow spheroid or irregularly curved bottom and straight flaring or very slightly convex sides which vary slightly in height and degree of flare (fig. 25, a-e). Some of the bowls have a pronounced hip between bottom and sides (fig. 25, a-c), whereas on others the sides merge in a nearly smooth curve with the bottom (fig. 25, d, e). Shape 5c bowls usually have more uneven, unsymmetric contours than other bowls, including their Phase 9 antecedents.

The shape 5c bowls described above appear only with negative decoration in our sample. However, there are two other bowl forms decorated alternatively with negative designs or with smoke blackened interior surfaces. One of these shape types is a hipped form with a deeper spheroid or paraboloid bottom and shorter convex sides which are either vertical or slightly flaring (Rubini Burials M, 20; fig. 25, n). The exact antecedents of this shape are at present uncertain, but it is clearly a variant of other hipped, convex-sided bowls in the shape 5b, 5c, and 5d tradition. The other Phase 10 shape which occasionally appears with negative decoration is similar to the one above but broader and shallower (shape 5b; Rubini Burials H, 34; fig. 25, h, i). This shape is used more typically for blackinterior bowls (see below).

There are fourteen bowls among the negative-decorated and black-interior bowls in burial associations, including all but one of the pattern-burnished ones, which belong to shape 5b, a form derived from a rare Phase 9 antecedent (Rubini Burials A, H, 12, 13, 21, 27, 34, 35, 67, and 85; fig. 25, h-k; compare with Phase 9 fig. 22, d). Shape 5b bowls are hipped bowls with a deep paraboloid bottom and relatively short, convex, vertical or slightly flaring sides. The Phase 10 bowls are relatively shallow, the most common height/diameter ratio being between 28 and 35 per cent. However, a related, more conservative variant (shape 5b-3; fig. 25, o) is deeper, with a height/diameter ratio of as much as 41 per cent. Shape 5b bowls that could be measured vary from 5.4 to 8.3 cm in height and 15.6 to 22.5 cm in diameter. Fragments of this new bowl form are common in surface collections at Phase 10 sites.

Two rarer, more advanced shape variants of shape 5b bowls deserve special mention. One is a widely flaring black-interior bowl that may be described as consisting primarily of the deep paraboloid bottom, the remnants of the sides being indicated only by an almost imperceptible incurving of the rim section, a form representing the logical extreme of the development trend in this bowl tradition (shape 5b-1; Rubini Burial 71; fig. 25, l). Two other bowls, one a fine negative-decorated bowl and one a thin, fine, black-interior bowl, have the short, incurving sides that characterize the Phase 10 bowls in the group above, but the bottom is shallow-curved rather than deep paraboloid (shape 5b-2; fig. 25, m). Both the last-named bowls were found in the same burial (Rubini Burial 28).

Most of the rest of the bowl shapes in Phase 10 belong to rarer miscellaneous plain-slipped, negative-decorated, black-interior, and pattern-burnished types that are irregular variants of the principal categories described above. Among those deserving special mention are twelve black-interior bowls, two negative-decorated bowls, and one white-slipped bowl that resemble shape 28 bowls. Most of these, however, are smaller and many have proportionately shorter sides, thicker walls, and a less smooth surface finish than the shape 28 bowls proper. Seven of the black-interior bowls in this group have fluted sides or indented and ribbed bottoms, shapes representing modeled squashes and gourds (cf. shape 28a; Rubini Burials E, 35, 46, and 68; fig. 24, g). On one bowl the fluting is confined to the rim section only (Rubini Burial 32).

Two negative-decorated vessels in the sample represent a distinct minority shape which may be described as a deep bowl or a small, neckless jar with a spheroid or paraboloid bottom, a prominent rounded hip at about one third of the height, and convex, tapering sides (shape 36; Rubini Burials E, 13; fig. 23, i).

WAISTED VESSELS

Five of the vessels in burial association (Rubini Burials K, 13, 18, 25, and 84), and four additional vessels without associations from Ocucaje (cf. Kroeber, 1944, pl. 16, A, C) are small neckless jars with a constricted waist at about two thirds of the height of the vessel (shape 34; fig. 23, g). The top portion of the vessel is usually slightly tapering, like the tapering, bulging necks on the new Phase 10 cooking ollas. This is a new vessel type in Phase 10 without specific Phase 9 antecedents. Although waisted jars similar in principle appear as early as Phase 3 as anthropomorphic vessels, the Phase 10 forms probably represent an independent innovation.

One of the Phase 10 burials (Rubini Burial 27) contained two small, high-sided black-interior bowls with two waistlike constrictions in the sides, tiered one above the other (shape 35; fig. 23, h), and a fine resin-painted bowl in the Rubini collection has a waist at about middle height. Although these vessels differ in

shape from the neckless jars, the use of waistlike indentations is probably related to the waisted constructions also used for other Phase 10 vessel forms.

DIPPERS

There is one dipper in one of the Phase 10 burials from Ocucaje (Rubini Burial 13). It resembles the Phase 9 dipper in body shape, but the hip is higher and less angular and the sides are less tapering. The handle is a narrow, tubular one which resembles Phase 10 bottle spouts, in contrast to the Phase 9 dipper handle which resembles Phase 9 bottle spouts (fig. 23, j).

ANTHROPOMORPHIC JARS

One vessel in one of the Phase 10 burials (Rubini Burial 84) represents the survival of the old tradition of anthropomorphic jars (fig. 23, f). It is a small neckless jar 13.5 cm high in which the upper part of the body, above the waist, forms a slightly tapering, necklike constriction without the traditional bulge. Some of the anthropomorphic features differ from those of Phase 9, notably the eyes, which are composite near-lenticular forms with circular central pupils instead of the more common "coffee bean" eyes derived from Phase 9. The rest of the anthropomorphic features are somewhat irregular and in part abbreviated, but all represent the continuation of older features, including hawk markings, a slit mouth in a raised ridge, a triangular hair peak over the forehead, and the outlines of arms and hands that meet at the midriff on the lower part of the vessel body. The small size of the Phase 10 vessel is the end product of a long trend towards smaller size in anthropomorphic necked bottles and jars, starting with the necked bottle of Phase 5 approximately 25 cm high.

Three anthropomorphic jars from Ocucaje in the Nathan Cummings collection share some of the features of the jar described above. One of them has the same modeled features and much the same shape, but the eyes and mouth are represented by long horizontal slits in slightly raised ridges, a slightly modified derivative of the corresponding Phase 9 "coffee bean" features. Two others have the same anthropomorphic features as the burial specimen, with an additional modeled knoblike projection at the front of the head, reminiscent of the knots in the head bands on modeled human heads of spouted bottles.

LARGE HOLLOW FIGURINES

One of the Phase 10 burials from Ocucaje (Rubini Burial R) contained a large, hollow figurine 28 cm high representing a standing human figure with slender, sticklike modeled arms akimbo and separate modeled legs, and wearing a shirt and a headband with the modeled representation of a reed flute in it. The figurine is gray fired, and the representational features are enhanced by fine resinpainted designs, including vertical serrated bands which decorate the shirt of the figure and the representation of a partially modeled beaded collar below the neck marked by small stamped circles on a cream-colored resin-painted surface. Like the anthropomorphic jars, the figure has a slit mouth on a slightly raised ridge, a triangular hair peak over the forehead, and luglike modeled ears. The eyes on the figurine are represented by long horizontal slits in raised ridges, like the eyes on one of the anthropomorphic jars of this phase. The traditional hawk markings are not present, but there is a diagonally diverging narrow band over each eye, like the diagonal stepped bands above the eyes of an anthropomorphic necked bottle with attributes of the Oculate Being in Phase 9 (cf. Kroeber, 1944, pl. 14, B; Tello, 1959, Lám. I, B).

A remarkably similar figurine in the collections of the American Museum of Natural History is illustrated by Bennett (1954, p. 38, fig. 36). The modeled features are virtually identical to those of the Rubini figurine, except that the modeled headband is ridged and terminated with a knot identical to the headbands on human-headed spouted bottles of this phase (cf. fig. 23, e). The figure is shown playing a panpipe. The vertical serrated stripes used to mark the shirt of the panpipe player are identical to the decoration on the shirt of the figurine with the reed flute in the Rubini collection. The principal difference is in the eyes. The panpipe player has eyes represented by plain triangles. The markings around the eyes and above the long, slitlike mouth are also distinct, but they resemble the markings on some of the other human representations in Phase 10.

Bennett illustrates a second figurine belonging to this general category, also from the collections of the American Museum of Natural History (Bennett, 1954, p. 38, fig. 37). This figurine differs more from the two figurines representing musicians, probably because it represents a different character, a simpler female figure. However, the modeled features resemble those of the other two figurines, and the mouth is a short slit in a short raised ridge, like that on some of the anthropomorphic jars of Phases 9 and 10. This figurine has bands resembling hawk markings below the eyes, but these markings appear as diverging stepped bands very similar to the diverging bands above the eyes on the Rubini figurine. An almost identical figurine, from the collections of the Cambridge University Museum of Archaeology and Ethnology, is illustrated by Bushnell (1957, pl. 21). There evidently is considerable consistency in the features associated with human representations in figurines, anthropomorphic jars, vases, and humanheaded spouted bottles of Phase 10. The variety of alternative representations for each feature cuts across the different shape categories and is evidently a result of the intention to represent different categories of humans, each of which has its special attributes.

Large hollow figurines with Ocucaje Phase 9 features are known from the Paracas peninsula (cf. Tello, 1959, Lám. I, A, C). Although there are no Phase 9 figurines in the available sample from the Ica Valley, similar or identical forms to the Paracas figurines were probably present in Ocucaje Phase 9 as well.

ENLARGED VESSEL FORMS

Three large ovoid vases with tapering sides, from 44 to 45 cm high, were found in three of the Phase 10 burials (Rubini Burials 19, 25, and 27; fig. 26, a). There are three additional complete large vases in this category from Ocucaje, but without burial associations, one in the Aldo Rubini collection, the other two in the Nathan Cummings collection. Another large vase from Ica is illustrated

by Ubbelohde-Doering (1952, fig. 239). Fragments of large vases of this type are not uncommon at Phase 10 sites. These vessels do not differ in shape from their corresponding Phase 9 antecedents, but they do differ in design.

A large jar 33 cm high, covered with fine negative decoration, is also present in one of the Phase 10 burials (Rubini Burial 21). The vessel has a large, globular body and a bulbous neck which recalls the tapering, bulbous necks at the top of utility ollas.

There are two large, anthropomorphic face-neck jars from Ocucaje, without burial associations, both in the Aldo Rubini collections, which have anthropomorphic features and body designs of Phase 10, including composite near-lenticular or long slit eyes, one having eye markings like some of the human-head bottles of Phase 10, the other with hawk markings like the anthropormorphic jar in Rubini Burial 84 (cf. fig. 23, f). Body features are derived from anthropomorphic jars and bottles of Phase 9, including the representation of long hair locks down the back, ending in "serpent" heads.

MUSICAL INSTRUMENTS

Pottery drums are no longer plain cylindrical. They have a new shape, which persists with modifications throughout the succeeding Nasca tradition until Nasca Phase 9 (fig. 23, k). The shape is a peculiar, complex one, consisting of a bulging, ovoid or lenticular central body with a tubelike cylindrical or hyperboloid neck at the top which is larger than the body. The neck is very slightly everted at the rim, probably to provide a purchase for the skin drum head that was tied to the top of the neck. The tubelike projection at the bottom of the drum is flattened at the base and has a perforation in the center of the bottom, evidently to provide an escape for the vibrations of the sound created by the drumming. These drums are between 20 and 40 cm high. There are six Phase 10 drums in the sample. One of them is in the Rubini collection and was found at Ocucaje, and two others in the Nathan Cummings collection are also purported to be from Ocucaje. There is an additional drum from the Ica Valley in the Museo Regional de Ica (MRI d 23). There are two additional elaborately decorated specimens reported to be from Ica, one in the Laffi collection in Lima, the other in the Olsen collection in Guilford, Connecticut. Although none of the specimens have burial associations, they can be assigned to Phase 10 on the basis of their decoration, firing, and surface appearance.

Sixteen panpipes were found in Phase 10 burial associations, and panpipe fragments are relatively common at Phase 10 sites (Rubini Burials 22, 27, 32, 36, 46, 58, and 62). Phase 10 panpipes differ from the ones that are attributed to Phase 9 in lacking the strip of clay imitating string lashings at the top of the pipes and in having each panpipe tube composed of three separate sections joined together with thickened, knobby joints showing tool marks on the interior. Many of the Phase 10 panpipes are also very long (as much as 41 cm in length), with a great difference in length between the shorter and the longer tubes. Phase 10 panpipes are generally gray fired, but surfaces sometimes show a slightly more irregular firing than the interior, with occasional tan-colored spots. The tips of the tubes are flat on top and are often compressed from the side to give them a slight flare.

Phase 10 panpipes usually consist of four or five tubes, but one is made of only two tubes and one of six. Each panpipe has two small perforations, one on each side just inside the end tubes with a string passed through them, evidently for the purpose of hanging the pipe around the neck. Several of the panpipes show traces of having been wrapped with bands of thread in sections, and some have traces of purple organic pigment at the tip of the tubes on one side, where the lips would touch the side if the long tube were on the left side of the player.

There are four pottery trumpets in the sample used for this study that are assigned to Phase 10 on the basis of their decoration. Two of them are in the Rubini collection and come from Ocucaje. Two others said to be from Ica are in the Laffi collection in Lima and are said to have been found in the same burial with the two elaborately decorated Phase 10 drums. The trumpets are from 20 to 30 cm long, gracefully flaring from a narrow cylindrical tube to a bell end, with flat, everted rims at the narrow base and at the bell. All the specimens have fine resin-painted designs on the bell of the trumpet.

One small resin-painted pottery whistle about 3 cm long, in the form of a small human figure, was found in one of the Phase 10 burials (Rubini Burial J). A second pottery whistle, reported in the notes for one of the burials, was missing at the time the study was made.

MODELED PARROTS

There are four small vessels in the shape of parrots in the Rubini collection. They are from Ocucaje but lack associations. The birds represented are the small green parrots that raid the maize fields in Peru and are a traditional hazard in farming. The parrot vessels are decorated with resin paint outlined by incision and have an opening in the back.

Associations of Shapes and Designs

SPOUTED BOTTLES

The innovating spouted bottles of Phase 10 are either plain white slipped, unpigmented, or decorated with simple negative designs. It has already been noted that the majority are modeled to represent squashes, gourds, or, more rarely, some other forms, and that some are further decorated with modeled animal figures in low relief (pl. 14, a). Bottles in this category are never decorated with resin-painted designs.

Two of the more traditional spouted bottles are also plain slipped without further decoration, but the two other regular-sized bottles and all three miniatures are decorated with incised, resin-painted designs partly derived from Phase 9 bottle decoration. The full-sized spouted bottle in Burial E (fig. 23, e) and one of the miniature bottles in Burial 1 are decorated with the full body of a human figure on the vessel below the modeled head (fig. 60, a). The body resembles the corresponding Phase 9 ones, but it is more elaborate and shown with more realistic detail. The body on the full-sized bottle has bulging shoulders and distinct elbows. lower arms which turn outward at the elbow, a distinctively outlined shirt ornamented with a vertically banded design similar to that on the shirts of the hollow figurines representing musicians, and a beaded collar at the base of the neck resembling that on the hollow figurine found in Rubini Burial R (fig. 60, a). The bands are represented by slightly curved blocks divided into three fingers, similar to the hands of corresponding Phase 8 and 9 designs. The feet are turned outward as in Phase 9. Each side of the bottle is decorated with a new Phase 10 design figure representing a killer whale. The top of the bridge of the bottle, however, is decorated with a diagonal step design identical to the corresponding designs of Phase 9.

The miniature bottles with human heads are decorated with abbreviated and simplified versions of the full-sized model.

The only other full-sized spouted bottle with a painted design is a double-spout bottle in Burial D. The body design is a broad-band bowl design of the type used for shape 28 bowls.

BOWLS

Shape 28 bowls and a few shape 29 bowls are decorated with an entirely new patterning of designs. All are covered with resin-painted decoration over the entire outer side of the bowl, from the rim edge to the bottom of the side. The design area of the bowl is most commonly divided vertically into two halves, with a single large representational figure on each side (pl. 13, b; Kroeber, 1944, pl. 15, D, E; Tello, 1959, Lám. VI, B). The two figures are usually separated from each other by a special type of vertical banding involving plain bands and step designs (fig. 62, d, e, h, i). These panel dividers are omitted when the principal designs consist of more than two figures (either four human representations or a series of smaller objects), or when the two principal figures represent Oculate Beings with long appendages.

It has been stated earlier that some Phase 10 shape 29 bowls are indistinguishable from those of Phase 9, in design as well as in shape. However, in Phase 10 there appears to be a greater variation in the width of the design bands, and various representational designs are used in addition to the traditional diagonal step patterns. The Phase 9 rim bands that could be measured vary in width between 2 and 3¹/₂ cm, except for a double rim-band design about 4 cm wide. In the Phase 10 sample, five of the seven bowls in burial associations have rim bands between 1 and 2 cm in width, and one bowl without burial associations in the Rubini collection, with a double rim-band design, has a design area 5 cm wide. The second innovation is the use of representational designs other than the abbreviated bird figures for decoration of Phase 10 rim bands, including primarily full-bodied felines (on four of the bowls and on several fragmentary ones; fig. 57, d-f) and short amphisbaena designs (on one of the bowls), in addition to abbreviated bird designs, which persist in use (fig. 62, c). However, as in Phase 9, the most common rim-band designs are variants of diagonal step patterns. Stamped circle designs, which are used with some frequency on Phase 9 rim-band bowls, do not appear in the Phase 10 sample, and diagonally banded subdivisions of rim bands also appear to be out of style in Phase 10. Opposing "serpent" heads, used as rim-band designs as well as for other design areas in Phase 9, are altogether out of style in Phase 10.

The majority of negative-decorated bowls of Phase 10 are decorated both outside and inside (Kroeber, 1944, pl. 16, F, J, K; Bennett, 1954, fig. 14). The outside design usually consists of special patterns of trapezoidal units of fine converging lines, or of blocks of crossed lines pendent from the rim edge (fig. 64, a-c; pl. 14, b). The interior design consists of a short fringe of similar blocks of converging lines or a very short pony fringe of vertical lines pendent from the inner rim surrounding a more elaborate design of fishes, birds, double-sided combs, and occasionally felines or Oculate Beings (fig. 64, e, f). The decoration is much more elaborate than the simple line-and-dot designs used for the great majority of Phase 9 negative-decorated bowls. The rarer high-sided negativedecorated bowls with various minority shapes have the more elaborate decoration on the outside and usually special small, less elaborate design elements covering the inside. Outside designs used on these bowls include an elongated doubleheaded serpentlike figure, birds, double-sided combs, and various more elaborate geometric designs (fig. 64, d); the interior is usually decorated with small crosses. S-shaped figures, or small line drawings representing monkeys.

Pattern-burnished bowls continue to have the pattern-burnished design on the inside only, but the patterning is slightly more elaborate than in Phase 9, and one specimen is decorated with a large figure representing a mythical fish (fig. 63, e), a design elaboration not found in earlier pattern-burnished bowls.

Large ovoid vases appear to be decorated with a greater variety of designs than in Phase 9, including much more elaborate and varied representations of the Oculate Being (fig. 58), a single large human head, and gliding birds. Another innovation is the use of zoned negative decoration in place of resin-painted designs on two of the vases (fig. 58). As in Phase 9, the design figures on these vessels are very large, in proportion to the increased size of the vessel, and the design area covers the upper part of the body to the middle or lower part of the shoulder (Ubbelohde-Doering, 1952, fig. 23, a).

One large jar in one of the Phase 10 burials (Burial 21) and a similar jar without associations in the Museo Regional de Ica, are decorated with fine negative bowl designs over the entire outside, a new association of features in Phase 10. Equally, some of the new waisted neckless jars are decorated with fine negative bowl designs (cf. Kroeber, 1944, pl. 16, A, C).

Compared with Phase 9 vessels, fewer fine Phase 10 vessels are decorated with resin-painted designs, and a great many more vessels are plain slipped, negative decorated, or decorated with the type of differential firing that creates blackinterior bowls. The increased use of plain-slipped pottery in Phase 10 is probably the result of influence of the Topará tradition centering in Chincha and Cañete, since this tradition emphasizes contours, finish, and firing control and lacks painted decoration.

Two of the large drums in the Phase 10 sample are also plain slipped, with dark gray surfaces, but the rest of the drums, the trumpets, and the pottery

whistles are elaborately decorated with resin-painted designs. The whistles, which are small modeled figures of birds and humans, have resin painted decoration which simply emphasizes representational details. The painted drums are decorated with elaborate representations of the Oculate Being or human impersonations of the Oculate Being, which cover the entire body of the drum except the neck area where the drum head is attached. One of the drums in the Laffi collection has the lower tubular end partly modeled and painted to represent a human head, with the human body painted "below" the head on the central part of the drum body, in analogy with the human-headed spouted bottles. The trumpets have the bells decorated with elaborate designs representing a plain human figure or a human with attributes of the Oculate Being, and one of the trumpets is decorated with simple step designs which resemble the panel dividers on fancy resin-painted bowls.

DECORATION

GENERAL FEATURES

Zoned resin-painted designs continue in use on vessels in special categories, but there is an increase of fine, plain-slipped vessels, and negative-decorated vessels are more common, including large jars, waisted neckless jars, and spouted bottles, in addition to the traditional bowls. Pattern burnishing also continues in use, but the small nicks on the interior of dark fired and pattern-burnished bowls that are still in use in Phase 9 are entirely out of style in Phase 10. Smoked black surfaces are once more virtually out of style, except for use in black-interior bowls. They are replaced by evenly fired dark to pale gray surfaces on the finer decorated vessels. Modeling is much more frequent, but it appears most commonly in the form of simple modifications of the contours of plain-slipped bottles and bowls to represent squashes, gourds, and occasionally other fruit. Unzoned painted decoration is out of style, except for the occasional use of spots of paint on the rim edge of resin-painted bowls. Incised unpainted decoration does not appear on either fancy or utilitarian ware in the Phase 10 sample, except for very special uses associated with modeled gourd representations on some of the innovating spouted bottles and mingled with some pattern-burnished designs.

NEGATIVE DECORATION

There is a great elaboration of negative decoration, which reaches its peak in Phase 10. Although negative designs continue to be used primarily for bowls, as in Phase 9, they are also used for other vessel forms, notably large jars, new double-spout bottles, and waisted neckless jars. As a measure of the increased prestige, elaboration and care of execution of negative decoration, some of the bowl types, bottles, and jars on which negative designs are used are special fancy shapes and thin, finely finished forms which are reserved for the finest decorated ware, a distinction not accorded to negative-decorated bowls of Phase 9. There also appears an innovation in the use of zoned negative decoration (in contrast to the traditional unzoned negative designs), which is used for elaborate incised designs on some of the large ovoid vases (fig. 58).

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Line-and-dot designs continue to be used in Phase 10 negative decoration, but they are patterned differently from those in Phase 9. Dot designs are used exclusively as filler elements in outlined design figures (Kroeber, 1944, pl. 16, A), and never as the exclusive design on open, unoutlined surfaces. Most line designs are not simple pendent vertical lines, as in Phase 9, but are patterned into different geometric figures (fig. 64, a-c). The lines average only slightly thinner than in Phase 9 (1-3 mm wide), but they are drawn more carefully, with more even thickness, and they are spaced evenly and more closely together, so that the space between lines is sometimes narrower than the lines themselves. In addition, a great many representational figures found only in resin-painted designs in earlier phases are executed in negative decoration in Phase 10, and new geometric designs especially adapted to negative-decorated bowls appear. The majority of the negative decorated vessels in Phase 10 have an unpigmented, orange-tan slipped surface under the organic black coating, but a few bowls have a pigmented red slip covering part or all of the interior and a band of varying widths on the exterior of the side in continuation of Phase 9 usage.

All the shape 5c bowls, which are derived from negative-decorated bowls of Phase 9, have simple standardized line patterns on the outside derived from a rare Phase 9 design antecedent consisting of pendent triangles (fig. 64, a-c; pl. 14, b). The most conservative as well as the most common variant in Phase 10 consists of two blocks of parallel lines that form a trapezoidal figure derived from the Phase 9 triangle, pendent from the rim edge (fig. 64, b; pl. 14, b). The trapezoidal shape is the result of a new pattern of converging lines. A block of from three to eleven fine parallel lines is placed at a diagonal slant on the left side, with the lines all ending approximately at the same level, thus forming an even horizontal border at the bottom. On the right of this block of lines there is a second converging line block usually containing approximately twice as many lines, in which the converging lines all end at the diagonal border of the lefthand block, thus forming the trapezoid in which the two blocks of lines join to form a solid striped area of converging diagonals. The great majority of the shape 5c bowls of Phase 10 have this design on the outside (cf. Bennett, 1954, p. 22, fig. 14). A rarer alternative is one in which two narrower diagonal blocks of from four to six lines cross each other, forming an X figure (fig. 64, c). Another rare advanced variant (one which persists into Nasca Phase 1) is a pattern in which the diagonal line blocks are spaced farther apart, so that the lines do not meet and do not form trapezoidal figures (fig. 64, a).

The inside of the rim is decorated with short line designs which are derived from the corresponding Phase 9 ones or which are borrowed from the new exterior designs of Phase 10. The Phase 10 lines are shorter and finer than those of Phase 9 and occur in two common patterns, one a very short pony fringe, the other an abbreviated pattern of blocks of tiny converging lines, line triangles, or crosshatches analogous to the line designs on the exterior of the sides. A rare alternative is a fringe of solid pendent triangles.

Over-all dot designs or unoutlined areas of dots are no longer in use as interior bowl decoration, and there are only a few bowls that have no interior decoration other than the rim fringe. In the great majority of the Phase 10 bowls the inside is quartered by various design techniques. One of the most common techniques uses four design figures, special gliding bird designs, fishes, or representations of combs, one in each quarter of the surface, pointing toward the center (fig. 64, f). Often there is a special design unit in the bottom center, most commonly a circular figure with a core of concentric circles and a star-shaped serrated frame. On some specimens, the interior surface is quartered by means of two bands which cross the bowl through the center and usually consist of sets of narrow lines framed by serrated bands. Sometimes the serrated band frame is omitted, and sometimes the bands are solid color areas framed on each side by a thin line. Another alternative is to have shorter blocks of these band types pendent from the rim edge.

Gliding bird designs (fig. 64, f-1), hourglass-shaped abbreviations of such designs (Kroeber, 1944, pl. 16, J), one form of stylized fish (fig. 64, f-2), and combs (fig. 64, e) are the most common design figures used on the interior of negativedecorated bowls. Other designs also occur, however, including a representation of a feline with attributes of the Oculate Being (Bennett, 1954, p. 22, fig. 14), an Oculate Being proper, serpentines pendent from the rim, pendent faces of some kind, and representations of birds and killer whales. Occasionally, when large and complex figures are involved, the design area is decorated with only one or two figures instead of the customary four.

Higher sided bowl and jar shapes with negative designs (shapes 28, 28b, 29a, 34, 36) have the pattern of the decoration reversed. That is, the outside is decorated with special adaptations of the interior designs of the shallower bowls, including both the geometric and representational figures, whereas the inside of the higher-sided bowls is covered with special simpler design motives, or, in the case of jars and bottles, is undecorated (fig. 64, d; Kroeber, 1944, pl. 16, A, C, F). The interior decoration on the deep bowls consists of small line figures, generally crosses, small, tightly curved S-shaped figures, or small, sticklike representations of monkeys, which cover the entire interior surface. Special outside designs on the higher sided vessels that are not found on the shallower bowls include units or bands of concentric rectangles, striped rectangles in alternating vertical and horizontal line arrangements, and checkerboard designs.

Although design figures used in negative decoration share some stylistic features with resin-painted designs, they are for the most part distinct from the latter. The principal reason is that the contours of the negative designs are almost entirely rectilinear, evidently for technical reasons, whereas most contours of resin-painted designs are curvilinear. This difference in technique leads to special stylized design adaptations in negative decoration.

PATTERN BURNISHING

There are five pattern-burnished bowls in Phase 10 burials, one each in Rubini Burials E, 13, 35, 67, and 85. All are black-interior bowls, four of them shape 5b ones, and one a shape 28 bowl. The pattern-burnished designs on the interior of these bowls are modified derivatives of the corresponding pattern-burnished bowl designs of Phase 9 with modifications which resemble some of the designs on the interior of negative-decorated bowls. Four of the bowls have a multiple circle center from which four principal bands radiate out to the rim edge of the bowl, quartering the bowl surface. The bands differ from the corresponding Phase 9 bands in consisting of several separate fine, polished lines rather than a single solid polished band. Like the cross bands in negative decorated bowls, the pattern-burnished cross bands on two of the specimens are framed by serrated lines, though the serrations are much smaller and more irregular than those in the negative designs. The intervening quarters in the pattern-burnished bowls are further decorated with additional designs, either secondary radiating line and band designs, or pendent triangles with crosshatched centers. Some of the secondary radiating lines and bands are serrated or wavy lined, and others are framed by lines which end in small scrolls.

One of the shape 5b bowls, in Burial 13, has the entire interior decorated with a large mythical fish with long, spinelike line projections which cover the rest of the interior surface of the bowl (fig. 63, e). The fish is an elaborate one with the eyes and mouth of the Oculate Being. This figure represents the first appearance of a representational design in the pattern-burnishd technique in the Ocucaje tradition.

One of the bowls with a standard pattern-burnished design is peculiar in that, although the majority of the design lines are burnished, some of them are actually fine, incised lines evidently applied on a fairly hard, dry surface. In another design, the mythical fish figure, the design lines are so deep that they could be classified as shallow incised. The mingling of the pattern-burnished and incised techniques appears to be a brief peculiarity of Phase 10, independent of the transition from incised graters to pattern-burnished bowls that occurs in Phase 8.

THE USES OF COLORS IN PAINTED DESIGNS

Some of the color conventions of Phase 9 are continued in Phase 10, especially the emphasis on browns and tans, the use of various shades of green, and the use of several colors with very little contrast in a single design. However, there are considerable changes in the color emphasis and the frequency with which different colors are used. In Phase 10 the emphasis is on light shades, in contrast to Phase 9. The deep golden yellow of Phase 9 is virtually or entirely out of style, and dark chocolate brown and black are seldom used for large design areas. Backgrounds are usually light brown, light tan, cream, light dull green, or medium brown. Design colors are often various shades of light tans, creams, browns, and odd pinkish orange or light yellow-cream shades which offer very little contrast. A dark red or maroon, a medium orange-red, a dull grayish green, a dark olive green, and black are other design colors which form a greater contrast with the browns, creams, off-yellows and white.

OUTLINING TECHNIQUES

In Phase 10 a standardized technique of horizontal outline banding of broad design areas takes the place of earlier outlining techniques. Fine resin-painted bowls with broad-band designs have almost always a single outline band at the top and one at the bottom of the principal design area, separated from the latter by an incised line (pl. 13, b; Kroeber, 1944, pl. 15, D, E; Tello, 1959, Lám. VI, B). The bottom band is a zoned band framed by two incised lines, but in the top band the rim edge replaces one of the incised borders. Both the top outline band and the background color of the principal design area are ordinarily painted with a light color such as white, cream, light tan, or a light yellow-orange hue, but the outline band does not necessarily have exactly the same shade as the background of the principal design area. The bottom outline band is either the same color as the top one, or it is a shade of red.

The same type of horizontal outline banding is also used in broad-band designs on traditional spouted bottles and for the large design areas on large ovoid vases. However, there are two large ovoid vases in the sample on which the upper outline band is broadened into a rim band with a standard geometric rim-band design (cf. Ubbelohde-Doering, 1952, fig. 239). Bottles and jars with anthropomorphic designs in part of the design area retain only the bottom outline band (fig. 23, f).

The majority of the bowls with decoration confined to exterior rim bands lack horizontal outline bands, a conservative persistence of Phase 9 usage which is in keeping with the general conservatism of this bowl category (shape 29 and some shape 28). On these vessels the design area is bordered by the rim edge at the top and by a plain incised line at the bottom. However, there are two Phase 10 bowls that have a zoned outline band at the bottom of the rim-band design and one Phase 10 bowl, with a double rim-band design, which has an outline band at the top, like the fancy resin-painted bowls.

