

**THE UHLE POTTERY COLLECTIONS
FROM MOCHE
AND
THE UHLE POTTERY COLLECTIONS
FROM SUPE**

**BY
A. L. KROEBER**

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INTRODUCTION

This paper is the fifth in a volume devoted to studies¹ of Max Uhle's collections of Peruvian antiquities assembled on behalf of the University of California, through the support of Phoebe Apperson Hearst. The previous studies dealt with Chincha, Ica, and Ancon; the present one with material from Moche, near Trujillo.

As in the case of Ica and Ancon, pottery alone is considered, for the present, on account of its readier potentialities for determination of time sequences. With a chronology established for various parts of ancient Peru and the country as a whole, on the basis of pottery, the development of industries in other materials should be more easily traceable.

Also as in the case of Ica and of Chincha, there is no endeavor to overthrow or alter the culture chronology of Peru which Dr. Uhle has been enunciating for twenty years, but the purpose is to proceed empirically with examination of the collections and data in possession of the University, toward an interpretation that is objectively documented. Indeed, it may again appear that relatively little has emerged in the way of conclusions beyond those formed by Dr. Uhle. Priority of opinion, as well as much more intimate knowledge, is clearly his. But the present monograph does rest on independent examination and is substantiated by a greater mass of evidence than Dr. Uhle has yet found time to present.

¹ Present series, XXI: A. L. Kroeber and William Duncan Strong, *The Uhle Collections from Chincha*, pp. 1-54, 1924; Max Uhle, *Excavations at Chincha*, pp. 55-92, 1924; Kroeber and Strong, *The Uhle Pottery Collections from Ica*, pp. 93-133, 1924; Strong, *The Uhle Pottery Collections from Ancon*, pp. 135-190, 1925.

The Trujillo collection is a large one. There are 3460 museum entries. Deducting about 1900 items of whole or cut *Conus* or *Spondylus* shell, there remain over 1500 catalogue numbers, nearly half of which, about 700, represent pottery vessels. At one site, F, most of the artifacts are segregated according to tombs, 33 in number.

RUINS AND CEMETERIES

Dr. Uhle left at the University relatively few manuscript records of his explorations at Trujillo, other than his field catalogue. Their place is well taken by an important paper, *Die Ruinen von Moche*, published by him in 1913.² The following summary of this paper outlines the principal data bearing on his excavations.

Two groups of ruins are outstanding in the valley of Trujillo: those of Chanchan or Gran Chimú and those of Moche, lying respectively north and south of Trujillo.³ The ruins of Chanchan are the more extensive and spread city-wise.⁴ They consist chiefly of *tapia* construction, clay laid down continuously. The pottery found in them is overwhelmingly⁵ of the black type represented in the most recent cemeteries at Pachacamac, and found also at one site (B) at Moche, where it occurs with some admixture of typical Inca forms.

The Moche ruins are situated between the Moche river and the Cerro Blanco (pl. 52*a*), a conical peak 1000 feet high. The Huaca de la Luna (pl. 52*a, b*) lies at the foot of this peak. Five hundred meters west is the Huaca del Sol (pl. 51*a, b*), with its back against the river bed. Between is a plain (pl. 52*a*), in which stood the ancient settlement. The topographical relations are shown in the map (pl. 50).⁶

² *Journal de la Société des Américanistes de Paris*, n.s., x, 95-117, pls. 4-6, figs. 1-20, 1913. Cited JSA.

³ Squier, chaps. 7-9, and Middendorf, II, pp. 370-397, give descriptive accounts of both groups of ruins.

⁴ Adolf Bandelier excavated at Chanchan for the American Museum of Natural History and seems to have made a detailed plan of the ruins which remains unpublished.

⁵ This statement by Uhle is only partly borne out by the Chanchan pottery in the American Museum of Natural History, which is mostly but not wholly of the kind found by Uhle at Moche site B. See below, p. 225, n. 50.

⁶ This map, furnished the University by Dr. Uhle, is a copy of the one from which his fig. 1 was engraved for the article in JSA, p. 97, except for certain changes necessitated in the lettering. In his field catalogue Dr. Uhle enclosed a similar though simpler map in which the sites were designated by certain letters. These letters were subsequently entered as the designations of the sites in the permanent museum catalogue. Meanwhile Dr. Uhle, who had returned to South America from the University, had relettered the sites on the larger map retained by him and so published it in JSA. The map, pl. 50 herewith,

The main platform of the Huaca de la Luna (fig. 1) measures 80 by 60 m., is 21 m. above the plain, and bore no pyramid. Its three sides other than that toward the hill are bordered by six terraces of adobe brick, 3 to 3.5 m. high and 2 m. wide. There are outbuildings to the north and east.

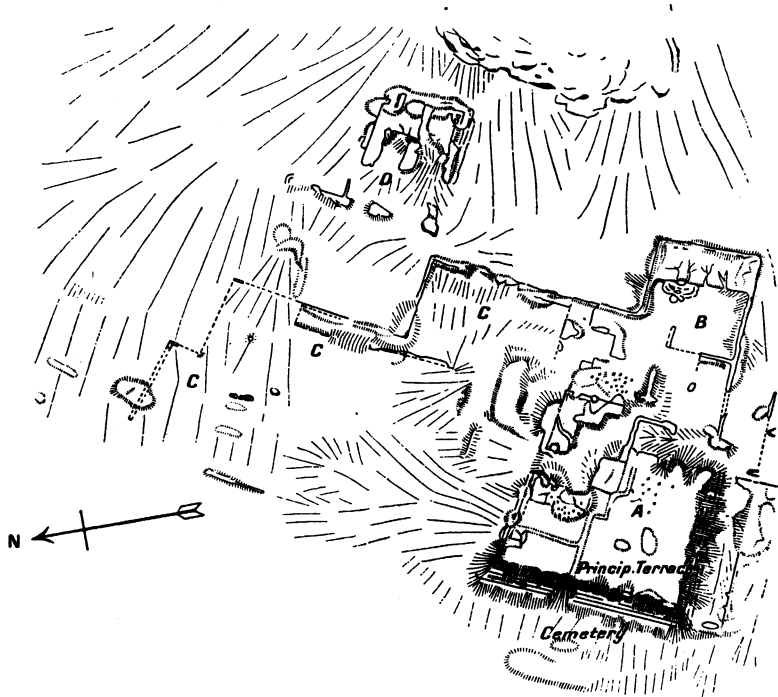


Fig. 1. Plan of the Huaca de la Luna (Uhle, JSA, fig. 2). Site F is at the spot marked "Cemetery."

The Huaca del Sol (fig. 4), also built of adobes but more defaced, has a platform 228 by 136 m., 18 m. high, bordered by five terraces like those of the Huaca de la Luna. The platform seems to consist of a larger southern and smaller northern rectangle, the latter

has therefore been made to show both sets of designations, to allow of ready cross-reference between the JSA article and the present one, which, being based on museum specimens, adheres to the museum catalogue. The following are the principal equivaluations:

<i>Univ. of Calif.</i>	<i>JSA</i>
A	D
B	d
C	e
D	e
E	b, f
F	a
G	g
H	summit Cerro Blanco

approached by a causeway 6 m. wide and 90 m. long. On the larger rectangle of the platform was set a pyramid 103 m. square, 23 m. high, which altitude seems to be preserved near the eastern edge. Seven terraces or steps form the slope of the pyramid. The southern part of the larger platform extended beyond the pyramid and contained a cemetery which was excavated as site A. The Huaca del Sol is the largest pre-Columbian edifice in Peru in mass, and probably in height.

Uphill from the Huaca de la Luna, along the lower slopes of Cerro Blanco, there stretched a cemetery 1 km. in length, site E, EEE on the map (pl. 50), previously rifled, but recognizable as Proto-Chimu from

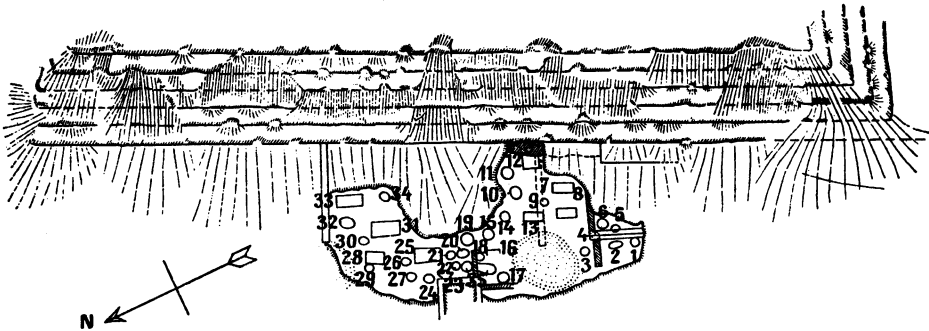


Fig. 2. Plan of graves excavated at site F, at foot of the Huaca de la Luna (Uhle, JSA, fig. 11).

the wealth of red and white sherds on the surface. Here Dr. Uhle was able to get about 100 specimens, the pottery among which was uniform in type with the following.

At the western foot of the same huaca, at F, 4-5 m. below the present surface, he uncovered a series of about 33 graves⁷ (figs. 2, 3), without exception containing modeled red-and-white Proto-Chimu pottery. The identical ware was subsequently found under the foundations of the structure by a resident of Trujillo. These two discoveries, coupled with the fact that only sherds of the red and white type are to be found on and about the Huaca, establish the age of the Huaca as Proto-Chimu and the date of its abandonment as the close of the same period.

As to the Huaca del Sol, its plan and construction are so similar to those of the Huaca de la Luna that it would be rash, says Dr. Uhle, to attribute the edifice to a different period, although it may have been

⁷ The catalogue segregates F1 to F33, catalogue numbers 2642 to 3394 (including some series from undifferentiated graves at site F); Uhle's plan, herewith reproduced (fig. 2) from JSA, fig. 11, shows 34 graves; and his text, JSA, p. 106, speaks of "about 37."

erected somewhat later and evidently remained in use longer. Excavations were conducted on the platform south of the top pyramid, where a walled area 136 by 29 m., filled with 0.8 m. of soil, had served as a dense cemetery. This had long since been dug over and contained only fragmentary artifacts. The pottery among these included occasional Proto-Chimu sherds, although of somewhat pallid type;⁸ and sherds of Tiahuanaco and "Epigonal" type as these are represented