DESIGN FIGURES: GENERAL STYLISTIC CHARACTERISTICS

Phase 10 resin-painted designs are characterized by a completely new artistic trend, quite different from the emphasis on geometric designs and stylized gliding birds, artistry in color effects, large open design fields with widely spaced design figures, and grace of line, which characterizes Phase 9 designs. In Phase 10 there is an entirely new interest in representational design. All the principal designs are representations of animals, tools, plants, humans or Oculate Beings, with the stress on large, recognizable figures with a great deal of attention to detail that will identify the kind of plant or animal, tool or human being that is meant to be shown. This new purpose in design affects the patterning. Most single figures are made as large as the dictates of their proportions and the design surface will allow, and all but a few of the most complex representations of the Oculate Being are drawn so that they can be seen in their entirety at a single glance. Thus, representations of animals and Oculate Beings are usually large figures that are wider than they are high, with two figures drawn on each vessel, one on each side, covering a little less than half of the circumference of the vessel. Human figures, which are generally proportionately higher than they are wide, are usually drawn four to a vessel. Representations of seeds or of tools such as slings and hafted knives, which differ greatly from one another in size and proportions, are patterned in various ways, as vertical or horizontal figures scattered or aligned over the entire vessel surface.

With the increased emphasis on the design representation itself, and the related de-emphasis on color effects, the background area ceases to be important. Hence, there is only as much background space as is required by the contours and proportions of the principal design, the background colors are unobtrusive and usually light, while the colors used in the design representations stand out more clearly, and background filler elements are avoided in all but a few conservative anthropomorphic designs on large face-neck jars. The old trademark of the Ocucaje tradition, the principle by which the shape and spacing of all color areas, including the background, are of equal importance, is in the process of being abandoned in Phase 10.

The new emphasis on representational designs brings with it additional innovations in patterning. Basically, the design representation is shown on an unsegmented design area. However, on vessels where only two principal figures are shown (primarily shape 28 bowls and some spouted bottles), the narrow gap left between the principal designs on each side of the vessel is usually decorated with secondary designs. On most vessels slight variants of the same simple design are used for this purpose, special adaptations of traditional diagonal step designs consisting of alternations of plain vertical bands and broader vertical blocks halved by diagonal steps (fig. 62, d, e, h, i). On rare occasions high, narrow representational figures or modified twined frets are used in place of the usual band and step designs.

The Phase 10 emphasis on single large, naturalistically drawn figures usually requires that the design surface not be much wider than it is high. This technical requirement in the decoration is evidently the reason high-sided bowls are preferred for fine resin-painted decoration.

DESIGN FIGURES: DETAILS

With the shift in emphasis from geometric to representational designs, the great majority of the most popular and distinctive geometric designs of Phase 9 are entirely out of use in Phase 10, and others are virtually out of use. The only geometric designs in Phase 9 that continue with comparable popularity in the same as well as in modified form in Phase 10 are different variants of the diagonal step designs, used primarily in traditional rim bands and also as space fillers for "blind" areas in broad-band bowl designs. Such Phase 9 specialties as twined-fret designs, diamond elements, rim bands covered with stamped circle designs, and rim bands with diagonal-band subdivisions, are for practical purposes entirely out of style in Phase 10. The only exceptions are the rare use of stamped circle elements, diagonal-band subdivisions, or a special form of large twined fret found in contexts that are very special and entirely different from those in Phase 9. One of the most important Phase 9 designs that is in very much reduced use in Phase 10 is the "serpent" head. The opposing geometrically patterned variants of serpent-head designs appear to be entirely out of style. In Phase 10, serpent heads survive only as ends on various types of appendages associated with the Oculate Being, as ends on separate serpentine designs, and at the ends of hair locks on large anthropomorphic vessels.

Representational designs derived from earlier phases that survive in Phase 10 in modified form include gliding birds, felines, the Oculate Being, and a unique, modified derivative of an upper-valley fox design. Two-headed worms (i.e., amphisbaenas) are in use in Phase 10, but they look very different from the large, elaborate creatures depicted in Phases 8 and 9, and their relationship to the earlier forms is not clear. Feline designs are once more common in Phase 10, especially on fancy resin-painted bowls and in a new context, as rim-band designs on less elaborately decorated bowls. Although traditional gliding birds persist in modified forms, they have acquired more specific characteristics which suggest that they are intended to represent a type of swallow which is common in the Ica Valley. More stylized derivatives of Phase 9 gliding birds survive in negative decoration. In addition, a great many new bird forms appear for the first time in Phase 10. They are found primarily in fine resin-painted designs, and represent a variety of birds found in the Ica Valley or vicinity, including one with a long neck which is either a flamingo or heron, ducks, parrots, condors, hawks, a water bird, and a large, finchlike seed-eating bird. Fish and whale representations appear for the first time in the Ocucaje tradition and are very common Phase 10 designs. The only recognizable species is an idealized killer whale, found both in resin-painted and negative decoration. Other resin-painted fish are naturalistic representations that have not been identified specifically. In addition, a uniformly standardized, stylized fish is a very common negative design which is not used in resin-painted decoration. Representations of the Oculate Being and both traditional and new human design representations are also common in Phase 10. Designs of tools and seeds occur, but they are relatively rare. Squashes, gourds, and tubers are common modeled representations associated with new plain-slipped pottery in Phase 10, but they are not found in painted decoration.

FELINE REPRESENTATIONS

There are thirteen feline representations in the Phase 10 sample, including five in the Rubini collection, four in the Nathan Cummings collection, and three fragmentary pieces from surface collections at Phase 10 sites. A thirteenth example from Ica in the John Wise collection is illustrated in plate 13, b. Three of the specimens have burial associations (Rubini Burials 14, 34; fig. 57, a, e). All the feline designs are derived from the feline figures on spouted bottles of Phases 8 and 9 of the Ocucaje Basin substyle (fig. 57, a-f; pl. 13, b). In the Phase 10 sample the resin-painted designs are found only as bowl decoration, as broadband designs on shape 28 bowls (fig. 57, a, b; pl. 13, b), as rim band designs on shape 29 bowls and some shape 28 variants (fig. 57, d-f), or in rarer contexts. There is one on the lower section of a waisted bowl (fig. 57, c), and two on a unique conservative interior-decorated bowl. In addition, one of the Phase 10 burials in the Rubini collection contains a new, white-slipped double-spout bottle which has a variant of the same feline modeled in low relief on the top. Some of

the features of the animal, such as lips, eye outlines, ankle bands, tail segments, and feline spots are applied in red slip (pl. 14, a). The felines in rim-band designs and on the interior-decorated bowl tend to have more conservative features, whereas the broad-band designs are more advanced.

The principal differences between Phase 9 and Phase 10 feline designs involve features of the head. Some of the new features are first found on specimens that are stylistically transitional between Phases 9 and 10 (cf. Museum of Primitive Art, 1960, fig. 13). One conservative Phase 10 feline in one of the rim bands retains the trapezoidal head outline found in Phases 8 and 9 (fig. 57, f), but the other Phase 10 specimens have more advanced head features. A slightly more advanced head outline, found in two other rim bands, is a subrectangular form in which the lower side outlines of the face are slightly rounded (fig. 57, d, e). In the most advanced and most common Phase 10 form, the base and sides of the face outline are rounded off into a smooth oval (fig. 57, a-c; pl. 13, b).

Another important difference between feline heads of Phases 9 and 10 is a series of radical changes involving eye features. None of the Phase 10 felines have eyes and brows such as are found in Phase 9. One of the principal innovations involves a reversal in the position of the eyes. In the more conservative specimens, the traditional eye band, found at the base of the pupils and brow arches in earlier phases, is placed above the pupil, and the latter is now pendent from the former eye band (fig. 57, d). The first appearance of this reversed eye is on a specimen that is transitional between Phases 9 and 10. In the more advanced forms, the use of the pendent parabolic eye is abandoned, and various new, free-standing eye forms appear. In the most conservative of these, found in rim-band designs, the former brow arch is converted into a variously shaped frame in each corner of the face which encloses a new circle and dot eye (fig. 57, e, f). The shape of one of the frames is similar to the eye frames used in modeled human heads of this phase. On other, more abbreviated forms the frames are omitted, and the eye is represented by a plain circle and dot or by a simple line (fig. 57, c; pl. 13, b).

A special new free-standing eye appears on the larger feline figures in broadband bowl designs (fig. 57, a). It is the same complex near-lenticular form also used for some human representations (cf. fig. 23, f). In it, one half of the eye outline, either the top or the bottom one, consists of a high arch, whereas the other half is a shallow curve. These eyes have a circular black pupil in the center projecting as a low-modeled knob on all the fine resin-painted feline representations in the sample.

There are also various progressive changes in the "ears" at the top of the feline head. On the more conservative specimens, the ears are high triangles on each side of the top of the head that do not differ much from the corresponding Phase 9 feature, except insofar as they top a straight horizontal band (the reversed "eye" band) instead of the brow arch (fig. 57, d, e). In one rim-band design, the tops of the ears are omitted because of lack of space, so that the ears appear as irregular trapezoids (fig. 57, f). The ears on the larger, more advanced broadband felines usually differ from the more traditional ones in being proportion-
ately much lower and wider triangles, in an adaptation to problems of spacing (fig. 57, a).

Traditional feline noses are entirely out of style in Phase 10. Instead, the most conservative Phase 10 felines either lack a nose, or the nose is represented by a pendent, slightly hyperboloid bar derived from the nose of the Oculate Being (fig. 57, f). On the finer broad-band felines, an entirely new, modeled nose form appears which resembles modeled human noses on painted faces of Phase 3 (fig. 57, a, c).

The mouth of Phase 10 felines differs from the majority of Phase 9 ones in lacking a lip outline. It is either represented by a plain white band with tooth subdivisions or by a simple horizontal incised line. On the fine, broad-band feline designs, however, the area of the mouth is enclosed by a contoured frame painted in a different color from the rest of the face and resembling the contoured lips of Phase 1 feline designs (fig. 57, a, c).

Phase 10 felines do not have side whiskers, and the chin whiskers are either omitted or appear in abbreviated form. When they appear, they generally consist of a single diagonal band on each side of the face below the mouth (fig. 57, a, e), instead of the triple bands used for chin whiskers of Phase 9 felines or of the Oculate Being of Phase 10.

There are several feline figures in the sample on which some or all of the face features described above are simplified or reduced in size, at least partly as an adjustment to space limitations. The most important abbreviation involves the omission of the former "eye" band at the top of the face and the joining of the ears in a single continuous outline at the top of the head, the ears being shown either in their conservative high triangular form or simply as low arches that meet in a slightly pointed "widow's peak" above the eyes (fig. 57, c). The latter contours create a heart-shaped head outline which is a very distinctive Phase 10 innovation also appearing in representations of the Oculate Being.

There are also some innovations in body features. The body of the broad-band figures always lacks the outer shell which encloses most of the earlier feline designs and has slightly different contours (fig. 57, a-c; pl. 13, b). The top of the body tends to be more highly arched, the tail is longer and more curved, ending in a large, looped end, and the legs on some of the specimens have angular "knees" that recall legs of the Oculate Being. Most of these felines have a traditionally segmented tail and traditional feline spots, usually consisting of multicolored diamonds with single outlines and no central dots. However, in smaller figures drawn in restricted space, particularly in rim bands, feline spots and tail segments are either omitted or reduced in number. Feline bodies in rim bands have a special conservative feature not found on the other feline designs, the remnant of the band shell, either plain or with serrated outline. In the Phase 10 designs this feature is usually confined to the upper part of the body only. Rimband felines usually also have a less elaborately curved tail than do the broadband figures.

One of the feline designs in the sample, and another fragmentary one, have a protruding tongue, a feature which belongs to representations of the Oculate Being rather than felines. The use of some features of the Oculate Being in feline representations is also found on a specimen that is transitional between Phases 9 and 10.

THE OCULATE BEING

Figures derived from the Oculate Being of Phase 9 are very common in the Phase 10 sample (figs. 58; 59, a-c). As before, there are two principal types, the Oculate Being proper and a full-bodied human representation with attributes of the Oculate Being. As in Phase 9, attributes of the Oculate Being are also used occasionally for animal figures such as the feline, fish, and killer whale (fig. 63, a, e).

The Oculate Being proper.—In the Phase 9 sample, representations of the Oculate Being proper are found only on enlarged vessel forms, primarily on ovoid vases. In Phase 10, elaborate representations of the Oculate Being continue to appear on enlarged vessel forms, including two large drums and an ovoid vase from Rubini Burial 25 (fig. 58). However, simplified variants of the large Oculate Being are also commonly used as broad-band designs on the outside of shape 28 bowls (fig. 59, a, c). There are six shape 28 bowls with representations of the Oculate Being in the sample. In addition, one of the negative-decorated bowls has a representation of the Oculate Being on the interior (Rubini Burial 71). There is another large ovoid vase in the Rubini collection, found at Ocucaje, which has two representations of the Oculate Being. It is stylistically transitional between Phases 9 and 10 and furnishes a very useful illustration of the sequence and manner in which the innovating traits appeared (Rubini Burial 16; fig. 56).

Oculate Beings of Phase 10 are composed basically of the same features as their Phase 9 antecedents, but many of the features are changed in detail and some of them are considerably elaborated. Distinguishing features persisting from Phase 9 include primarily the large, concentric circle eyes, an arched "smiling" mouth, a protruding tongue, a long nose projecting vertically into the middle of the face from the top of the head, a special profile body attached horizontally to the left or right of the head, long appendages which emanate from the head, variants of serpent-head finials at the end of appendages and of the nose, and the association of hafted knives and trophy heads with many of the figures.

Some of the features distinguishing the Oculate Being of Phase 10 from its Phase 9 antecedents are stylistic innovations which these representations share with feline designs, and sometimes with human figures. Distinguishing features of the Oculate Being of Phase 10 include a heart-shaped head outline, like the heads of some of the Phase 10 felines (figs. 58; 59, a, c). This heart-shaped head also appears on the Oculate Being which is transitional between Phases 9 and 10 (fig. 56). Another innovation is the addition of an outline band which encloses the entire head, not just the protruding tongue (figs. 56; 59, c). On one large vase and one smaller bowl the head outline is made to join the outline band of the body in a continuous frame enclosing the body as well as the head, including the appendages (figs. 58; 59, a). On one large specimen, the head outline is serrated to match the body outline (fig. 58). There is an alternative head form of the Oculate Being in Phase 10 in which the lower portion is oval and the top of the head is flat or nearly flat, a separate derivative from the Phase 9 prototypes. In a third variant, found only on two smaller bowls in the sample, the head form is ovoid, more nearly like Phase 9 heads. There are also two specimens on the fine resin-painted bowls which have vertically ellipsoid heads, like the heads of some human and feline figures in Phase 10 bowl designs.

Another Phase 10 innovation is the treatment of the vertical nose bar as part of the band outlining the head, the nose protruding into the upper part of the face and creating the impression of a cleft in the top of the head (fig. 58). On the specimen that is transitional between Phases 9 and 10 the nose is joined to the "widow's peak" in the heart-shaped outline band at the top of the head, but it is separated from the outline band by an incised line marking a separate color zone (fig. 56). The same device is used on the feline with attributes of the Oculate Being, which also belongs to the Phase 9-10 transition. The contours, proportions and shape of the tips of the Phase 10 noses are much more varied than in Phase 9, and no two are exactly alike, some being shorter and thicker, others longer and narrower (fig. 58). The concavity in the sides of the nose is usually uneven and not necessarily in the central portion, as in Phase 9, and the nose tips vary greatly in proportions. "Serpent head" tips differ from the more homogeneous Phase 9 ones in contours and proportions, especially in having partly rounded outlines at the base instead of the sharply angular ones of Phase 9, in containing brief dashes, dots, or circles in place of the rectangular nasal apertures or "serpent eyes," and in having the two tines of the forked tip, when this form occurs, separated at the base by a horizontal line. In the smaller, abbreviated representations of the Oculate Being in bowl designs the nose is either omitted, or it is indicated by two small dashes or dots in the center of the face.

The mouth of the Oculate Being of Phase 10 continues to be arched, as in Phase 9, but it undergoes a variety of other changes. Although Phase 10 mouths are rarely exactly alike, they all differ from the standard, homogeneous sausageshaped mouths of Phase 9. In the most conservative Phase 10 form the mouth consists of a toothed band in the center, enclosed by a lip band, as in Phase 9 (fig. 58). However, the mouth is less arched than in Phase 9, and one or both ends of the lip band are straight sided instead of rounded. The more advanced and more common Phase 10 specimens lack lip bands, and the mouth consists of a single band with or without tooth subdivisions (fig. 57, c), or, in the smaller bowl designs, it sometimes consists of a simple arched incised line. There are also some additional variants, including one in which a simple line mouth is enclosed by a lip band (fig. 57, a).

The form of the tongue and the way it is attached to the face also differ from Phase 9 designs, and the Phase 10 forms are very varied. On several Phase 10 specimens the tongue is merely an extension of the face outline below the mouth rather than being directly attached to the mouth (fig. 58), a variation that also appears on the figure transitional between Phases 9 and 10 (fig. 56). This technique is the modification of the Phase 9 practice of outlining the tongue with a narrow band which in some designs is continuous with the outline of the face. Another distinguishing feature of some of the Phase 10 tongues is that they taper more abruptly than Phase 9 ones from a broad base to a long, narrow tip. Some Phase 10 tongues are longer, narrower, wavier, streamerlike appendages which wind around the vessel surface, whereas others are shorter, simpler, and straighter appendages than those in the Phase 9 sample. The short, simplified tongues are most common in the abbreviated bowl designs, whereas the long, elaborate tongues are typical of the designs on large vessels. Most of the longer, streamerlike tongues and one of the shorter ones have serrated borders, another Phase 10 innovation (figs. 58, 59, a). In the smaller, abbreviated bowl designs the tongues are often simplified in individual ways: some of them lack banded outlines (fig. 58, a); they all project directly from the abbreviated mouth; and on some the outlines are uniquely modified.

Chin and side whiskers are either omitted on representations of the Oculate Being of Phase 10, or they are modified in different ways, no two being exactly alike. On one specimen the whiskers are long, straight bands extending to the border of the design area (fig. 58). Wavy-banded chin whiskers and chin whiskers with shovel-shaped ends, which are typical of Phase 9, do not appear on any of the figures in the Phase 10 sample, though they are present on one of the specimens transitional between Phases 9 and 10 (fig. 56). The modification and occasional omission of chin whiskers is parallel to the simplification and occasional omission of chin whiskers in Phase 10 feline designs.

The proportions of the body features of the Oculate Being of Phase 10 change, in some respects the same way that feline bodies do. The back of the body is more highly arched, the legs or "arms" tend to be more spindly and more sharply bent at the "elbows" and "knees," and there are often only two toe or finger lines instead of the traditional three or four. The arms and legs on the smaller bowl designs tend to be somewhat more conservative than on the enlarged forms. Several specimens retain the triangular feet that characterize the Oculate Being of Phase 9 (fig. 59, b, c).

The banded outline of the body of the Oculate Being is amplified on the large Phase 10 designs. In Phase 9, the specimens in the sample have the upper part of the body, from the base of the neck down, contoured with a plain narrow band (cf. Sawyer, 1961, fig. 10, a). In Phase 10 the larger figures tend to have much more elaborate contouring, on one specimen enclosing the entire figure; on two specimens the contouring is framed by a serrated border such as is found on the back of some feline designs in Phase 9 (fig. 58). Serrated borders on representations of the Oculate Being are a Phase 10 innovation which is also extended to the long appendages emanating from the head or neck.

Like the tongue, appendages from the top of the head or, in one design, from the neck, are longer, narrower, and more winding than in Phase 9, and on the more advanced specimens they have serrated borders (figs. 58; 59, a). The use of serrated borders for the appendages is first noted on the figure which is transitional between Phases 9 and 10 (fig. 56). The Phase 10 appendages wind in more intricate ways over the vessel surface, filling the surfaces of the design area not covered by the head and body of the figure. Some of the appendages terminate in derivatives of Phase 9 serpent heads, and others terminate in thickened circular or ovoid ends with the slit eyes and slit mouth that designate trophy heads (figs. 58; 59, a). These elaborate appendages are found primarily on the enlarged forms. In the smaller bowl designs appendages are often omitted, or simplified and shortened variants are used, often in unique patterns. A common technique in the smaller designs is to have a short appendage ending in a hafted knife, trophy head, or simple curl, projecting away from the body at the base of the back, as a kind of brief adjunct to the outline band over the back (fig. 59, b, c).

Human figures with attributes of the Oculate Being.—As in Phases 8 and 9, there are, in addition to representations of the Oculate Being proper, representations of full-bodied human figures with attributes of the Oculate Being in the features of the head and face and in the objects shown as being suspended from the elbows or held in the hands of the figure. In Phase 10, markings on the clothing and attachments to the clothing are also borrowed from features of the Oculate Being proper. There also appears for the first time concrete evidence that these figures may represent human beings wearing masks, and that they may be intended to represent impersonations of the Oculate Being. Representations of masked human figures are found in bowl designs, and examples of the masks themselves have turned up in two collections (see section on human figures below).

There are seven examples of human figures with attributes of the Oculate Being in the Phase 10 sample. Five are found on enlarged vessel forms, including a drum in the Laffi collection, two large ovoid vases in the Nathan Cummings collection, one ovoid vase in the Rubini collection (RU32), and an ovoid vase from Ica illustrated by Ubbelohde-Doering (1952, fig. 239). In addition, smaller variants of this figure appear on two trumpets in the Laffi collection. It is possible that two of the examples, including the one illustrated by Ubbelohde-Doering, may be of a slightly earlier date than the rest, because both specimens have some conservative features not usually found in Phase 10.

Human representations with attributes of the Oculate Being have a front-face human body resembling the corresponding bodies of the preceding phases, but with innovating features in the arms and hands and general body proportions which are like those found on other representations of human bodies in this phase. Although there is a great deal of individual variation among the heads associated with these bodies, all the figures follow a recognizable basic pattern. The most complete and distinctive examples, in head as well as in body features, are found on two large ovoid vases, one in the Nathan Cummings collection and the other illustrated by Ubbelohde-Doering (1952, fig. 239). On these figures the head is round or subrectangular, with a serrated border. Both the figures have odd proportions, with a disproportionately large head, probably representing a mask, and oddly arranged face features symbolic of the Oculate Being. The figure illustrated by Ubbelohde-Doering has the essential associated features divided between two heads, one on top of the other, the top head being a small human one below which is a large, almost unrecognizable masklike face with the same attributes found on the other figure (Ubbelohde-Doering, 1952, fig. 239 top). The most conspicuous mythological attributes involve curved or wavy-lined segmented bands with serpent-head finials at each end, which cross horizontally through the masklike face. On the specimen illustrated by Ubbelohde-Doering, two of these crossbands have a crenelated border, a feature that is also found in association with the representation of the Oculate Being proper on a fragment found by Aldo Rubini at Ocucaje (fig. 59, b). Other attributes of the Oculate Being associated with one or both of these figures are chin whiskers, multiplecircle eyes, and trophy heads. The trophy heads are either pendent from the elbows of the figure, or they are separate designs with long winding hair-lock bands which fill the background space on either side of the principal figure, as do the streamerlike appendages of the Oculate Being proper. The figures, like some of their Phase 8 prototypes are also shown holding stafflike objects in either hand. One of the staves in both designs is identifiable as a club with one or two club heads on it. One of the other staves appears to be a spear thrower. Both these elaborate figures also have a body design consisting of one or more crosses.

The bands with serpent-head finials which cross the face, the head shape, the serrated head borders, the streamerlike hair locks and cross designs in the body, and the general stylistic innovations in patterning and design details are all innovations distinguishing the Phase 10 figures from those of the preceding phases. The rest of the figures in the Phase 10 sample are various unique and simplified variants of the more elaborate figures described above. Two figures on an ovoid vase in the Nathan Cummings collection have irregular rectangular heads with a fringed border which resembles the serrated border around the head of the figures described above, but the fringe consists of small rectangles decorated with eye, mouth, and hair-lock features of trophy heads. On one of the other figures in this category, appearing on a large ovoid vase in the Rubini collection (RU32). the principal identifying attributes consist of a trophy head, which dangles from one hand, and a hafted knife, which dangles from the other. The head is a large, simple one with a mixture of features that appear in human and feline head forms as well as in those of the Oculate Being. In another unique variant, a large drum in the Laffi collection, the hollow, cylindrical projection at the bottom of the drum's body is made to represent a partly modeled human head without special mythological features, but the human body which is drawn below the head has long, horizontal appendages with spiny borders and serpent-head finials. These appendages emanate from the hips and wind over the rest of the vessel surface, as do the appendages associated with the Oculate Being, and the representation of an obsidian knife is shown pendent from one elbow. In another variation, two trumpets in the Laffi collection show human bodies with heads of the Oculate Being proper with long, winding appendages emanating from each side at the top of the head.

It is worth noting that all the decorated drums in the Phase 10 sample, as well as two of the trumpets, are decorated either with representations of the Oculate Being proper or with human figures with attributes of the Oculate Being. Particularly in the drums this association may furnish a clue to the significance of the instruments so decorated.

TROPHY HEADS

Trophy-head representations continue to be shown in association with the Oculate Being proper as well as with human figures with attributes of the Oculate Being, but the Phase 10 variants are both more varied and more simplified than the Phase 9 representations. None of the Phase 10 forms show separate strands of hair, a toothed mouth, or lunate eyes, such as are found in Phase 9. All the seven examples in the sample have simple slit eyes and mouths (fig. 58). Phase 9 trophy heads are shown held in the hand, whereas all but one of the Phase 10 forms are shown in a number of different ways, as finials on long streamerlike appendages, as design ornaments in a fringe framing the head of two of the human impersonations, or pendent from the elbows of one of the human figures with attributes of the Oculate Being. Most typically, Phase 10 trophy heads have circular head outlines, instead of being vertical ellipsoids. An approximately ellipsoid shape is retained on only one of the Phase 10 specimens (cf. Ubbelohde-Doering, 1952, fig. 239). The hair locks are also more varied, either forming two short, arched wedges on either side of the head or being part of the long streamerlike appendages. The special adornment of rectangular sections of a head fringe with trophy head features appears to be another Phase 10 innovation.

SERPENT HEADS

Like the trophy heads, serpent-head designs are more varied than in Phase 9, with three specialized forms for specialized uses. However, serpent heads are also more limited in use, their use being confined to the tip of the nose of the Oculate Being, as ends of hair locks on some of the large anthropomorphic faceneck jars, as finials on the streamerlike appendages and bands associated with the Oculate Being and its human impersonators, and at both ends of geometrized independent serpentine designs. The many Phase 9 uses of serpent heads in purely geometric designs, including all the opposing step or opposing head patterns, appear to be out of style in Phase 10.

The differences between serpent-head finials at the ends of noses of the Oculate Being of Phases 9 and 10 are discussed in an earlier section. Serpent-head finials similar to those at the tips of noses are also used with the horizontal bands that adorn the face mask of the human impersonators of the Oculate Being (cf. Ubbelohde-Doering, 1952, fig. 239). These serpent heads are conservative in having simple, triangular forked tips without a gap at the base. Many also have angular outlines at the outer base of the design and some have rectangular "eyes," two additional conservative features. They differ from the Phase 9 antecedents primarily in being proportionately broader and shorter. Some differ further from the Phase 9 forms in having rounded outer bases like the nose finials of Phase 10. Serpent heads at the end of long appendages and serpentines with serrated borders have a slightly different appearance in which the lower part of the serpent head has broader, more rounded contours, and the former triangular prongs are converted into two slender, slightly curved "tines" separated at the base by a horizontal crossline (fig. 59, d, e). A related variant appears in the upper-valley substyle (pl. 15, b). These forms have a Phase 9 antecedent in which the gap between the tines is almost imperceptible, and the tines themselves are more nearly triangular (cf. Sawyer, 1961, fig. 10, a).

HUMAN FIGURES

There is a great variety of human representations in Phase 10, all of which share some features distinguishing them from other representations. The majority are derived from representations already present in preceding phases and have been described in earlier sections, including spouted bottles with modeled human heads and drawn bodies (fig. 60, a), small anthropomorphic jars (fig. 23, f), large hollow figurines, large face-neck jars, and human figures with attributes of the Oculate Being on various vessel types, including large drums and trumpets. However, there also appear new representations of human figures in Phase 10 that are usually found on fine resin-painted bowls but occur also on one large ovoid vase and one trumpet in the sample (fig. 60, b-f). Very frequently these figures are shown as standing under banded arcs (fig. 60, b, c, e). The figures have front-face bodies and front-face heads drawn on the same basic pattern and varying mainly in details of headdress, clothing, and the objects that may or may not be held in the hands. The bodies have the general characteristics of other human bodies of Phase 10. The heads are circular or vertically ellipsoid, either with a flat horizontal top or with a rounded top and a triangular hair-lock projection. The eyes and mouth are usually short horizontal slits, rarer forms being a lipless toothed mouth and circle-and-dot eyes. The principal feature distinguishing these figures from other human representations is the feet, which are usually shown as triangular out-turned wedges, a form evidently derived from a foot type first used for representations of the Oculate Being in Phase 9.

Different types of figures are distinguished primarily in the head ornaments. Some have no further adornment beyond the triangular hair peak over the forehead or a more elaborate cover of long hair (fig. 60, e, f). On other figures, the head is enclosed by an arc with rectangular or triangular fringelike projections that are analogous to the fringed border on some of the human impersonators of the Oculate Being, described earlier (fig. 60, b). In another variant the head ornament consists of a horizontal bar across the top of the head from which there projects a block of vertical bands, possibly representing a feather tuft (fig. 60, c). On one specimen the horizontal bar is shown with a small face and a vertical extension in the center, the representation of a gold forehead ornament of the type found in almost every one of the Phase 10 burials (cf. Sawyer, 1960, fig. 1, a). Some of the figures are shown wearing shirts with short sleeves, and some are shown holding banded objects in their hands, objects which in one figure can be identified as spears.

One bowl in the Rubini collection has a distinctive design of a human figure which differs from the rest in being shown wearing a large mask representing a fox, the mask modeled in relief on the side of the bowl (fig. 60, d). A large pottery mask, identical in most details to the mask in the bowl design, exists in the collections of The Montreal Museum of Fine Arts and has been illustrated by Bennett (1954, p. 38, fig. 38). Another elaborately decorated pottery mask with human features, which belongs to this phase or to Phase 9, is located in the Bliss collection at the National Gallery in Washington, D.C. (cf. Lothrop, 1960, pp. 91-96). The existence of these masks, together with the representations of the masked figures themselves, are important clues to the interpretation of the representations of figures with human bodies and large heads with attributes of the Oculate Being about the head and face. It supports the impression that the figures represent humans impersonating mythological beings. The figure with the fox mask in the bowl design is shown holding a staff with two loaf-shaped objects in its upper portion, very similar to the staff held by one of the human figures with attributes of the Oculate Being, where it can be seen to represent a club with two round stone heads.

The appearance of the human figure with the fox mask has another special significance. It marks the first appearance of a human figure with masklike attributes representing something other than the Oculate Being. This expansion of the idea of human impersonations of other beings, mythological or natural, heralds a great amplification of mythological and symbolic figures of various types in the first phase of the Nasca tradition which follows Ocucaje Phase 10.

There is another unique human representation in one of the Phase 10 burials, a large bodiless head which is partly modeled and partly drawn on the sides of a large ovoid vase in Rubini Burial 19. Most of its features are like those found on other human representations of Phase 10 described in various earlier sections. The unique features about this design are its size and its association with a large ovoid vase. Like some of the other human representations, this head is enclosed by a frame suggesting a mouth mask.

GLIDING BIRDS

Derivatives of the traditional gliding birds are found in fine resin-painted designs as well as on negative-decorated bowls and on a large ovoid vase in Rubini Burial 27. Most of the bird figures in negative bowl designs differ from the resinpainted ones, but the two types also share some features.

The most typical Phase 9 gliding bird, a square-shouldered form with two triangular projections in front representing the head or beak of the bird, do not appear in the Phase 10 collections, with the possible exception of a few very modified derivatives among the negative designs. However, there are six derivatives of another Phase 9 form which has a round head, a beak facing sideways or down, rounded "shoulders" and more curvilinear wings, and which derives from the crested birds of Phase 8 (fig. 61, a, c). All but one of the Phase 10 birds in this group appear in resin-painted decoration. Each of the Phase 10 birds has some unique features, but all of them differ from the Phase 9 variants in having the beak facing upward instead of sideways and in having stouter, less gracile proportions with a proportionately thicker tail and thicker wings. White markings in the tail and at the base of the neck, as well as the general appearance of the bird in flight, suggest that they are modified to represent the "golondrina," a swallow that is common in the Ica Valley.

There is a different conservative derivative of smaller round-headed birds with beaks facing downward which also appear as space fillers on a large ovoid vase in the Phase 9 sample (cf. Sawyer, 1961, fig. 10, a). The Phase 10 derivatives are found as designs in rim bands on two shape 29 bowls (fig. 62, c), and as a space filler in the "blind" area on a fine resin-painted bowl in the Regional Museum of Ica (MRI d20). They differ from their Phase 9 antecedents primarily in the contouring of the head and beak. The beak projections merge in a smooth curve with the contours of the head instead of being separated from the head outline by a sharp angle, and the head is smaller and not evenly rounded.

The variant of the bird described above that is used as a space filler in a broadband design on a shape 28 bowl is of particular interest, because it is represented as a double-headed bird with each head facing outward. This marks the earliest appearance of the double-headed bird figure which is an interesting bowl design in the early part of the Nasca tradition.

Some of the gliding bird designs in negative-decorated bowls resemble the resin-painted ones, whereas others are distinct in a variety of ways (fig. 64, f-1; Kroeber, 1944, pl. 16, J). All of them tend to have bodies with straight rather than curvilinear outlines, perhaps because straight lines are more convenient to do in the negative technique. The majority of the negative-painted birds share another distinguishing feature, a greatly enlarged, straight-sided, triangular or trapezoidal tail which is usually filled with tiny dots and is decorated with a fringe of vertical lines at the end. Sometimes two tail units are joined together to form a purely geometric "hourglass" figure.

NEW BIRD FIGURES

Along with the traditional gliding birds, there appears a great profusion of new, naturalistic bird figures, most of them in fine resin-painted bowl designs and some in negative designs. The majority are shown standing in profile, with a large, expanding, concave-sided tail (analogous to the straight-sided tails on negative birds), which is derived from the old gliding bird designs, feet borrowed from human and feline figures, one arching wing at the top of the body, and generally a stout breast at the bottom (figs. 61, b, d-g; 62, b). The principal variations are in the contours and proportions of the body and wing, the feet, the beaks, and the markings on the head, body, and wing. However, sometimes the tail or breast is also specially modified to represent more accurately the natural features of the bird, and one specimen, the figure of a condor, is shown in top view and in flight rather than in profile and repose (fig. 62, a), probably because the condor is most impressive in flight. The features that distinguish these bird figures represent natural features designating different types of birds.

Several bird designs in the sample represent large, long-legged birds painted white, red, or orange, with long, curving necks, long legs, and long, slender beaks (figs. 61, f; 64, d; Kroeber, 1944, pl. 15, E). These birds represent either a kind

of heron known at Ica as ''garza,'' or a flamingo that appears as far north as the Bahía de la Indepencia, just north of the Ica Valley.

One bird design in the sample represents a muscovy duck, recognized as such by the form of the beak, by a short, red, wedge-shaped marking at the base of the top part of the beak, and by the body and wing markings and tail form (fig. 62, b; Kroeber, 1944, pl. 15, D; Tello, 1959, Lám. VI, B).

Other birds shown in fine resin-painted designs include representations of green parrots with red head crests (fig. 61, g), a type common in the upper part of the Ica Valley and in the intermountain valleys east of Ica. One bowl in the Rubini collection shows a hawk, recognizable by two bands under the eyes representing the dark-colored feather bands extending diagonally down from the back and front corners of hawks' eyes, a checkerboard pattern on the body representing the brown and white speckled feathers on the breasts of hawks, and banding of the tail representing alternate brown and white bars of feathers in the tail of these birds (fig. 61, b). Another profile bird, appearing on a bowl in one of the Phase 10 burials (Rubini Burial 8) represents a big, finchlike seed-eating bird about the size of a robin, known at Ica as "cochuco," which is recognized by its eye markings, its thick, short beak, and its olive-brown color without other markings (fig. 61, e). It is considered locally as a serious crop-eating pest. Another bowl in the Rubini collection is decorated with the representation of a gallinule, a water bird known locally as "gallineta," which is found on the coast and some distance up the Ica River, and which is distinguished by a crest of feathers on top of the head and a black body with some red zones (fig. 61, d).⁸

The only one of the new bird figures shown in flight is a condor, drawn on a bowl at the Museo Regional de Ica (fig. 62, a). It can be identified as a condor by the caruncle above its nose, white zones around the neck and along the top of the wings (the markings of a male condor), long, spreading wing feathers, and the widely spreading border of the tail feathers.

FISHES AND KILLER WHALES

Representations of fishes and killer whales appear for the first time in Phase 10 and are used as fine resin-painted designs on bowls and spouted bottles (fig. 63, a-d, f), and as negative bowl designs (fig. 64, f-2). Most of the fish representations in negative decorated bowls are very homogeneous, simple, straight-sided figures which suggest anchovies in their appearance. They have a triangular body with a narrow line through the middle indicating the backbone, finlike projections indicated by two sets of two or three short lines projecting diagonally from either side, and a short tail also indicated by two or three lines. The head is shown by means of two pointed triangles projecting at the broad end of the body, with a dot in the center of each, which may have been borrowed from the "head" form of Phase 9 gliding birds. The only other fishlike form shown in negative designs is the representation of the killer whale, which is also shown in resin-painted designs (fig. 63, a-c). The negative variants of the killer whale designs are angular and

⁸ The representation of the gallinule has been identified as such by Lorenzo Rosselló Truel. The rest of the identifications are Dawson's.

straight sided instead of curvilinear, but otherwise they have the same features.

Fishes and killer whales in resin-painted designs have rounded contours and more naturalistic features than the negative representations. The killer whale ("orca") is the most common fishlike representation, and the only one that has been identified specifically. It is distinguished by an elaborately arching body with two fin projections at the top and two at the bottom, a saw-toothed mouth, a widely flaring, concave-sided tail, and a "hand" in front like hands of humans or of the Oculate Being. The killer whale is sometimes shown with other mythical attributes in addition to the hand, including a multiple-circle eye and side whiskers, features borrowed from representations of the Oculate Being (fig. 63, a, c). These features suggest that the killer whale had some special mythical significance (cf. Yacovleff, 1932a).

There are two other types of fish designs in the Phase 10 sample, one with a clublike, rounded head with a vertical band in the bottom representing the mouth (fig. 63, d). This fish has a straight, concave-sided body with a slightly spreading tail and two fins. It lacks the saw teeth and nonnaturalistic features of the killer whale representations. The other fish has a stout, lenticular body with a horizontal, slitlike line in front indicating the mouth, fin projections, and vertical curved banding at the base of the head (fig. 63, f). Like most other fish and bird figures, it is shown in profile. Some of the smaller killer whale designs and the other fish figures have simple circle-and-dot eyes.

PLANTS

The only resin-painted representations of plants are found on a fine decorated bowl in the Nathan Cummings collection. The design consists of a series of seedlike figures which recall squash seeds. Modeled representations of squashes, gourds, and tubers are described in an earlier section.

THE AMPHISBAENA

A double-headed, wormlike figure is found in Phase 10 as a principal broadband design on two shape 28 bowls in the sample (one in Rubini Burial J), as a rim-band design on one shape 29 bowl, and as a filler element on the body of a large face-neck jar in the Rubini collection. An antecedent to this design is found as a background filler on a large ovoid vase with representations of the Oculate Being at the Textile Museum (Sawyer, 1961, fig. 10, a). The Phase 10 figures differ in being stouter and shorter, two of them with modified serpent-head ends that have convex curved sides and two forked tips separated by a horizontal line at the base, like other Phase 10 serpent heads (cf. fig. 59, d, e). The other two double-headed wormlike designs have abbreviated trophy head representations instead of serpent heads at each end.

It is not certain to what extent these two-headed, wormlike figures are related to the large, elaborate amphisbaena representations found in Phases 8 and 9. The filler designs of Phase 9 and their Phase 10 derivatives may represent an entirely independent design.

FOX

One resin-painted bowl in the Nathan Cummings collection is decorated with a peculiar figure which appears to be a derivative of fox representations of the upper-valley substyle (Sawyer, 1961, fig. 8, j). This design is unique in the Phase 10 sample. It is represented as having side whiskers, like the whiskers of the Oculate Being, a feature that may represent a mythical attribute. This possibility is strengthened by the representation of a human being wearing a fox mask in one of the Phase 10 bowl designs and by the existence of an actual mask of this type (see the section on human figures, above).

TOOLS

One shape 28 bowl in the Nathan Cummings collection is decorated with representations of hafted, triangular knives. Both hafted and unhafted triangular obsidian blades are also found in several of the Phase 10 burials. Another representation of a utilitarian object consists of a series of figures representing slings with one looped end, one fringed end, and a large, diamond-shaped center with diamond-shaped ornaments in it (fig. 62, f). This design is found on a shape 28 bowl in Rubini Burial H.

GEOMETRIC DESIGNS

Virtually the only geometric designs in use in Phase 10 are diagonal step-design patterns derived from Phase 9 antecedents. Most of the step designs in the rim bands on shape 29 bowls are at present indistinguishable from the variants found in Phase 9. The only exception is one design on a relatively broad rim band, in which vertical, serrated incised lines alternate with straight vertical bands.

Slightly modified variants of the traditional diagonal step designs are used as space fillers in the "blind" areas in broad-band designs on shape 28 bowls (fig. 62, d, e, h, i). The designs are larger and higher than the traditional ones because of the difference in design surface, and they are drawn with straighter lines and more even execution, to match the care in decoration of the principal designs on these bowls. These filler designs are also distinguished by the delicately shaded color alternation of light shades of barely contrasting colors, with an occasional insertion of a darker shade of red, maroon, dark olive green, or black.

NASCA PHASE 1

As WE NOTED in the introduction, the distinction between an earlier "Ocucaje" and a later "Nasca" style at Ica is an arbitrary one. Both are parts of a single tradition in which there is a strong element of continuity between any two successive phases, and such continuity exists between Ocucaje Phase 10 and Nasca Phase 1 as well as elsewhere in the sequence. The subject of this particular study is the Ocucaje style, and a detailed analysis of Nasca Phase 1 would be out of place in it. A few comments on the first of the Nasca phases are in order, however, to provide the context of Ocucaje Phase 10.

The stylistic change marking the beginning of Nasca Phase 1 is the use of slip paint applied before firing, instead of resin paint applied after firing, as the means of producing polychrome designs on fancy pottery. The new slip colors were generally separated by incised lines in the first Nasca phase, as the resin pigments of earlier phases had been. Pottery with polychrome designs in slip paint outlined by incision is common in the refuse at Cahuachi in Nasca, but it is rare in Ica, where the influence of the prevailing monochrone Topará tradition of the valleys to the north remained strong.

The other changes that took place between Ocucaje Phase 10 and Nasca Phase 1 are relatively minor modifications in technology, shape, and details of design. Negative decoration and pattern burnishing continued to be used, and many shapes persisted, such as spouted bottles, waisted neckless jars, bowls, drums, panpipes, and whistles. Grater bowls, however, ceased to be made altogether at the end of Ocucaje Phase 10 after enjoying great popularity at least since Phase 3. Large ovoid vases persisted into the first Nasca phase but appear to have been much rarer then than in Phases 9 and 10 of the Ocucaje tradition.

THE SAMPLE

Abundant remains of Nasca Phase 1 have been found in the Ica Valley. The Aldo Rubini collection includes the contents of eighteen burials of this phase from the Pinilla sector of Ocucaje and from the narrows above the Ocucaje Basin, and these materials are accompanied by careful diagrams and notes on associations. The Rubini burials contain a total of forty-eight pottery vessels as well as a variety of other archaeological remains, including a substantial number of embroidered textiles like some of those found by Julio C. Tello at the Great Necropolis at Paracas. A number of habitation sites with pottery of this phase on the surface have been found in both the upper and lower parts of the Ica Valley. At site PV62-104B on the hillslopes north of the settlement of Pampa de la Isla in the upper Ica Valley Nasca 1 pottery was found to the exclusion of other types. At La Peña de Ocucaje (PV62-38), in the narrows above Ocucaje, Dawson conducted a small excavation in which he found two refuse strata containing Nasca 1 pottery to the exclusion of other phases. In addition, there are many unassociated vessels in museums and private collections that can be assigned to this phase.

TECHNOLOGY

Pottery of Nasca Phase 1 has a slightly greater average wall thickness than Ocucaje Phase 10 pottery, though a few conservative vessels have thin walls like the earlier ones. The firing atmosphere is more carefully controlled than before. Nasca Phase 1 pottery is distinguished by its evenly colored surfaces and cross sections, the paste color being usually an orange-red or a reduced fired gray with a charcoal-black smoked surface which usually has a fine, metallic gloss. Lighter orange-colored or pink vessel surfaces are found more rarely. Black-interior bowls persist as rare survivals from Ocucaje Phase 10, but the great majority of reduced fired bowls have an even charcoal-black surface inside and out. The use of white paste is out of style in Nasca Phase 1, nor are plain white-slipped spouted bottles with red-tipped spouts any longer in use.

Fine plainware, both smoked black and orange-red, is characterized by a very fine, even surface finish, including careful smoothing, slipping, and a fine gloss. The principal vessel forms so distinguished are new base-angled bowls and double-spout bottles. The majority of the bowls are done in smoked blackware, and many have pattern-burnished decoration on the interior. Some have simple incised decoration outside or, more rarely, inside, and some have vertical fluting of the sides, a feature that survives from Ocucaje Phase 10. Double-spout bottles appear in smoked blackware or orange-redware with about equal frequency and are derived from the monochrome double-spouted forms of Ocucaje Phase 10.

Polychrome decoration in pottery is virtually confined to various new types of modeled spouted bottles, to large drums, and to a few bowls and large ovoid vases. The designs on these elaborately decorated forms are slip painted. Traditional resin paint survives only in association with incised designs on some bottles and bowls of smoked blackware, a type of firing for which slip painting is not suitable. The only color of resin paint used on these vessels is white (Strong, 1957, fig. 7, D).

The change from resin painting in Ocucaje Phase 10 to slip painting in Nasca Phase 1 is not as radical an innovation as it appears to be at first glance. The foundations for the change are laid in Ocucaje Phase 10 with the introduction of white slip paint and red slip designs from the Cañete-Chincha area. From the very beginning of the introduction of polychrome slip-painted designs in Nasca Phase 1 as many or more different colors are used as in the resin-painted designs of the Ocucaje style. This observation indicates that, once the idea of producing traditional polychrome designs with slip paint had occurred to the potters of Ica and Nasca, the techniques for creating polychrome slip colors were discovered immediately and evidently without major technological obstacles. The only evidence of experimentation that appears in Nasca Phase 1 slip painting is the varying density of the slips. Some of them are thin, matte, irregular washes, whereas others are thick, glossy, evenly colored pigments. This irregularity is not found in the later slips of the Nasca tradition. Ica and Nasca potters also experimented with effects other than color alone, for in Nasca Phase 1 the maroon pigment sometimes has many minute, silvery inclusions of specular hematite, producing an added effect used for contrast in the designs.

The slip colors in use in Nasca Phase 1 include cream-white, dark brown, orange-red, terracotta, dark red, maroon, orange, buff, dark gray, medium gray, and black. One vessel in the sample is decorated with as many as nine different colors. Except for the appearance of grays and the loss of greens, a substitution based on technological problems, the color shades are approximately the same as in Ocucaje Phase 10. As in Phase 10, most of the colors used in any given design show little contrast, and, also as in Phase 10, color zones are separated by incised outlines, a traditional technique that is not abandoned until the following Nasca phase. However, in Nasca Phase 1 the incisions are either scratched into hard surfaces, or they are done in smooth, even grooves, unlike the cutting incisions of the Ocucaje tradition. Incisions are also usually filled with black or white slip paint to help separate the color zones, a Nasca 1 innovation.

VESSEL SHAPES AND SURFACE APPEARANCE

The most important shape innovation involves the reappearance of sharp base angles in fine plain-slipped bowls and double-spout bottles, the angle separating the bottom from the sides of the vessel. Since sharp base angles are associated primarily with the fine, plain-slipped vessel types in Nasca Phase 1, it is probable that this shape feature is a development of the Topará style which influences the Nasca 1 style. However, most of the shapes on which the base angles appear at Ica are derived from Ocucaje Phase 10 antecedents. In addition to the doublespout bottles, there are two common bowl types with base angles in Nasca Phase 1. One is a relatively high-sided form with vertical or barely flaring, straight or slightly concave sides, and the other is a low-sided form with vertical, slightly flaring or slightly tapering sides which are either convex, straight, or slightly concave. Both bowl-shape types have strongly paraboloid, tapering bottoms of varying depths. The lower-sided form of these bowls is an only slightly modified derivative from shape 5b bowls of Ocucaje Phase 10. The great majority of these base-angled bowls in Nasca Phase 1 are smoked black, and many have patternburnished decoration on the inside and scratched-incised decoration on the outside, sometimes combined with white resin paint (Strong, 1957, fig. 7, A-C).

The plain-slipped double-spouted bottles in Nasca Phase 1 resemble the Nasca 1 bowls in the shape of the bottom and base angle (Strong, 1957, fig. 7, D). The contours of the upper part of the body are modified derivatives of the squash- and gourd-shaped bottles of Ocucaje Phase 10. Among the principal shape innovations, besides the contours of the bottom and base angle, are the proportionately smaller diameter of the recessed shelf at the top of the body, and the much rarer use of vertical fluting in the sides, which is replaced by groovelike incisions on some vessels and pointed, bumplike projections on others. The bridge is much more highly arched than in Ocucaje Phase 10, with an abrupt "buckle" at the top, and it is also thicker in cross section and usually lacks the leaf-shaped contours of the Phase 10 form. The spouts also have slightly different and more varied contours than in Ocucaje Phase 10.

In contrast to the shape modifications of the fine, plain-slipped double-spout bottles and bowls, the great majority of the negative-decorated bowls of Nasca Phase 1 lack base angles, and their shapes are only slightly modified derivatives of common shape 5c and shape 5b negative-decorated bowls of Ocucaje Phase 10. A few black-interior shape 5b bowls also survive in Nasca Phase 1 with much the same shapes as in Ocucaje Phase 10, and some blackware bowls of Nasca Phase 1 retain the shape contours of some of the shape 28 bowls of Ocucaje Phase 10. A few of these bowls have fluted sides, like some of the black-interior bowls of the preceding phase.

Waisted neckless jars appear in Nasca Phase 1 in much the same form as in Ocucaje Phase 10.

Utility ollas and jars of Nasca Phase 1 are slightly modified in shape from their Ocucaje Phase 10 antecedents, especially in the form of the necks, which are more tapering and less bulging than in Ocucaje Phase 10. Although some of the ollas and jars retain the characteristic Phase 10 brownware paste, a great many are made of different, orange-red to buff fired paste.

Some of the Nasca 1 drums are very large, and the tubular base is rounded rather than flattened at the bottom. In other respects Nasca 1 drums are like Ocucaje Phase 10 drums in shape (Tello, 1959, Lám. LXXXII).

Nasca 1 panpipes are very similar in form to those of Ocucaje Phase 10, but they have a more careful surface finish and are painted with a thin, dark red slip or with a dense, maroon-colored slip.

Several new varieties of fine, modeled and polychrome-painted spouted bottles appears in Nasca Phase 1. Perhaps the most popular category has a body modeled and painted to represent a container, either a bowl, a twined basket, or a woven bag decorated with vertical stripes and with the representation of a draw string at the top (Strong, 1957, fig. 7, F, G). The bowl shapes are covered with an arched top decorated with fruit or fish designs to represent bowls heaped full with these foods. The basket representations have fruit such a lúcumas or beans modeled or painted at the top, indicating a heaping basket full of fruit. The bagshaped bottles are also shown as full, the contents held in by the representation of the tied draw string at the top. Some of the bowl- and bag-shaped bottles have a modeled hawk seated on the top (Kroeber, 1953, pl. 28, a).

Other modeled forms include fully modeled birds derived from the incised painted forms in Ocucaje Phase 10 bowl designs, a fully modeled, seated human, a fully modeled figure spread-eagled over the top of a bottle (Bennett, 1946, pl. 20, c), the representation of a fisherman lying across the top of an inflated skin, a fully modeled trophy head, a modeled monkey and other forms.

Types of Decoration

PATTERN BURNISHING

Pattern-burnished designs appear to be more common than in Ocucaje Phase 10. They are found on the interior of fine base-angled bowls of smoked blackware, and on a few blackware bowls that have more traditional shapes without base angles. The designs are for the most part slightly modified derivatives of the pattern-burnished designs of Ocucaje Phase 10, but they are executed with greater care and precision, and there are more representational figures, including birds, fishes, and fanciful feline designs (cf. Strong, 1957, fig. 7, A, B, C). Filler elements consist of long, open S-shaped figures, often with large spiraled ends, and of lozenges, both designs that are not used in pattern-burnished designs of Ocucaje Phase 10. When the design area is sectioned by bands, the pattern of the sectioning differs from that of Ocucaje Phase 10 in that each sectioning band consists of only one, two, or a few lines instead of broad blocks of fine lines and in that the distinction between broad quartering bands and narrower secondary radiating lines or bands is either not made or is minimized. As a result, many bowls are sectioned by eight or nine simple radiating lines or narrow bands, instead of being divided into four quarters with secondary subdivisions. Instead of bands with scroll-like borders, single lines with spiral ends are often used to section the design field. In some designs straight lines alternate with wavy or zigzag lines. The individual lines and glossy fields in the pattern-burnished decoration of Nasca Phase 1 are glossier and stand out more clearly from the background than in pattern-burnished designs of preceding phases.

INCISING

Smoked blackware, both in spouted bottles and base-angled bowls, is sometimes decorated with incised designs, either without paint or set off by white resinpainted zones. The incisions are usually shallow scratches in a hard surface, but sometimes deeper cutting incisions persist from preceding phases. Baseangled bowls are often decorated with spaced, vertical incised lines on the outside, and some bottles and bowls are decorated with diagonal step designs derived from Ocucaje Phase 10 (cf. Strong, 1957, fig. 7, D). A few vessels are decorated with more elaborate representational figures, such as fishes.

NEGATIVE DECORATION

The principal difference between the negative decoration of Ocucaje Phase 10 and that of Nasca Phase 1 is that the latter is usually done with thicker lines. There are only a few conservative bowls with fine-line negative decoration that survive in Nasca Phase 1. The patterning of the blocks of lines on the outside of Nasca 1 bowls resembles a rare advanced variant of Ocucaje Phase 10 in which diagonal blocks of lines are set apart at converging angles but do not meet, or meet only at the tips of the border lines. The angle at which the line blocks are placed is less acute than in Ocucaje Phase 10, and on the more advanced Nasca 1 specimens the line blocks are vertical instead of diagonal (cf. Strong, 1957, fig. 6, F, J). On some advanced Nasca 1 bowls evenly spaced vertical or diagonal lines or stripes replace the line blocks. The negative designs on bowl interiors are for the most part also thicker-lined derivatives of the designs used in Ocucaje Phase 10, including fishes, killer whales, gliding birds, and star-shaped figures (cf. Strong, 1957, fig. 6, H). Bowl interiors are also sometimes quartered by thick plain or dotted bands, and blocks of thick-line dashes or S-shaped figures are sometimes used as space fillers (cf. Strong, 1957, fig. 6, G, J). The S-shaped

figures resemble small design elements used on the interior of some of the highsided negative-decorated bowls of Ocucaje Phase 10, but the Nasca 1 forms are usually longer and more open, and some of them have large spiral ends, like the corresponding pattern-burnished designs of Nasca Phase 1.

"FALSE NEGATIVE" DECORATION

Some bowls and waisted neckless jars with shapes and design patterns of negative-decorated vessels have the corresponding line designs applied in red slip on the unpigmented orange-red vessel surface, instead of by the negative method (cf. Strong, 1957, fig. 8, A, C, D). This use of red-slip painting is a Nasca Phase 1 innovation. The pigmented red slip and the unpigmented orange-red slip offer very little color contrast, a feature that creates an additional superficial resemblance to those negative designs on which the organic black coloring is thin and partly worn away.

Two vessels in one of the Nasca 1 burials in the Rubini collection are bowls with shapes derived from grater bowls of Ocucaje Phase 10. On these bowls, the interior is decorated with blocks of short line designs applied in red slip on the unpigmented surface, patterned in imitation of Ocucaje Phase 10 grater incisions. These imitation graters represent the last survival of the grater bowl tradition in the Ica Valley.

POLYCHROME SLIP PAINTING

Polychrome slip-painted designs with scratched or grooved incised outlines are used for the new fancy decorated modeled spouted bottles, for large, olla-shaped incurving bowls with very small collars, large ovoid vases, large drums, and, more rarely, standard-sized bowls of various types (Bennett, 1946, pl. 20, c; Kroeber, 1953, pl. 28, a; Strong, 1957, fig. 7, F, G; Tello, 1959, Lám. LXXXII). With the exception of the supporting designs on the new modeled basket and bag representations in spouted bottles, most of the Nasca 1 polychrome designs are derived from resin-painted designs of Ocucaje Phase 10. The pottery designs include representations of the Oculate Being and design details associated with the Oculate Being but sometimes used as independent figures, such as trophy heads and long, spiny serpentines ending in various head forms (Tello, 1959, Lám. LXXXII). Other traditional designs that persist in Nasca Phase 1 include fish and killer whale representations, design details on modeled humans and bird figures, painted designs in modeled fruit, and various patterns of diagonal step designs. Although there are a number of innovations in stylistic detail, most of the Nasca 1 figures are very similar to the corresponding designs of Ocucaje Phase 10.

INTERPRETATIONS AND CONCLUSIONS

UP TO THIS point our emphasis has been on the distinguishing characteristics of the phases into which we have divided the Ocucaje tradition, on dating, and on the principles that give the style of each phase its coherence. Let us turn now to a consideration of some of the broader implications of the story we have been following in such close detail.

The course of stylistic development at Ica was profoundly affected by influences from other areas. From the beginning of the Ocucaje sequence to the end of Phase 8 the art of Ica was under constant, or at least recurrent, influence from the culture of Chavín. In Phase 10 of the Ocucaje tradition and Phase 1 (and 2) of the Nasca sequence the influence of the Topará tradition was very strong. Only Phase 9 appears to have been an interlude of artistic independence in this chain of outside influences.

The Topará tradition had its home in the valleys of Cañete, Chincha, and Pisco, which are Ica's immediate neighbors to the northwest. The relationship of these valleys to Ica was close in all periods, and the spread of Topará influences to a valley so closely adjacent is easy to understand. The source of the earlier influence from the Chavín culture is much less obvious. The home of the Chavín culture was in northern Peru, and the nearest site where any substantial quantity of fancy Chavín pottery has been found so far is the Huaca Malache at Lurín in the valley of Pachacamac. The Chavín influences that reached Ica could perhaps have been transmitted indirectly through intervening areas where other varieties of the Paracas style were in use, on the coast or in the sierra. On the coast, the Topará style was preceded by styles of the Paracas tradition; in the sierra a variety of the Paracas style has been found near Huanta. However, the Chavín influence at Ica is so detailed and so extensive that an indirect contact hardly provides a sufficient explanation. Direct influence is not so unreasonable a possibility as the distances involved suggest. The recent discovery of two painted textiles in the purest Chavín style in a burial in the Callango Basin (cf. Rowe, 1962b, figs. 29, 30) indicates that examples of Chavin art were being imported to Ica, or that Chavín artists were working there, or both. No examples of imported Chavín style pottery have yet been found at Ica, but a bottle in Munich appears to be a close imitation of a Chavin original (see pp. 33-34 and 34-35; Ubbelohde-Doering, 1952, fig. 235). The model may have been either a pottery or a metal bottle. The mythical face with feline attributes that ornaments the side of the Munich specimen is executed in a Chavín rather than a Paracas style, but the face is placed under the end of the stirrup arc, the usual position for faces on bottles of the Ocucaje tradition, instead of on the side where faces are located on bottles of the Cupisnique and other northern styles of the Chavin group. The Munich bottle, therefore, was probably manufactured in Ica, but it reflects Chavín influences almost as directly as the painted textiles.

There are resemblances to the Chavín style in every phase of the Ocucaje sequence from 1 to 8, but the resemblances are particularly close in the first two Ocucaje phases and in Phases 4 and 5. In addition, the Ocucaje style from Phase 1 to Phase 8 shared general stylistic trends with the Chavín style. The two styles shared a gradual change from subrectangular, curvilinear features to angular rectilinear ones, an increased adjustment of the designs to bands of modular width, a gradual decrease in the modular width of the design bands, and a lengthening of the stems of decorative curls and rays with recurved tips (cf. Rowe, 1962b, pp. 5–14).

The specific correlation of a phase in the Ocucaje sequence with a phase in the Chavín sequence depends on the occurrence of a few specific features in each. The small number of such features no doubt reflects the fact that we are comparing pottery with stone sculpture, and the two different media were used for different purposes. Features that are identical in the Ocucaje style and at Chavín include fangs in mythical feline mouths in Ocucaje Phases 2, 3, and 4 which correlate with fangs in Chavin Phases AB, C, and D, respectively; some Ocucaje Phase 8 fangs which correlate with fangs in continuous mouth bands of Chavín Phase EF; the decorative points in the lip corners of mythical feline mouths in Ocucaje Phase 4 and Chavín Phase D; serpent-head appendages in Ocucaje Phase 4 and Chavín Phase D, and serpent-head appendages in Ocucaje Phase 5 and Chavín Phase EF; a full-bodied mythical figure with a profile head and a front-face body in Ocucaje Phase 5 and Chavín Phase D; the unframed rectangular eye as it appears in Ocucaje Phase 8 and Chavín Phase EF; elongated, tiered ray appendages with recurved tips as head ornaments in Ocucaje Phase 8 and Chavín Phase EF; and a single-step narrow-band design in Ocucaje Phases 7 and 8 and Chavín Phase EF. Other features with long persistences at Chavín that appear in various Ocucaje phases include the agnathic jaw and the nonmythical feline in Ocucaje Phases 1 and 2; various mythical human representations with feline attributes in Ocucaje Phases 2-8; the guilloche, which appears especially in Ocucaje Phases 3 and 8; and the use of bands of a modular width to make representational designs, which is an important aspect of Ocucaje designs from Phase 1 to Phase 8 as well as of Chavín design.

In spite of the evident importance of Chavín influence as a source of inspiration in Phases 2-8, the maintenance of local specialties makes the Paracas style in general, and its Ica variants in particular, at all times a distinctive one, very different from the Chavín influenced styles in central and northern Peru. The double spout and bridge bottle, one of the most distinctive south coast vessel types, has a prototype in the Hacha style, an Initial Period style of the Acarí Valley, as do red-slipped vessels and negative painting. Other important characteristics distinguishing the south coast tradition from Chavín influenced pottery styles of other areas include single- and double-chambered whistling bottles, the variety of representational designs used in bowl as well as bottle decoration, and the emphasis on polychrome painting and color contrasts.

The greatest artistic independence in the Ocucaje style is found in Phase 9, especially in certain features and themes that originated in Phase 8. The Oculate Being, a mythical representation originating in Phase 8 in the Ocucaje Basin substyle, was the first mythical figure in the Ocucaje tradition that showed no relationship to the types of mythical figures found at Chavín. How much local originality was involved is not clear; it is possible that some of the innovations appearing in association with the Oculate Being in Phase 9, such as the trophy heads and hafted knives, may be related to similar themes found elsewhere in Peru, especially in the Pucara style of the southern sierra; radiocarbon determinations suggest that this style was contemporary with Ocucaje Phase 9.

Influences of the Topará tradition affect the Ica Valley to a considerable degree in Ocucaje Phase 10 and even more profoundly during Nasca Phases 1 and 2. Unlike the Chavín influences, which merely provided artistic inspiration for an original south coast style, the Topará style was copied mechanically and without originality in the areas where it exerted its influence. The Topará style is characterized by very fine, thin, carefully shaped plain pottery without painted decoration of any kind and a highly accomplished technology involving the use of very fine clays, slips, and temper and a high degree of control over firing techniques. In Ocucaje Phase 10, most of the vessel shapes were based on local antecedents, but Topará influence manifests itself in the large quantities of carefully shaped, very thin, unpainted pottery, the use of differential firing as a decorative device, and the introduction of a white slip and white paste. During Nasca Phases 1 and 2, Topará shape features and firing techniques dominated the pottery of the Ica Valley, and polychrome painted pottery is extremely scarce. In excavations at Cahuachi in the Nasca drainage, the Columbia University Expedition of 1952 turned up much less Topará influenced pottery in the contemporary phases, an indication that Topará influences were weaker in Nasca than at Ica (Strong, 1957). The part of the common stylistic development that is based on the earlier Paracas tradition is, in consequence, better represented at Nasca than at Ica during the time of Ocucaje Phase 10 and Nasca Phases 1 and 2.