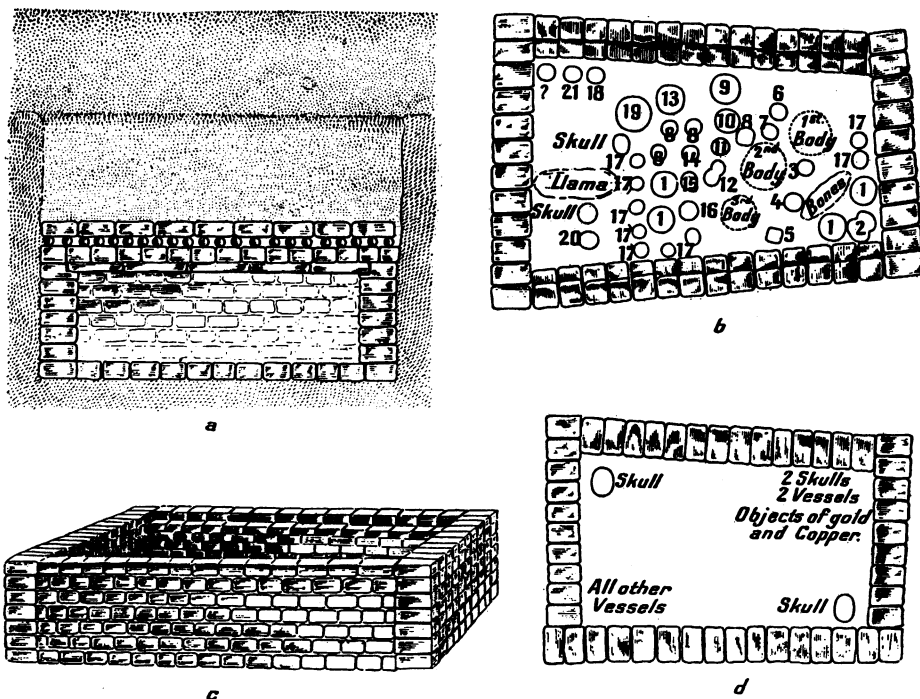


Fig. 3. Two adobe tombs and plan of their contents. Site F, at foot of the Huaca de la Luna (Uhle, JSA, fig. 12).

at Pachacamac. In addition there were finally found several intact graves, sunk into the pyramid terraces or walled in with adobes (fig. 5). These chambers contained chiefly a black ware with elaborate relief designs, and held no pure Tiahuanaco vessels; but they had been filled with soil taken from the adjacent cemetery, as shown by its content of Tiahuanaco sherds. These graves are therefore subsequent to the mass of the cemetery and evidently represent the final phase of its use. Assuming therefore that both huacas are Proto-Chimu in origin, it follows that the Huaca de la Luna was abandoned by the

⁸ Cat. no. 4-2633 b, c.

close of that period, whereas the Huaca del Sol continued to be occupied during the Tiahuanaco era and in at least one subsequent period.

In the middle of the plain, D, between the two great huacas, was a cemetery, excavated shortly before Dr. Uhle's arrival. He secured there no intact vessels, but the fragments were of black Chimú type corresponding to the late ware of Pachacamac and the characteristic ware of Chanchan.

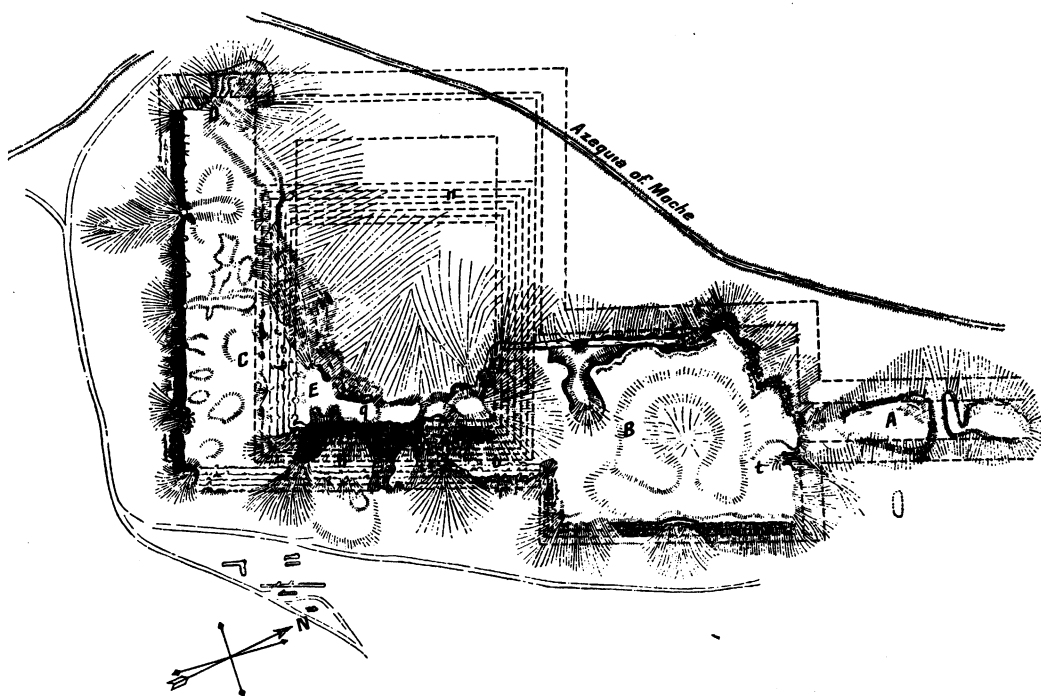


Fig. 4. Plan of the Huaca del Sol. C, southern platform, site A; E, pyramid; q, summit. The directions are the reverse of those in pl. 50 and fig. 1 (Uhle, JSA, fig. 3).

About 150 m. south of the Huaca del Sol, at B, Dr. Uhle excavated a cemetery containing the same black Chimú ware mixed with Inca forms.

At C, north of the Huaca del Sol, ware of different types was found at different levels. The soil in the vicinity contained Proto-Chimú sherds, establishing the priority of this style over the burials. At a depth of 1 m. there were graves with black Chimú pottery; at 2 m., two graves with red-white-black jars in a style familiar from Pacha-

camac; at 4 m., a child's burial without significant content but in the manner of the post-Tiahuanaco walled graves on the Huaca del Sol platform.

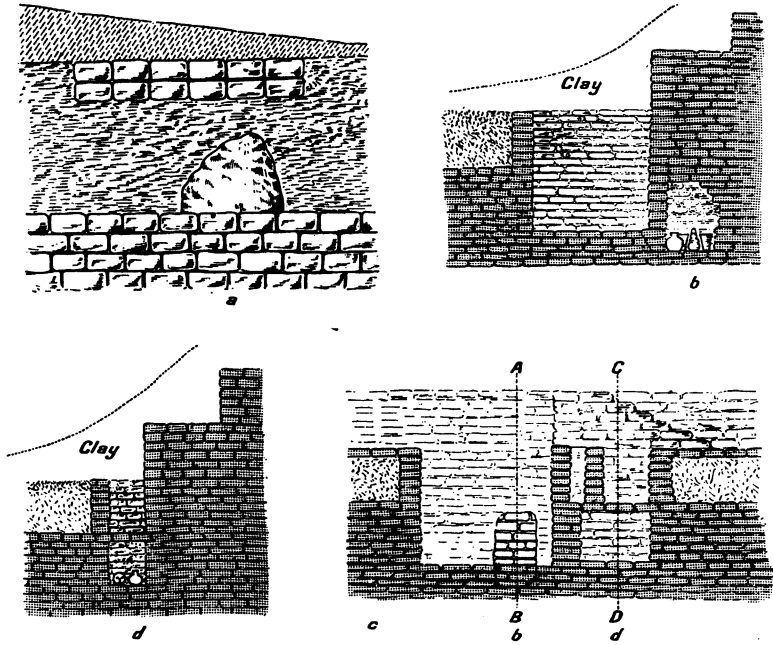


Fig. 5. Tombs at site A, southern platform of the Huaca del Sol (Uhle, JSA, fig. 14).

This makes "at least" four periods at Moche: Proto-Chimu, with red-and-white well-modeled ware, associated with long skulls; Tiahuanaco and Epigonal; post-Tiahuanaco blackware; possibly separate from this, red-white-black ware; and Chimu blackware with Inca admixture.

So far the outline of Dr. Uhle's presentation. Now follows the examination and interpretation of the collections.

PROTO-CHIMU: SITES E AND F

As to the antiquity of this ware, and its priority to any other yet found at Trujillo, there can be no reasonable doubt. Its discovery at and below the foot of the decayed Huaca de la Luna, the stylistic uniformity and purity of all Proto-Chimu graves, and the fact that where it is found associated with other styles these are represented by intact burials and the Proto-Chimu by fragments scattered through the surrounding soil, establish its precedence.

As between Proto-Chimu and Tiahuanaco, there might be some question because no intact Tiahuanaco graves or vessels have yet been discovered at Trujillo. The fact, however, that at the Huaca de la Luna there are no Tiahuanaco sherds in or about the intact Proto-Chimu graves, whereas at the Huaca del Sol sherds of both styles occur in the soil of later graves, makes the precedence of Proto-Chimu probable.⁹

Proto-Chimu pottery is the well-known red and white ware of the northern Peruvian coast, the most freely and best modeled in Peru; bearing loop or stirrup handles which are also spouts; usually flat-bottomed; and tempered, baked, and polished with consistent skill. There are some mediocre pieces among the 600 from Moche sites E and F, but scarcely any poor ones, technologically.

Dr. Uhle repeatedly speaks both of this ware and Proto-Nazca as "bunt"—many colored. The term applies well to Proto-Nazca, which normally carries four pigments, often five, and sometimes six or seven, and these applied in relatively small areas. Proto-Chimu, however, never bears more than three colors—red, white, and black—and of these black occurs rather infrequently (under 5 per cent), is usually employed sparingly, and was either applied after firing or consisted of a pigment that was not fixed by baking, since sometimes only traces of it remain. The percentage of vessels containing black was therefore perhaps originally larger than now; but the indications are that it was not much larger.

⁹ A tempting argument for Proto-Chimu priority, which however may not be pressed too far, is the fact urged by Dr. Uhle that the Tiahuanaco remains were deposited in an artificial cemetery constructed on the Huaca del Sol platform. This argument would be conclusive if it were known that this structure was of Proto-Chimu construction; but however probable such an age may seem, it is well to remember that it is not yet supported by evidence—Dr. Uhle merely saying that it would be "verwegen" to conjecture otherwise.

The prevailing Proto-Chimu coloration is accordingly red-and-white; with a small proportion (about 7 per cent) of all-white or all-red or red-white-black vessels. The red and the white are as a rule applied in large masses, accentuating the plastic qualities of the modeling. The effect is therefore describable as piebald. In unmodeled vessels, pigment is applied less boldly, and in general serves as a vehicle for drawing in dark on light, as opposed to the fundamentally polychrome character of Proto-Nazca, Tiahuanaco, and much of Inca decoration. A small percentage of carefully made vessels, usually stirrup-mouth jars, show realistic scenes, the outline painting being done in considerable detail and with more precision, probably, than in any other kind of Peruvian ceramic decoration.

The white is often creamy, buff, or even bluish gray; the red may be chestnut, maroon, dark brown, reddish or pale orange buff. It appears however that these variations are accidents of pigment grinding, dilution, or application, or of firing, and that the intent, except when black was added, was always to use only the two colors, red and white. It even seems quite possible that only two specific pigments were employed.

White on red is about as common as red on white, and there are vessels almost wholly of either color with but touches of the other. Whichever predominates, or if the vessel is monochrome, there is a slip. The paste is red where thoroughly fired. The surface is almost invariably well polished.