If we now look at the pottery of Ica in its own terms and not as related to outside influences, we can see the following patterns of change. During Phases 1-5 a great deal of change took place, but most of the changes were in a consistent direction. Bowls became proportionately broader and shallower, especially from Phase 3 on, and spouted bottles followed suit with a considerable increase in breadth between Phase 4 and Phase 5. As a result, design panels on these vessel shapes also became proportionately broader and lower, a change in patterning that reinforced the decreasing modular width of design bands. An increasingly larger area of the design panels was covered with design bands and with stamped circle filler elements, so that the empty background spaces in the design figures shrank in size. In another consistent pattern of change, mythical human representations with feline attributes and nonmythical feline representations were gradually merged, so that the two themes increasingly came to resemble each other, a process of assimilation that stopped in Phase 5. Other consistent trends from Phase 1 to Phase 5 are the transference of representational designs from spouted bottles to bowls and the increasing number of representational themes used in bowl designs. The use of smoked carbon-black surfaces for fancy pottery decreased between Phase 2 and Phase 5, being out of style by Phase 5.

The main innovation in Phases 6 and 7 was the introduction of a group of new geometric bowl designs in the upper-valley substyle. Most of these designs represent variations on a single theme, a narrow-band step design which may show Chavín influence. In most other respects, Phases 6 and 7 represent conservative changes in features, themes, and trends already present in Phase 5. Spouted bottles and bowls continued to grow proportionately broader and lower, design panels and design figures continued to change accordingly, and these changes reinforced the increasing use of bands of a narrowing modular width for designs. The use of colors in painted designs was greatly standardized, with red and white (or yellow) far outnumbering all other colors in use. The firing and surface color of the paste changed slightly from a mottled dark gray to brown to a lighter gray.

The first major change in stylistic patterning that had a profound effect on the Ocucaje style appeared in Phase 8. In this phase, the trend toward broader, lower vessel shapes was reversed in many vessel categories, the reversal having a drastic effect on the patterning of designs. Although the modular width of some design details continued to decrease in continuation of the old trend, many design features were no longer made exclusively with bands of a modular width, and design figures were frequently enclosed by open background spaces, a new feature in the Ocucaje tradition that is especially noticeable in the Ocucaje Basin substyle. The background spaces continued to be decorated with space fillers, as before, but the filler elements were spaced farther apart in many of the design categories. Representational designs were drawn with more naturalistic and curvilinear contours. A greater variety of colors was used than in Phases 6 and 7, and some fancy vessel types again had smoked charcoal-black surfaces. There was a change in firing technique, with bright orange surfaces becoming common in the upper-valley substyle, and much of the pottery is thinner walled than in preceding phases. A variety of new representational design themes appeared in the lower-valley substyles, the most important of which is the Oculate Being of the Ocucaje Basin. We also find a variety of new geometric designs, especially in specimens from the Ocucaje Basin.

Phase 9 represents a slightly modified continuation of the stylistic innovations of Phase 8, but many of the older features of the Ocucaje tradition were out of style. There is an emphasis on color contrasts, large empty background spaces not decorated with filler elements, and widely spaced design figures. Smoked charcoal-black surfaces are once more common in fancy ware.

A second major stylistic change gave a new direction to the Ocucaje style in Phase 10. The principal innovation is based on a greatly increased interest in naturalistic design representations, especially of birds, fishes, plants, tools, and humans. Figures were drawn as large as possible, vessel shapes were modified to suit the proportions of the representations, background spaces shrank once more, and contrasting colors were used primarily to distinguish naturalistic detail. The emphasis on color contrasts for purely artistic effects, and the use of large, uncluttered design fields, were again out of style, as were smoked carbon-black surfaces on fancy painted ware. On the other hand, representations of the Oculate Being increased in numbers and variety, and feline representations as well as other earlier Ocucaje tradition features continued to form important aspects of Ocucaje Phase 10. Both the innovations and the selected older features and themes characterizing Ocucaje Phase 10 were further developed in the early phases of the Nasca tradition, for which they formed a basis.

The major stylistic breaks in Phases 8 and 10 are not obviously the result of foreign influences. On the other hand, it must be noted that the stylistic break in Phase 8 coincides with the end of Chavín influences at Ica and that the Phase 10 break coincides with the first appearance of Topará influence. There was probably some connection between the changes in relations with the foreign styles and major local style changes, even though the foreign styles do not appear to have exerted a direct influence on the local features in question.

An important result of our investigations has been the observation that from Ocucaje Phase 6 on there was a trend toward increasing stylistic diversification within the Ica Valley. Evidently such diversification was much less or did not exist during the earlier phases, since we are unable to see any regional distinctions in the Phase 3 sample, the only earlier phase for which an adequate sample from both the upper and lower Ica Valley is available to us. Regional diversification was relatively slight in Phase 6, for which it is possible to distinguish two substyles, one in the upper valley and one in the Callango Basin. The diversification was greatest in Phase 8, for which four substyles can be isolated, three very distinctive ones in the Callango Basin, the Ocucaje Basin, and the upper Ica Valley, with a fourth substyle representing a unique mixture of different influences and traditions in the middle Ica Valley. In Phase 9, and possibly as late as Phase 10, an increasingly divergent regional substyle continued to develop in the upper Ica Valley. However, the rest of the valley underwent stylistic unification during Phases 9 and 10, with influences of this unifying movement reaching as far as the upper valley and existing side by side with the uppervalley substyle. The Callango Basin substyle of Phase 8 is in part identical with a contemporary Paracas style phase in the Nasca drainage by which it was probably influenced. The Ocucaje Basin substyle, on the other hand, is the most distinctive and was the one on which the unification of Phase 9 was based.

The existence of divergent substyles within the Ica Valley is a matter of some theoretical interest, because it must be at least in part a reflection of local originality. Stylistic unity over broad areas can only result from very careful imitation when the objects reflecting it are locally made, as domestic pottery is. Local variation implies less dependence on standard models and more initiative on the part of the potters. It is probably no coincidence that the phase in which local differentiation was most extreme in Ica (Phase 8) was followed by the one in which the style of Ica shows the greatest independence of foreign influences (Phase 9), or that the independent style of Phase 9 should have been derived from the most original substyle of Phase 8, that of the Ocucaje Basin. Imitation reflects prestige, and the story of the Paracas style in the Ica Valley can be read as a fluctuating pattern of prestige relationships and local pride. The story is of particular interest, because the Early Horizon, during which it took place, was a period of wide trade relationships and relative cultural unification in the Peruvian Andes, and Ica clearly was not a quiet backwater shut off from the great events of the time. On the other hand, there is no reason to think, just because we happen to know something about it, that this valley was the pivot of Peruvian cultural development. It provides one glimpse, more or less at random, of a very complex scene of human activity.

The completeness and accuracy of our story cannot exceed the limits set by the evidence available to us, and we are painfully aware that our evidence is very fragmentary. No doubt many revisions of interpretation will have to be made as more data become available. Nevertheless, when the balance is finally added, it should not be forgotten that, as recently as 1957, only five years before this study was completed, no more than two phases could be distinguished in any Early Horizon style in Peru. Our study should not be read as the last word in an argument but as the first.

INTRODUCTION TO TABLES

Tables 1 and 2 represent a selected sample of contrasting stylistic features present in the Ocucaje and early Nasca styles, features that serve to distinguish single phases or groups of phases from each other. The two lists are included to illustrate in abbreviated form the way in which the features replace each other in the course of time. Reference to contrasts in patterning and in associations of the features is included in the tables only incidentally or by implication. Although there are contrasts in context and patterning, as well as in features, the former usually require more involved descriptions than are convenient in an abbreviated tabulation, and so are treated in the text.

In table 1 contrasting features are listed first under general topical headings (1-5), and secondly under the headings of the particular theme of which they are a part. A theme, as the term is used here, is a patterned combination of features of shape or design, or of shape and design, the themes being defined, like the features, by contrast and repetition. For example, it is possible to distinguish two distinct front-face head designs in the early part of the Ocucaje style as separate themes (3.1.1, 3.2.1) because of consistent contrasts in some of the features that make them up (5.1, 5.2, 5.4, 5.5, 5.7, 5.8). The significant point is that a given theme is made up of a limited number of positions having standard relationships with one another and a limited number of the features may appear in each position. In the two front-face head designs cited in the example above, the majority of the positions are identical, and only some of the features contrast. However, in comparing such different themes as a gliding bird (3.5.2.1, 5.10) and a front-face feline head (3.1.1, 3.1.2), there are contrasts in positions as well as in features.

Since positions in a theme, like feaures, may undergo alterations, it is necessary to determine at which point a design can still be considered a variant of one theme and at which point it should be assigned to another. Each borderline case must be treated individually. However, as a general rule designs with contrasting positions are assigned to the same theme if all the component features are alike or very similar, if most of the positions of these features are constant, and if a great many features, or markedly contrasting and distinctive features, are involved.

The first section in table 1 is designated "vessel types" (1). A vessel type is here defined as a distinctive shape theme, which may or may not be associated regularly with one or a limited number of decorative themes. All vessels in the Ocucaje and Nasca styles are vessel types in this sense, but only a limited number have been selected for inclusion in table 1. The principal vessel type representing a stylistic theme in Table I is that of spouted bottles (1.1). Spouted bottles are especially useful as an illustration, because they are a distinctive south coast theme with an early origin and a long persistence (Initial Period to Middle Horizon, some 2,300 years), which is represented by many variants furnishing easily identifiable contrasts, both diachronically and synchronically (1.1.1-1.1.8). Most other vessel types in the Ocucaje style are marked by more subtle, less abrupt contrasts in shape themes and are associated with a variety of decorative themes, thus being more easily described in the text than tabulated. However, some additional vessel types that form obvious contrasts and have interesting synchronic and diachronic distributions are also included in the table (1.2-1.11).

The second section in table 1 lists the principal contrasts in design techniques (2), including negative decoration (2.1), incised designs not associated with painted decoration (2.2), incised designs combined with painted decoration (2.3), polychrome resin painting (2.4), slip painting (2.5) and smoked carbon-black surfaces (2.6). Contrasts in other decorative devices, such as differential firing techniques (Ocucaje, 10, Nasca 1), various polishing techniques, or the effects of paste, temper, and firing techniques on surface appearance, are not included in the table, although references to them can be found in the text. Design techniques as such are not treated here as themes, but as independent contrasting features or as component parts of themes which furnish contrasts in position rather than in appearance.

Section 3 is a brief list of some of the major representational design themes, and section 4 tabulates the most easily contrasted abstract themes. Section 5 deals with contrasts in details of a few design themes, here treated as themes in their own right. Contrasts in details of themes are generally the most sensitive indicators of stylistic differences, because it is easiest to make relevant comparisons of contrasting features when the respective features are identifiable as homologues not only by their appearance, but also by their position and their association with other features. Furthermore, features which are not closely related to others in a complex pattern are capable of undergoing more diverse and less easily traceable alterations. The distinction between homologues and analogues among diverse but similar features is of especial importance in a diachronic study.

The emphasis in table 1 is on representational design (3, 5.1-5.11), because themes and homologous contrasting features are most easily recognized in such designs. In representational designs, the positions of the features are limited to some extent by the positions of features in the natural model that is represented. The correspondence in positions between model and design is a guide to the meaning of the features, even where the features vary in appearance. If the positions of features in a representational design theme are altered so far beyond the positions of their natural counterparts that the design is no longer identifiable as a representation of a natural object, we no longer treat it as representational. If a feature which was originally part of a representational design is used outside the context of its original representational theme, we also treat it as abstract rather than representational (for example, the elaborated human eye, 4.1, or the continuous mouth band design, 4.2).

In abstract, especially geometric, designs there is often much contrast in positions as well as in features (4, 5.12-5.15). There being no recognizable model, the observer cannot infer the meaning of the features from their position. As a result, different variations on a single theme in abstract designs are often less obviously similar and their relationship is recognized with greater difficulty than in representational designs. Conversely, it is also easier to mistake coincidentally similar variants of two separate themes as variants of the same theme. The distinction can only be made by determining the antecedents of both. For example, in Phases 8 and 9 a horizontal twined-fret band (5.12.3) is superficially similar to a diagonal twined-fret band (5.13.4, 5.13.5), but the two designs have different antecedents and hence belong to separate themes. On the other hand, the earlier opposing-hook design (5.13.1) is not obviously similar to the later diagonal twined fret, but a diachronic connection between them can be shown.

The principle followed in setting up the chronology presented in this paper is that, in normal stylistic change, most features have a continuous span of distribution in time. The order of features and themes that shows the most continuous distributions should therefore be the chronological order. The seriation was not done by means of a formal statistical analysis, however, because the features are not units that can be treated as equivalent to one another for counting purposes. Any feature is chosen that will demonstrate the chronological sequence, without regard to whether it is a general pottery technique or shape feature with a relatively limited choice of variations and without close relationship to other features (for example smoked black surfaces), or whether it is a design detail that has a unique meaning in an intricate composition (for example, a brow-tip ornament on a front-face feline head). Furthermore, this type of seriation is not possible unless there is already some clue, external to the seriation, to the chronological order. This clue draws attention to chronologically significant contrasts, and the discovery of these contrasts makes it possible in turn to work out the chronological order in more detail. The two processes are reciprocal, and there is nothing random about the way the features are selected and defined.

In the process of refining the chronological sequence we have tried to define a very large number of features and themes which show a continuous distribution in the order which we interpret as the correct one. The chronological distribution of 440 such features has been tabulated in table 2. We believe that it would not be possible to arrange the material of our sample in a different order for which anything like this number of continuously distributed features could be defined.

Having determined that this order is the correct one in terms of our assumptions, we have then sought features that have, or appear to have, split distributions in time when this order is accepted. We have found twenty-one features, which are included in table 2. Of these features, five present special problems in definition or in the sample. One represents the accidental convergence in appearance of two features with different antecedents (see 238: 5.3.1.1.8). In two other instances of split distribution the feature is defined on the basis of the absence of a detail in a composition, a negative definition of a contrast that does not so much represent a reinvention as a coincidental recurrence of an omission (24: 5.9.1.1; 149: 5.10.4.1). In the fourth case, the inadequacy of the sample probably hides the continuous occurrence of the feature (298: 3.4.6). The fifth instance of split distribution seems inexplicable and is probably also due to the inadequacy of the sample (354: 5.11.6.6; see table 1, 5.11.6.6.3 for an explanation).

The remaining sixteen features with split distributions that are listed in table 2 probably or certainly represent authentic instances of the reuse of older features. Their recurrence is not random. It follows interesting patterns of its own which invite hypotheses and questions that should lead to further insights into the archaeology of the Ica Valley. Twelve of these recurrences of old features appear primarily or exclusively in Phase 8 of the Callango Basin substyle or the Ocucaje and Callango Basin substyles jointly (see table 2, 1: 2.2.2; 3: 2.2; 48: 2.6; 65: 2.2.5; 66: 2.2.6; 67: 5.2.1.4; 74: 5.14.1.1; 75: 5.14.1.2; 76: 5.14.2; 78: 2.4.2; 79: 3.4.5; 125: 5.10.7.1). The twelve recurrences actually represent different combinations of only six features or themes, namely 2.2; 2.6; 2.4.2; 3.4.5; 5.10.7.1, and 5.14 (table 1). Two other apparently recurring features appear in Phase 4 (7: 2.2.1.1; 10: 2.2.3). There are also two possibly authentic recurrences in Nasca Phase 1 (65: 2.2.5; 307: 3.8). In most of these examples, associated stylistic features suggest the possibility that the features in question may represent the reintroduction of old traits from another region where they survived longer than at Ica, though the evidence now available is not conclusive. It must be stressed, however, that the identification of every recurrent feature listed above depends on the aspects of the design that have been selected for contrast. There is no feature or theme that cannot be distinguished from the corresponding older one by virtue of its position and its associations with other features.

In establishing the chronological subdivisions of the Ocucaje and early Nasca styles we are relying not only on the arrangement of features, but also, for chronological ordering, on stratigraphic superposition and, for the description of the synchronic units, on the associations in burials, at occupation sites where a phase or group of phases is isolated, and within stratified refuse layers. The reader is reminded that Phase 3 refuse underlies refuse of Phases 5, 7, 8, and 9 at Cerrillos in the upper Ica Valley (Wallace, 1962). In the ravine of Nasca, on the grounds of the Hacienda Cahuachi, the Columbia University Expedition of 1959 uncovered pottery that is in great part identical in style to Ocucaje Phase 10 pottery. This pottery was found at the bottom of trenches, where it was overlain by refuse containing pottery of the first two phases of the Nasca style (Strong, 1957). For further information on evidence of associations and stratigraphy the chapters of the text should be consulted.

The descriptions of phase units in the text may be taken as predictions that can be tested against burial, site, or stratum associations. The predictions may also be tested against unassociated vessels, especially those with site or valley provenience, insofar as the vessels are comprised of several diagnostic features.

Data on site provenience have made it possible to see regional distinctions in Ocucaje Phases 6-9. In tabulating the persistence of features in time, it was necessary to include in table 2 separate columns for each regional substyle, because some features survive longer in one area than in another, and others start earlier in one area than in the others. In many instances, the persistence of a feature can be shown only by tracing it through one particular regional substyle.

TABLE 1

GUIDE TO STYLISTIC FEATURES IN THE OCUCAJE AND NASCA 1 STYLES

The number preceding the colon after the description of each feature corresponds to the feature number in table 2. The numbers following the colon represent style phases. Two phase numbers connected by a dash signify that the feature persisted from the phase indicated by the first number to the phase indicated by the second number. Phase numbers with no prefixes represent phases of the Ocucaje tradition for the entire Ica Valley, or for those parts of the valley that are represented by the sample of a given phase. If the name of a specific subregion of the Ica Valley precedes a phase number, it means that the feature in question (1) is confined to that subregion, (2) is found only rarely elsewhere, or (3) is found elsewhere only in unique rare patterns. If the feature in question is found elsewhere in the valley during other phases, the rest of the phase numbers for that particular feature are prefaced by the term "Ica" to indicate this. Phases of the Nasca style are prefaced by the word "Nasca," and if no number follows it means the feature persists later than Nasca Phase 1. The term "Initial Period" is used whenever the feature in question is known from pottery that is of earlier date than the beginning of the Early Horizon; such pottery is known from the areas immediately north and south of the Ica Valley, primarily the Acari Valley and the areas of Pozo Santo and the Paracas Peninsula. A phase number or numbers placed in parentheses means that the feature is almost certainly present in that phase, although no example is present in the sample. If a question mark follows a phase number in parentheses, it means that there is a fair chance that the feature is present in that phase, but that there is no evidence for it in the existing sample.

The terms "subtriangular," "subrectangular" and "subtrapezoidal" refer to figures that approximate the respective geometric shapes but have slightly rounded sides. The terms "near-rectangular" and "near-trapezoidal" refer to figures that approximate the respective geometric shapes and have straight sides which, however, are joined at slightly irregular angles.

1. Vessel types.

- 1.1 Spouted bottles. 5: Initial Period-Nasca.
 - 1.1.1 Stirrup-spout bottles. 18: 1-4.
 - 1.1.2 Whistling bottles. 2–8.
 - 1.1.2.1 Single-chambered whistling bottles. 55: 2-8.
 - 1.1.2.1.1 Single-chambered whistling bottles with reversed "toy" bird-head whistles. 46: 2-5.
 - 1.1.2.1.2 "Sausage"-shaped whistling bottles and their derivatives with thick, reversed or front-face, birdlike heads at one end. 138: 4-8.
 - 1.1.2.2 Double-chambered whistling bottles with reversed or front-face "toy" bird whistles. 117:4, 5. (Fig. 11, f.)
 - 1.1.3 Spout and bridge to reversed "toy" bird-head bottles. 52: Ica 2-4—upper valley 8. (Figs. 1, o-7, a; 9, d, h; 10, a; 12, g; 13, a; 15, b, e.)
 - 1.1.3.1 Bird-spout bottles as single-chambered whistling bottles. 47: 2-5.
 - 1.1.3.2 Bird-spout bottles that are not whistling bottles. 169: 5-8.
 - 1.1.4 Spout and bridge to human-head bottles. 102: 3-Nasca.
 - 1.1.4.1 Bottles with a modeled human head with rounded, near-cylindrical contours. 88: 3-8. (Figs. 13, c; 15, g; 49, b.)
 - 1.1.4.1.1 Arms and a necklace painted on the vessel body below the head. 63: 3-7. (Rowe, 1962, fig. 54.)
 - 1.1.4.1.2 Necklace, only, painted on the vessel body below the head. 251: 7, 8. (Figs. 13, c; 49, b.)
 - 1.1.4.1.3 Geometric designs painted on the vessel body below the head. 265: 8.
 - 1.1.4.2 Bottles with a modeled human head with rectangular contours and a narrow, slablike, slightly tapering profile. The body of the vessel below the head is

decorated with arms and geometric designs or, rarely, other bowl designs. 168: 5-6 or 7. (Figs. 12, h; 35, a; 36, d.)

- 1.1.4.3 Bottles with a modeled human head with tapering, near-trapezoidal head outlines and narrow, slablike, slightly tapering profile. A full-front human body is painted on the bottle below the head. 329: 8, 9. (Figs. 15, g; 20, c.)
- 1.1.4.4 Bottles with a modeled head with especially naturalistic modeling, especially in the headdress. A full-front human body is represented on the vessel below the head. 451: 10-Nasca. (Figs. 23, e; 60, a.)
- 1.1.5 Spout and bridge to hawk-head bottles, with the wings of the hawk and geometric designs painted on the body of the vessel below the head. 213: 6-8. (Sawyer, 1961, fig. 4, m-o.)
- 1.1.6 Spout and bridge to fox-head bottles. 264: upper valley 7/8 transition-9.
- 1.1.7 Double spout and bridge bottles. 355: lower valley 8, Ica 9-Nasca. (Figs. 8, a, b; 17, a-c; 18, a, b; 20, a-c; 23, a-c.)
 - 1.1.7.1 A human or hawk head modeled at the base of one or both open spouts, with a shelflike recess at or slightly above the bridge attachment. 305: lower valley 8. (Figs. 8, a; 17, a; 18, a, b; 49, c, d.)
 - 1.1.7.2 Plain, thickened spout bases without modeled heads, with a shelflike recess at or below the bridge attachment. 330: 8, 9. (Figs. 18, b; 20, c.)
 - 1.1.7.3 Tapering or cylindrical spouts without shelflike recesses at the bridge attachment. 395: 9-Nasca 1. (Figs. 8, b; 20, a, b; 23, a-e.)
- 1.1.8 Plain white-slipped and sometimes white paste double-spout bottles with red spout tips. 419: 10. (Fig. 23, a-c; pl. 14, a.)
- 1.2 "Dippers" with a hollow handle. 96: Ica 3, (41, 51), upper-valley 6, 7, (81), Ica 9, 10. (Figs. 10, g; 14, f; 23, j.)
- 1.3 Bowls with a pouring lip. 40: 2, 3. (Figs. 9, f, i; 10, b, e.)
- 1.4 Incised grater bowls. 98: 3-10. (Figs. 40, c, e; 50, a-c; 54, f-j, l, m; and pls. 6, b; 15, a.)
- 1.5 Painted imitation grater bowls. 458: Nasca 1.
- 1.6 Pattern-burnished bowls. 348: 8-Nasca 1.
- 1.7 "Stamped circle bowls." 334: 8, 9. Most common in the Callango Basin and increasingly rarer in the higher parts of the valley. (Figs. 40, h; 50, a, b; 54, a-e.)
 - 1.7.1 Plain bowls or grater bowls with unpainted stamped guilloche designs on the inside of the rim. 311: 8. (Fig. 50, b.)
 - 1.7.2 Plain bowls or grater bowls with complete stamped circle-and-dot designs on the inside of the rim. 312: 8. (Fig. 40, h.)
 - 1.7.3 Plain bowls with very small complete stamped circles without central dots on the inside of the rim. 357: 9.
 - 1.7.4 Plain bowls or grater bowls with incomplete stamped circle-and-dot designs on the inside of the rim. 332: 8, 9. (Figs. 50, a; 54, a-e.)
 - 1.7.5 Plain bowls with small stamped wedges on the inside of the rim. 358: 9.
- 1.8 Bowls with red slipped interiors and painted, incised decoration on the outside. 236: upper valley 7, 8.
- 1.9 Large ovoid neckless jars with painted decoration. 396: 9-Nasca 1. (Fig. 26, a.)
- 1.10 Musical instruments of pottery. 9-Nasca.
 - 1.10.1 Drums. 399: 9-Nasca. (Fig. 23, k.)
 - 1.10.2 Panpipes. 400: 9-Nasca.
 - 1.10.3 Trumpets. 401: 9-Nasca.
 - 1.10.4 Whistles. 402: 9-Nasca.
- 1.11 Red-slipped or plain-slipped, polished cooking ollas. 333: lower valley 8, 9. (Figs. 16, l; 22, h, i.)
- 2. Design techniques.
 - 2.1 Negative decoration applied with an organic solution. 4: Initial Period-Nasca 1.

- 2.1.1 Large rings, dots, or line designs on bottles and bowls as well as on utility ware. 2: Initial Period-3. (Fig. 28, d.)
- 2.1.2 Bowls painted with both negative dots and resin-painted incised designs. 237: upper valley 7, 8. (Fig. 39, c; pl. 7, b.)
- 2.1.3 A separate bowl type painted only with negative decoration in special patterns. 349: 8-Nasca 1. (Figs. 41, c; 54, k, n; 64, a-f; and pls. 8, a; 14, b.)
- 2.2 Incised designs without painted decoration on fancy ware. 3: Initial Period-4, 8, 9, Nasca 1.
 - 2.2.1 Surface "roughening." 19: 1-4. (Pl. 1, a, b.)
 - 2.2.1.1 Surface "roughening," outlined by incised lines, used as a background for incised designs. 7: 1, 4. (Pl. 1, a, b.)
 - 2.2.1.1.1 Dentate rocker stamping. 8: 1. (Pl. 1, a.)
 - 2.2.1.1.2 Dentate stamping, not rocked. 106: 4.
 - 2.2.1.1.3 Short, broad, deep, partly wedge-shaped dashes made in soft clay. 9: 1. (Pl. 1, b.)
 - 2.2.1.2 Surface "roughening" outlined by incised lines or filling the central spaces of incised patterns, but not forming the background for incised designs. 41: 2, 3.
 - 2.2.1.2.1 Elongate, shallow, grooved incised dashes. 42: 2, 3.
 - 2.2.1.2.2 Elongate, partly wedge-shaped dashes made in soft clay. 64: (21), 3.
 - 2.2.2 Stamped circles. 1: Initial Period, 3, 4, 8, 9. (Fig. 40, h; pl. 2, b.)
 - 2.2.3 Deep, broad grooved incisions. 10: 1, 4. (Pl. 1, a, b.)
 - 2.2.4 Shallow, broad grooved incisions. 43: 2, 3.
 - 2.2.5 Shallow, incised designs scratched in a hard surface. 65: 3, 8, Nasca 1.
 - 2.2.6 Deep, narrow cutting incisions in soft clay. 66: Ica 3, lower valley 8.
- 2.3 Incised designs combined with painted decoration. 29: 1-Nasca 1.
 - 2.3.1 Incisions separating zones of contrasting colors. 30: 1-Nasca 1.
 - 2.3.2 Deep, broad grooved incisions filled with resin paint. 11: 1.
 - 2.3.3 Deep, broad grooved incisions not filled with paint. 39: 2, 2/3 transition.
 - 2.3.4 Shallow, broad grooved incisions covered with a line of resin paint that is wider than the incision. 61: 2/3 transition-5. (Pl. 3, b.)
 - 2.3.5 Shallow, broad grooved incisions filled with slip paint. 459: Nasca 1.
 - 2.3.6 Narrow cutting incisions not filled with paint. 99: 3-10.
 - 2.3.7 Shallow incisions scratched into a hard surface. 460: Nasca 1.
 - 2.3.8 Large incised circles 2.5 cm or more in diameter. 20: 1-4.
 - 2.3.9 Stamped circle designs. 100: 3-10.
 - 2.3.9.1 Stamped circle designs 5 mm or more in diameter. 97: 3-10.
- 2.3.9.2 Stamped circle designs less than 5 mm in diameter. 335: Ica 8, upper valley 9.
- 2.4 Polychrome resin painting. 26: 1-10.
 - 2.4.1 With incised outlines. 27: 1-10.
 - 2.4.2 Line designs not outlined by incision. 78: Ica (11, 21), 3-5, Callango Basin 8, lower valley 9.
- 2.5 Slip painting. Initial Period-Nasca.
 - 2.5.1 Red slipping. 6: Initial Period-Nasca.
 - 2.5.2 White slipping. 452: 10-Nasca.
 - 2.5.3 Polychrome slipping. 461: Nasca 1 and later.
- 2.6 Smoked carbon-black surfaces. 48: Ica 2-5, Callango Basin 8, Ica 9-Nasca 1.
- 3. Representational decorative figures.
 - 3.1 Feline representations. 28: 1-10; see 5.1, 5.4, 5.6, and 5.9, below, for detail.
 - 3.1.1 Bodiless front-face feline head in the side of stirrup-spout bottles, placed transversely to the axis of the stirrup. 21: 1-4.
 - 3.1.2 Bodiless front-face feline heads in rectangular panels in bowl designs. 143: 4-8.
 - 3.1.3 A profile feline head with an articulated profile feline body used as a bottle design. 107: 4. (Kroeber, 1944, pl. 14, C.)
 - 3.1.4 A front-face feline head with a profile feline body. 183: 5-10.

- 3.1.4.1 A front-face feline head in a rectangular panel with a profile body in a separate, adjoining panel, in bowl designs. 173: 5-8. (Figs. 30, d; 32, b-d; 33, a, b; 34, a, b; 37, a; 38, b; and pls. 5, a; 6, a.)
- 3.1.4.2 Free-standing feline figures with a front-face head and a profile body articulated to the side or bottom of the head, in bowl and bottle designs. 342: lower valley 8-10. (Figs. 41 b, d; 42, a; 45, a, b; 46, b, c; 47, a, c, d; 48, b; 51, a; 57, a-f; and pls. 9, b; 10, a, left; 13, b.)
- 3.1.5 Complete modeled felines with bottle spout and bridge or neck at the top of the body. 323: Ocucaje Basin 8, 9.
- 3.2 Mythical representations with both human and feline attributes, and their derivatives. 57: (1?), 2-8 (see 5.2, 5.5, 5.6, 5.7, and 5.8, below, for detail).
 - 3.2.1 Bodiless front-face head, as design in the side of spouted bottles, placed transversely to the axis of the bridge or stirrup. 56: (1?), 2-7-upper valley 8. (Figs. 1, c-7, b; 29, a.)
 - 3.2.2 A profile head of a figure with or without a human body, as a design in the side of spouted bottles, placed transversely to the axis of the bridge. 62: (1[‡], 2[‡]), 2/3 transition, (3[‡], 4[‡]), 5. (Figs. 27, a; 30, a.)
 - 3.2.3 A bodiless profile head in rectangular panels in bowl designs, and, rarely, on other vessel forms. 134: 4-7. (Figs. 29, c; 30, c, d; 31, b; 34, c-e.)
 - 3.2.4 A bodiless part front-face and part profile head. 5. (Pl. 3, b.)
 - 3.2.5 A double-sided, bodiless face used primarily in Callango Basin bowl designs. 306: lower valley 8. (Fig. 45, b; pl. 8, b.)
- 3.3 The Oculate Being. 350: Ocucaje Basin 8, Ica 9-Nasca.
 - 3.3.1 The Oculate Being proper. 351: Ocucaje Basin 8, Ica 9-Nasca; see 5.11, below, for detail. (Figs. 43, a-c; 52, a, b, d, e; 56; 58; 59, a-c; pl. 9, a.)
 - 3.3.2 Full-bodied human figures with attributes of the Oculate Being. 352: Ocucaje Basin 8, Ica 9-Nasca. (Figs. 44; 52, c.)
 - 3.3.3 Full-bodied human figures shown wearing masks representing the Oculate Being. 420: 10 (Ubbelohde-Doering, 1952, fig. 239).
 - 3.3.4 Various animals with attributes of the Oculate Being, including the killer whale (10-Nasca), felines (10-Nasca 1), the amphisbaena (9/10 transition), and fish (10). 417: 9/10 transition-Nasca 1. (Fig. 63, *a-c*, *e*.)
- 3.4 Human representations without mythical attributes. 103: 3-Nasca; see 5.2 and 5.3, below, for detail. (Figs. 11, g; 12, h; 13, c; 18, c; 20, c; 23, e, f; 28, a; 35, a; 36, d; 48, a; 49, a-c; 52, g; 60, a-c, e, f.)
 - 3.4.1 Modeled human heads on spouted bottles. Front-face human body designs are usually found on the vessel body below the head. 104: 3-Nasca; see also 1.1.4, above. (Figs. 12, h; 13, c; 15, g; 20, c; 23, e; 35, a; 36, d; 49, b; 60, a; and pl. 11, b.)
 - 3.4.2 Jars with anthropomorphic, partly modeled body features, including the representation of a human head and the upper part of the human body. In Phase 9 lower body parts are also represented on some specimens. 182: lower valley 5-10. (Figs. 11, g; 18, c; 23, f.)
 - 3.4.3 Large hollow figurines of full-bodied, front-face figures. 380: 9, 10.
 - 3.4.4 A complete modeled human in seated position, with a bottle spout and bridge in the top of the body. 297: lower valley 8.
 - 3.4.5 Bodiless front-face human heads in rectangular panels in bowl designs. 79: Ica 3-5, Callango Basin 8. (Figs. 28, a, b; 49, a.)
 - 3.4.6 Full-bodied front-face human figures, usually in bowl designs. 298: Callango Basin 8, Ica 10. (Fig. 48, *a*, *c*.)
 - 3.4.7 Trophy-head representations (found in association with representations of the Oculate Being). 403: 9-Nasca. (Figs. 52, c, g; 58.)
- 3.5 Bird representations. 59: 2-Nasca.
- 3.5.1 Modeled birds. 60: 2-Nasca.