Sixteen of the Proto-Chimu vessels from Moche, less than 3 per cent of the total, are buccero—smoked black. This fact is of interest because this Proto-Chimu occurrence of smoked ware appears to be the earliest yet established for Peru.¹⁰ At both Pachacamac and Ica buccero is post-Tiahuanaco. Also, buccero is the typical and prevailing ware of most subsequent periods¹¹ in the Trujillo region. The technological rooting of these later arts in the earlier local one is thus clear; just as there is a relation of aesthetic dependence. At the same time, there is rarely danger of Proto-Chimu and later Trujillo ware being confounded, even in the absence of provenience or association data, because the Proto-Chimu blackware is a complete duplicate of Proto-Chimu red-and-white ware in every respect save color. Not only are the shapes and the style of modeling identical, but the ware has the same firm, hard, well-baked, and highly polished quality, in

¹⁰ The blackish or dark gray ware of the early shellmounds of Ancon and Supe appears to be unsmoked, burning naturally to those colors.

¹¹ See sites B and C below.

contrast with the soft, granular, often crumbly and lusterless blackware of later periods, which also is inferior in plastic achievement.

Forty-four vessels—41 red and white, 3 blackware—show relief, either a pressed design or low modeling. Five vessels or fragments are incised as well as painted (cf. pl. 57*j, l*); to which must be added one incised bucchero vessel (pl. 56*j*). There are represented in relief: dance scenes, deer, birds, fish, crab, octopus, maize ears, simple scroll, and spiral. The low frequency of relief and incision contrasts with the abundance of such decoration in later times in this area, when painting became scarce.

Ornament

	<i>Vessels</i>	<i>Per cent</i>
Red and white	539	90.9
Red, white, and black (including 1 black on red)	23	3.7
White only or red only	16	2.7
Smoked blackware	16	2.7
	594	100.0
Relief	41	7.4
Incised	6	1.0
Scenes (2 or more figures in action)	12	2.0
Scenes in relief	2	0.3
Painted design (i.e., more than accentuation of modeling or relief; also more than mere lines of paint)	202	34.0

Shapes are better seen in the illustrations than described in words, but the relative frequency of the various types is of interest. Dr. Uhle's collection presumably includes all his findings and is therefore unselected.

Shapes

	<i>Vessels</i>	<i>Per cent</i>
1. Pots, with lip. Pl. 59 <i>b</i>	22	4
2. Globular bowls, without lip (2 with lids). Pl. 59 <i>f</i>	5	1
3. High flaring bowls, sides concave (3 with low foot). Pl. 59 <i>e</i>	53	9
4. Hemispherical bowls with low foot	1	---
5. Dippers (?) with handle, lenticular body, small opening. Pl. 59 <i>a</i>	14	2
6. Jars with abrupt, flaring, wide mouth, usually round in horizontal section. Pl. 59 <i>g, h, j, l</i>	206	35
7. Same, with indication of head modeled on mouth part. Pl. 55 <i>k, m</i>	15	3
8. Globular jars with long narrow vertical mouth connected with body by quarter-circle handle. Pl. 57 <i>a, b, c</i>	25	4
9. Globular jars with stirrup mouth, i.e., semi-circular hol- low handle rising from body and a vertical unflaring mouth from the middle of this loop. Pl. 58	129	21
10. Same, but body cylindrical. Pls. 56 <i>j, 58f</i>	4	1

	<i>Vessels</i>	<i>Per cent</i>
11. Same, but body like two cone frustums, hourglass-shaped. Pl. 58 <i>d</i>	4	1
12. Jars in form of human head, handle or mouth like type 9. Pl. 54 <i>j-l</i>	11	2
13. Jars in form of seated or kneeling human body with human, animal, or monster head, handle mostly like type 9 but set like that of type 8; or jar of type 8 with human figure on it. Pls. 53 <i>b-f, i-k, 54a-i</i>	69	12
14. Jars in form of mammal, bird, frog, or fish; handle usually like type 9 (2 with double bodies). Pl. 55 <i>d-j</i>	29	5
15. Jars in form of plant or root. Pls. 53 <i>g, 55b</i>	5	1
16. Small low bowls, plate form (1 pair)	2
	594	100

There are three jars with double body, one of type 6 (pl. 59*k*) and two of 14 (pl. 56*k, l*).

The smoked blackware (pl. 56) is all narrow mouthed, and was therefore probably definitely ornamental, in contrast with its habitual use in later periods. Its occurrence is, type 9, 5 pieces; 10, 1; 11, 1; 12, 1; 13, 5; 14, 3.

Not only is the preserved Proto-Chimu pottery consistently of excellent quality as ware, but it is so regularly ornamented, in shape or color or both, that it obtrudes as essentially funerary apparatus. Very few vessels show signs of use; and nearly half are forms that could scarcely be put to daily, utilitarian employment. Peruvian practice evidently varied considerably on this point according to period and locality. The later pottery from Moche consists in considerable part of pieces that might have been used in the household and many of which had actually been so used. The Proto-Nazca pottery of Ica is in the main perhaps a show ware; but there are a few definite kitchen utensils made in much simpler manner. The pottery of all other periods at Ica and Chinchu regularly contains vessels whose inferiority to others suggests that they were not made primarily to be set in a grave. In fact, it seems on inspection of these collections that the minority of vessels, if any, were manufactured for the tomb. Mended pieces, for instance, are almost conclusive on this point. At Supe, a collection made by Dr. Uhle, consisting chiefly of Tiahuanaco-style and derived or related examples, comprises a heavy percentage of pots blackened by fire.

By contrast, the Proto-Chimu ware of museums, and as here analyzed, is then mainly tomb ware. The domestic utensils are represented by five vessels, two from site E and three from grave F20

(pl. 59*b-d*). The two first are wide-mouthed, coarse red jars, somewhat blackened, unslipped, 45-50 cm. high. One has a flaring mouth, the other an unusually wide vertical walled one. The three F20 pieces are also unpainted, of dark gray material coarsely tempered. They comprise a fire blackened pot; a bowl with short spout; and an incised bowl which appears still to contain marks of food. There is also a soot-blackened globular pot with lip, 3460*a*; Dr. Uhle's catalogue describes it as of "late" period; its number suggests that, although from the vicinity of the Huaca de la Luna, it was found separately from the mass of the collection there, possibly under circumstances which do not leave his verdict as to its age wholly subjective.

Handles and mouths were evidently molded separately and joined on in Proto-Chimu ware, spouts usually being slipped over a shorter and smaller interior spout rising from the vessel's body. Figures rising from a jar body are also obviously joined on to it. Some at least of the figure jars, and perhaps all, were made in molds. This is clear from duplicates like F27-3305 and F28-3307, plate 53*e*. One of these has lost more of its black overpainted areas than has its twin, so that it looks somewhat dissimilar; but examination of details like the finger interstices shows identity of form.¹² Of course the back of such figures must have been made separately. So too, round-bellied jars of types 8 and 9, with their minimal mouths, must have been made in an upper and lower hemisphere, or body and bottom. All evidence of this joining, however, has been obliterated on the outside. This does not need to argue high skill, but it does evince consistent care, precision, and interest in work.

Other circumstances point to much of this tomb ware being the product of professionals. The jars shown on plate 58*k, l*, for instance, both with black overpainting, are not identical in number or filling of their pattern panels. Yet the recurring lizards on each are so similar in proportions and handling of line that it is hard to believe that they are not the work of the same artist. As the vessels are from distinct tombs, production for sale is suggested.

The Proto-Chimu population of Moche must have been prosperous, and prosperous for some duration of time. A technical and aesthetic flowering like that of their ceramics does not often if ever occur among a distraught or poor people. The persistence of many of their types—blackware, figure jars, loop handles—through all periods down to the Spanish conquest, and their extension over a long stretch of the

¹² Compare the jars F12-2932, 2933, 2981 (pl. 59 *m*), each pressed between the same pair of molds, as discussed below, p. 217, n. 40.

Peruvian coast, testify to the strength of the impulse that produced this art. The two great huacas of Moche, finally, which are associated with this pottery, prove the population of the valley, or of the district of which the valley formed the nucleus, to have been populous, politically well organized, and possessed of economic surplus and leisure.

With the peak of Proto-Chimu culture so marked, the origin of this culture becomes a problem. To this problem there is as yet no answer, other, perhaps, than essentially speculative or legendary ones. The soil of the northern coast of Peru should however hold the evidence as to the nativity and history of this Proto-Chimu civilization, which, like that of Proto-Nazca, we now know only in its full bloom.

LATE CHIMU: SITE B

The pottery from site B includes three aryballoid jars but no other vessels of Inca type or showing serious Inca influence. The great bulk of the ware is black, some red, very little of it painted, a fair proportion modeled into figures, and most of the remainder decorated with low relief. This is the same ware as found at Chanchan and at other points on the northern coast, it and Proto-Chimu constituting the overwhelming bulk of the ceramics that have come from this area into museums, collections, and the trade. Since this blackware is associated with the aryballoids, it must have been at least partly contemporary; and since it was the Chimus whom the Incas encountered as a considerable power on the northern coast and overthrew a century or less before the arrival of the Spaniards, Dr. Uhle is probably beyond challenge in attributing the black pottery to them; although it is entirely possible that the Proto-Chimu people were also Chimu ethnically. For this reason I shall use the term "Late Chimu" for the ware from site B. This Late Chimu collection classifies as follows:

Three-color aryballoid, orange, deep red, black	1	
Two-color stirrup-mouth jars	2	3
Plain red ware, for domestic use	8	
Similar, incised	2	10
Blackware, plain cooking pots or other domestic ware	15	
Same, with simple relief pattern in zone	15	
Blackware, stirrup-mouths, plastic modeling, aryballoids, etc.	29	59
		<hr/> 72

The two two-colored stirrup-handled jars (pl. 60*f*) are of course a type that goes back to Proto-Chimu. They bear on one side of the base of the vertical spout a small modeled monkey or bird. Where this spout joins the stirrup, a sort of collar is painted. The designs on the body are geometric and disposed in zones. The color scheme is reddish brown on dull white, and black on a dull buff. In spite of the fundamental resemblance to the earlier prototype, these two jars could be mistaken for Proto-Chimu only through carelessness.

The red ware and simple blackware need little comment beyond the illustrations (pls. 60, 61). The more elaborate blackware includes two aryballoids, one of them fairly well shaped (pl. 60*k*), the other bastard; a two-spouted jar with bridge (pl. 60*b*); two stirrup mouth jars (pl. 60*d*, *e*); a human figure jar with stirrup mouth (pl. 60*g*); three double jars, two showing a person and one a bird (pls. 60*c*, *i*, 61*b*); animal, animal head, and bird head jars (pls. 60*a*, *h*, 61*d*, *j*, *k*); round and flattish jars with one flat loop handle (pls. 60*l*, 61*a*, *j*); and forms like plate 61*c*. The vessel in plate 61*a* appears to be Inca influenced.

It is clear that many of these forms derive directly from Proto-Chimu ones, as does the bucchero ware itself. But the modeling is grosser and more slovenly in the Late Chimu period, the polished surface inferior or absent, and the body of the clay less crisp and black. As if to compensate for this retrogression, new impulses to ornament appear, like the small animals or monkeys in plates 60*e* and 61*f*, the ridges of plate 60*d*, the coruscations of plate 61*c*; but these represent excrescences, unnecessary additions.

Geometric surface decoration is usually in relief, sometimes incised, and some of it may have been pressed on with molds. Most frequent is a sort of stippling of raised dots with an effect of "goose-flesh" (pls. 60*l*, 61*b*, *c*, *e*, *f*, *h*, *i*, *j*); but more elaborate schemes also occur (pls. 60*i*, 61*b*, *i*, *l*). One vessel (pl. 60*l*) bears a panel containing a figure with superficial resemblance to the black jars from A tombs described below (pl. 64). But the figure is differently handled and less elaborate, is surrounded by stippled dots, and the jar carries one ribbon handle instead of a pair of suspension lugs.

The heavy prevalence of Chimu over Inca vessels at site B and the qualitative poverty of the Inca pieces, as compared with the excellent ones at Ica, suggest that Inca cultural influence was relatively weak in the region of Trujillo. In other words, the Late Chimu style is mainly a local style, with a minor Inca ingredient whose significance is less in its effects than in its enabling the fixing of the time of the local style.

THREE-COLOR AND LATE CHIMU: SITE C

Reference has already been made to Dr. Uhle's brief account of his finding graves of three different ages at as many levels at site C. The lowest of these levels contained only a child's grave, without significant content. The second revealed two graves, C1 and C2, in which there were parts of three oval jars, red and black on white (pl. 62*a-d*) and one grayish white unpainted oval jar. This seems not much to build on. But the R-W-B jars are of a distinctive ornamentation, which is without parallel or approach in the remainder of the Moche collection, but agrees rather closely with a ware characteristic of the "third¹³ period" of Pachacamac.¹⁴ While this Pachacamac R-W-B ware is illustrated by only a few pieces in Dr. Uhle's monograph on that group of ruins, it is well represented in the Bandelier collection from Pachacamac in the American Museum of Natural History. It also occurs in the University collection from Ancon, where Strong has identified it as of Late Ancon I period;¹⁵ and in the University collection from Chancay, as yet undescribed. Dr. Uhle's determination of it as a well-marked and representative style is therefore corroborated. Its home was evidently the coast of central Peru. The present occurrence at Moche is the first so far north. The restriction of the type there to three pieces in two detached graves is interesting, but consideration of the significance of the restriction would be speculative rather than profitable. It is however clear that the style was never abundantly represented at Moche, and it may have been altogether a sporadic intrusion. It is also clear that this style was posterior to Proto-Chimu and anterior to Chimu; the first, because of about two dozen Proto-Chimu sherds¹⁶ found by Dr. Uhle in the soil surrounding the R-W-B graves; the latter, because grave 3, 1 m. nearer the surface than these graves, contained Late Chimu ware, as described in the next paragraph. The temporal relation of the R-W-B ware to the Tiahuanaco and associated ware of site A is not ascertainable from any Moche data. At Pachacamac Dr. Uhle determined the R-W-B as the later of the two, and Moche at least does not contradict.

¹³ Post-Tiahuanaco and post-Epigonol, pre-Inca.

¹⁴ Uhle, Pachacamac, pp. 36, 41, pl. 7, figs. 1-8, pl. 8; so cited by himself, with reference to the period; but only pl. 8, figs. 2, 3, 4, and pl. 7, figs. 1, 4, 5 are actually in R-W-B style, and only the last one of these shows the style quite specifically.

¹⁵ This volume, p. 144, pl. 43*i-p*.

¹⁶ Mus. no. 4-168.

Grave or rather graves C3, above C1, C2, held nine vessels or considerable fragments of vessels, without exception good Late Chimu in style, identical, in other words, with the vessels of site B. Not one is painted; one is red ware, another gray, the remainder all blackware. Three are cook pots, blackened with soot; a fourth, a red fragment, may be pot or jar; a fifth is part of a low bowl; the remainder are jars, one of them double (pl. 62*e*), another the shape of a dog's head—a form typical of Chimu. Five vessels have stippled dots in the zone of ornament, either alone, or with zigzag lines or scrolls, or, in one instance, associated with the figure of a deity (pl. 62*f*). There is not a piece that shows discrepancy from the site B late Chimu pottery already discussed.

TIAHUANACO AND ASSOCIATED WARE: SITE A

The complex and disturbed conditions explained by Dr. Uhle render it exceedingly fortunate, and a tribute to his patience, that any collections were recovered from site A, the southern terrace of the Huaca del Sol. The collection however remains small and largely composed of fragments; his filed records do not distinguish separate graves nor grave contents from soil finds; and his published article helps only in so far as it illustrates a selection of his discoveries. He seems to separate: (1) "*Tiahuanaco*" style sherds found scattered;¹⁷ (2) "*post-Tiahuanaco*" vessels found in tombs;¹⁸ and (3) vessels and sherds in style "other than Tiahuanaco,"¹⁹ which we may provisionally call *non-Tiahuanaco*, not from tombs, but "from the same soil" as the Tiahuanaco pieces.

The first or Tiahuanaco group, which is small, comprising only specimens 2530–2534, is also distinctive in style, and presents no difficulties. The second and third, or post-Tiahuanaco and non-Tiahuanaco groups, are not separated in Dr. Uhle's catalogue, and his published account²⁰ does not leave it wholly clear whether he employs the two terms as synonymous designations of ware of a single style found under two sets of circumstances, or as designations of two wares of different style and period. He states that group 2, the post-Tiahuanaco, is from tombs (fig. 5) on the Huaca del Sol platform that constitutes site A (fig. 4) and group 3, the non-Tiahuanaco, from loose soil in which these tombs were built, and apparently considers the two lots

¹⁷ JSA, fig. 16, p. 113.

¹⁹ JSA, pl. 6, figs. 1–8, p. 111.

¹⁸ JSA, fig. 19, p. 115.

²⁰ Pp. 111–115.

to differ not only in origin but also in age. Specimens 2536–2546 are definitely referred to as from tombs²¹ and can therefore be taken as constituting group 2 or its nucleus. From 2547 on, however, there is nothing on record to show which pieces Dr. Uhle considers “post-Tiahuanaco” (group 2) or “non-Tiahuanaco” (group 3), except for his publication of a few specimens as of the latter sort.²² There is no recourse, accordingly, but first to consider separately his delimited group 2 and his indefinite and vaguely described group 3; and then to consider their relation.

GROUP 1: TIAHUANACO

Outstanding among the Tiahuanaco pieces is the pair of partially reassembled tall goblets 2530–2531, one of which is shown in plate 63*b*.²³ These would suffice to establish the Tiahuanaco style if all its other remains in Peru and Bolivia had perished. The tall goblet shape is typical of the Titicaca plateau area. The design is characteristic in its massiveness, monumental squareness, headdress, rows of circles, white squared finger nails or feather tips. The coloring is white, buff, gray, deep red, black, corresponding to the formula white-yellow-gray-red-black, typical alike of the Proto-Nazca style²⁴ and the best non-Inca ware of the Bolivian highland,²⁵ and contrasting thoroughly with the Proto-Chimu prevailing two-color and maximum three-color scheme; just as form and design are totally different.

There are a few other sherds done in the same manner (pl. 63*c*, *d*)²⁶ but they do not reassemble.

Less characteristic is a goblet (pl. 63*a*)²⁷ smaller than the pair which Dr. Uhle classes as Tiahuanaco, but whose toothed scroll pattern

²¹ JSA, pl. 6, figs. 1–8 identify as numbers 2540, 2541, 2538, 2539, 2536, 2537, 2544, 2546. By inclusion, therefore, 2542, 2543, 2545 probably also belong to the group.

²² The pieces in JSA, fig. 19, identify as follows: Left to right—top row: 2568, 2537, 2572*a*, 2553; middle row: 2552*a*, 2565, 2546; bottom row: 2565, not found (but similar to 2562*g*), 2562*a*. Two of these numbers, 2537 and 2546, are rear views of JSA, pl. 6, figs. 6, 8, and are therefore attributed both to post-Tiahuanaco group 2 and to non-Tiahuanaco group 3. The contradiction is no doubt due to the author's being remote from his materials at the time of writing, but contributes toward rendering the somewhat obscure situation at site A still more uncertain.

²³ Uhle, JSA, pl. 5, *b*; and fig. 15, no. 2. The field catalogue says that the fragments of both vessels had evidently been used as amulets in later times and in part had been laid between adobes of the [tomb] walls. The article states, JSA, p. 114, that the parts of the vessels were found scattered over a distance of 20 m., and that one fragment lay between the tomb adobes.

²⁴ This volume, p. 106.

²⁵ Based on observations of the collections exhibited in the American Museum of Natural History.

²⁶ Uhle, JSA, fig. 16, nos. 4 and 5, 16–736, 4–2532*b*.

²⁷ *Ibid.*, no. 6.

is less severe, and whose color scheme is merely buff, light brownish, and black, corresponding to the formula white-red-black.

There is also a heavily modeled cat head (pl. 66*e*), whose number (2532d) as well as appearance place it in the Tiahuanaco group.

GROUP 2: POST-TIAHUANACO

The eleven pieces specified as from tombs, and construed by Dr. Uhle as post-Tiahuanaco, group as follows (pl. 64) :

One figurine (pl. 64*g*),²⁸ 10 vessels, of which 8 are jars, 1 a goblet, 1 a cookpot. Six of the jars and the pot are blackware; 2 small jars and the figurine are red; the goblet is painted white-red-black (pl. 64*l*). Of the 8 jars, 7 have flaring mouths—5 plain and 2 bearing a modeled face; 1 has a contracting mouth that bears a face. Four of the eight have pierced lugs for hanging; the cookpot also has handles for suspension. Of the 10 vessels, 6 carry a pressed pattern, which in 3 cases is inclosed in an arched, flat-based panel; in a fourth, the panel is circular; in 2 of the 4, the panel decoration is different on the two sides of the jar. Two of these relief-paneled jars show a double-ended serpent with serrated back conforming to the arch of the panel (pl. 64*e, j*); one shows a serpent-sceptred deity on one side and a figure enveloped in sun-rays or feathers on the other (pl. 64*b, c*); another has a pair of kissing (?) figures and rays on both sides (pl. 64*d*). Of the two jars with the double-ended serpent, one (pl. 64*e, f*) carries a lizard (?) with arched, serrated tail on the reverse; the other (pl. 64*j*) has the serpent inclosed in a band of S-scrolls with triangles in the spaces left by the curves. This last pattern occurs also on the cookpot, in a zone below the neck. Another jar has a crab in relief (pl. 64*k*), and shows small incised figures which suggest property marks or mnemonic signs. One of these is an upright rectangle horizontally bisected, the other a circle with a vertical stroke through it. The jar with the contracting spout has this rising from a head that is set on a body which in turn rests on a still larger belly; it is the only incised piece (pl. 64*a*). Of the two red jarlets, one is heavy, squat, plain, with suspension lugs (pl. 64*i*); the other has a face on its neck and the sides are scalloped into 3 lobes (pl. 64*h*). The ears on the heads into which jar mouths are modeled are long, and in one case notched horizontally in the middle (pl. 64*a*).

²⁸ JSA, pl. 6, no. 8.