3.5.1.1 A slender modeled "toy" bird head with indeterminate bird features, found

usually in reversed position as a closed spout on spout and bridge bottles. In Phases 2-5 these bird heads are whistles (see also 1.1.2 and 1.1.3, above). 53: Ica 2-4—upper valley 8. (Figs. 1, c-7, a; 9, d, h; 10, a; 11, b; 12, g; 13, a; 15, b, e.)

- 3.5.1.2 A thick modeled head on "sausage"-shaped whistling bottles, usually in reversed position, with indeterminate bird features (see also 1.1.2.1.2, above).
 135: Ica 4, (5), upper valley 6-8. (Sawyer, 1961, fig. 4, j-l.)
- 3.5.1.3 Small modeled whistles in the form of indetedminate birds. 404: 9-Nasca.
- 3.5.1.4 A modeled bird head with hawk markings around the eyes, used on spouted bottles, either as a closed spout or, in lower-valley Phase 8, at the base of open bottle spouts. Hawk heads are always shown front-face and are never whistles. Long, spreading wings are drawn on the bottle body below the head (see also 1.1.5, above). 214: 6-8. (Figs. 7, b; 8, a; 13, d; 18, a, b; 49, d; and pl. 11, a.)
- 3.5.2 Drawn birds. 155: 4-Nasca.
 - 3.5.2.1 Gliding birds (for detail see 5.10 below). 152: 4-10.
 - 3.5.2.1.1 In rectangular panels in bowl designs. 144: 4-8. (Figs. 29, f; 30, b; 31, a, b; 32, d; 33, a-c; 34, c; 36, b, e; 37, f, i; 38, c, e, f, j; 49, f, g.)
 - 3.5.2.1.2 Free-standing gliding birds on various vessel forms. 343: 8-10. (Figs. 38, *i*; 42, *e*, *f*; 49, *e*; 51, *b*, *c*; 55, *i*-*k*; 61, *a*, *c*; 62, *c*; 64, *f*.)
 - 3.5.2.2 Naturalistic bird designs of different types, with markings indicating genus or species. 453: 10-Nasca. (Figs. 61, b-g; 62, a, b; 64, d.)
 - 3.5.2.3 Doubled-headed bird designs. 454: 10-Nasca.
- 3.6 The amphisbaena (double-headed worm; not to be confused with double-ended serpentines found in Phases 9 and 10). 179: lower valley 5-9.
 - 3.6.1 Modeled amphisbaena with bottle spouts and bridge, or jar necks in the top, and with feline features in the treatment of the eyes, mouth, "whiskers," and body spots. The majority of the specimens in the sample are from the Ocucaje Basin, and all known specimens are from the lower valley. 180: 5-9. (Fig. 17, c.)
 - 3.6.2 Drawn amphisbaena variants found on spouted bottles, necked bottles, or jars, and handled jugs. They have the same features as the modeled specimens in the respective phases. All known specimens of the standard type are from the Ocucaje Basin, and only a uniquely aberrant Phase 8 specimen is known from the Callango Basin (cf. Rosselló, 1960, Lám. VI, b). 316: Ocucaje Basin 8, 8/9 transition. (Fig. 42, b, d.)
 - 3.6.3 A drawn amphisbaena on a large jar, differing from all other known specimens in having attributes of the Oculate Being and not of felines. 411: 9/10 transition.
- 3.7 Representations of foxes. 261: upper valley 7-9, Ica 10.
 - 3.7.1 Full-bodied profile drawings of figures that appear to be foxes. 258: upper valley 7-9. (Fig. 39, a, d; pl. 5, b.)
 - 3.7.2 Modeled fox heads on spouted bottles. 321: upper valley 8, 9.
 - 3.7.3 Human representations shown wearing a mask representing the head of a fox. 421: 10. (Fig. 60, d.)
- 3.8 Monkeys. 307: lower valley 8, Nasca 1. (Fig. 47, b; pl. 10, b.)
- 3.9 Killer whales. 455: 10-Nasca. (Fig. 63, a-c.)
- 3.10 Fishes. 456: 10-Nasca. (Figs. 63, d-f; 64, f.)
- 3.11 Various types of fruit and seeds. 405: 9-Nasca.
- 3.12 Tools. 406: 9-Nasca.
 3.12.1 Hafted obsidian knives. 407: 9-Nasca.
 3.12.2 Slings. 457: 10-Nasca. (Fig. 62, f.)
- Abstract and geometric designs (for details of additional designs, see 5.12, 5.13, 5.14, and 5.15, below).
- 4.1 Elaborated mythical human eye. 87: 3-8. (Figs. 27, i, j; 29, b, d; 36, g, i; 37, d.)
- 4.2 Continuous mouth band with fangs. 85: 3-7. (Figs. 27, j; 35, f.)
- 4.3 Diagonal step and step-fret designs. 105: (Initial Period?, 1?, 2?), 3-Nasca. (Figs. 27, g; 31, a; 35, g; 36, f; 37, j; 39, g, j; 53, a-d, h; 62, d, e, h, i.)

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- 4.4 "Serpent heads" used in opposing geometric patterns. 359: 9. (Fig. 53, a-c.)
- 4.5 The "bull's eye" design. 324: Ocucaje Basin 8, 9. (Figs. 8, a; 42, c.)
- 4.6 Double-headed serpentines that represent variants of appendages of the Oculate Being used as indepedent designs, primarily on bowls. 394: 9, 10. (Fig. 59, d, e.)
- A sample of some of the changes in design detail.
- 5.1 The feline eye. 31: 1-Nasca.
 - 5.1.1 Pupil.
 - 5.1.1.1 Circular or near-circular eccentric pupils. (There is no comparable eye in the Phase 2 and 3 samples, but the pupil of the subrectangular human eye in Phase 2 is also circular.) 17: 1, (2). (Fig. 1, a.)
 - 5.1.1.2 Lenticular and near-lenticular eccentric pupils. 131: 4-6. (Figs. 2, b-4, b; 29, a, c, e; 30, c, d; 31, a, b; 32, a-d; 36, a.)
 - 5.1.1.3 Pupils with a shallow, irregularly curved base line and a curved parabolic or circular top. 191: 6. (Figs. 4, b; 32, b, c; 34, a, d; 36, a.)
 - 5.1.1.4 Pupils with a straight horizontal base line merging with a horizontal brow-end base, and a parabolic or circular curved top. 218: Callango Basin 6, Ica 7-9. (Figs. 5, a-7, b; 8, b; 33, a-c; 34, b; 37, a; 38, b; 41, b; 46, d; 47, a, c; 51, a.)
 - 5.1.1.5 Triangular pupils with a straight base line. (Found most commonly in the Callango Basin, less commonly in the Ocucaje Basin, and rarely in the upper valley.) 314: 8. (Figs. 41, d; 42, a; 45, a, b; 46, a-c; 47, d.)
 - 5.1.1.6 Pupils with a straight "base" line at the top instead of the bottom of the parabolic or circular curve, in reverse position. 381: 9, 10. (Fig. 57, d.)
 - 5.1.2 Iris band.
 - 5.1.2.1 A short circular band below the pupil, representing the iris. (There is no comparable example in the Phase 2 and 3 samples). 12: 1, (2?). (Fig. 1, a.)
 - 5.1.2.2 A short, shallow curved iris band below the pupil. 118: 4, 5. (Figs. 2, b; 3, a; 29, a, o, e; 30, c, d-3.)
 - 5.1.2.3 A shallow curved iris band below the pupil, with an extension on the side contouring the upcurving brow end. 156: 5. (Fig. 30, d-2.)
 - 5.1.2.4 An extended iris band contouring the respective curvilinear and diagonal lower outlines of pupils and brow ends, with a straight horizontal base line that is continuous across the width of the design panel and is common to both eyes. 164: 5, 6. (Figs. 3, b; 4, b; 31, a.)
 - 5.1.2.5 An extended iris band with straight, parallel horizontal outlines, resulting in a band of even width below each pupil and brow end. 219: Callango Basin 6, Ica 7-9. (Figs. 5, a-8, b; 33, a-c; 34, b; 37, a; 38, a, b; 41, b, d; 42, a; 45, a, b; 46, a-d; 47, a, c, d; 48, b; 51, a.)
 - 5.1.3 Brows.
 - 5.1.3.1 Single brow curves with a short, inflected side projection (the brow end) ending in an uptilted point (the tip). 22: 1-4. (Fig. 1, a, b; pl. 1, a.)
 - 5.1.3.2 Single or double brow curves with short, inflected brow ends in which both brow bands are joined in an uptilted point. 108: 4. (Fig. 29, a.)
 - 5.1.3.3 Double or single brow curves, both curves ending in elongated, up or down turning ends. 130: 4-6. (Figs. 2, b; 3, b; 4, b; 29, c, e; 30, d-2; 31, a; 34, d.)
 - 5.1.3.4 Double or single brow curves ending in elongated, straight horizontal ends. 181: 5-9. (Figs. 3, a; 4, a; 5, a-8, b; 30, c, d-3; 31, b-2; 32, a, c; 33, a-c; 34, a-e; 35, a; 37, a; 38, a, b; 41, b, d; 42, a; 45, a, b; 46, a-d; 47, a, c; 51, a.)
 - 5.1.4 Brow ends.
 - 5.1.4.1 Short inflected brow ends with closed pointed tips projecting beyond the outline of the head (feline heads on stirrup-spout bottles; see 3.1.1, above). 23:
 1-4. (Fig. 1, a, b; pl. 1, a.)
 - 5.1.4.2 Short inflected brow ends with closed pointed tips ending short of the face outline. 109: 4. (Fig. 29, a.)

- 5.1.4.3 Elongated, straight or curved brow ends with plain open tips ending at the face outline or panel border. 119: 4, 5. (Figs. 3, a; 29, e.)
- 5.1.4.4 Double band brows with elongated brow ends ending at the panel border, the lower end having a plain, open tip, and the upper end being terminated by a special tip ornament. 204: 6-8. (Figs. 3, b-7, b; 38, b; 45, b; 46, b, d.)
- 5.1.4.5 Double or triple band brows with short, horizontal brow ends, used in free-standing felines only; all lower brow bands end in plain, open tips, whereas the upper one is capped by a special tip ornament altered to represent an ear. 325: Ocucaje Basin 8, Ica 9. (Figs. 8, a, b; 41, b, d; 42, a; 45, a; 47, c; 48, b; 51, a.)
- 5.1.5 Brow tip ornaments.
 - 5.1.5.1 Brow ends with low, recurved tips. 132: 4-6.
 - 5.1.5.1.1 Brow ends with low recurved tips rounded on both the upper and lower sides. 110: 4, (5?). (Fig. 2, b.)
 - 5.1.5.1.2 Brow ends with low, recurved tips rounded on the upper side only, the lower side being straight. 192: (5?), 6. (Fig. 3, b.)
 - 5.1.5.1.3 Brow ends with low recurved tips in which the upper tip outline is a straight or nearly straight diagonal. 111: 4. (Fig. 29, c.)
 - 5.1.5.2 Upper brow bands terminated by rectangular banded loops. 174: 5-8. (Figs. 4, a, b; 5, a; 6, a; 30, c, d; 31, a, b; 32, a-c; 33, a, c; 34, a, d, e; 36, a; 37, a; 46, c, d.)
 - 5.1.5.3 Upper brow bands terminated by triangular banded loops. 215: Callango Basin 6, Ica 7, 8. (Figs. 5, b; 6, b; 7, b; 32, d; 33, b; 38, a; 45, b.)
 - 5.1.5.4 Upper brow bands terminated by high rectangular bars containing a short perpendicular vertical line terminated by a dot finial or short perpendicular horizontal lines with dot finials. 257: Callango Basin 6 or 7, Ica 7, 8. (Figs. 34, b; 45, a; 46, a, b.)
 - 5.1.5.5 Brow ends or derived brow ends (ears) terminated by high, closed triangular tips. 346: 8-10. (Figs. 7, a; 8, a, b; 38, b; 41, b, d; 42, a; 48, b; 51, a; 57, d, e.)
 - 5.1.5.6 Brow ends or derived brow ends terminated by high, closed, subtriangular tips or ears in which the inner vertical side is curved. 299: Callango Basin 8. (Fig. 47, a, c, d.)
 - 5.1.5.7 Derived brow end tips (ears) in the form of low, broad triangles. 422: 10. (Fig. 57, a.)
- 5.1.6 Circle and dot eye. 423: 10. (Fig. 57, c, e, f.)
- 5.1.7 Wide, asymmetrical composite lenticular eye with a circular black central pupil. 408: 9 (rare), 10-Nasca. (Fig. 57, a.)
- 5.2 Subrectangular to rectangular human eye, used for representations of mythical humans with feline attributes, as well as for humans without mythical feline attributes; see also elaborated eye. 2-8.
 - 5.2.1 Pupil.
 - 5.2.1.1 Circular or near-circular eccentric pupils. 32: 2. (Fig. 1, c.)
 - 5.2.1.2 Narrow, long rectangular eccentric pupils. 86: 3-8. (Figs. 27, i, j; 30, a.)
 - 5.2.1.3 Narrow, long trapezoidal eccentric pupils. 170: (3?, 4?), 5-8. (Figs. 31, b-3; 37, d.)
 - 5.2.1.4 Narrow, short rectangular eccentric pupils. 67: 3, 8. (Figs. 28, b; 30, b; 36, i; 49, a.)
 - 5.2.1.5 Medium broad, short trapezoidal eccentric pupils. 68: 3. (Fig. 2, a.)
 - 5.2.1.6 Broad, short rectangular eccentric pupils. 145: 4-8. (Fig. 29, b.)
 - 5.2.1.7 Broad, short trapezoidal eccentric pupils. 133: 4-6. (Figs. 29, d; 36, g.)
 - 5.2.1.8 Trapezoidal or rectangular eccentric pupils with an overlapping base line usually ending in dot finials. 244: 7, 8. (Fig. 37, d.)
 - 5.2.2 Eye shape.
- 5.2.2.1 Subrectangular eye with four slightly rounded sides and rounded corners. 33: 2. (Fig. 1, c.)
- 5.2.2.2 Subrectangular eye with one straight side (either the top or bottom one) or two straight sides (both the top and bottom ones), the remaining two or three sides being slightly rounded. 69: 3. (Figs. 2, a; 28, a.)
- 5.2.2.3 Straight-sided rectangular eyes. 89: 3-8. (Figs. 27, *i*, *j*; 28, *b*; 29, *b*; 30, *a*, *b*; 31, *b*-3; 36, *i*.)
- 5.2.3 Brow bands over mythical human eyes (not including the elaborated geometricized ones).
 - 5.2.3.1 Brow bands present. 49: 2-5.
 - 5.2.3.1.1 Brow bands with curved sides and curved, inflected ends overlapping the eye base and ending in a point. 34: 2. (Fig. 1, c.)
 - 5.2.3.1.2 Brow bands with straight sides, vertically extended ends overlapping the eye base, and rectangular tips. 70: 3, (4?). (Fig. 2, a.)
 - 5.2.3.1.3 Brow bands with straight sides and horizontally extended open ends ending at the panel border. 157: (4?), 5. (Fig. 30, b-1.)
 - 5.2.3.1.4 Rectangular, straight-sided brow bands which do not overlap the eye base. 80: 3-5. (Figs. 28, b; 30, a.)
 - 5.2.3.2 Brow bands omitted (i.e., the "unframed" eye). 90: 3-8. (Figs. 28, a; 35, a; 36, d; 48, a, c; 49, a-c.)
- 5.3 Various human eye forms used for partly modeled closed bottle spouts, jar necks, and anthropomorphic jar bodies during Phases 6-10, and for drawn figures in Phases 8 and 10, all of them without mythical attributes.
 - 5.3.1 Unframed browless eye, a separate, increasingly differentiated derivative from the subrectangular human eye found on human representations without mythical attributes in Phase 3 (cf. 5.2.2.2, above). 95: 3-8.

5.3.1.1 Eye contours.

- 5.3.1.1.1 Subrectangular eye with a straight top outline and slightly curved side and bottom outlines (cf. 5.2.2.2, above). 81: 3-5. (Figs. 11, g; 28, a, left.)
- 5.3.1.1.2 Eye with a straight top outline and a deep, sometimes slightly irregular curve forming the outline at sides and bottom. 82: 3-5. (Fig. 28, a, right.)
- 5.3.1.1.3 Eye with a shallow curved top outline and a subtrapezoid or deep parabolic curve forming the outline at sides and bottom. 193: (5?), 6. (Fig. 36, d.)
- 5.3.1.1.4 Eye as 5.3.1.1.3, above, but with the shallow curve at the bottom and the deeply curved or subtrapezoidal outline at the top, in reversed position. 167:
 5, 6. (Fig. 35, a.)
- 5.3.1.1.5 Eye with a straight horizontal base line and a high elliptical or parabolic top outline. 206: Callango Basin 6-8. (Fig. 49, b, c.)
- 5.3.1.1.6 Eye with a straight horizontal base line and a widely diverging, often proportionately shallow, parabolic top outline. 300: Callango Basin 8. (Fig. 18, c.)
- 5.3.1.1.7 Lunate eye with a straight horizontal top outline and a widely diverging parabolic bottom outline. This eye form has a coincidental resemblance to 5.3.1.1.2, above, but the parabolic curves diverge more widely and tend to have less rounded sides. 382: 9, 10. (Fig. 52, g.)

5.3.1.1.8 Circular eye. 238: upper valley 7, 8, Ica 10. (Figs. 15, g; 60, f.)

5.3.1.2 Pupils.

- 5.3.1.2.1 Subrectangular eccentric pupils. 71: 3.
- 5.3.1.2.2 Parabolic bottom outline of the eccentric pupils, making a lunate (Phases 3-5) or lenticular (Phase 6) pupil. [A coincidentally similar eye used for a human representation in Phase 9 is actually a mythical attribute signifying the Oculate Being, derived from concentric half-circle eyes used for human impersonations of the Oculate Being in Phase 8 (cf. fig. 44; Kroeber, 1944, pl. 14, B; Tello, 1959, Lám. I, B)]. 84: 3-6. (Figs. 28, a; 36, d.)

- 5.3.1.2.3 Eccentric pupil indicated by a shallow curve in the center of the eye. 198:
 6, 7. (Figs. 13, c; 35, a.)
- 5.3.1.2.4 Eccentric pupil indicated by a straight horizontal line in the center of the eye. 252: 7, 8. (Figs. 15, g; 18, c; 49, b, c.)
- 5.3.1.2.5 Central "floating" lenticular pupils. 360: 9.
- 5.3.1.2.6 Central "floating" slit pupils. 361: 9. (Fig. 52, g.)
- 5.3.2 The "coffee bean" eye, consisting of a horizontal slit in an oblong, raised clay protrusion. 383: 9, 10. (Figs. 20, c; 23, e; 60, a.)
 - 5.3.2.1 Short oval clay protrusion with a short, "floating" slit. 384: 9, 10. (Figs. 20, c; 23, c; 60, a.)
 - 5.3.2.2 Long, narrow clay protrusion with a long slit. 424: 10.
- 5.3.3 Plain slit eyes. 425: 10. (Fig. 60, b, c, e.)
- 5.3.4 Circle-and-dot eyes. 426: 10. (Fig. 60, f.)
- 5.3.5 Wide asymmetrical composite lenticular eye with one high parabolic or elliptical curve and one shallower parabolic or very shallow curve, and a complete circular pupil in the center (see also feline eye 5.1.7, above). 427: 10. (Fig. 23, f.)
- 5.4 Front-face feline mouth on feline representations without mythical attributes.
 - 5.4.1 Lips.
 - 5.4.1.1 Full, double-lipped mouth. 25: 1-9.
 - 5.4.1.1.1 Broad, large, contoured lips filling most of the lower part of the oval face, with the exception of a bare, light colored "chin" spot at the base. The side ends of the lips are bordered by the curved oval of the face outline. The top and bottom outlines of the lip band are contoured around the fangs, in such a way that they form two pointed projections separated by a concave line. 13: 1. (Fig. 1, a; pl. 1, a.)
 - 5.4.1.1.2 As in 5.4.1.1.1, above, but the upper lip outline is straight or nearly straight horizontal and is not contoured around the fangs. 44: 2-4. (Rowe, 1962, fig. 53.)
 - 5.4.1.1.3 Broad, large, contoured lips filling all or most of the lower part of the oval face outline, as in 5.4.1.1.1, above. The upper lip is either contoured into two points separated by a concave line, as in 5.4.1.1.1, or it consists of a single concave line across the entire face. The lower part of the lip band is outlined by the face outline, leaving no contoured "chin" spot, in contrast to 5.4.1.1.1. 428: 10. (Fig. 57, a, c.)
 - 5.4.1.1.4 Rectangular, straight-sided lip bands with straight, vertical-sided ends (see also 5.5.1.2.1, below). 150: 4-9. (Figs. 29, e; 31, a; 32, a-d; 33, a-c; 34, a, b; 36, a; 37, a; 38, a; 41, b, d; 45, a, b; 46, a-d; 47, a, c; 51, a.)
 - 5.4.1.1.5 Straight, horizontal lip bands with curved vertical side ends (see also 5.5.1.2.2, below). 158: 5. (Fig. 30, c, d.)
 - 5.4.1.2 Lipless mouth. 429: 10. (Fig. 57, d-f.)

5.4.2 Teeth.

- 5.4.2.1 Central horizontal band enclosed by a lip band, with a double row of teeth indicated. 14: 1. (Fig. 1, a; pl. 1, a.)
- 5.4.2.2 Central horizontal band enclosed by a lip band, with a single row of teeth indicated. 58: 2 or 3-10.
- 5.4.2.3 Central horizontal band enclosed by a lip band, without tooth subdivisions. 308: 8. (Fig. 48, b.)

5.4.3 Position of fangs.

- 5.4.3.1 Two pairs of opposing fangs at the side ends of the tooth band, the fangs projecting beyond the teeth but remaining within the lip band, which is contoured around them. 15: 1. (Fig. 1, *a*; pl. 1, *a*.)
- 5.4.3.2 As in 5.4.3.1, above, but the pointed tips of the lower fangs project slightly through the upper lip, which is not contoured around them. 45: 2-4. (Rowe, 1962, fig. 53.)

- 5.4.3.3 Two pairs of opposing fangs on each side of the central teeth, not at the side ends of the tooth band. The fangs project beyond the teeth but end at the outer lip outlines. 147: 4-8. (Figs. 29-34; 36, a; 37, a; 38, a; 42, a; 45, a, b; 46, a-d.)
- 5.4.3.4 Feline mouth without fangs. 344: lower valley 8, Ica 9, 10. (Figs. 41, b, d; 47, a, c, d; 48, b; 51, a; 57, a, b-f.)
- 5.4.4 Shape of fangs (see also 5.5.4.4, below).
 - 5.4.4.1 Subtriangular pointed fangs with slightly curved sides. 16: 1, (2?, 3?). (Fig. 1, a; pl. 1, a.)
 - 5.4.4.2 Triangular straight-sided pointed fangs. 146: (3?), 4-8. (Figs. 42, a; 45, b.)
 - 5.4.4.3 Irregular trapezoidal fangs with straight or slightly curved sides and blunted tips. 141: 4, (5), 6-8. (Figs. 29, e; 32, a-c; 34, c, d; 37, a; 46, c.)
 - 5.4.4.4 Fangs with evenly curvilinear tapering sides, broad bases, and blunted tips. (This form is derived from Phase 4 fangs in mythical feline mouths, described under 5.5.4.3, below.) 166: 5, 6. (Figs. 3, a; 30, a, c, d; 31, a; 32, d; 36, a.)
 - 5.4.4.5 Irregular, very unevenly tapering fangs with straight or unevenly curved sides and blunted tips. 175: 5-8. (Figs. 4, b; 5, b; 6, b; 30, b; 33, a-c; 34, a, b, e; 45, a.)
 - 5.4.4.6 Straight or nearly straight, diagonal, parallel-sided fangs. 199: 6, 7. (Figs. 3, b; 6, a.)
 - 5.4.4.7 Straight, vertical, parallel-sided fangs. 255: 7, 8. (Figs. 5, a; 46, a, b.)
 - 5.4.4.8 Inverted triangular or trapezoidal fangs with the broad end at the outer lip outlines and the narrow or pointed end on the inside of the mouth. 310: 8. (Figs. 7, b; 38, a; 46, d.)
- 5.4.5 Plain horizontal slit mouth. 430: 10. (Fig. 57, e.)
- 5.5 Symbolic feline mouth on mythical front-face heads, primarily in designs on bird-spout bottles. 2-8.
 - 5.5.1 Lips.
 - 5.5.1.1 Agnathic jaw without a lower lip, and with a high, subrectangular upper lip "curl" at each end arching over the fangs. 35: 2. (Fig. 1, c.)
 - 5.5.1.2 Full, double-lipped mouth. 91: 3-8. (Figs. 2-7; 29, a; 30, b.)
 - 5.5.1.2.1 Rectangular, straight-sided lip bands with straight, vertical side ends. 92: 3, (41), 5-8. (Figs. 2, a; 3, b; 4, a; 5-7; 30, b.)
 - 5.5.1.2.2 Straight, horizontal lip bands with curved vertical side ends. 129: 4, 5, and rare survivals in 6. (Figs. 2, b; 3, a.)
 - 5.5.1.2.3 Straight, horizontal lip bands with a decorative point at the side ends. 112: 4. (Fig. 29, a.)
 - 5.5.1.2.4 Straight, horizontal lip bands without side ends. 202: 6-8. (Figs. 4, b; 6, a.)
 - 5.5.1.2.5 Straight-sided lip bands with rectangular lip "curls" arching over opposing fangs. 301: Callango Basin 8. (Rosselló, 1960, Lám. I top.)
 - 5.5.2 Teeth.
 - 5.5.2.1 Agnathic jaw with triangular, pendent teeth. 36: 2. (Fig. 1, c.)
 - 5.5.2.2 Double-lipped mouth showing a single row of vertical tooth subdivisions in a central band the same width as the lip bands. 93: 3-8. (Figs. 2-7.)
 - 5.5.2.3 A geometricized double checkerboard row of "teeth" in alternating black and white checks. 266: 8.
 - 5.5.3 Position of the fangs.
 - 5.5.3.1 Agnathic jaw with two long upper fangs that fill the interior of each lip "curl" and protrude downward, cutting through the lower outlines of the face. 37: 2. (Fig. 1, c.)
 - 5.5.3.2 Double-lipped mouth with two sets of opposing fangs. 94: 3-8. (Figs. 2-5; 45, b.)
 - 5.5.3.2.1 Pointed opposing fangs protruding slightly through the lips. 72: 3. (Figs. 2, a; 27, j.)

- 5.5.3.2.2 Pointed opposing fangs protruding prominently through the lips. 113: 4. (Figs. 2, b; 29, a.)
- 5.5.3.2.3 Blunted opposing fangs ending at the lips. 176: 5-8. (Figs. 3-7, a; 30, b.)
- 5.5.3.2.4 Slightly elongated, blunted opposing fangs enclosed by rectangular lip "curls." 302: Callango Basin 8.
- 5.5.3.2.5 Pointed, triangular opposing fangs ending at the lips. 205: 6-8. (Fig. 45, b.) 5.5.4 Shape of fangs.
 - 5.5.4.1 Very long, slender fangs with parallel, straight-sided stems and pointed tips in which one side is straight or slightly curved, whereas the other side is sharply curved. 38: 2. (Fig. 1, c.)
 - 5.5.4.2 Shorter, broader fangs than those described under 5.5.4.1, above, but with the same contouring (i.e., parallel, straight-sided stems, and pointed tips in which one side of the tip is straight or slightly curved, whereas the other is sharply curved). 73: 3. (Figs. 2, a; 27, j.)
 - 5.5.4.3 Fangs proportionately longer and more slender than those described under 5.5.4.2, above, but not so long as the type described under 5.5.4.1. They also differ from the other types in having slightly converging, curved stem outlines and nearly evenly tapering tips coming to a point slightly to one side of the vertical axis of the fangs. 114: 4. (Figs. 2, b; 29, a.)
 - 5.5.4.4 Shapes of the fangs the same as those of felines proper described under 5.4.4.2-5.4.4.8, above. 177: 5-8.
- 5.6 Lip whiskers on both mythical and nonmythical feline mouths. 151: 4-9.
 - 5.6.1 Lip whiskers projecting from the upper corners of the mouth, in the form of one or two angular bands or triangular projections. 115: 4. (Figs. 2, b; 29, a, e.)
 - 5.6.2 Two straight horizontal bands extending from the sides of the lips to the panel borders; they occupy a narrower space than the vertical lip ends. 159: 5, (6?). (Fig. 30, d.)
 - 5.6.3 Three straight horizontal bands extending from the lip ends to the panel borders, forming rectangular blocks the same width as the vertical lip ends. 194: 6, (7?). (Fig. 3, b.)
 - 5.6.4 Two L-shaped bands extending from the sides of the lips to the panel borders or face outline, and forming blocks the same width as the lip ends. 254: 7, 8, (9?). (Fig. 48, b.)
 - 5.6.5 A U-shaped band extending from each side of the lips to the face outline, and forming a block the same width as the vertical lip ends. 326: Ocucaje Basin 8, 9. (Figs. 41, d; 51, a.)
 - 5.6.6 A rectangular block extending horizontally from each lip end to the face outline and containing two horizontal short perpendicular lines ending in dot finials. 303: Callango Basin 8. (Fig. 47, a, c, d.)
- 5.7 Chin whiskers on mythical faces in designs on spouted bottles. (Chin whiskers on feline figures proper in Phases 8 and 9 of the Ocucaje Basin substyle are not included, because they belong in a different category and their derivation is not evident at present.) 137: 4-8.
 - 5.7.1 Chin whiskers proper.
 - 5.7.1.1 A high, narrow subtrapezoid below the center of the lip, with single, slightly concave outlines. 116: 4. (Figs. 2, b; 29, a.)
 - 5.7.1.2 A broad subtrapezoid below the center of the lip, with single, slightly concave outlines. 160: 5. (Fig. 3, a.)
 - 5.7.1.3 A broad subtrapezoid below the center of the lip, with three or four slightly concave outlines. 195: 6. (Fig. 4, a, b.)
 - 5.7.1.4 A broad trapezoid below the center of the lip, with three or four straight outlines. 196: 6, 7. (Fig. 5, a.)
 - 5.7.1.5 A broad rectangle below the center of the lip, with three or four straight, vertical outlines. 245: 7, 8. (Figs. 5, b; 6, a; 7, b.)