GROUP 3: NON-TIAHUANACO

This group, which is not from tombs but lay loose in the soil or rubbish about them, is the largest from site A.²⁹ It consists of the following (pls. 65, 66):

A series of flat bowls or fragments, usually with low foot, the inside occasionally painted in two colors (pl. 66*h*), the outside regularly bearing a zone of conventional, non-pictorial relief (pl. 65*g, h, i*). Of 20 specimens, 3 are painted inside; outside, 11 are blackware, 7 unslipped red, 2 slipped white over red. The relief pattern seems just too irregular to have been pressed in repeatedly with a small stamp; it includes scrolls with triangles, fret or steps, perhaps conventionalized faces; and, some half-dozen times, the raised stippling or "goose-flesh" dots characteristic of Chimu ware; although this stippling, contrary to Chimu style, is confined to small areas—quadrants of a circle under the foot (4 cases—pl. 65*i*), step areas (1), rows of dots (2).

A blackware jar with one flat handle and a double zone of relief (pl. 65*k*); 5 blackware jar necks with conventional but sharply modeled faces (pl. 66*a-c*); the ears are long and narrow.

Blackware fragments (pl. 65*a-d*), in part in character like the group-2 vessels shown in plate 64, depicting mythological characters or scenes.

A blackware jar of a seated woman with a load; modeled with Proto-Chimu vigor, but more roughly executed.

Two red pots, one with relief pattern like that on the bowls, the other diagonally grooved.

Three goblets or fragments, black on white, or red and black on white (pl. 66*f, i*).

Various fragments or odd pieces (pls. 65*c, d, e, f, j, m, 66d, g*), and trumpets, whistles, figurines, or heads (pl. 65*b*).

²⁹ 2548-2572 are vessels, 2547 and 2573-2593 trumpets, whistles, and figurines; JSA, fig. 19. The non-tomb provenience is attributable for the pieces listed in footnote 22 above, only on the basis of Dr. Uhle's fig. 19 and statement, p. 115. For the other pieces in the lot, the same attribution rests only on the fact that the catalogue numbers which he assigned to them and to the pieces which he grouped into his figure 19 form a continuous series when combined.

RELATION OF THE THREE GROUPS AT SITE A

Whether this group-3 material comes partly from the tombs or wholly from the soil, it does not seem to differ positively from the specified tomb material that makes up group 2; except in so far as the collector seems mainly to have put his whole jars first in his catalogue, and his shallow bowls, fragments of jars, and odd pieces later. The following traits are common to the two lots:

No stirrup-mouth jars; no aryballoids or double-spouted jars, as they occur in the Late Chimu material from site B; relief stippling only in small patches, not as background as in Late Chimu ware; faces similarly modeled on jar necks; long ears on such faces, sometimes horizontally notched;³⁰ the scroll and triangle pattern in relief—2 and 7 times respectively; goblets, painted; much more relief than painted decoration, on the whole; blackware most abundant, unpainted red ware next. So far as there are consistent differences, they are at least possibly all due to the sort of grouping which is natural in a catalogue: suspension lugs occur on jars, feet on bowls.³¹

I conclude therefore that groups 2 and 3 from site A probably represent no very fundamental stylistic difference; and that the pieces from within site A tombs and those loose in the soil outside the tombs are probably nearly the same or at least not certainly differentiable as to stylistic age.

This raises the question whether the pieces of Tiahuanaco style in lot 1 are also to be included temporally with groups 2 and 3, since they differ only in style. This question I am disposed to answer affirmatively, because of the association, at places other than Moche, of pottery of definite Tiahuanaco style with ware showing only remote Tiahuanaco traits and otherwise resembling the group 2 and 3 ware. This is true at Pachacamac, where Dr. Uhle indeed distinguishes a Tiahuanaco and an Epigonal style,³² but says that pieces of the two kinds are found in the same grave;³³ at Ancon, where the Middle Ancon I ware shows pieces in what appears to be a local native style and pieces with unmistakable Tiahuanaco affiliations;³⁴ and at Supe, where Dr. Uhle's collection at the University shows a similar mixture or association of styles. Much of the non-Tiahuanaco pottery from Supe is in fact close to the group-3 ware from Moche site A: a long series of

³⁰ Pls. 64a and 65b.

³² Pachacamac, pls. 4, 5.

³¹ See note 22, p. 208, above.

³³ *Ibid.*, p. 22.

³⁴ Strong, this volume, p. 148, pls. 46, 47; also figs. 2, 3, 4.

footed bowls, for instance, some of them badly painted inside, and many zonally decorated with relief outside.

In other words, evidence from burial or from circumstance of occurrence, upon which might be based a differentiation of the ware at site A into two or more groups, is lacking or has been lost. The differentiation made by Dr. Uhle into specific Tiahuanaco ware and ware in part more remotely resembling Tiahuanaco pottery, may be stylistically sound, but appears to be founded only stylistically. The indications are that this specific Tiahuanaco ware and the Tiahuanacoid or "post-Tiahuanaco" and "non-Tiahuanaco" ware were associated so closely as to warrant the inference that they were contemporaneous; just as an analogous and similar association and contemporaneity hold elsewhere.

In short, except perhaps in its presumptive immediate homeland on the Bolivian plateau, the Tiahuanaco style nowhere appears alone but is regularly associated with the supposedly derivative Epigonal or with local styles or with both. On the other hand, it is the one style other than the Inca which is found over almost all Peru.

POSSIBLE NORTHERN INFLUENCES

I have reserved until now consideration of a special type of ware among the "non-Tiahuanaco" series from site A. This is represented by fragments of several three-legged bowls,³⁵ the inside painted black and red on buff (pl. 63*f-p*). Vessels on legs are as rare in Peru—although they occur sporadically in most of its districts—as they are typical of the Isthmian and Mexican regions. The occurrence of fragments of a considerable number in the rather meager recoveries of pottery from site A is therefore notable. Further, the shapes are typically Mexican, and the color and character of the pattern in several of the sherds do not agree with the mass of ceramics recorded from Peru. The painting is distinctly rapid, almost cursive, linear, with few masses; the thickness of the same stroke often varies so much as to suggest its having been made with a soft brush (pl. 63*f, g, p*). There is abundance of Peruvian pottery whose painting is slovenly; but it is also crude and heavy. I know of none that is at once careless,

³⁵ 2565, 2567*a-c*. There are 2 sherds with legs; 4 sherds from which a leg has been broken and which show by their pattern that they belong to other vessels than those whose legs remain; and several other sherds without mark of having had legs but painted in the same distinctive style as those which give evidence of having had them. Altogether, the fragments represent 9 or 10 vessels of the type. Another example is plate 63*p*, listed without comment by Uhle as from near the Hacienda de Pampas, presumably in the Trujillo region.

free, and thin-stroked, like the painting on these legged bowls, and on much Mexican ware. A definite influence from an area north of Peru, or possibly an importation, might therefore be inferred from these sherds,³⁶ were it not for a degree of resemblance evident in a pair of three-legged bowls from Viru or Chicama, now in the Peabody Museum, and reproduced by courtesy of Director C. C. Willoughby (pl. 69*a, b*). Both of these show the same style of three-color painting as the Moche sherds (compare especially pl. 69*a* with pl. 63*f, g, i, j*, and pl. 69*b* with pl. 63*m, p*). But the triangles, the toothed scroll, and especially the heads on plate 69*b* are so manifestly Peruvian—Tiahuanaco-derived of the baser sort—as to make possible the interpretation of the Moche sherds as the product of a native style. Dr. Hrdlička has also figured two tripod bowls, from Chiquito in Chicama, whose painting is in part in good Peruvian style and in part suggestive of foreign influence.³⁷

INFERENCES DERIVABLE FROM THE UHLE COLLECTION

The following styles of pottery are recognizable at Moche on the basis of Dr. Uhle's collection and data.

Style 1. Proto-Chimu. Established as earlier than the following by the stylistic purity of the cemeteries at sites E and F, the position of these with reference to the Huaca de la Luna, and the fact that the ware is not specifically associated with any other but where it occurs in the same cemetery is found only as fragments strewn in the soil in which intact interments of other type were made. The antecedents of the Proto-Chimu style are wholly obscure. On the other hand, the influence of the Proto-Chimu style can be followed long after its disappearance, in fact until the Spanish period, directly at Moche and in weaker form on the coast of central Peru.

Style 2. Tiahuanaco. Represented only by fragments in one cemetery, A, on the Huaca del Sol, and this contained also pieces of style 3. The style is definitely close to that of the Titicaca region, but sparsely represented.

³⁶ W. Lehmann, *The Art of Old Peru* (London, 1924), says, p. 40, n. 68, that three-footed vessels are "rare in South America and perhaps not really native to it. In Peru they seem to be confined to the northern part and in Moche are ornamented with patterns markedly distinct from those of the rest of the pottery in the ruins."

³⁷ *Smithsonian Miscellaneous Collections*, LVI, no. 16, pl. 1, 1911.

Style 3. Pottery, including relief ornament ware and blackware, found associated with Tiahuanaco were at site A. Dr. Uhle appears to distinguish two styles, a non-Tiahuanaco represented by disturbed fragments, and a post-Tiahuanaco from tombs; but the available data do not allow of a certain distinction.

Style. 4. Three-legged bowls, cursively painted red and black on buff. Found associated with the last, that is, its non-tomb portion, at site A. Suggestive of Isthmian or Mexican influence, but related to Tiahuanaco-derived ware through a few other specimens from the Chimu area.

Style 5. Red and black on white, from two graves at site C, definitely similar to a distinctive red-white-black ware found at Pachacamac and Ancon.

Style 6. Late Chimu. Prevailing blackware with relief ornament. Found at B and C3. Certain features, including smoking, stirrup handles, double jars, relief modeling, figure modeling, obviously connect with Proto-Chimu. The Moche Late Chimu is a more consistent, less mixed style than the corresponding blackware style at Pachacamac. There is a rather small but positive admixture of Inca pieces of not very pure type.

Inca ware in pure lots has not been found at Moche.

As to the periods represented by these styles, while Proto-Chimu is indicated by all the evidence as the earliest, and Late Chimu is fixed as latest by its Inca admixture, both the number and the sequence of the periods represented by the other styles are less certain. Styles 2, 3, and 4 are closely associated at site A; and even if the varieties of style 3 distinguished by Dr. Uhle prove to be distinct in type as well as provenience, it seems unlikely that 2, 3, and 4 were far apart in time. The R-W-B style 5 is suggested as later than 2-3-4 by the respective occurrences of the two groups at Pachacamac, their Moche proveniences affording no positive clues as to their time relation.

Late Chimu, the latest style, is in many respects definitely more similar to Proto-Chimu, the earliest, than either is to the four or more styles of the one or more intervening periods. These intervening styles all occur also at some distance—2 at Tiahuanaco and elsewhere, 3 and 5 at Pachacamac, Supe, and elsewhere on the coast of central Peru, 4 north of Peru—and are more abundantly represented in these remote regions. They are therefore evidently styles which were developed in these areas and imported to Moche; indeed in some cases the vessels themselves may have been bodily transported. The Proto-Chimu and

Late Chimu have enough of certain fundamentals in common however—stirrup mouths and plastic modeling for instance—which are lacking in the introduced styles, to make it certain that a connection between them persisted.³⁸

The indicated connecting style may be called Middle Chimu. Its general era would be that of the exotic styles 2-3-4-5. These may have temporarily driven it out of Moche, but in that case it continued elsewhere in the northern coast region. Or, on the other hand, it may have continued at Moche—perhaps among distinct populational groups, like contemporaneous Late Ica and Inca at Ica—and have been deposited in cemeteries which Dr. Uhle did not happen to encounter.

RELATIONS OF CHIMU STYLES

Obviously, the hypothetical Middle Chimu style could be considered determined if a ware were isolable which in the main combined or averaged traits of Proto-Chimu with traits of Late Chimu, plus perhaps certain traits of its own. The determination would be strengthened by the occurrence of a certain degree of exotic influencing—by a Tiahuanacoid style, for instance—provided this foreign influence were not so strong as to disrupt the Proto-Late Chimu continuity, as appears to have happened in the culture phase or phases represented by the sites A and C material of styles 2 to 5. Such imported traits of non-Chimu character would at any rate help to mark off the presumptive Middle Chimu ware as being neither Proto-Chimu nor Late Chimu.

It must be remembered, however, that very little ancient pottery or other cultural material has come out of Peru with exact data as to its occurrence or associations. The Uhle collections are rather unique, perhaps wholly unique, in being accompanied by such information. A mere record of provenience as from a certain locality, perhaps as general a one as a whole valley or the vicinity of a town, means very little in the face of Dr. Uhle's finding half a dozen styles within a diameter of a fraction of a mile at Moche. In short, if there is Middle Chimu material in existence, it cannot be expected to be

³⁸ Seler, *Gesammelte Abhandlungen*, v, 130, 1915, in discussing the Uhle explorations at Moche, accepts the priority of Proto-Chimu to Tiahuanaco and Late Chimu, but is skeptical of a hiatus between Proto and Late Chimu culture. He also argues that the priority of Proto-Chimu to Tiahuanaco ware at Moche does not necessarily make Proto-Chimu culture earlier than Tiahuanaco culture: the latter may have been late reaching the northern coast.

accompanied by data, nor even, except on a lucky chance, to be represented as a segregated, pure unit in any preserved or described collection. It could only be sifted out from among other material by analytic comparison. Such a sifting is worth attempting, in view of the indications which have been set forth that there may have been such a style—one distinctively Chimoid but also distinctively transitional between the Proto and Late phases.

As a first step toward a reconstructive segregation of this possible Middle Chimu style, it will be necessary to characterize the Proto-Chimu and Late Chimu styles in greater detail than before; especially, to point out the finer differences within the features which they possess in common.

COMPARISON OF PROTO-CHIMU AND LATE CHIMU

Color is an age index of high probability but not certainty: blackware constitutes about 3 per cent of Proto-Chimu, three-fourths or more of Late Chimu ware.

Texture is allied as a criterion, the surface being definitely harder and better polished in Proto-Chimu; but the individual vessels vary so much that the chief value of this feature is corroborative.

The stirrup mouth is not an index, so far as its presence or absence is concerned, since it carries over. Whether its greater Proto-Chimu frequency in the Uhle collection is wholly significant (42 per cent as against 7 per cent), is not certain: the Late Chimu series contains a larger number of utilitarian vessels. The shape of the stirrup mouth, however, is significant. The Proto-Chimu stirrup is slender, free springing, and invariably devoid of ornamental increment. The Late Chimu stirrup tends to be heavier and grosser. In all five examples it bears a small monkey, bird, or small lug-like ornament, or a pair of them, either at the base of the stirrup or base of the spout. There is not a single example of such an excrescence in the two hundred odd Proto-Chimu stirrups.³⁹

In collections other than the Uhle one, stirrup mouths on vessels that otherwise agree with the Uhle Late Chimu ones, often have the stirrup laterally flattened, or rectangular in cross-section instead of circular; and in the latter case, sometimes ornamented in relief. No Proto-Chimu piece shows a trace of these traits.

The double-spouted vessel is Late Chimu (pl. 60*b*) but not Proto-Chimu. The history of this form is clear in outline. It first appears in Proto-Nazca in the far south. The two spouts are short, cylindrical, and parallel or nearly so. Later forms have longer and usually tapering spouts, spreading at an angle of about 45°, and the connecting bridge is thin and flat and often humped. These vessels occur on the whole coast of Peru, usually in association with Tiahuanaco-

³⁹ The nearest approach to these monkeys or birds is found in a pair of Proto-Chimu jars, F-2716-2717, type 8, with a monkey leaning against the spout. But this monkey is free of the handle, is much larger than the Late Chimu stirrup monkeys, has its tail carried on to the belly of the pot, and is modeled in some detail. Motives like this one may however have influenced the development of the Late Chimu trait.

influenced ware, and often with Tiahuanacoid patterns. Even at Nazca there seems to have been a reintroduction or occasional importation of this Tiahuanacoized double-spout, as evidenced by a typical specimen in the Uhle collection from Nazca, and another in the American Museum of Natural History. The form did not always die out with the disappearance of the Tiahuanaco-influenced style, but, as at Moche, sometimes continued until Inca and Spanish times. Still, its association with the Tiahuanaco style is so frequent that it might be expectable in Middle Chimu.

A form related to the double-spout is a jar whose front part consists of a modeled figure, which is connected by a flat bridge or ribbon handle with a single tapering spout. This form can be construed as a hybrid between the stirrup-mouth and the double-spout; that is, a figure jar with half a typical double spout replacing the stirrup portion; or, a double-spout vessel one of whose spouts has been replaced by the sort of figure customary in stirrup-mouthed jars. This type is Late Chimu (pl. 60*a*), not Proto-Chimu.

The flat or ribbon handle, frequent in Late Chimu on double-spout jars, double jars, single figure jars, bird lip jars, and even cook pots, is wholly lacking in Proto-Chimu.

A spirally twisted handle occurs once in the Late Chimu ware from site B, and not otherwise at Moche.

Double jars occur in both Proto-Chimu and Late Chimu, but of different type, and appear to be much commoner in the later period. There are only 3 Proto-Chimu examples among nearly 600 specimens. Two of these are whistling jars bearing a modeled bird of moderate size; the third consists of two unmodeled jars (pl. 59*k*). The 4 Late Chimu examples (out of a total of 81 at B and C3) consist each of a modeled vessel joined to a plain jar by a ribbon handle (pls. 60*c*, *i*, 61*b*, 62*e*).

An excrescence resembling the knob on Inca aryballoids occurs on 3 or 4 Late Chimu vessels (pl. 61*l*, *m*). Two Proto-Chimu vessels (F-2851 and pl. 55*l*, the latter a miniature) have a human head or bust in the same position; but the modeled arms, raised to draw a shawl over the head, preclude the bust from having been more than an ornament, since a carrying strap bearing against the fragile arms would be likely to break them. The Late Chimu head knobs, on the contrary, would have served well to keep a packstrap from slipping.

Jars oval in cross-section are Late Chimu, some examples being markedly flattened (pls. 60*l*, 61*c*, 62*f*). With the flattening there tends to appear a circular or arched panel of pressed design (the same, also pls. 60*i*, 61*b*). Proto-Chimu also knows flattening, but only to a moderate degree, and normally in unmodeled jars simply painted in red and white. There are 5 such jars in grave lots F3 and F5 (including one with a perforation through its belly—pl. 59*i*), 4 in F6, 3 in F8, 4 in F23, 4 in F25. They tend to come in pairs.

There are also three identical Proto-Chimu oval jars from grave F12 (2932, 2933, 2981, pl. 59*m*) which bear on each side a pressed scene contained in an arched panel.⁴⁰ This appears to be the earliest determined occurrence of this type of panel; which, it should be remembered, is fairly abundant in the pressed ware of Tiahuanacoid associations at site A. The panel is therefore not differentially characteristic of Late Chimu. Whether the Proto-Chimu

⁴⁰ The scene on the two sides of each vessel is the same, but slightly different in details. The identical pair of molds was used on each of the three vessels. The use of two molds suggests that they were employed simultaneously. See p. 203, n. 12.

occurrence is due to invention within the style or to extraneous influence acting upon it, is hard to say; the design of the pressed scene is however in fairly vigorous Proto-Chimu manner.

Animal forms are modeled as follows in the two styles:

The monkey appears in Proto-Chimu pieces E-231, F15-3023, F-2715, F23-3139, besides the supplementary figure on F2716-2717 already mentioned. Late Chimu uses the monkey as a small ornament on the stirrup mouth, and also as a jar knob (pl. 61*m*) and handle (pl. 61*f*).

The cat, frequent in Peruvian art of all kinds, is specially important in the Tiahuanaco and Tiahuanaco-influenced styles of pottery. It occurs in both Proto-Chimu and Late Chimu, but much less often. Apart from cat headdresses worn by human beings or divinities, there is but one modeled occurrence of the cat in the 600 Uhle pieces, and that in relief associated with a freely modeled lizard (pl. 55*h*). There are no cat-head jars such as characterize the Tiahuanaco and Epigonal ware of Pachacamac and Supe. The only Late Chimu example in the Uhle collection is shown in plate 61*d*, a crouching figure with upturned open jaws serving as mouth of the vessel. This is a type occurring also in central Peru.

The owl, also a fairly frequently modeled object in Tiahuanaco-influenced wares, occurs in Proto-Chimu E-229 with a human body, god's tusks, and an ax; F7-2779, similar; and in F11-2903. There are no pairs of owls or double-headed ones. Late Chimu is without examples in the present collection.

Various birds occur realistically modeled in Proto-Chimu: the duck in plate 55*f*, the condor in 56*e*, other birds on the whistling jars in plates 56*k*, *l*. Late Chimu uses small birds on the stirrup mouth (pl. 60*d*) and indicates a bird's head on the lip of jars (61*j*, *k*) or in double jars (60*i*).

The lizard is a Proto-Chimu favorite, both in modeling and painting: plates 55*h*, 56*i*, 58*c*, *k*, *l*. On the other hand, the serpent is rare, and, to judge from pieces outside the Uhle collection, occurs chiefly in painting, and then as feathered, horned, or clawed. Neither animal is represented in the Uhle Late Chimu collection.

Fishes are both early and late (pls. 53*c*, 55*a*, *g*, 56*j*, 62*e*). Pieces in the American Museum are generally black and late in manner.

Eels, lobsters, and crocodiles, in fact all elongate animals, are unrepresented in the University Museum. Examples elsewhere generally suggest a late style.

The squid or octopus is Proto rather than Late Chimu. Simple scroll ornaments suggest derivation from cephalopod representations (pls. 58*j*, *m*, 59*f*, *k*, *l*). However, Baessler's derivation of the step-scroll from the octopus⁴¹ is both hypothetical and rather unconvincing. The curvilinear geometric step-scroll (pl. 59*i*), the rectilinear geometric step-fret (pl. 55*e*), and the octopus-god (pl. 55*a*) all appear in the pure Proto-Chimu collection of Uhle, and are therefore contemporary.