- 5.7.1.6 A continuous horizontal band below the entire lip, containing various narrowband designs. 262: 7/8 transition, 8. (Figs. 6, b; 7, a.)
- 5.7.1.7 "Chin whisker" band omitted. 267: 8.
- 5.7.2 Filler designs in the center of the subtrapezoids, trapezoids or rectangles described under 5.7.1, above.
 - 5.7.2.1 None. 120: 4, 5. (Figs. 3, a; 29, a.)
 - 5.7.2.2 A single circle-and-dot filler. 121: 4, (5). (Fig. 2, b.)
 - 5.7.2.3 One elaborated eye design. 189: 6. (Figs. 3, b; 4, a, b.)
 - 5.7.2.4 Two elaborated eye designs. 230: 7. (Figs. 5, a, b; 6, a.)
 - 5.7.2.5 A very long, narrow, modified elaborated eye design. 268: upper valley 8. (Fig. 7, b.)
- 5.7.3 Filler designs on either side of the subtrapezoids, trapezoids, or rectangles described under 5.7.1, above.
 - 5.7.3.1 None. 127: 4-6. (Figs. 3, a; 4, a, b; 29, a.)
 - 5.7.3.2 A single circle-and-dot filler. 123: 4, (5), 6. (Figs. 2, b; 3, b.)
 - 5.7.3.3 An elaborated eye design. 246: 7, 8. (Fig. 7, b.)
 - 5.7.3.4 A horizontal ball-band design consisting of one, two, or three circles without dot centers. 231: 7. (Fig. 6, a.)
 - 5.7.3.5 Two circles without dot centers separated by vertical color zones. 232: 7. (Fig. 5, b.)
 - 5.7.3.6 Short perpendicular horizontal lines. 233: 7. (Fig. 5, a.)
- 5.8 Forehead decoration on mythical faces on spouted bottles.
 - 5.8.1 Ornaments projecting above the nose.
 - 5.8.1.1 None. 50: 2-5. (Figs. 1, c; 2, a, b; 3, a.)
 - 5.8.1.2 Double-ray appendage with two rounded recurved tips. 163: 5, 6. (Fig. 3, b.)
 - 5.8.1.3 Triple-ray appendage with two rounded recurved tips. 234: 7. (Fig. 5, a.)
 - 5.8.1.4 Triple-ray appendage with two rectangular recurved tips. 203: 6-8. (Figs. 4, a, b; 5, a, b; 6, b.)
 - 5.8.1.5 Triple-ray appendage with plain, open ends. 247: 7, 8.
 - 5.8.1.6 Triple-ray appendage in which the central band is broad and is filled with alternating horizontal short perpendicular lines (the "ladder" design). 221: 6/7 transition, 7, 8. (Figs. 5, a; 6, b.)
 - 5.8.1.7 Triple-ray appendage in which the central band is broad and filled with a narrow-band step design. 269: 8.
 - 5.8.1.8 Tiered triple-ray appendage with rectangular recurved tips. 270: 8. (Fig. 7, b.) 5.8.2 Ornaments projecting above the brow ends.
 - 5.8.2.1 None. 54: 2-8. (Figs. 1, c; 2, a, b; 3, a, b; 4, a, b; 5, a; 6, b.)
 - 5.8.2.2 Triple-ray appendages with two rectangular recurved tips. 248: 7, 8. (Fig. 5, b.)
 - 5.8.2.3 Triple-ray appendages with plain open ends. 249: 7, 8. (Fig. 6, a.)
 - 5.8.2.4 Tiered triple-ray appendages with rectangular recurved tips. 263: 7/8 transition, 8. (Fig. 7, b.)
 - 5.8.3 Space fillers in the "forehead" area.
 - 5.8.3.1 None. 51: 2-6, 8. (Figs. 1, c; 2, a, b; 3, a; 4, a, b.)
 - 5.8.3.2 One stamped circle. 122: 4, (5), 8. (Fig. 29, a.)
 - 5.8.3.3 Two stamped circles and dots on either side of the nose ornament. 190: 6. (Fig. 3, b.)
 - 5.8.3.4 Many stamped circles without dot centers on either side of the nose ornament. 250: 7, 8. (Figs. 5, a; 6, a.)
 - 5.8.3.5 Vertical or horizontal ball-band designs separating color zones in the spaces between the nose and brow end ornaments. 222: 6/7 transition, 7, 8. (Figs. 5, b; 6, b; 7, a, b.)

5.8.3.6 Crosses. 271: 8.

- 5.9 "Forehead" decoration on natural feline representations, primarily in bowl designs.
- 5.9.1 Ornaments projecting above the nose.

- 5.9.1.1 None. 24: 1-8, 10.
- 5.9.1.2 A short rectangular block with trapezoidal and diamond-shaped ornaments in it. 161: 5. (Fig. 30, d.)
- 5.9.1.3 A single-ray appendage with two rectangular recurved tips. 197: 6, 7. (Figs. 32, c; 37, a.)
- 5.9.1.4 A double-ray appendage with two rectangular recurved tips. 211: 6-8. (Figs. 32, d; 34, b; 42, a; 45, b; 46, a, c; 47, c, d.)
- 5.9.1.5 Two or three vertical bars, the outer ones containing short, vertical perpendicular lines with dot finials. 212: 6-8. (Figs. 32, b; 33, b, c; 38, a; 45, a; 46, d.)
- 5.9.1.6 A triple-ray appendage with a segmented center, and with two straight diagonal recurved tips that give a shovel-shaped appearance to the tip of the ornament. 280: Ocucaje Basin 8. (Fig. 41, b.)
- 5.9.1.7 A segmented triangle. 281: Ocucaje Basin 8. (Fig. 41, d.)
- 5.9.1.8 One or two plain vertical bars. 304: Callango Basin 8. (Figs. 47, a; 48, b.)
- 5.9.1.9 A vertical bar with a segmented center and a forked tip. 362: 9. (Fig. 51, a.)
- 5.9.2 Ornaments other than those above the nose are rarely used, and if they occur consist of one or two stamped circle or ball-band designs. 256: 7, 8.
- 5.10 Gliding birds. 4-10.
 - 5.10.1 Types of gliding birds.
 - 5.10.1.1 Plain-beaked gliding birds. 153: 4-10. (Figs. 29, f; 30, b; 31, a, b; 32, d; 33, a-c; 34, c; 36, b; 37, f; 38, j; 42, f; 49, e-g; 51, b, c; 61, a, c; 62, c.)
 - 5.10.1.2 "Clothespin"-headed gliding birds. 200: upper valley 6-8. (Figs. 36, e; 37, i; 38, c, e, f.)
 - 5.10.1.3 Abbreviated geometricized derivations of "clothespin"-headed gliding birds. 243: upper valley 7 (rare), Ica 8. (Figs. 38, d, g, h; 42, e; 55, k.)

5.10.2 Patterning.

- 5.10.2.1 Gliding birds enclosed in rectangular panels. 148: 4-8. (Figs. 29, f; 30, b; 31, a, b; 32, d; 33, a-c; 34, c; 36, b, e; 37, f, i; 38, c, e, f; 49, f, g.)
- 5.10.2.2 Gliding birds in which the body and the head are placed in two separate panels. 272: 8. (Fig. 38, j.)
- 5.10.2.3 Free-standing gliding birds not enclosed in panels. 345: 8-10. (Figs. 38, i; 42, f; 49, e; 51, b, c; 55, i-k; 61, a, c.)
- 5.10.3 Body forms.
 - 5.10.3.1 Gliding birds in panels, with an evenly proportioned or irregular T-shaped body and a line or irregular bar space filler in the center of the spaces left between the tail and the panel borders. These space fillers create the effect of outline banding around the T-shaped body and panel border. In succeeding phases the outer outline bands adjoining the panel borders can be seen to represent wings (cf. 5.10.3.4-5.10.3.8, below). 123: 4, 5. (Figs. 29, f; 30, b.)
 - 5.10.3.2 Gliding birds in panels, with an evenly proportioned T-shaped body, the spaces between the tail and panel borders being outlined with a band of even width that forms a rectangular or subrectangular frame around a plain, band-wide space of a contrasting color. 171: Ica 5, Callango Basin 6-8. (Figs. 31, a, b; 32, d; 33, c; 49, f.)
 - 5.10.3.3 Gliding birds in panels, the spaces between the tail and panel borders being outlined on three sides only, the vertical outline band at the tail end being omitted. 185: upper valley 6. (Fig. 36, b.)
 - 5.10.3.4 Long narrow gliding birds in panels, in which the central space and both vertical ends in the erstwhile outline banding (cf. 5.10.3.2, 5.10.3.3) are omitted, leaving just two horizontal bands between the tail and the panel border. The outer wing bands and central tail consist of narrow horizontal banding, the tail being only very slightly broader than the other bands, which are of a single modular width. This variant also differs from 5.10.3.3, above, in that the outer wing bands are separated from the plain band intervening

between wing bands and tail by a free floating or short perpendicular line ending in dot finials, and terminated at the front, and sometimes at the back, by a recurved tip, an effect created by the terminal segments of the outer wing bands. The vertical T-bar of the body is either omitted, or it is narrower than in the forms described under 5.10.3.1-5.10.3.3, and is centered approxivalley 8. (Figs. 29, f; 31, b; 33, c; 37, f.)

mately across the middle of the eye. 293: upper valley 7, 8. (Figs. 37, f, i; 38, c, e, f.)

- 5.10.3.5 Gliding birds in panels, which resemble 5.10.3.4, above, in that the central space and both vertical ends of the older outline banding are usually omitted. However, this variant differs from the upper-valley one in that the outer wing space is a tapering band much narrower than the central tail, that the horizontal dividing lines cross the entire body space and do not end in dot finials, and that the tail is slightly trapezoidal, being wider at the back. 216: 6-8. (Figs. 33, a, b; 34, c; 36, e; 49, g.)
- 5.10.3.6 Free-standing gliding birds with long, tapering wings and rectangular shoulders. 328: Callango Basin 8, Ica 9. (Fig. 51, b.)
- 5.10.3.7 Free-standing gliding birds with long, tapering wings and rounded shoulders. 341: 8-10. (Figs. 38, i; 49, e; 51, c; 61, a.)
- 5.10.3.8 Free-standing gliding birds with long, horizontally spreading wings. 385: 9, 10. (Fig. 61, a.)
- 5.10.4 Body decoration.
 - 5.10.4.1 Gliding birds with unsegmented wings. 149: 4-9. (Figs. 29, f; 30, b; 31, a, b; 32, d; 33, c; 36, b; 49, f; 55, j.)
 - 5.10.4.2 Gliding birds with an unsegmented tail. 124: 4, 5. (Figs. 29, f; 30, b; 31, a, b.)
 - 5.10.4.3 Gliding birds with segmented wings and tail. 220: 6-10. (Figs. 33, a, b; 34, c; 36, e; 37, f, i; 38, c, e, f; 49, e, g; 51, b, c; 61, a.)
 - 5.10.4.4 Gliding birds without space fillers in the front of the body. 154: 4-10.
 - 5.10.4.5 Gliding birds with stamped circle space fillers in the front of the body. 336: 8, 9. (Figs. 38, i; 49, e.)
 - 5.10.4.6 Gliding birds with small rectangular space fillers in the front of the body. 337: 8, 9. (Fig. 51, b.)
- 5.10.5 Head forms, plain-beaked gliding birds.
 - 5.10.5.1 A rectangular or near-rectangular loop, usually of slightly irregular shape, with the beak passing back to front through the center. 136: Ica 4, 5-upper valley 8. (Figs. 29, f; 31, b; 33, c; 37, f.)
 - 5.10.5.2 A near-rectangular loop of irregular shape, in which the vertical outlines above and below the back of the beak project forward in arcs or straight diagonals. The rest of the beak outline band shows less consistent irregularities.
 172: 5-8. (Figs. 30, b; 31, a; 32, d; 33, a; 49, f, g.)
 - 5.10.5.3 A near-rectangular loop in which the outlines of the back interior are merged with the outlines of the beak, projecting directly forward in straight or concavely curved diagonals. 208: Ica 6, Callango Basin 7, 8. (Figs. 33, b; 34, c; 36, b.)
 - 5.10.5.4 The head is a small, simplified contraction of a T-shaped body to which a beak is joined directly. The top of the T-bar is usually enclosed with rays terminating in rectangular recurved tips that give the effect of a head crest (the "crested" gliding bird). 309: Callango Basin 8. (Figs. 38, *i*, *j*; 49, *e*.)
 - 5.10.5.5 A simplified version of the T-bar head described under 5.10.5.4, above, in which the recurved ray crest is omitted and the entire head is enclosed in a rounded outline with the beak attached to the side. 363: 9. (Sawyer, 1961, fig. 10, a, b.)
 - 5.10.5.6 A rounded head with the beak attached to the top. 431: 10. (Fig. 61, a.)
 - 5.10.5.7 Headless gliding birds in which the beak is attached directly to the eye and body. 338: 8, 9. (Figs. 51, b; 55, j.)

5.10.6 Head forms, "clothespin"-headed gliding birds.

- 5.10.6.1 A rounded head with two straight, converging rays, which represent the beak, forming a continuation of the head band. 186: upper valley 6. (Fig. 36, e.)
- 5.10.6.2 A rounded head with two straight, parallel horizontal rays representing the beak and forming a continuation of the head band. 240: upper valley 7, 8. (Figs. 37, i; 38, e.)
- 5.10.6.3 A headless gliding bird in which the "clothespin" beak is attached directly to the eye and body. 273: upper valley 8. (Fig. 38, c, f.)
- 5.10.7 Beak forms, plain-beaked gliding birds.
 - 5.10.7.1 Hooked, downward curving beaks ending in a point; the upper outline is strongly curved and the lower outline is straight and downward slanting. 125: Ica 4, 5, lower valley 8, (Ica 9?). (Figs. 29, f; 30, b; 49, e.)
 - 5.10.7.2 Hooked, downward curving beaks ending in open tips, the outlines not meeting in a point, the bottom outline slightly-to-strongly curved and downward slanting. 139: Ica 4, 5, Callango Basin 6-8. (Figs. 31, a, b; 32, d; 33, a, c.)
 - 5.10.7.3 Beaks merging with the back outline of the head quadrangle. 209: Ica 6, Callango Basin 7, 8. (Figs. 33, b; 34, c; 36, b.)
 - 5.10.7.4 Symmetrical, concave-sided beaks ending in open tips at or near the center of the vertical panel border. 207: Callango Basin 6-8. (Fig. 33, b.)
 - 5.10.7.5 Straight-sided beaks ending in open tips at or near the center of the vertical panel border. 253: 7, 8. (Figs. 37, f; 49, g.)
- 5.10.8 Beak forms, "clothespin"-headed gliding birds.
 - 5.10.8.1 Tapering, straight-sided rays separated by a central space and ending in recurved tips in front. 187: upper valley 6. (Fig. 36, e.)
 - 5.10.8.2 Parallel, straight-sided horizontal rays not separated by a central space and ending in recurved tips in front. 241: upper valley 7, 8. (Figs. 37, *i*; 38, *e*.)
 - 5.10.8.3 Parallel, straight-sided horizontal rays, which may or may not be separated by a central band of the same width and which end in recurved tips at the front as well as at the back end. This beak form is joined to a headless eye and body. 274: upper valley 8. (Fig. 38, c, f.)
- 5.10.9 Beak tips, "clothespin"-headed gliding birds.
 - 5.10.9.1 Tips recurved on the outside with a short rounded curve that is not joined to the head. 201: upper valley 6, (7?), 8. (Fig. 36, e.)
 - 5.10.9.2 Tips recurved on the outside with a long, straight diagonal line joined to the head at the base of the beak. 223: upper valley 7. (Fig. 37, i.)
 - 5.10.9.3 Tips recurved on the outside with a short, straight diagonal line not joined to the head. 275: upper valley 8.
 - 5.10.9.4 Tips recurved on the outside with two straight lines at right angles which are not joined to the head and which give the tip a rectangular appearance. 242: upper valley 7 (rare), 8 (common). (Fig. 38, e.)
 - 5.10.9.5 Tips recurved on the outside with two short straight lines joined at an obtuse angle; one of these lines is formed by the horizontal panel border, the other being a short straight diagonal from the panel border to the beak ray, which is not joined to the head. This tip form has an irregular quadrangular appearance. 276: upper valley 8. (Fig. 38, c, f.)
 - 5.10.9.6 Tips recurved at the front and back with curved arcs, the outside center being a straight line formed by the horizontal panel border. 277: upper valley 8.
 - 5.10.9.7 Tips recurved at the front, back, and outside center, with a full, curved loop. 278: upper valley 8. (Fig. 38, d.)
- 5.11 The Oculate Being (see 3.3.1, above; not including 3.3.2-3.3.4). Ocucaje Basin 8, Ica 9-Nasca.
 - 5.11.1 Types.
 - 5.11.1.1 A bodiless representation consisting of an unoutlined front-face head indicated by eyes with appendages, a nose with an appendage over it, a mouth with a

protruding tongue, and "whiskers" at the sides of the lips. This figure is not associated with hafted knives or trophy heads. 282: Ocucaje Basin 8. (Fig. 43, a-c.)

- 5.11.1.2 A full-bodied representation consisting of an outlined front-face head in horizontal or vertical position, and a special body with human features, attached to the side or base of the head and drawn in profile in such a way that it appears to be floating. This figure is usually shown in association with trophy heads, hafted knives, or both, which it is holding in its hands or which may be attached to various parts of the figure as appendages, or shown alongside it. 409: 9-Nasca. (Fig. 52, a, b, d, e; Sawyer, 1961, fig. 10, a.)
- 5.11.2 Eyes.
 - 5.11.2.1 Large concentric circle eyes consisting of two, three, four, or five circular outlines. 347: Ocucaje Basin 8, 9-Nasca 1. (Figs. 43, a-c; 52, b; 56; 58; 59, a.)
 5.11.2.2 Single circle or circle-and-dot eyes (used for smaller representations in bowl)
 - 5.11.2.2 Single circle or circle-and-dot eyes (us designs). 432: 10. (Fig. 59, c.)

- 5.11.3.1 Slightly upcurved subrectangular "smiling" mouth with lip bands and a central tooth band, in which the upper and lower outlines are very slightly curved and the side ends are straight, with angular corners. 283: Ocucaje Basin 8. (Fig. 43, a.)
- 5.11.3.2 Strongly upcurved subrectangular "smiling" mouth, in other respects as 5.11.3.1, above. 412: (9?), 9/10 transition. (Fig. 56.)
- 5.11.3.3 Slightly upcurved "sausage"-shaped "smiling" mouth with lip bands and a central tooth band, as in 5.11.3.1, above, but with one or both side ends rounded rather than straight and angular. 284: Ocucaje Basin 8. (Fig. 43, b.)
- 5.11.3.4 Downcurved "sauage" shaped mouth with lip bands and a central tooth band. 285: Ocucaje Basin 8.
- 5.11.3.5 Horizontal oval "sausage"-shaped mouth with lip bands and a central tooth band. 286: Ocucaje Basin 8. (Fig. 43, c.)
- 5.11.3.6 Strongly upcurved "sausage"-shaped "smiling" mouth, in other respects as 5.11.3.3, above. 397: 9-Nasca 1. (Figs. 52, a, d; 58.)
- 5.11.3.7 Strongly upcurved subrectangular or "sausage".shaped "smiling" mouth in which two white "tooth" bands frame a central red "lip" band, in reverse position. 410: 9-Nasca.
- 5.11.3.8 "Smiling" mouth with angular rather than curved outlines, with strongly upturned straight sides. 433: 10. (Fig. 59, c.)
- 5.11.3.9 Upturned "smiling" mouth consisting of a lip band only, with or without a central slit in place of the tooth band. 386: 9, 10. (Fig. 59, a.)
- 5.11.3.10 Upturned "smiling" mouth consisting of a lipless tooth band. 387: 9, 10. (Fig. 59, c.)

5.11.3.11 Upturned "smiling" mouth consisting of an upcurved slit only. 434: 10.

5.11.4 Nose.

5.11.4.1 Over-all shape and position.

- 5.11.4.1.1 An elliptical or parabolic curve above the center of the lip. 287: Ocucaje Basin 8. (Fig. 59, a.)
- 5.11.4.1.2 In place of the nose there is a painted area between the eyes in a contrasting color from the adjoining areas, outlined at the top and bottom with curved lines. 327: Ocucaje Basin 8, Ica 9. (Fig. 43, b.)
- 5.11.4.1.3 A human modeled nose. 288: Ocucaje Basin 8. (Fig. 43, c.)
- 5.11.4.1.4 A vertical band halving the face. 398: 9-Nasca 1.
 - 5.11.4.1.4.1 A long band with evenly centered concave sides. 364: 9. (Fig. 52, a, d.)
 - 5.11.4.1.4.2 A band of varying lengths with uneven sides which may be concave or waisted at varying points, usually near the upper part of the nose, often with nearly straight diverging or tapering sides. 447: 10, Nasca 1. (Fig. 58.)

^{5.11.3} Mouth.

- 5.11.4.1.4.3 Nose indicated by two small "nostril" slits only (in smaller figures in bowl designs). 435: 10. (Fig. 59, a.)
- 5.11.4.1.4.4 No nose indicated (in smaller figures in bowl designs). 436: 10. (Fig. 59, c.)
- 5.11.4.2 Top end in vertical band noses (see 5.11.4.1.4).
 - 5.11.4.2.1 The top end is broadened, with a straight horizontal tip that does not reach the top outline of the head. 365: 9. (Sawyer, 1961, fig. 10, a.)
 - 5.11.4.2.2 The top end is broadened, with a straight horizontal tip joined to the top outline of the head. The nose is painted a different color from the band outlining the head. 415: 9/10 transition, 10. (Fig. 56.)
 - 5.11.4.2.3 The top end of the nose is merged with the head outlines, so that each outline of the nose is continuous with the inner outline of the head. The nose is painted the same color as the head-outline band, and thus forms a continuation of it, making it appear that the head-outline band projects into the face. 448: 10, Nasca 1. (Fig. 58.)
- 5.11.4.3 Bottom tip in vertical band noses.
 - 5.11.4.3.1 Elongate rounded or circular, with a small rectangular or stamped circle filler in the center. 366: 9. (Sawyer, 1961, fig. 10, a.)
 - 5.11.4.3.2 Long triangular, with sharp pointed side and end corners and one or two small rectangular or stamped circle fillers in the center. 367: 9. (Fig. 52, a.)
 - 5.11.4.3.3 Long forked ("serpent headed"), with sharp-pointed side and end corners and two small rectangular or stamped circle fillers in the center. 368: 9. (Fig. 52, d.)
 - 5.11.4.3.4 Long, forked ("serpent headed"), with rounded sides and small rectangular filler elements or plain slit "nostrils" in the center. 437: 10. (Fig. 58.)
 - 5.11.4.3.5 Short, forked ("serpent headed") or short triangular, with sharp pointed side and end corners and two small rectangular fillers. The Phase 10 variants may also have small slit or dot "nostrils." 388: 9, 10. (Ubbelohde-Doering, 1952, fig. 239.)
 - 5.11.4.3.6 Short, forked ("serpent headed"), with rounded sides and small rectangular or plain slit filler elements in the center. 438: 10.
 - 5.11.4.3.7 A plain horizontal line at the base of the nose. 418: 9/10 transition, 10, Nasca. (Fig. 56.)
- 5.11.5 Head outline.
 - 5.11.5.1 None. 289: Ocucaje Basin 8. (Fig. 43, a-c.)
 - 5.11.5.2 A near-oval head with a flattened top, drawn with a single outline. 369: 9. (Fig. 52, a, b, d; Sawyer, 1961, fig. 10, a.)
 - 5.11.5.3 A heart-shaped head outline with a "widow's peak" point at the top center and framed by an outline band of a contrasting color. In one example the outline band of the head merges with body outline bands and outlines of appendages. 416: 9/10 transition, 10. (Figs. 56; 58; 59, a, c.)
- 5.11.6 Appendages.
- 5.11.6.1 Tongue.
 - 5.11.6.1.1 A short triangular or subtriangular pointed tongue attached to the lower lip. 340: Ocucaje Basin 8, Ica 9, 10. (Fig. 43, a, b.)
 - 5.11.6.1.2 A long, broad, tapering, serpentine tongue with a pointed tip, which projects either from the lower lip or from the lower part of the tooth band. The tongue is enclosed by an outline band that usually represents either the continuation of the outer part of the face or the continuation of the lip band. In Phase 10 the tongue sometimes has a serrated outline. 389: 9, 10. (Figs. 52, a, d; 58, c.)
 - 5.11.6.1.3 A short pointed appendage which is the continuation of the face outline below the mouth. 413: 9/10 transition. (Fig. 56.)

- 5.11.6.1.4 A long, serpentine, tapering appendage which is the continuation of the lower part of the face outline below the mouth, and which ends in a point. It may or may not have serrated outlines. 439: 10. (Fig. 58.)
- 5.11.6.1.5 A very long, serpentine and winding appendage consisting of a band of even width which does not taper, which may or may not have serrated outlines, which, on the larger figures, usually terminates in a forked "serpent head" tip, and which is further decorated with segmenting cross lines and sometimes with feet near the base of the "serpent head." 440: 10. (Fig. 59, a; see also fig. 59, d, e.)
- 5.11.6.1.6 None (in some of the smaller bowl designs). 441: 10.
- 5.11.6.2 Appendages above the nose or top center of the head.
 - 5.11.6.2.1 A short triangular or spreading fan-shaped vertical bar above the nose. 290: Ocucaje Basin 8. (Fig. 43, a, b.)
 - 5.11.6.2.2 A broad, tapering serpentine appendage with a pointed tip, extending from the top center of the head, and framed by narrow outline bands (see also 5.11.6.1.2, above). 390: 9, 10. (Sawyer, 1961, fig. 10, a.)
 - 5.11.6.2.3 A narrow, nontapering, curving band of even width enclosed by plain outline bands and ending in a plain horizontal tip or a "serpent head." 391: 9, 10.
 - 5.11.6.2.4 A very long, winding, narrow, serpentine band of even width projecting from the top center of the head, enclosed by plain or serrated outline bands, and terminating in a forked "serpent head" or some other head form. This type of appendage is used primarily for large representations of the Oculate Being on large pottery objects such as drums, trumpets and ovoid neckless jars. 442: 10.
 - 5.11.6.2.5 A simple, narrow, curving band of even width projecting from the top center of the head or forming an extension of the head outline and merging with the contour band on the top or "back" of the "floating" body. It usually ends in a short projection from the base of the back, either with a pointed tip, or terminated by a trophy head or the representation of a hafted triangular obsidian blade. On some specimens the end projection is omitted. This appendage is used primarily for the smaller representations of the Oculate Being in bowl designs, where space is restricted. 443: 10. (Fig. 59, a-c.)
 - 5.11.6.2.6 The representation of a triangular obsidian blade hafted in a handle and standing up vertically from the top center of the head. (Actual hafted knives of this type have been found in Phase 10 burials from the Ocucaje Basin.) 392: 9, 10. (Fig. 56.)
- 5.11.6.3 Appendages above the eyes.
 - 5.11.6.3.1 A short, hooked, segmented band with a pointed tip and a small circle filler, projecting from the top of each eye. 291: Ocucaje Basin 8. (Fig. 43, b.)
 - 5.11.6.3.2 A broad, tapering, serpentine segmented band, enclosed by outline bands and ending in a pointed tip, projecting from the top of each eye. (Unsegmented bands of this type are used in Phase 9, where, however, they project from the top of the head rather than from the eyes; cf. 5.11.6.2.2, above.) 292: Ocucaje 8. (Fig. 43, a.)
 - 5.11.6.3.3 A long curving band of even width, enclosed by plain outline bands and ending in a "serpent head" or trophy head, projecting from the top of the head above each eye. (In Phase 8 a similar band with a different tip shape is found on a human figure with attributes of the Oculate Being, but there is no example of such a feature on a Phase 8 representation of the Oculate Being proper.) 370: 9.
 - 5.11.6.3.4 A long, curving, slightly tapering band with one straight and one ser-

rated outline, projecting from the top of the head above each eye. 414: 9/10 transition. (Fig. 56.)

- 5.11.6.3.5 A very long, winding, narrow, serpentine band of even width and with serrated outlines, projecting from the top of each eye, and ending in a forked "serpent head," a trophy head, or a contracted version of the head of an Oculate Being. This type of appendage is used primarily for large representations of the Oculate Being on large pottery objects such as drums, trumpets and ovoid neckless jars (see also 5.11.6.2.4, above). The patterning is often slightly modified to adjust to the available space. Sometimes one of the eye appendages is omitted, or an appendage projects from the base of the head instead of from the area above the eye. 449: 10, Nasca 1. (Fig. 58.)
- 5.11.6.3.6 The representation of a triangular obsidian blade hafted in a handle and standing up vertically from the top of the head above one or both eyes (see also 5.11.6.2.6, above). 393: 9, 10. (Fig. 58.)
- 5.11.6.3.7 No appendage above the eyes. The omission of eye appendages is the result of space restrictions and is usually found in the smaller design representations on bowls. 444: 10. (Fig. 59, *a*, *c*.)
- 5.11.6.4 "Side whiskers" at mouth, eyes and sides of the face.
 - 5.11.6.4.1 A straight or slightly curved block of three short bands in contrasting colors attached to the side of the lips. The bands have plain horizontal tips. The appearance of these appendages is the same as that of "chin whiskers" of Ocucaje Basin 8 feline representations without human or mythical attributes, and only the position of the "whiskers" in the face of the Oculate Being is different in order to leave more space for the protruding tongue. In one representation in which the tongue is omitted, the "whiskers" are in their feline position on each side below the lips. 293: Ocucaje Basin 8. (Fig. 43, a, b.)
 - 5.11.6.4.2 A straight horizontal block of three short bands in contrasting colors projecting from the outer side of each eye. (The same projections are found on masks of human impersonations of the Oculate Being in Phase 10.) 294: Ocucaje Basin 8.
 - 5.11.6.4.3 Straight, slightly curved, or strongly curved blocks of three bands with plain horizontal tips. The sets of three bands are of varying lengths and are attached to the face outline near the sides of the mouth, the sides of of the eyes, and sometimes the space between eyes and mouth as well. 371:
 9. (Fig. 52, b.)
 - 5.11.6.4.4 Same as in 5.11.6.4.3, above, but with some of the appendages ending in long, diagonal recurved (''shovel-shaped'') tips, an Ocucaje Basin feature that is not used for this type of appendage in Phase 8, although it does appear in Phase 8 in other contexts. 379: 9, 9/10 transition. (Fig. 56.)
 - 5.11.6.4.5 Very long bands, sometimes enclosed by serrated outlines like other types of appendages in Phase 10. In Phase 10 such "side whiskers" are used only if space permits, and they are usually limited to one set at the lower side of the face. 445: 10. (Figs. 58, 59, c.)
- 5.11.6.5 Complete "forehead sets" above the eyes, which support nose and eye appendages and which probably always represent metal ornaments. 353: Ocucaje Basin 8-Nasca.
 - 5.11.6.5.1 A "brow band" curving above each eye and bridging the top of the nose. A vertical bar with a face at the end projects from above the nose, and from the tops and sides of the brows above the eyes. 295: Ocucaje Basin 8. (Fig. 43, c.)
 - 5.11.6.5.2 Similar to 5.11.6.5.1, above, but with an additional rectangular frame which forms a horizontal band above the "brow" curves, and straight or

slightly curved vertical bands at each side of the face, from which the appendages project. 372: 9.