Late Chimu shows the simple scroll (pl. 61*j*) and the step-fret (pl. 60*i*). The Tiahuanaco-associated ware from site A uses a repeated scroll, plain or toothed (pls. 63*a*, 64*j*, 65*h*, *j*, 66*i*), the step-scroll (pl. 65*g*, *i*), and the step-fret (pl. 65*c*, *e*).

Animal head jars are both early and late. Baessler interprets some red-and-white examples as foxes.⁴² The Late Chimu pieces (pl. 60*h*) are haltered and therefore more likely represent dogs, possibly llamas. There are four Proto-Chimu animal heads in the collection, all without halters.

⁴¹ Baessler, pls. 1-8 and accompanying text.

⁴² Baessler, pl. 56.

Human figures and heads, modeled, relief, and painted, which are so conspicuous in all Chimu ware, are best distinguished with reference to their attitudes, detailed features, dress, or other specific traits.

Proto-Chimu painted figures are usually in action, often vehement action: running, fighting, hunting, dancing. To represent motion was obviously one of the chief endeavors of this phase of the style. Groups of figures lent themselves particularly well to this handling. On the other hand, the modeled human figures are almost throughout in attitudes of repose. They mostly sit, occasionally kneel, rarely stand; and they normally occur singly. There is not an example of a plastic group in the Uhle collection. The nearest approach is the amative couple in plate 54*b*, and these, enveloped in an embrace and one garment, are virtually a single figure. Wherever, therefore, modeled ware occurs which bears two or several human figures, there must lie some presumption of post-Proto-Chimu origin, especially if the ware is colored. Late Chimu, with its comparatively gross, slovenly modeling, would not lend itself well to group scenes; and the Uhle collection contains none.

With groups go landscapes, mountain peaks, cliffs or dunes, and houses or other structures. None of these appear modeled in the Uhle Proto-Chimu series, although fairly frequent in red-white ware in other museums. Such vessels might therefore be Middle Chimu, since the Uhle Late Chimu collection is void even of approaches to these motives.

Among the prevailing seated modeled figures of Proto-Chimu, the majority have their legs crossed. A minority squat or sit with knees drawn up—some clearly on the ground, some possibly on a low seat. The respective numbers are 25 and 20, about half of each number being shown in plates 53–59, 67. The Late Chimu numbers—legs crossed, 1, drawn up, 2—are too small for reliability. The American Museum of Natural History collection from Trujillo segregates as follows: red and white ware, mainly Proto-Chimu, legs crossed, 9, legs drawn up, 2, standing, 1; blackware, mainly Late Chimu or post-Proto-Chimu, respectively 2, 8, 3. The red and white ware from Chimbote, which appears to be a mixture of Proto-Chimu and post-Proto-Chimu, shows intermediate proportions, namely 20, 31, 8. While posture is thus no certain index of period, it seems that the characteristic attitude occupied or represented in Proto-Chimu times was with legs crossed, with an increasing tendency in later ages to substitute sitting on a seat or with knees drawn up.

The seated Proto-Chimu figures usually have their arms down, often with the hands resting on the knees (pls. 53*a*, *d*, *e*, *f*, *h*, *i*, 54*b*, *c*, *e*, *i*, 67*b*); sometimes one hand holds something; in that case the forearm is level (pl. 53*j*, *k*). Occasionally one or both arms are raised to a weapon or carrying strap (pls. 53*l*, 56*a*). Late Chimu on the contrary has the hands normally held across the stomach (pls. 60*c*, *g*, 61*b*). This attitude is rare in Proto-Chimu (pl. 56*b*). Equally awkward is the characteristic Late Chimu attitude of standing figures done in relief—arms bent at the elbow, the hands nearly on a level with the shoulders (pls. 60*l*, 62*f*). Usually a scepter, weapon, or something of the sort is held. Both these Late Chimu mannerisms occur in Tiahuanaco-influenced ware at Moche (pls. 64*a*, *b*, 65*a*) and elsewhere, in fact are prevalent on the northern and central Peruvian coast in the post-Tiahuanaco periods.⁴³ As compared with these stiff, posed attitudes, Proto-Chimu arm postures are natural, at once free and reposeful.

⁴³ Compare the Ancon figurines classified by Strong in this volume, pl. 49; and Uhle, Pachacamac, pls. 7, 8, 13.

Proto-Chimu heads are more often than not bare or covered only with a cloth. The prevalent form is therefore that of the natural rounding of the head. Of decorative headdresses, the following appear: A rectangular pad or trapezoidal board on edge (in one case extending shelf-like above the forehead) and held by bands, 10 cases. Plain fillet, or simple, rather thick head band, 9. Fillet with cat head in the center and often claws on the side, apparently a cat fur bound over the forehead, 8. A fillet with side wings, 2—both seated, bearded old men. A semicircular, erect disk or shield, 3, including one case with two smaller, circular disks in front of the semi-circular one, and one combination with the cat-head fillet. Cylindrical headdress with one or two constrictions, 2. Total, less one duplication, 33 as against 40 instances of bare or shawled head.

The quadrilateral head ornament and the head veil or cloth appear to be worn by both warriors and women.

The 8 heads with cat fillet include 6 of tusked gods (pls. 53*c*, 54*j*, *l*, 55*b*, 67*a*). Two are men, one of these with a nose-ring (pl. 67*b*, cf. pl. 56*a*).

Late Chimu figures are characterized by two types of headdress not found modeled in the Moche Proto-Chimu collection. The first of these is a large, semilunar, stemmed disk, worn transverse to the length of the head. This appears in a relief figure from site B (pl. 60*l*), in another from C3 (pl. 62*f*), and in a figurine. It seems to be associated with the stiff-arm standing position and the holding of scepter or weapon. It occurs in the Uhle Proto-Chimu collection only in painted scenes, as a crest on warriors' helmets (pl. 57*b*, *e*). In other Proto-Chimu collections, also, it appears much more often in painted representations, perhaps on account of the difficulty of modeling the form.

The second Late Chimu headdress is represented in plate 61*b*. It is highest at the two sides, depressed in the middle. It might be described as horned, its upper edge as recumbent crescentic. Its meaning is unknown; but decoratively it seems allied to the three-figure groups and double mountains occurring in the plastic ceramics of the area. The Proto-Chimu winged fillet of the bearded men may be a prototype, but is lower and not a complete head covering.

Proto-Chimu portrayal of ear treatment classifies as follows: Undecorated ears, 15 (pls. 54*g*, *i*, 56*a*). Ears with a hole, possibly for attaching a shell or stone ornament to the pottery figure, 4. Hair or shawl covering the ears, 33 (pl. 53*a*, *b*, etc.). Cylindrical ear plug, sometimes emerging from the head wrappings, 5 (pls. 53*j*, 55*m*). Oblong or diamond-shaped pendant hung from the lobe, 6; the persons appear all to be gods, and the pendant seems always to represent the same type of ornament, perhaps a snake's head (pls. 53*c*, 54*l*, 55*b*). A disk hung from the ear lobe as pendant, 7 (pls. 53*h*, 54*d*, *h*, 67*a*). A disk, probably inserted in the lobe by a stud, 5 (pl. 56*c*). Disk covering the whole ear area, probably an inserted ornament, possibly a hair whorl, 3 (pl. 53*d*, *f*). In two-thirds of the 78 cases, ear ornament is lacking or invisible. There are 15 clear cases of ears without ornament, 17 of pendant or provision for same, 13 (at most) of inserted plug.

Late Chimu shows two relief figures with disks (pl. 61*b*), a modeled one with disk or circular pendant (pl. 60*g*), and one figure with covered ears (pl. 60*c*). These cases, together with the occurrence of ear plugs in relatively late pottery elsewhere,⁴⁴ suggest that the disk plug was more characteristic of late than early periods on the Peruvian coast.

Fabric marking of otherwise unornamented surface occurs surely in one and possibly in two other pieces of the site B Late Chimu collection (pl. 61*l*).

⁴⁴ Uhle, Pachacamac, pls. 7, 13; Strong, this volume, pl. 49.

A characteristic device of north Peruvian pottery modeling is a scalloped or round indented edge along the upper parts of both sides of a figure. The meaning of this very likely varied; the unity of the aesthetic motive is rather clear. A case has already been cited (pl. 64*h*) among the tomb ware from site A. The only Proto-Chimu approach to anything of the sort is a curious vessel (pl. 67*d*), which probably represents a helmet off the head.⁴⁵ The only Late Chimu example is plate 61*c*, which may be a derivative from a shell representation. The motive may then be expected to be perhaps most characteristic of the hypothetical Middle Chimu. At any rate, something like it recurs whenever a modeled vessel shows several mountains instead of a pair, or when a jar has a pair or more of excrescences on each side of the head in the center.

THE QUESTION OF MIDDLE CHIMU

The foregoing comparison based primarily on the pure Proto-Chimu and the pure Late Chimu Moche collections of Uhle defines both types. If now there exists in the material from the north Peruvian coast which has been illustrated or is accessible in museums, any considerable quantity of ware which corresponds exactly with neither type while still of general Chimoid character, it will be indicated as Middle Chimu. Particularly will this be the case if any notable series of vessels can be found in which distinctive Proto and Late Chimu traits are combined—say, relief figures in vigorous action and raised stippling, red-and-white animal heads and halters, or painted genre scenes on the belly and miniature monkeys on the stirrup mouth of the same vessel.

Such frank combinations, which would be compulsorily interpretable as evidence of a transitional Chimu style and perhaps period, have not been observed.

There remain the less certain indications afforded by Chimoid vessels that in the main are of either early or late type, but present certain features unrepresented in the determined early and late Uhle collections. Here, in the nature of things, there can be no great degree of positiveness, the ultimate criteria being negative. The following are the indications of this type.

In general, the material most suggestive of a Middle Chimu phase consists of red-and-white vessels modeled substantially with Proto-Chimu firmness and skill, but depicting subjects unrepresented in the Uhle Proto-Chimu collection. Many of these subjects are more or less interrelated: groups of figures; scenes of ritual or myth; landscape, especially mountains, dunes, or cliffs; houses, boats, thrones—in other

⁴⁵ Cf. Baessler, pl. 24, figs. 117, 118.

words, genre subjects executed in modeling, whereas Proto-Chimu as represented by the Uhle collection does genre or landscape only in painting. The following may be cited:⁴⁶

Modeled genre scenes of two or more figures (exclusive of painting or relief), ritual, fishing, etc. B15:62, 25:124, 90:301, 90:302, 91:303, 92:308, 93:309-310-311, 94:312 (blackware), 95:313, 96:314, 99:317, 99:319-320, 100:321, 123:354-5, 125:357; Se 16:7, 17:18, 21:9, 22:15, 23:11, 34:1-3.

Houses, pyramids, structures: B10:47-48, 11:50, 13:53, 13:55-56-57-58, 14:59, 15:62, 16:63, 38:197, 121:350—B11:51 resembles these, and is red-white, but has a monkey on the stirrup mouth. B14:60 also seems to be Late.

Seat or throne: B16:64-65, 23:105, 51:221, 52:222, 54:228, 91:305, (124:355, 125:356, relief); Se 18:21, 32:1.