- 5.11.6.5.3 A wide horizontal band above the forehead, without the "brow" curves or side bands, the only appendage being a short vertical projection from the center, with a face indicated at the base of the projection instead of at the tip. Actual ornaments of this type, made of thin sheet gold, were found in the majority of the Phase 10 burials from the Ocucaje Basin, and have also been found in burials from Paracas (cf. Bennett and Bird, 1960, fig. 35, center). The small faces at the base of the vertical central projection on all the metal forehead ornaments found are abbreviated small representations of the Oculate Being. 450: 10, Nasca 1. (Sawyer, 1960, fig. 1, a.)
- 5.11.6.6 Face ornaments supporting head appendages in the lower part of the face. (They probably also represent metal ornaments, although no actual metal specimens are known to us.) 354: Ocucaje Basin 8, Ica 9, Nasca.
 - 5.11.6.6.1 A band contouring the face between the eyes and the mouth, with small head projections extending from the sides of the band. 296: Ocucaje Basin 8. (Fig. 43, b, c.)
 - 5.11.6.6.2 A band contouring the face between eyes and mouth, similar to 5.11.6.6.1, above, but merging with the "brow" curves above the eyes, and bordered by additional vertical side bands which support the small head appendages. 373: 9.
 - 5.11.6.6.3 Since mouth masks are the rule in Nasca-style representations derived from the Oculate Being, and since actual specimens of thin sheet gold have been found in burials of Nasca style phases, one might expect similar mouth masks to be present in Ocucaje Phase 10. However, to date neither a representation of such masks nor an actual specimen has been found for Phase 10.
- 5.12 Narrow-band designs, single-step figures to horizontal twined frets.
 - 5.12.1 A narrow-band design consisting of parallel horizontal single-step outlines drawn in a continuous series, in which the horizontal narrow-band borders form part of the design. The symmetry of the design is one of simple translation in which adjoining outlines form step bands painted in contrasting colors of red and white or yellow (for type of symmetry see Shepard, 1956, p. 269, fig. 37-1). 260: Ica 7, upper valley 8, 9. (Fig. 37, b.)
 - 5.12.2 A narrow-band design consisting of horizontal single-step outlines, in which pairedstep outlines enclosing contrasting color areas interlock in a pattern of bifold rotational symmetry (for type of symmetry, see Shepard, 1956, p. 269, fig. 37-4). 279: upper valley 8. (Fig. 7, b.)
 - 5.12.3 A narrow-band design as in 5.12.1, above, but with the difference that pairs of step outlines are separated by central quadrangles, in Phase 7 usually with dot centers, in the later phases without dot centers. This design is called a *horizontal twined fret*, because it creates the appearance of a twined band. 259: upper valley 7, Ica 8, 9. (Figs. 6, b; 37, c; 43, a; 47, c; 55.)
 - 5.12.4 A narrow-band design consisting of parallel diagonal single-step outlines drawn in a continuous series, in which the horizontal narrow-band borders form a part of the design. Adjoining step outlines enclose fields of contrasting colors in red and white or yellow, in the shape of diagonal bands terminating in triangular spaces at the top and bottom, which are usually filled with central dots. The interlocking pattern of the painted figures is one of bifold rotational symmetry. 224: upper valley 7. (Fig. 37, h.)
 - 5.12.5 As in 5.12.4, above, but with pairs of step outlines separated by quadrangular central spaces, usually with dot fillers in the center as well as in the triangular border spaces at top and bottom. 235: upper valley 7, 7/8 transition. (Fig. 37, e.)

- 5.12.6 A narrow-band design consisting of parallel diagonal single-step bands drawn in a continuous series with interlocking ends, a modification of 5.12.4, above. The horizontal narrow-band borders do not form an integral part of the design, unlike the designs described under 5.12.1-5, above, but the triangular spaces between the border outlines and the design figures are decorated with central dots, thus receiving the same treatment as the designs described under 5.12.4 and 5.12.5, in which the corresponding triangular spaces do form an integral part of the design. 225: upper valley 7. (Fig. 37, g.)
- 5.13 Broad-band designs, opposing hook design to diagonal twined frets. 217: upper valley 6, 7, Ica 8, 9.
 - 5.13.1 A broad-band design consisting of opposing hook bands separated by diagonal bands spaced to form trapezoids bordered at the top and bottom by the horizontal broad-band borders. The arms of the opposing hooks end near the top and bottom of the design band, respectively. The spaces between the band figures are decorated with central dots. 188: upper valley 6. (Fig. 36, h.)
 - 5.13.2 A broad-band design which resembles the opposing hook design described under 5.13.1, above, with the difference that the diagonal bands separating the hooks are joined at the ends, forming triangles rather than trapezoids, in a continuous zigzag band and that the opposing hooks end near the center of the diagonals. The spaces between the bands are decorated with dot fillers, as in 5.13.1. 226: upper valley 7. (Fig. 37, *l*.)
 - 5.13.3 A broad-band design very similar to 5.13.2, but with sections of the opposing hook figures and the separating zigzag band joined to form a series of diagonal Z-shaped figures that create the illusion of a twined band. This design is called a *diagonal twined fret*. Dot fillers are used in intervening spaces, as in 5.13.1 and 5.13.2, above, and in some designs bar fillers are used in the central spaces. 227: upper valley 7. (Fig. 37, k.)
 - 5.13.4 The diagonal two-ply twined fret as a continuous design in a broad band, as in 5.13.3, above. It differs from the latter in that the design figures are smaller, so that the border outlines of the broad band do not frame the design. Dot fillers are usually not used. 322: upper valley and Ocucaje Basin 8, Ica 9. (Figs. 39, b; 53, g.)
 - 5.13.5 The diagonal two-ply twined fret as a continuous design in a narrow band. It differs from the narrow-band designs proper in that the horizontal borders of the narrow band do not form an integral part of the design, although they border the tips of the diagonal step figure. Dot fillers are usually not used. The transfer of the diagonal twined fret to a narrow-band design is a modification of this design which seems to have originated in the lower valley, to judge by its much greater popularity there during Phase 8. 331: lower valley 8, Ica 9. (Figs. 43, b; 48, a; pls. 8, b; 10, b; 11, a.)
 - 5.13.6 The diagonal three-ply twined fret as a continuous design in a broad or mediumbroad band, in which the band borders may or may not touch the tips of the design figures but do not form an integral part of the design. This design is a modification of the two-ply twined fret. It has the appearance of a three-ply twined band. Filler dots may or may not be used in the central and end spaces. 315: 8. (Figs. 39, e, i; 45, b; and pl. 7, a, right).
 - 5.13.7 The paired diagonal two-ply twined fret as a continuous design in a broad band. It differs from other twined fret designs in consisting of paired instead of single bands. 375: 9. (Tello, 1959, figs. 34, 35.)
 - 5.13.8 Imitation two-ply twined fret as a continuous design in a broad band. It differs from diagonal twined fret designs proper in consisting of two horizontal zigzag bands with their points touching, leaving quadrangular spaces in the center between the bands. This design is used in the same contexts as diagonal twined fret bands proper in Phases 8 and 9. 356: upper valley 9. (Fig. 55, *l*.)

- 5.13.9 The incomplete diagonal twined fret, in which the outer outlines of the twined fret designs are omitted and only the inner outlines are used. 376: 9. (Figs. 53, f, i-k; 55, c.)
- 5.13.10 Complete diagonal twined fret unit designs consisting of one, two, or several links terminated at each end of the unit by an extension of the diagonal bands. 339:
 8, 9. (Figs. 42, g, h; 51, a-2; 53, k.)
- 5.13.11 Complete diagonal twined fret unit designs consisting of one, two, or several links terminated at each end of the unit by a complete, closed diamond figure. 377: 9. (Fig. 53, e.)
- 5.13.12 Incomplete diagonal twined fret unit designs consisting of one, two, or several links placed in horizontal or diagonal units and terminated at each end either by an extended diagonal line or by a complete, closed diamond figure. 378: 9. (Figs. 53, f, k; 55, c.)
- 5.14 Guilloche.
 - 5.14.1 Painted guilloche with stamped-incised outlines. 83: Ica 3-5, (Callango Basin 61, 71), Callango Basin 8.
 - 5.14.1.1 Continuous horizontal guilloche. 74: Ica 3, Callango Basin 8. (Figs. 28, h, 45, a, 48, c, 49, e; and pl. 2, a.)
 - 5.14.1.2 Horizontal guilloche segments consisting of several links. 75: Ica 3, Callango Basin 8. (Fig. 45, b-2.)
 - 5.14.1.3 Vertical or horizontal guilloche segments consisting of two links. 126: Ica 4, 5, (Callango Basin 6?, 7?), Callango Basin 8. (Pl. 3, b.)
 - 5.14.2 Unpainted, stamped-incised guilloche. 76: Ica 3, lower valley 8.
 - 5.14.2.1 Continuous horizontal guilloche (on the interior of "stamped circle bowls"; see 1.7.1, above). 313: lower valley 8. (Fig. 50, b.)
 - 5.14.2.2 Horizontal guilloche segments consisting of several links. 77: 3.
 - 5.14.3 Painted line guilloche without incised outlines. 317: Callango Basin 8, 8/9 transition.
 - 5.14.3.1 Continuous guilloche. 318: Callango Basin 8, 8/9 transition. (Figs. 40, d, f; 46, a.)
 - 5.14.3.2 Horizontal or vertical guilloche segments. 319: Callango Basin 8, 8/9 transition. (Pl. 9, b.)
- 5.15 Vertical panel dividers in bowl designs.
 - 5.15.1 Single plain outline band. 101: 3-10. (Figs. 27, g; 29, b, c; 38, b, j; 39, j; 42, c; 45, b; 46, a; 47, a; 53, a, d, g; 57, f; 62, i.)
 - 5.15.2 Two adjoining plain outline bands in contrasting colors, usually red and white. 178: 5-8. (Figs. 33, c; 34, a, b; 38, b; 46, c.)
 - 5.15.3 Three adjoining plain outline bands in contrasting colors, usually red and white. 183: 5-10. (Figs. 32; 33; 35, b; 36, a, b, f, i; 39, a, g; 46, a, d; 49, a; 62, e.)
 - 5.15.4 Two or three outline bands in contrasting colors, the outer ones ending in recurved tips. 320: Callango Basin 8, 8/9 transition (occasionally found farther up the valley as down-valley influence). (Figs. 46, b; 47, d.)
 - 5.15.5 "Ladder" design bands. 142: 4-8.
 - 5.15.5.1 ''Ladder'' design band consisting of short perpendicular horizontal bars, enclosed by a plain vertical outline band on each side. 140: Ica 4, (Callango Basin 5, 6), Callango Basin 7, 8. (Fig. 29, e, f.)
 - 5.15.5.2 "Ladder" design band consisting of short perpendicular horizontal incised lines without dot finials, enclosed by a plain vertical outline band on each side.
 162: 5. (Fig. 30, b-d.)
 - 5.15.5.3 "Ladder" design band consisting of short perpendicular horizontal incised lines with dot finials, enclosed by one or two plain vertical outline bands on each side. 208: 6-8. (Fig. 34, c.)
 - 5.15.5.4 "Ladder" design band consisting of short perpendicular horizontal incised

lines with dot finials, as in 5.15.5.3, above, but not enclosed by vertical outline banding. 228: upper valley 7. (Fig. 37, a.)

- 5.15.6 Vertical twined fret band consisting of two or three rectangular loop segments, enclosed by a plain vertical outline band on each side. 165: Ica 5, Callango Basin 6. (Fig. 31, a, b.)
- 5.15.7 A band halved by a vertical incised zigzag line, and enclosed by a plain vertical outline band on each side. 229: upper valley 7.
- 5.15.8 A single incised line. 374: 9.
- 5.15.9 Diagonal step design bands or blocks used as panel dividers, enclosed by one, two, or three plain vertical outline bands in a variety of contrasting colors. 446: 10. (Fig. 62, d, e, h, i.)

TABLE 2

GUIDE TO STYLISTIC FEATURES OF TABLE 1, LISTED IN THE ORDER OF THEIR PHASE ATTRIBUTION

The letters I.P. in the column head below refer to Initial Period styles. The Ocucaje style is separated from the styles of the Initial Period and the Nasca style, respectively, by solid lines. Style phases are separated from each other by dotted lines. If a single column is used for a style phase, it means that regional distinctions could not be made, either because the sample is too small (especially for Phases 1, 2, 4, and 5), or because the evidence indicates that regional distinctions were small or nonexistent (Phases 3, 10, Nasca 1). If several columns are used for a single style phase, they signify regional subdivisions in the Ica Valley, and a distinguishing symbol is used above each column, in addition to the phase number, to indicate the location; "C" stands for the Callango Basin, "O" for the Ocucaje Basin, "U" for the upper valley above the town of Ica, "M" for the middle valley between the town of Ica and the Ocucaje Basin, and "L" for the lower valley including both the Callango and Ocucaje basins and sometimes the lower parts of the middle valley as well. An "x" mark in the center of a column indicates the presence of the feature in that phase. An "x" mark across a division line means that a feature appears first, last, or exclusively on specimens that are transitional between two phases. If a space is left blank it signifies that there is definite evidence of absence, or that the feature is not present in the sample and that at the moment there is no reason to think that it was present. The symbol "Pr." means "probable presence" and the symbol "Po." means "possible presence," where there is reason to believe that the feature was present or may have been present, even though the sample from the Ica Valley does not include an example. The symbol "P.a." signifies "probable absence" of a feature from the Ocucaje Basin substyle in Phase 8. Dashes signify gaps of information in an otherwise continuous sequence of features, or gaps in information for some substyles, especially for upper-valley Phase 9, middle-valley and Ocucaje Basin Phase 8, and lower-valley Phase 7. The order in which the features are listed is determined first by the phase of origin and second by the length of the continuous time span. In phases 6-9, in which regional subdivisions can be distinguished, features of up-valley origin are listed first, features of subregions lower in the valley are listed next, and features that are found simultaneously in two or more subregions of the valley are shown last.

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| <u>, 7</u> | , S | <u>5</u> | ່າວ | <u>5</u> | 5 | 1 0 | લં | i. | Ċ | à | ci | <u>5</u> | <u>.</u> | | | à | 5. | , S | 5 | | က် | õ | i | က် | ŝ | ò | r, | ŝ | 61 | с. С | | 2 | 2 | ~ |
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| 1.4 | 5.5 | 3 | 5.] | | ŝ | <u>.</u> | 4 | 21 | m | 'n | ů. | ъ. | ō. | õ | õ | õ | <u>.</u> | ō. | | 5. | 5. | 5. | ù. | 5 C | 5. | , S | ы. С | , S | 5 | ů. | ŗ. | 5 | 5. | - 2 |
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| 5.7.2.4 | 5.7.3.4 | 5.7.3.5 | 5.7.3.6 | 5.8.1.3 | 5.12.5 | 1.8 | 2.1.2 | 5.3.1.1.8 | 5.10.3.4 | 5.10.6.2 | 5.10.8.2 | 5.10.9.4 | 5.10.1.3 | 5.2.1.8 | 5.7.1.5 | 5.7.3.3 | 5.8.1.5 | 5.8.2.2 | 5.8.2.3 | 5.8.3.4 | 1.1.4.1.2 | 5.3.1.2.4 | 5.10.7.5 | 5.6.4 | 5.4.4.7 | 5.9.2 | 5.1.5.4 | 3.7.1 | 5.12.3 | 5.12.1 | 3.7 | 5.7.1.6 | 5.8.2.4 | 1.1.6 |
| 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 |



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5.8.1.8 5.8.3.6 5.8.1.7

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| 1.9 | 0.5 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5. | 1.6 | 1.6 | 1.6 | 1.6. | 5.8 | 3.7 | 3.9 | 3.11 | 3.15 | 1.6. | ę | .1.6 | 1.1 | 3 | 2.1 | 0.3. | 1.3. | 1.3. | 1.4 | 1.6. | 1.6. | 1.6. | 1.6. | 1.6. | | 7.3 | _ |
| 5.9 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 3.4 | 5.1 | 5.3 | 5.3 | 5.3 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 4.6 | 1.1 | 1.9 |
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| 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 |
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| | I.P. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Index of features in table 1 | | 5.11.3.6 | 5.11.4.1.4 | 1.10.1 | 1.10.2 | 1.10.3 | 1.10.4 | 3.4.7 | 3.5.1.3 | 3.11 | 3.12 | 3.12.1 | 5.1.7 | 5.11.1.2 | 5.11.3.7 | 3.6.3 | 5.11.3.2 | 5.11.6.1.3 | 5.11.6.3.4 | 5.11.4.2.2 | 5.11.5.3 | 3.3.4 | 5.11.4.3.7 | 1.1.8 | 3.3.3 | 3.7.3 | 5.1.5.7 | 5.1.6 | 5.3.2.2 | 5.3.3 | 5.3.4 | 5.3.5 |
| | Feature nos. | | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 |

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| | | | | | | | 4.3 | 4.4 | 4 | 9 | 4 | 2 | 9 | 4 | 5 | 2 | 5 | | 4.2 | с С | 5 | 8 | | | | | | | | | | | |
| 1.1.3 | 1.2 | 20 | .5.6 | 2.2 | .3.8 | .3.11 | 4.1. | 4.1. | 4.3 | .4.3. | .6.1. | .6.1. | .6.1. | .6.2 | .6.2 | .6.3. | .6.4. | 6.9 | 4.1. | 4.2 | .6.3 | .6.5. | 4.4 | 2 | 2.2 | 2.3 | | _ | 2 | | ñ | ~ | ~ |
| 5.4 | 5.4. | 5.4. | 5.10 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.11 | 5.15 | 5.11 | 5.11 | 5.11 | 5.11 | 1.1. | 2.5. | 3.5. | 3.5. | 3.9 | 3.10 | 3.12 | 1.5 | 2.3. | 2.3. | 2.5. |
| 88 | 50 | 8 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | ₿ 0 | 41 | 1 2 | 43 | 44 | 45 | 46 | 47 | 48 | 4 9 | 22 | 51 | 52 | 53 | 54 | 55 | 56 | 22 | 28 | 59 | 8 | - 19 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

APPENDIX 1

BURIAL ASSOCIATIONS OF SPECIMENS ILLUSTRATED

Chiquerillo, Burial 1.—(Figs. 1, c; 9, d-f; Sawyer, 1961, fig. 4, a, b; Rowe, 1962, fig. 49.) Information on association furnished by Pablo L. Soldi to Alan R. Sawyer.

Chiquerillo, Burial 2.—(Figs. 9, h-j; 27, a; Rowe, 1962, fig. 48.) Information on association furnished by Pablo L. Soldi to Alan R. Sawyer.

Aldo Rubini collection, Ocucaje.—Phase 8 burials from Paraya: Z (fig. 16, j, k); 43 (figs. 16, i; 41, a); 44 (figs. 16, g, h, l; 41, c; pl. 5, o). Phase 8 burial from Ocucaje: 80 (figs. 17, g; 43, c; 44; pl. 6, b). Phase 9 burial from Ocucaje: 61 (figs. 21, d; 22, a-d). Phase 9/10 transition burial from Ocucaje: 16 (fig. 56). Phase 10 burials from Ocucaje: A (figs. 23, c; 25, f; 61, a; 62, h); E (figs. 23, e; 24, g; 60, a; 63, a); G (figs. 24, c; 61, c); H (figs. 25, h; 62, f); J (fig. 62, e); K (fig. 24, i); M (figs. 24, n; 60, b, o); 1 (figs. 23, b; 24, l); 6 (fig. 24, o); 8 (figs. 23, d; 24, b; 61, e); 13 (figs. 23, g, i, j; 25, j; 26, b; 63, e); 14 (figs. 24, f, j; 57, e); 15 (figs. 61, d; 62, i); 20 (fig. 25, e); 23 (figs. 25, c, n; 64, b); 36 (figs. 24, e; 25, b, g); 48 (fig. 25, o); 62 (fig. 25, m); 71 (figs. 23, a; 25, k; 64, c). Phase 10 burials from the Peña de Ocucaje: 25 (figs. 26, a; 58); 27 (fig. 23, h); 28 (figs. 24, h; 25, l; 64, d); 33 (figs. 25, d; 64, e, f; pl. 10, b); 34 (figs. 24, a; 25, i; 57, a). Phase 10 burial from Paraya: 84 (fig. 23, f).

APPENDIX 2

List of figures representing specimens of which illustrations have been published, with references

- Figs. 1, c; 9, d (Sawyer, 1961, fig. 4, a, b; Rowe, 1962b, fig. 49).
- Fig. 2, a (Tello, 1959, Lám. II, D).
- Figs. 2, b; 11, b (Kroeber, 1944, pl. 13, E; Soldi, 1956; Tello, 1959, Lám. VI, A).
- Figs. 8, b; 20, b; 51, a (Soldi, 1956; Tello, 1959, Lám. V, A).
- Fig. 9, b (Rosselló, 1960, Lám. XII).
- Fig. 10, b (Kroeber, 1944, pl. 15, I).
- Fig. 10, c (Kroeber, 1944, pl. 15, J).
- Fig. 10, e (Kroeber, 1944, pl. 15, H).
- Fig. 11, a (Rowe, 1962b, fig. 53).
- Figs. 11, f, 30, a (Rowe, 1962b, figs. 52, 52, a).
- Figs. 15, d, 39, c (Strong, 1957, fig. 3, F).
- Fig. 15, g (Soldi, 1956, bottom row, last on right).
- Fig. 20, e (Kroeber, 1944, pl. 15, G).
- Figs. 20, f, 53, e (Kroeber, 1944, pl. 14, E).
- Fig. 21, a (Kroeber, 1944, pl. 15, B; Soldi, 1956).
- Figs. 21, b, 53, i (Kroeber, 1944, pl. 14, D).

- Fig. 21, h (Kroeber, 1944, pl. 15, C; Soldi, 1956; Ubbelohde-Doering, 1959, pl. 21).
- Figs. 22, f, 51, c (Soldi, 1956; Ubbelohde-Doering, 1959, pl. 20).
- Figs. 24, d, 61, f (Kroeber, 1944, pl. 15, E; Soldi, 1956).
- Fig. 27, a (Rowe, 1962b, fig. 48).
- Fig. 27, j (Rowe, 1962b, fig. 51).
- Fig. 28, a (Kroeber, 1944, pl. 13, B).
- Fig. 28, b (Kroeber, 1944, pl. 15, A; Soldi, 1956).
- Fig. 29, a (Sawyer, 1961, fig. 4, c).
- Fig. 31, b (Tello, 1959, Lám. VII, A).
- Fig. 38, f (Strong, 1957, fig. 3, G).
- Fig. 42, b (Kroeber, 1944, pl. 13, F).
- Fig. 47, c (Rosselló, 1960, Lám. VI, a).
- Fig. 48, a (Rosselló, 1960, Lám. V, b).
- Fig. 48, c (Rosselló, 1960, Lám. V, a).
- Fig. 53, f (Kroeber, 1944, pl. 15, F).
- Fig. 62, b (Kroeber, 1944, pl. 15, D; Soldi,
- 1956; Tello, 1959, Lám. VI, B).

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FIGURES

EXPLANATION OF FIGURES

In figures 9-64, shapes and designs are illustrated separately and are arranged by phases. In order to make it easier to trace the diachronic relationships between the phases, we have arranged illustrations of shape and design themes belonging to the same diachronic descent line in the same general order within each phase unit, insofar as it was possible to do so. Furthermore, each shape theme illustrated in figures 9-26 has been given a separate number, which is placed on the shape drawing. It is possible to trace the changes in a particular shape theme by comparing the shapes with the same number in succeeding phases. If two or more different variants of the same shape theme appear in a phase, the new variants are distinguished from the more traditional forms by small letters following the number. If such a variant persists as a distinct theme in succeeding phases, the same letter is used to indicate this fact. Numbers are assigned to different shapes in the order in which they appear in the illustrations, without regard to shape category. Changes in a particular design theme can be traced in the same way, although the design themes have not been given numbers because their arrangement is of necessity more complex and their relationship somewhat more obvious.

Designs taken from the same vessel are shown together whenever possible. If a design is taken from a vessel the shape of which is illustrated in figures 9-26, reference to this fact is made in the list of vessel identifications accompanying the figures.

Figures 1-8 illustrate changes in a single complex and persistent vessel type, the bird-spout bottles, and the double-spout bottles that appear as their derivatives in the later Ocucaje phases. These illustrations were traced to scale from slides projected on a screen. In addition to the shape outlines, they show the designs regularly appearing on these shapes, a type of association that forms an important aspect of the style analysis. It was not possible to illustrate this type of association systematically for other shapes, but additional examples of it can be seen in the photographic plates. In addition, further information on shape and design associations is furnished in the identification of figures.

As far as possible, the shape illustrations are drawn from photographs showing a true profile. Sometimes, however, it was necessary to use photographs taken from a higher angle, resulting in an outline that is not a standard profile.

Some of the line illustrations are drawn to scale, which was determined by direct measurements on the original vessels. Many of the shape illustrations, however, had to be traced from photographs in which the scale was provided by a ruler set in front of the vessel. The fact that the ruler is not in the plane of the profile introduces a small error in the scale which we could not correct, because the distances between profile plane and ruler and between ruler and camera were not recorded and vary from one exposure to another. The only illustrations not drawn to scale are figures 9, e, f, i, j; 10, f, g; 29, a; 30, a; 36, h; 37, l; 49, b-d; and 55, i, j, k. These illustrations were either traced or copied from photographs or slides.

The majority of the design illustrations are taken from rubbings made by Dawson from the actual specimens. However, some of the illustrations of designs are freehand copies that Dawson drew at actual size with the specimen as a model. It is possible to distinguish the two types of illustrations, since the designs taken from the rubbings show the curvature of the vessel contours and the outlines and irregularities of the incisions, whereas in the copies the incisions appear as single lines. Some of the drawings were traced to scale from slides projected on a screen, as can be seen from the distortions in perspective.

The spouted bottles in figures 1-8 and most of the design illustrations in figures 27-64 are reduced to half size, and the shape illustrations in figures 9-26 are reduced to quarter size. There are some additional illustrations showing vessel profiles and drawings taken from sherds. Most of these sherd drawings are reduced to half size to show significant details, and are therefore included with the design drawings in figures 27-64, even when no design is involved. Sherd profiles reduced to quarter size are shown with the rest of the shape drawings in figures 9-26.

EXPLANATION OF FIGURE IDENTIFICATION

In the identification of figures, the name of the collection is usually followed by an identifying number or letter. With the exception of the Rubini and Masson collections, the specimens in the private collections have not been catalogued, and the numbers assigned to these specimens are taken from the notes of Dawson and Menzel. Some specimens are identified by the slide numbers in Dawson's collection of color slides. Most of the specimens in the Nathan Cummings collection are identified by the numbers of the photographs furnished us by Alan R. Sawyer.

Each specimen in the Rubini collection that was found in a burial association is identified first by the number of the burial and then by the number of the vessel in the burial, the vessels in each burial having been numbered separately. Specimens in the Carlos Soldi collection are identified by two separate lists of numbers, one for vessels from the Pampa de las Animas, Callango, the other for vessels from other sites, or for those which have been documented only as coming from the lower Ica Valley. The numbers of the specimens from the Pampa de las Animas is preceded by the abbreviation "An."

Sherd illustrations are identified by site number. All the sherds were collected in surface surveys made by Rowe, Dawson, Menzel, and Edward P. Lanning, or come from refuse strata in exposed surfaces or excavations. The sherds from these collections are deposited at the Regional Museum of Ica and at the Museum of the Institute of Ethnology and Archaeology at the University of San Marcos.

If a size measurement is given after the specimen number, the vessel has been measured directly. The place names in parentheses indicate the provenience of the specimen. The shape identification precedes the identification of provenience for the design illustrations in figures 27-64. All designs are from the exterior sides of the vessel unless otherwise indicated.

ABBREVIATIONS

MUSEUM COLLECTIONS

| BM | Brooklyn Museum, New York |
|---------|--|
| MAI | Museum of the American Indian (Heye Foundation), New York |
| MIEAUSM | Museum of the Institute of Ethnology and Archaeology, University of San |
| | Marcos, Lima |
| MPA | Museum of Primitive Art, New York |
| MRI | Museo Regional de Ica, Ica |
| RHLMA | Robert H. Lowie Museum of Anthropology, University of California, Berkeley |
| тм | Textile Museum, Washington, D.C. |

PRIVATE COLLECTIONS

| Coe | Collection, Dr. Michael D. Coe, New Haven, Connecticut |
|-----------|--|
| CS | Collection, Mr. Carlos Soldi, Hacienda Ocucaje, Ica |
| del Solar | Collection, Mr. Gonzalo del Solar, Lima |
| Laffi | Collection, Mrs. Graciela Laffi, Lima |
| Masson | Collection, Mr. Duncan M. Masson, Ica |
| NC | Collection, Mr. Nathan Cummings, Washington, D.C. |
| Olsen | Collection, Mr. Fred Olsen, Guilford, Connecticut |
| PS | Collection, Mr. Pablo Soldi, Hacienda Ocucaje, Ica |
| Rosselló | Collection, Mr. Lorenzo Rosselló Truel, Lima |
| Ru. | Collection, Mr. Aldo Rubini, Hacienda Ocucaje, Ica |
| Slavitz | Collection, Mr. Louis Slavitz, New York |
| Tishman | Collection, Mr. and Mrs. Paul Tishman, New York |
| Truel | Collection, Mr. Paul Truel, Hacienda Ocucaje, Ica |
| Wielgus | Collection, Mr. and Mrs. Raymond Wielgus, Chicago |
| Wise | Collection, Mr. John Wise, New York |

Color slides provided by Dawson, Menzel, Junius B. Bird, and Robert Sonin.

Black-and-white photographs taken by Dawson and by the staff of the Museum of the American Indian (Heye Foundation), New York.
IDENTIFICATION OF FIGURES

Figure 1. a, b, Olsen 1, 16.75 cm high (Ica, cf. fig. 9, a; pl. 1, a); c, Wielgus 1, 16.2 cm high (Chiquerillo, Bur. 1, cf. fig. 9, d).

Figure 2. *a*, Truel 22 (Cerro La Cruz, Ocucaje); *b*, Truel 21 (La Capilla, Ocucaje, cf. fig. 11, *b*).

Figure 3. a, NC, Dawson slide 83 (Teojate); b, Truel 123 (Teojate).

Figure 4. a, Truel 122 (Teojate, cf. fig. 12, g); b, Truel 121 (Teojate).

Figure 5. a, Truel 139 (Teojate, cf. fig. 13, a); b, CS, Dawson slide 736 (Teojate).

Figure 6. a, Truel 36 (Teojate); b, Wise, Bird slide (Teojate).

Figure 7. a, Truel 37 (Teojate, cf. figs. 15, b; 38, g); b, Truel 24 (Teojate).

Figure 8. *a*, Truel V (Ocucaje, cf. figs. 17, a; 41, d; 42, f); *b*, Truel 73 (Ocucaje, cf. figs. 20, *b*; 51, *a*).

Figure 9. *a*, Olsen 1, 16.75 cm high (Ica, cf. fig. 1, *a*, *b*; pl. 1, *a*); *b*, Rosselló 1, 4.5 cm high (Nasca); *c*, MRI, DA-2993, 16.7 cm high (Ica or Nasca, cf. pl. 1, *b*); *d*, Wielgus 1, 16.2 cm high (Chiquerillo, Bur. 1, cf. fig. 1, *c*); *e*, NC, FA-2/9 (Chiquerillo, Bur. 1); *f*, NC, FA-2/10 (Chiquerillo, Bur. 1); *g*, NC 82, 16.5 cm high (Callango); *h*, BM, 59.197-1, 16.7 cm high (Chiquerillo, Bur. 2, cf. fig. 27, *a*); *i*, NC, FA-24/3 (Chiquerillo, Bur. 2); *j*, NC, FA-24/4 (Chiquerillo, Bur. 2).

Figure 10. a, Truel Y (Ocucaje); b, Truel 18 (Ocucaje, cf. fig. 27, e); c, Truel 8 (Ocucaje, cf. fig. 27, g); d, Truel 3 (Ocucaje); e, Truel 6 (Ocucaje); f, NC, FA-2/11 (Chiquerillo); g, NC, FA-24/12 (Teojate).

Figure 11. a, Tishman 1, 19 cm high (Callango); b, Truel 21 (La Capilla, Ocucaje, cf. fig. 2, b); c, Truel 13 (Ocucaje, cf. pl. 2, c); d, Truel 11 (Ocucaje, cf. fig. 29, c); e, MAI, 22/8711, 13.5 cm high (Teojate, cf. pl. 3, b); f, Coe 1, 17.25 cm high (Callango, cf. fig. 30, a); g, Truel 9 (Ocucaje); h, del Solar, Dawson slide 3122 (Callango, cf. fig. 31, a); i, del Solar, Dawson slide 3119 (Callango, cf. fig. 30, i).

Figure 12. a, CS, An. 3 (Callango); b, CS, An. 4 (Callango, cf. fig. 33, a); c, CS, An. 1 (Callango, cf. fig. 34, e); d, Truel 203 (Teojate, cf. fig. 36, c); e, Truel 214 (Teojate, cf. fig. 36, e); f, Truel 134 (Teojate); g, Truel 122 (Teojate, cf. fig. 4, a); h, Truel 34 (Teojate, cf. fig. 36, i); i, Truel 130 (Teojate); j, Truel 132 (Teojate, cf. fig. 36, g).

Figure 13. a, Truel 139 (Teojate, cf. fig. 5, a); b, Truel 159 (Teojate); c, Truel 35 (Teojate); d, Truel 154 (Teojate); e, Truel 178 (Teojate); f, Truel 173 (Teojate); g, Truel 169 (Teojate).

Figure 14. a, Truel 204 (Teojate); b, Truel 205 (Teojate); c, Truel 215 (Teojate); d, Truel 27 (Teojate); e, Truel 238 (Teojate); f, Truel 252 (Teojate); g, Truel 248 (Teojate); h, Truel 136 (Teojate); i, Ru. 1 (Teojate, cf. pl. 4, c); j, Teojate, surface, 18 cm diam.; k, Truel 254 (Teojate); l, Truel 189 (Teojate); m, MRI, DA-3376, 9.5 cm high (Ica); n, Truel 185 (Teojate).

Figure 15. a, Truel 193 (Teojate); b, Truel 37 (Teojate, cf. figs. 7, a; 38, g); c, Truel 194 (Teojate, cf. fig. 38, j); d, Truel 222 (Teojate, cf. fig. 39, c); e, Truel 167 (Teojate); f, Truel 212 (Teojate); g, Truel W (Teojate); h, Truel 269 (Teojate); i, Truel 28 (Teojate, cf. fig. 39, b).

Figure 16. a, Truel 225 (Teojate, cf. fig. 39, l); b, Truel 268 (Teojate); c, Truel 233 (Teojate, cf. fig. 38, a); d, Truel 224 (Teojate); e, Truel 244 (Teojate, cf. fig. 39, f); f, Truel 234 (Teojate); g, Ru. Bur. 44, 9, 9.1 cm high (Paraya); h, Ru. Bur. 44, 8, 8 cm high (Paraya, cf. fig. 41, c; pl. 5, c); i, Ru. Bur. 43, 4, 6.1 cm high (Paraya, cf. fig. 41, a); j, Ru. Bur. Z, 3 (Paraya); k, Ru. Bur. Z, 6 (Paraya); l, Ru. Bur. 44, 13, 11.9 cm top diam. (Paraya).

Figure 17. a, Truel V (Ocucaje, cf. figs. 8, a; 41, d; 42, f); b, Truel 44 (Ocucaje, cf. figs. 42, e; 43, a); c, Truel 49 (Ocucaje); d, Truel 41 (Ocucaje); e, Truel 40 (Ocucaje); f, Truel 61 (Ocucaje); g, Ru. Bur. 80, 3, 5 cm high (Ocucaje, cf. fig. 44); h, Truel 62 (Ocucaje, cf. fig. 42, c); i, Truel 60 (Ocucaje, cf. fig. 43, b).

Figure 18. a, Wise, Bird slide, 11 cm high (Río Grande, Nasca, cf. pl. 7, c); b, MRI,

DA-2214, 18.2 cm high (Ica or Nasca); c, CS, An. 31 (Callango); d, del Solar, Dawson slide 3042 (Callango); e, del Solar, Dawson slide 3041 (Callango).

Figure 19. a, CS 2 (Callango); b, del Solar, Dawson slide 3112 (Callango); c, del Solar, Dawson slide 3044 (Callango, cf. fig. 47, d; pl. 6, c); d, CS 1 (Callango); e, del Solar, Dawson slide 3000 (Callango, cf. fig. 47, a, b); f, del Solar, Dawson slide 3021 (Callango); g, del Solar, Dawson slides 3008, 3009 (Callango, cf. fig. 48, b; pl. 7, a); h, del Solar, Dawson slide 3093 (Callango); i, del Solar, Dawson slide 3071 (Callango); j, del Solar, Dawson slide 3072 (Callango); k, del Solar, Dawson slide 3096 (Callango); l, CS 16 (Callango).

Figure 20. a, Truel 76 (Ocucaje); b, Truel 73 (Ocucaje, cf. figs. 8, b; 51, a); c, Truel 96 (Ocucaje, cf. pl. 8, a); d, Truel 43 (Ocucaje); e, Truel 66 (Ocucaje); f, CS 3 (Ocucaje, cf. figs. 51, b; 53, e).

Figure 21. a, Truel 90 (Ocucaje); b, Truel 92 (Ocucaje, cf. fig. 53, i); c, Truel 81 (Ocucaje); d, Ru. Bur. 61, 1 (Ocucaje); e, CS 4 (Sta. Lucía, cf. fig. 53, k); f, CS 27 (Sta. Lucía); g, Truel 97 (Ocucaje); h, Truel 91 (Ocucaje); i, Truel 74 (Ocucaje); j, Truel 78 (Ocucaje); k, CS 17 (lower Ica); l, CS 15 (lower Ica); m, CS 6 (lower Ica); n, RHLMA, 4/4493, 6 cm high (Ocucaje); o, Ru. 16 (Ocucaje); p, Truel 109 (Ocucaje).

Figure 22. a, Ru. Bur. 61, 3 (Ocucaje); b, Ru. Bur. 61, 4 (Ocucaje); c, Ru. Bur. 61, 5 (Ocucaje); d, Ru. Bur. 61, 2 (Ocucaje); e, Ru. 12 (Ocucaje or Paraya); f, Ru. 15 (Ocucaje); g, Truel 80 (Ocucaje); h, Ru. (Ocucaje or Paraya); i, Truel 72 (Ocucaje, cf. fig. 51, c); j, NC, FA-7/10 (Teojate).

Figure 23. a, Ru. Bur. 71, 2 (Ocucaje); b, Ru. Bur. 1, 5 (Ocucaje); c, Ru. Bur. A, 5 (Ocucaje); d, Ru. Bur. 8, 4 (Ocucaje); e, Ru. Bur. E, 1, 19.6 cm high (Ocucaje, cf. figs. 60, a; 63, a); f, Ru. Bur. 84, 1 (Paraya); g, Ru. Bur. 13, 1 (Ocucaje); h, Ru. Bur. 27, 12 (Peña de Ocucaje); i, Ru. Bur. 13, 3 (Ocucaje); j, Ru. Bur. 13, 2 (Ocucaje); k, MRI (Ica or Nasca).

Figure 24. a, Ru. Bur. 34, 2 (Peña de Ocucaje, cf. fig. 57, a); b, Ru. Bur. 8, 2 (Ocucaje, cf. fig. 61, e); c, Ru. Bur. G, 2 (Ocucaje, cf. fig. 61, c); d, Truel 113 (Ocucaje, cf. fig. 61, f); e, Ru. Bur. 36, 2 (Ocucaje); f, Ru. Bur. 14, 2 (Ocucaje); g, Ru. Bur. E, 4 (Ocucaje); h, Ru. Bur. 28, 2 (Peña de Ocucaje); i, Ru. Bur. K, 5 (Ocucaje); j, Ru. Bur. 14, 1 (Ocucaje, cf. fig. 57, e); k, Ru. 29 (Ocucaje, cf. fig. 59, o); l, Ru. Bur. 1, 7 (Ocucaje); m, Ru. 21 (Ocucaje or Paraya, cf. fig. 62, c); n, Ru. Bur. M, 1 (Ocucaje, cf. fig. 60, b, c); o, Ru. Bur. 6, 2 (Ocucaje).

Figure 25. a, Truel 117 (lower Ica); b, Ru. Bur. 36, 7 (Ocucaje); c, Ru. Bur. 23, 2 (Ocucaje, cf. fig. 64, b); d, Ru. Bur. 33, 5 (Peña de Ocucaje, cf. fig. 64, e); e, Ru. Bur. 20, 8 (Ocucaje); f, Ru. Bur. A, 6 (Ocucaje); g, Ru. Bur. 36, 6 (Ocucaje); h, Ru. Bur. H, 2 (Ocucaje or vicinity); i, Ru. Bur. 34, 3 (Peña de Ocucaje); j, Ru. Bur. 13, 6 (Ocucaje, cf. fig. 63, e); k, Ru. Bur. 62, 4 (Ocucaje); l, Ru. Bur. 71, 4 (Ocucaje); m, Ru. Bur. 28, 8 (Peña de Ocucaje); n, Ru. Bur. 23, 5 (Ocucaje); o, Ru. Bur. 48, 4 (Ocucaje).

Figure 26. *a*, Ru. Bur. 25, 1 (Peña de Ocucaje, cf. fig. 58); *b*, Ru. Bur. 13, 7 (Ocucaje); *c*, Ru. 44 (Ocucaje or Paraya); *d*, Ru. 45 (Ocucaje or Paraya).

Figure 27. a, BM, 59.197-1 (shape 4, Chiquerillo, Bur. 2, cf. fig. 9, h); b-d, f, PV62-63 (El Cerrillo), surface; e, Truel 18 (shape 5, Cerro La Cruz, Ocucaje, cf. fig. 10, b); g, Truel 8 (shape 5a, Cerro La Cruz, Ocucaje, cf. fig. 10, c); h, Ru. 62 (shape 5, Chiquerillo); i, Truel 4 (shape 5, Ocucaje); j, TM (shape 8).

Figure 28. *a*, Truel 19 (shape 8, Ocucaje, cf. pl. 2, *b*); *b*, Truel 20 (shape 8, Ocucaje); *o-e*, PV62-63 (El Cerrillo, from lower "Cerrillos" stratum below thick clay floor).

Figure 29. a, NC, FA-14/3 (Chiquerillo); b, Truel 16 (shape 5, Ocucaje, cf. pl. 3, a); c, Truel 11 (shape 5, Ocucaje, cf. fig. 11, d); d, Truel 12 (shape 5, Ocucaje); e, f, Truel 17 (shape 5, Ocucaje).

Figure 30. a, Coe 1 (Callango, cf. fig. 11, f); b, CS, An. 24 (shape 5, Callango); c, del Solar, Dawson slide 3119 (shape 5, Callango, cf. fig. 11, i); d, del Solar, Dawson slide 3118 (shape 5, Callango).

Figure 31. a, del Solar, Dawson slide 3122 (shape 5, Callango, cf. fig. 11, h); b, MIEAUSM, Fracchia, F/2492 (shape 5, Nasca).

Figure 32. a, CS, An. 28 (Callango); b, CS, An. 20 (shape 5, Callango); c, CS, An. 2 (shape 5, Callango, cf. pl. 3, c); d, del Solar, Dawson slides 3113, 3114 (shape 5, Callango).

Figure 33. *a*, CS, An. 4 (shape 5, Callango, cf. fig. 12, *b*); *b*, CS, An. 6 (shape 5, Callango); *c*, CS, An. 5 (shape 5, Callango).

Figure 34. a, CS, An. 26 (shape 5, Callango); b, CS, An. 16 (shape 5, Callango); c, CS, An. 7 (shape 5, Callango); d, CS, An. 8 (shape 5, Callango); e, CS, An. 1 (shape 8, Callango, ef. fig. 12, c).

Figure 35. *a*, del Solar, Dawson slide 3116 (shape 4, Callango); *b*, CS, An. 28 (shape 22, Callango); *c*, CS (shape 22, Callango); *d*, CS, An. 27 (bowl, Callango); *e*, CS, An. 12 (shape 5, Callango); *f*, CS, An. 21 (shape 5, Callango); *g*, CS, An. 9 (shape 5, Callango).

Figure 36. a, b, Laffi 1 (shape 5, Ica); c, Truel 203 (shape 5, Teojate, cf. fig. 12, d); d, Truel 128 (shape 4, Teojate); e, Truel 214 (shape 5, Teojate, cf. fig. 12, e); f, Truel 133 (shape 5, Teojate); g, Truel 132 (shape 14, Teojate, cf. fig. 12, j); h, NC, FA-5/7 (shape 5, Teojate); i, Truel 34 (shape 4a, Teojate, cf. fig. 12, h).

Figure 37. a, Truel 206 (shape 5b, Teojate); b, Truel 183 (shape 12, Teojate); c, Truel 192 (shape 19, Teojate); d, Teojate, surface (shape 19 frag.); e, Slavitz, Sonin slide (shape 17, Teojate); f, Teojate, surface (shape 19 frag.); g, Slavitz, Sonin slide (shape 10, Teojate); h, Truel 141 (shape 4, Teojate); i, Truel 187 (shape 19, Teojate); j, Truel 237 (shape 17, Teojate); k, Truel 196 (shape 5b, Teojate); l, NC, FA-22/5 (shape 14, Teojate).

Figure 38. a, Truel 233 (shape 5b, Teojate, cf. fig. 16, c); b, i, Truel 267 (shape 5b, Teojate, i, interior design); c, Truel (shape 4, Teojate); d, Truel 227 (shape 5b, Teojate); e, MAI, 22/8748 (shape 4, Teojate, cf. pl. 5, a); f, Truel 31 (shape 4, Teojate); g, Truel 37 (shape 4, Teojate, cf. figs. 7, a; 15, b); h, Truel 263 (shape 4a, Teojate); j, Truel 194 (shape 19, Teojate, cf. fig. 15, c).

Figure 39. a, Truel 209 (shape 5, Teojate); b, Truel 28 (shape 5, Teojate, cf. fig. 15, i); c, Truel 222 (shape 12, Teojate, cf. fig. 15, d); d, Truel 182 (shape 19, Teojate); e, g-k, PV62-63 (El Cerrillo), surface; f, Truel 244 (shape 17, Teojate, cf. fig. 16, e); l, Truel 225 (shape 5b, Teojate, cf. fig. 16, a).

Figure 40. a-h, PV62-7 (Huaca Pantaleón, Hacienda Tronquitos), surface and bulldozer cuts; b, shape 5b, 32 cm diam.; c, shape 5, 23 cm diam.; d, shape 5, 16 cm diam.; g, utility jar, 13 cm top diam.; h, shape 5, 20 cm diam.; e, shape 5; f, probably from same vessel as d.

Figure 41. a, Ru. Bur. 43, 4 (interior, shape 5c, Paraya, cf. fig. 16, i); b, Truel 56 (shape 4, Ocucaje); c, Ru. Bur. 44, 8 (shape 5c, Paraya, cf. fig. 16, h; pl. 5, c); d, Truel V (shape 4, Ocucaje, cf. figs. 8, a; 17, a; 42, f).

Figure 42. a, Truel 57 (shape 4, Ocucaje); b, Truel 42 (shape 25, Ocucaje); c, Truel 62 (shape 5d, Ocucaje, cf. fig. 17, h); d, Truel 39 (shape 24, Ocucaje); e, Truel 44 (shape 4a, Ocucaje, cf. figs. 17, b; 43, a); f, Truel V (shape 4, Ocucaje, cf. figs. 8, a; 17, a; 41, d); g, Truel 53 (shape 5, Ocucaje); h, Truel 54 (shape 5, Ocucaje).

Figure 43. a, Truel 44 (shape 4a, Ocucaje, cf. figs. 17, b; 42, e); b, Truel 60 (interior, shape 5, Ocucaje, cf. fig. 17, i); c, Ru. Bur. 80, 2 (Ocucaje, cf. pl. 6, b).

Figure 44. Ru. Bur. 80, 3 (shape 26, Ocucaje, cf. fig. 17, g); a, exterior side; b, interior. Figure 45. a, del Solar, Dawson slide 3003 (interior shape 5, Callango); b, MPA (b-1, interior, b-2, exterior side, shape 5, no provenience).

Figure 46. *a*, del Solar (*a*-1, exterior side, *a*-2, interior, shape 5, Callango); *b*, MRI, d26 (interior, shape 5, Palpa, Nasca, 15.6 cm diam.); *c*, del Solar (exterior side, shape 5, Callango; the interior design consists of two red and white crossed guilloche chains on a red-slipped surface); *d*, Pampa de las Animas, Callango, surface (exterior side, shape 19 frag.).

Figure 47. a, b, del Solar, Dawson slide 3000 (shape 26, Callango, cf. fig. 19, e); c, del Solar, Dawson slide 3028 (shape 4, Callango); d, del Solar, Dawson slide 3044 (shape 26, Callango, cf. fig. 19, c; pl. 6, c).

Figure 48. *a*, del Solar, Dawson slide 3008 (interior, shape 26, Callango); *b*, del Solar, Dawson slide 3009 (*b*-1, exterior side, *b*-2, exterior bottom, shape 26, Callango, cf. fig. 19, g; pl. 7, *a*, left); *c*, del Solar, Dawson slide 3002 (interior, shape 5, Callango).

Figure. 49. a, del Solar (a-1, exterior side, a-2, interior bottom, shape 5, Callango);

b, del Solar, Dawson slide 3030 (shape 4b, Callango); c, del Solar, Dawson slide 3029 (shape 4, Callango); d, del Solar, Dawson slide 3028 (shape 4, Callango); e, del Solar, Dawson slide 3006 (interior, shape 5, Callango); f, del Solar, Dawson slide 3024 (shape 5, Callango); g, del Solar (shape 5, Callango).

Figure 50. a-o, PV62-154 (Pampa de las Animas, Callango), surface; f, 25 cm top diam.; k, 36 cm top diam.; l, 25 cm top diam.

Figure 51. *a*, Truel 73 (shape 4, Ocucaje, cf. figs. 8, *b*; 20, *b*); *b*, CS 3 (shape 27a, Ocucaje, cf. figs. 20, *f*; 53, *e*); *c*, Truel 72 (shape 32, Ocucaje, cf. fig. 22, *i*).

Figure 52. *a, d, g,* PV62-148 (Pampa Media Luna, Callango), surface—shape 38 frags.; *b, e,* PV62-92 (Peña de Tajahuana), surface—shape 38 frags.; *f,* PV62-92 (Peña de Tajahuana), surface—interior, shape 5 or shape 26 frag., cf. fig. 53, *g* for exterior design; *c,* Ru. (flask, Ocucaje).

Figure 53. a, CS 5 (shape 26 cup, Ocucaje); b, PV62-148 (Pampa Media Luna, Callango), surface; c, Cerro Max Uhle, Ocucaje, surface—exterior rim band, shape 29 frag.; d, Ru. 8 (exterior rim band, shape 26 cup, Ocucaje or Paraya); e, CS 3 (shape 27a, Ocucaje, cf. figs. 20, f; 51, b); f, Truel 64 (shape 27, Ocucaje); g, PV62-92 (Peña de Tajahuana), surface—exterior side, shape 5 or shape 26 frag., cf. fig. 52, f); h, Cerro Max Uhle, Ocucaje, surface—exterior rim band, shape 29 bowl frag.; i, Truel 92 (interior rim band, shape 5, Ocucaje, cf. fig. 21, b); j, Truel 77 (shape 27a, Ocucaje, cf. pl. 8, c); k, CS 4 (shape 26 cup, Sta. Lucía, cf. fig. 21, e).

Figure 54. a, b, PV62-151 (Cerro La Cruz, Ocucaje), surface; c-e, PV62-154 (Pampa de las Animas, Callango), surface; f-j, m, PV62-148 (Pampa Media Luna, Callango), surface—f, 28 cm diam.; g, 30 cm diam.; h, 34 cm diam.; i, 40 cm diam.; j, 48 cm diam.; l, PV62-28 (Ocucaje), surface, 32 cm diam.; k, Pampa de las Animas, Callango (shape 5c frag.); n, Truel 106 (shape 5c, Ocucaje).

Figure 55. a, PV62-148 (Pampa Media Luna, Callango), surface; b, PV62-148 (Pampa Media Luna, Callango), surface, 22 cm top diam.; o-e, PV62-63 (El Cerrillo), surface (c, shape 26 cup, d, e, shape 5); f, Truel 228 (shape 17, Teojate); g, h, NC, Dawson slides (shape 5, Teojate); i, NC, FA-28/5 (shape 5, Teojate); j, NC, FA-6/12 (shape 5, Teojate); k, NC, FA-6/11 (shape 5, Teojate); l, Teojate, surface (probably shape 5).

Figure 56. Ru. Bur. 16, 1 (shape 38, Ocucaje).

Figure 57. a, Ru. Bur. 34, 2 (shape 28, Peña de Ocucaje, cf. fig. 24, a); b, Ru. (bowl frag., Ocucaje, surface); c, Ru., Dawson slide 874 (shape 35 variant, Ocucaje, cf. fig. 63, b); d, Ru. (bowl frag., Ocucaje, surface); e, Ru. Bur. 14, 1 (shape 29, Ocucaje, cf. fig. 24, j); f, Ru. 24 (shape 28, Ocucaje).

Figure 58. Ru. Bur. 25, 1 (zoned negative decoration, shape 38, Peña de Ocucaje, cf. fig. 26, a).

Figure 59. a, MRI, DA-3138 (shape 28, Ica or Nasca); b, Ru. (large vessel frag., Ocucaje, surface); c, Ru. 29 (shape 28, Ocucaje, cf. fig. 24, k); d, Laffi 4 (shape 36, Ica); e, Masson 114 (shape 28, La Capilla, Pinilla, Ocucaje).

Figure 60. a, Ru. Bur. E, 1 (shape 4e, Ocucaje, cf. fig. 23, e); b, c, Ru. Bur. M, 1 (shape 29, Ocucaje, cf. fig. 24, n); d, Ru., Dawson slides 871, 872 (shape 28, Ocucaje); e, f, Ru. (shape 28 frags., surface, Ocucaje).

Figure 61. *a*, Ru. Bur. A, 1 (shape 28, Ocucaje, cf. fig. 62, h); *b*, Ru. 30 (shape 28, Ocucaje); *c*, Ru. Bur. G, 2 (shape 28, Ocucaje); *c*, Ru. Bur. G, 2 (shape 28, Ocucaje); *c*, Ru. Bur. G, 2 (shape 28, Ocucaje, cf. fig. 24, c); *d*, Ru. Bur. 15, 1 (shape 28, Ocucaje, cf. fig. 62, i); *e*, Ru. Bur. 8, 2 (shape 28, Ocucaje, cf. fig. 24, d); *g*, PS (shape 28, Ica or Nasca).

Figure 62. a, MRI, DA-3176 (shape 28, Ica or Nasca); b, Truel 114 (shape 28, Ocucaje); c, Ru. 21 (shape 28, Ocucaje, cf. fig. 24, m); d, Ru. (shape 28, Ocucaje); e, Ru. Bur. J, 4 (shape 28, Ocucaje); f, Ru. Bur. H, 5 (shape 28, Ocucaje); g, Ru. (hair-lock representation on large face-neck jar, Ocucaje); h, Ru. Bur. A, 1 (shape 28, Ocucaje, cf. fig. 61, a); i, Ru. Bur. 15, 1 (shape 28, Ocucaje, cf. fig. 61, d).

Figure 63. a, Ru. Bur. E, 1 (shape 4e, Ocucaje, cf. figs. 23, e; 60, a); b, Ru., Dawson slide 874 (shape 35 variant, Ocucaje, cf. fig. 57, c); c, Ru. bowl frag., surface, Ocucaje; d, Ru. Bur.

D, 1 (shape 4, Ocucaje); e, Ru. Bur. 13, 6 (pattern-burnished interior design, shape 5b, Ocucaje, cf. fig. 25, j); f, Ru., bowl frag., surface, Ocucaje.

Figure 64. *a*, north slope Cerro Max Uhle, Ocucaje, surface (shape 5b frag.); *b*, Ru. Bur. 23, 2 (shape 5c, Ocucaje, cf. fig. 25, c); c, Ru. Bur. 71, 5 (shape 5c, Ocucaje); d, Ru. Bur. 28, 4 (shape 5b-2, Peña de Ocucaje); e, Ru. Bur. 33, 5 (interior, shape 5c, Peña de Ocucaje, cf. fig. 25, d); f, Ru. Bur. 33, 4 (interior shape 5c, Peña de Ocucaje).

FIGURES

COLOR KEY



WHITE

(or color not preserved or recorded when so noted in captions)

OLIVE GREEN

DARK GREEN



GRASS GREEN



CRFAM

GRAY-BLUE



UNPAINTED SURFACE



PASTE CROSS SECTION



COLOR NOT PRESERVED



PATTERN BURNISHING



Fig. 1. a, b, Phase 1; c, Phase 2. Traced from slide projections; colors in designs not recorded. Scale 1/2.



Fig. 2. a, Phase 3; b, Phase 4. Traced from slide projections; colors in designs not recorded. Scale 1/2.











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Fig. 9. *a-c*, Phase 1; *d-g*, Phase 2; *h-j*, Phase 2/3 transition. Decoration (exterior only): *a*, *b*, *d*, *h*, *i*, incised, resin painted; *c*, *e*, *f*, unpainted incised; *j*, unpainted stamped circles; *g*, plain; *a-d*, *g*, *h*, scale 1/4; *b-2*, scale 1/2; *e*, *f*, *i*, *j*, not drawn to scale.



Fig. 10. Phase 3. Decoration (exterior only): a, negative; b, c, e, incised, resin painted; f, g, unpainted stamped circles; d, unpainted incised; a-e, scale 1/4; f, g, not drawn to scale.



Fig. 11. a-d, Phase 4; e-i, Phase 5. Decoration (exterior only): incised, resin painted. Scale 1/4.



Fig. 12. a-c, Callango Basin Phase 6; d-j, upper valley Phase 6. Decoration (exterior only): incised, resin painted. Scale 1/4.



Fig. 13. Upper valley Phase 7. Decoration (exterior only): a-f, incised, resin painted; g, plain red slipped. Scale 1/4.



Fig. 14. Upper valley Phase 7. Decoration: *a-h, j, l-n,* incised, resin painted (exterior only); *i,* grater; *k,* plain red slipped. Scale 1/4.



Fig. 15. Upper valley Phase 8. Decoration (exterior only): incised, resin painted. Scale 1/4.



Fig. 16. a-f, Upper valley Phase 8; g-l, middle valley Phase 8. Decoration: a-f, incised, resin painted (exterior only); g, plain red slipped; h, red slipped, exterior negative decorated; i, unpigmented gray-black, interior pattern burnished and stamped circles; j, interior red slipped, stamped circles; k, plain; l, red cooking olla. Scale 1/4.



Fig. 17. Ocucaje Basin Phase 8. Decoration: a-c, e-i, incised, resin painted (a-c, e, h, i, exterior only; f, g, exterior sides, interior sides, bottom); d, smoked black, unpainted incised. Scale 1/4.









Fig. 18. Callango Basin Phase 8. Decoration (exterior only): *a*, *c-e*, incised, resin painted; *b*, negative and unincised resin painted. Scale 1/4.



Fig. 19. Callango Basin Phase 8. Decoration: a-g, incised, resin painted (a, b, d, f, on exterior side and interior side and bottom; <math>c, e, on exterior side; g, on exterior side and bottom and interior side and bottom); h, fancy grater; i, j, plain graters; k, stamped circles on interior side; l, unpigmented gray-black, interior pattern burnished. Scale 1/4.

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Fig. 20. Middle and lower valley Phase 9. Decoration: *a-c, e, f,* incised, resin painted; *d,* smoked blackware, unpainted incised. Scale 1/4.



Fig. 21. Middle and lower valley Phase 9. Decoration: a-m, incised, resin painted (a, b, g, h on exterior side and interior side and bottom; c, e, f on exterior side; d, i, exterior outline band at rim; j-m, exterior geometric rim band); n-p, negative decorated. Scale 1/4.



Fig. 22. a-i, Middle and lower valley Phase 9; j, upper valley Phase 9. Decoration: a, plain, dark gray fired; b, gray fired, interior pattern burnish; c, oxidized, interior pattern burnish; d, gray fired, nicks on interior side; e, red cooking olla; f, negative decorated; h, brown cooking olla; g, i, j, incised, resin painted (g, exterior geometric rim band; i, exterior broad band; j, exterior broad band and probably interior rim band). Scale 1/4.



Fig. 23. Phase 10. Decoration: a, c, plain white slipped; b, plain cream slipped; d, g, plain unpigmented; h, smoked black interior; i, negative decorated; k, plain, dark gray fired; e, f, j, incised, resin painted. Scale 1/4.



Fig. 24. Phase 10. Decoration: a-d, f, i-n, incised, resin painted (a-d, k, n, fancy exterior broad band; f, i, j, l, m, exterior rim band); e, h, o, fancy negative; g, smoked black interior, fluted sides. Scale 1/4.



Fig. 25. Phase 10. Decoration: *a-i*, negative decorated; *j*, *l-o*, smoked black interior (*l-o*, plain; *j*, with pattern burnish); *k*, grater. Scale 1/4.



Fig. 26. Phase 10. Decoration: *a*, incised, resin-painted broad band; *b*, plain utility vessel; *c*, *d*, cooking ollas. Scale 1/4.



Fig. 27. *a*, Phase 2/3 transition; b-j, Phase 3. Incised, resin-painted designs (*a*, on bottle; b-j, on bowls): *a*, traced from rubbing; b-j, copied freehand; g-i, colors not recorded. Scale 1/2.







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Fig. 36. Upper valley Phase 6. Incised, resin-painted designs (a-c, e, f, h, on bowls; d, modeled bottle head; g, on necked bottle): a, i, traced from rubbings; b-g, traced from slide projections; h, freehand copy from photograph; a-g, i, scale 1/2; h, not drawn to scale.



bings; b, c, e, g, h, j, k, traced from slide projections; l, freehand copy from photograph; f, k, l, colors not recorded; a-k, scale 1/2; l, not drawn to scale.





















Fig. 44. Ocucaje Basin Phase 8. Incised, resin-painted bowl designs: b, most blank areas indicate white, but some indicate colors not recorded. Traced from rubbings. Scale 1/2.



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traced from rubbing; a, c, d, scale 1/2; b, not to scale.









hand copies; e, traced from slide projection (background areas covered with unincised, painted dots, mostly not shown here). Scale 1/2.









Fig. 52. Middle and lower valley Phase 9. Incised, resin-painted designs (a, b, d, e, g, on ovoid vases; c, on a flask; f, on a bowl): a-e, g, traced from rubbings, colors not preserved; f, freehand copy; a-e, g, scale 1/2; f, not to scale.





































The scale appearing in plates 1, b; 2, a; 3, a, b; 4, a; 5, a; 6, b; 7, b; 8, a; 9, a; 10, a; 11, b; 12, a, b; 13, a; 14, a, b; and 15, a is marked in centimeters.
PLATES



UNIV. CALIF. PUBL. AM. ARCH. AND ETHN. VOL. 50 [MENZEL-ROWE-DAWSON] PLATE 2



a, Phase 3. Ru. 62 (Chiquerillo).



b, Phase 3. Del Solar, Dawson slide 3111 (Callango).

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UNIV. CALIF. PUBL. AM. ARCH. AND ETHN. VOL. 50 [MENZEL-ROWE-DAWSON] PLATE 3



a, Phase 3. Truel 19 (Ocucaje).



b, Phase 4. Truel 13 (Ocucaje).

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[MENZEL-ROWE-DAWSON] PLATE 4



a, Phase 4. Truel 16 (Ocucaje).



b, Phase 5. MAI, 22/8711, 13.5 cm high (Teojate). Photo by the staff of the Museum of the American Indian (Heye Foundation), New York.

[388]



a, Phase 6. CS, An. 2 (Callango).



b, Phase 7. Slavitz, (Teojate). Photo, Robert Sonin.
[389]



a, Phase 7. MAI, 22/8788, 8.3 cm high (Teojate). Photo by the staff of the Museum of the American Indian (Heye Foundation), New York.



b, Phase 7. Ru. 1 (Teojate).
[390]



a, Phase 8. MAI, 22/8748, 14.75 cm high (Teojate). Photo by the staff of the Museum of the American Indian (Heye Foundation), New York.



b, Phase 8. Truel Z (Teojate).
[391]



a, Phase 8. Ru. Bur. 44, 8 (Paraya).



b, Phase 8. PS (Ocucaje). [392]



a, Phase 8. Ru. Bur. 80, 2 (Ocucaje).



b, Phase 8. Del Solar, Dawson slide 3044 (Callango).

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[MENZEL-ROWE-DAWSON] PLATE 10



a, Phase 8. Del Solar, Dawson slide 3009 (Callango).



b, Phase 8. Wise, 13.5 cm diam. (Río Grande, Nasca). Photo by Junius B. Bird.

[394]



a, Phase 8. Wise, 11 cm high (Río Grande, Nasca). Photo by Junius B. Bird.



b, Phase 9. Truel 96 (Ocucaje).

[395]

[MENZEL-ROWE-DAWSON] PLATE 12



a, Phase 9. Truel 101 (lower Ica).



b, Phase 9. Truel 77 (Ocucaje).

[396]



a, Phase 9. Truel 83 (Ocucaje).



b, Phase 10. Wise, 6.5 cm high (Cerro de Córdoba, Ocucaje). Photo by Robert Sonin.

[397]

[MENZEL-ROWE-DAWSON] PLATE 14



a, Phase 10. Ru. Bur. 34, 1 (Peña de Ocucaje).



b, Phase 10. Truel 121 (Ocucaje).

[398]



a, Phase 10. Ru. Bur. 33, 3 (Peña de Ocucaje).



b, Phase 10. MAI, 23/825, 16.5 cm high (Teojate). Photo by the staff of the Museum of the American Indian (Heye Foundation), New York.

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