Boats (balsas): B74:268-269; Se 22-16; (B118:347, relief, 120-349, painted). —B74:270-271 are Late Chimu.

Mountains: B15:62, 38:197, 52:222, 73:265; 92:306-7-8, 93:309-310-311, 94:312 (black), 95:313, 96:314, 99:317, 100:320-21, 114:343 (=F47), 126:357; F11; Se 22:8, 22:14, 23:10-12, 34:1-3.

Double mountain, horned effect: B38:197, 89:299-300, 90:301-302, 91:303, 96:314, 114:343 (=F57); Se 19:4, 32:1.

More or less allied to the foregoing, not in subject of the modeling but in some aspect of the decoration, are the following:

“Horned” headdress, higher at the sides than in the middle: B24:112, 114, 115 (=F39); these pieces show only an approach to the type, which appears fully developed in Late Chimu F8, corresponding to plate 61*b* of the Uhle collection.

Double or triple figures of maize-ear gods, etc.: B86:291-292, 97:315; compare the flanking condors in 123:354-355, above; Se 16:9.

Scalloped edge of corn ears, mountains, shell, or cloak by which the central figure is enveloped or against which it is placed; or similar effect on knob-bordered headdress: B23:107, 109, 52:224 (=F31), 57:235, 82:283-284; Se 16:13, 21:15-19, 22:1 Allied, in outline effect, to the group and mountain scenes above; to Moche site A specimen plate 64*h*, Proto-Chimu plate 67*d*, Late Chimu plate 61*c*; also to the Pacasmayo Late Chimu piece shown in plate 67*h*; and to Late Chimu F9.

Cloak (?) with snakes along edges: B84:286-7, 85:288; Se 21:18-19.

To these might be added:

Double snake belt: B87:295-6, 96:314 (B107:332, 113:341, relief).

Double-ended snake: B87:293-294 (Late?), 296 (Late) (B124:355, 125:356, relief); Se 16:17.

This looks like a fair list in favor of Middle Chimu. But it must be taken with some reserves. While the number of pieces is considerable, it is not known from how large a number they represent a selection. Nearly all the vessels are showy and many elaborate—precisely

⁴⁶ B, Baessler, *Ancient Peruvian Art*, 4 vols., 1902; F, Fuhrmann, *Reich der Inka*, 1922; H, d'Harcourt, R. and M., *La céramique ancienne du Perou*, 1924; L, Lehmann, *The Art of Old Peru*, 1924; P, Putnam, E. K., *The Davenport Collection of Nazca and Other Peruvian Pottery*, *Proc. Davenport Acad. Sci.*, xiii, 17-46, 1914; Se, Selser, *Peruanische Alterthümer*, 1893; Sq, Squier, *Peru*, 1877. References are to illustrations, not pages. Thus, B10:48 is Baessler, pl. 10, fig. 48. Unpublished material: AM, American Museum of Natural History; PM, Peabody Museum of Harvard University; numbers are specimen numbers.

the kind that would concentrate in the hands of collectors actuated by aesthetic or possessive motives, and from them find their way into museums or book illustrations, while thousands of accompanying simpler specimens might not even have been collected. That is, the specimens in the list may represent only 10 per cent, or less, of the ware of which they form a part. If their proportion is actually as low as this, the non-appearance of the same types in the Uhle Proto-Chimu collection might be due to accident, instead of real lack of the types from the Proto-Chimu style. Since the total number of realistic or representative pieces among the 600 Uhle vessels is only about 200, there is a certain degree of probability that types characteristic of Proto-Chimu ware, but aggregating to no more than a small percentage of it, might be missing from this key collection.

It must be remembered in this connection that the Uhle collection contains none of the superbly realistic portrait heads that came from the north Peruvian coast—such as are illustrated by Lehmann, for instance⁴⁷—and which could hardly be reckoned as anything else than classic Proto-Chimu.

In short, the Uhle collection is scientifically made and unselected, whereas others are selected to an uncertain degree, so that comparisons based on quantitative occurrences, or even on presence-absence of any but quite common traits, cannot be conclusive. All of which emphasizes the need of scientifically planned and conducted excavation in Peru, and suggests how fruitfully it will yield answers to problems. The reason that the archaeology of Peru has remained relatively chaotic appears not to be that it is specially intricate or difficult, but that there have been so few scientific data to work on.

Still, a vessel like Baessler 11:51, so similar in general character to other red-and-white vessels of its kind and yet bearing a monkey on its stirrup mouth, weighs rather heavily on the side of the existence of a Middle Chimu style. And again, Baessler's two jar-holding, seated condors, in his plate 54, figures 227 and 228, impress one as having been handled in a quite different spirit, in spite of the identity of their pattern as a whole. Figure 227 is simple, reposeful, characteristic, and expressive, like the Uhle Proto-Chimu pieces; the legs are crossed. Figure 228 is at once bolder and less plastic in execution; its maker more interested in expressing detail than in rendering character; it is seated on a throne or chair, the arms are held higher, the wings form a half-enveloping cloak or cape. All these traits suggest

⁴⁷ *Op. cit.*, pls. 76, 82. Only pl. 54*k* approaches these in quality.

Late Chimu manner; and yet the concept of the piece is close to Proto-Chimu, as are its color and technology. In view of the gap between Proto and Late Chimu, it is difficult not to give some credence to specimens like these as possible evidences of a transitional style.

With this suspended conclusion the problem of Middle Chimu must be left for new evidence to solve.

LOCAL DEVELOPMENTS IN THE NORTHERN COAST REGION

A review of the published or accessible ceramics from the northern coast of Peru shows that the basic Chimoid style prevailed from latitude 5° to 10° south,⁴⁸ but that its history varied, and that the forms assumed by it were different at one time or another, in five distinguishable areas, according to the list that follows:

Stylistic Area	Locality	Department	Data
1	Casma	Ancachs	AM (B)
2	Chimbote	Ancachs	B, F, L, AM, PM (H)
2	Viru	Libertad	L, PM, (H)
2	Trujillo	Libertad	B, F, L, H, AM, UC
2	Chicama	Libertad	L, PM
3	Pacasmayo	Libertad	(B), (F), (PM), (UC)
3	Chepen	Libertad	AM
4	Saña	Lambayeque	PM
4	Chiclayo	Lambayeque	P, (B), (F)
4	Lambayeque	Lambayeque	H, PM
4	Fereñafe	Lambayeque	P
5	Piura	Piura	PM

Sources of data as ante, note 46. Sources in parentheses give only a small number of specimens. "Trujillo" includes Moche, Chanchan, and Trujillo district without further specification.

AREA 1: CASMA

This area is illustrated chiefly by a collection of about fifty vessels in the American Museum of Natural History. About half of these are Late Chimu. Most of the remainder are in styles characteristic of the coast of central Peru. Some of the Late Chimu is pure, that is, in the manner of Moche site B; some florid; some affected by central influences. There are three or four specimens in fair Proto-Chimu manner.⁴⁹

⁴⁸ It may have extended north of 5°: my data end there.

⁴⁹ Seler, *Peruanische Alterthümer*, shows 1 Proto-Chimu piece, 26:1; 1 post-Proto-Chimu (?), 25:1; and 5 Late Chimu, 35:5, 7-8, 13, 37:10.

Casma accordingly appears to have been at most an outpost of Proto-Chimu culture; to have come more strongly under Late Chimu influence; but to have been at all times about equally subject to influences from the south. Beyond the Casma district, Chimu influences are traceable for a long distance, as far as Nazca sporadically, but the unmitigated Chimu style did not prevail.

AREA 2: VICINITY OF TRUJILLO

This tract, which includes Chicama on the north and Chimbote on the south, takes in the coast of the greater part of Libertad and the northern part of Ancachs. It is the area of classic Proto-Chimu and classic Late Chimu, both of which agree, at every spot from which there are data, with the Uhle collections from Moche. Proto-Chimu ware outnumbers Late Chimu; whether because actually more frequent in the soil or because more attractive and sought after, is not certain. Even Chanchan, whose Late Chimu yield has put blackware in the majority in the Trujillo collection of the American Museum of Natural History, has produced some splendid Proto-Chimu vessels.⁵⁰

There is practically no evidence in any other collection of the Tiahuanaco and related foreign styles that Dr. Uhle encountered at site A. It is significant that he had difficulty in assembling a dozen whole vessels there and that even his series of fragmentary ones is so limited as to leave doubtful the separateness of two of his styles. His fragments in the pure Tiahuanaco, red-white-black geometric, and three-legged cursive manners seem to be almost wholly unrepresented in other collections. It thus appears that these foreign styles never took real root in the area. A few Chimbote pieces in the American Museum, more or less in the style of central Peru, are about what might be expected at the southern end of the area. The goblet seems never to have flourished in this area. The only examples I know are the Tiahuanaco and Tiahuanacoid ones obtained by Dr. Uhle at site A.

AREA 3: PACASMAYO AND CHEPEN

This area takes in the northern part of the department of Libertad. The scattering illustrations of vessels are nearly all Late. So are a dozen blackware pieces from Pacasmayo in the Peabody Museum. Of something over 200 Chepen vessels in the American Museum, at least three-fourths are black and Late Chimu. The only indubitably Proto-Chimu pieces are 3 stirrup mouths with relief scenes, 6 stirrup mouths

⁵⁰ A.M.N.H. spec. nos. B-3863, B-3876, B-3927, B-3962, etc. I assume that the catalogued location "Chanchan" is to be understood as specific.

on portrait-type heads, and 8 open-jar portrait heads. The remaining red or red-and-white ware from Chepen must be construed as post-Proto-Chimu. For instance, of 10 stirrup mouths, 8 carry the familiar miniature monkey, bird, or lug; 4 have their stirrup square in cross-section. There are 7 flat-handled jars. The cat appears 6 times: 2 open-mouthed lying figures, 3 heads with stirrup placed crosswise, 1 head jar. Exploration on the spot may be necessary to determine how far such forms represent respectively a Middle Chimu style or a local red-white variant of Late Chimu.

Dr. Uhle obtained only two pieces from this area, both from Pacasmayo and no doubt purchased. Plate 67*h* is obviously late; on the other hand, plate 67*g* is good Proto-Chimu.

It appears that the situation is similar for Pacasmayo-Chepen to the north and Casma to the south of the Trujillo-Chimboto area: the Proto-Chimu culture penetrated in both directions, but apparently for a short time only, to judge by the relative paucity of preserved examples. Late Chimu took much firmer hold, but is purer in Chepen-Pacasmayo than at Casma because without competition.

Plate 68 shows a number of vessels from Chepen in the Bandelier collection of the American Museum of Natural History, reproduced by courtesy of that institution. The first two, *a*, *b*, are red and white and done in Proto-Chimu manner. All the others are Late Chimu, and all are black, except *g* and *p*, which last is red and white but otherwise parallels its black companion piece, *q*.

This late ware from Chepen is more ornate than the Late Chimu from Moche; in part, presumably, because the latter has not been selected out and the cooking vessels rejected. However, the Chepen vessels seem to incline to more floridity of treatment, to a piling on of adjuncts for the sake of decoration. This tendency recurs in the Late ware of the two areas farther north.

The double-spout, *c*, illustrates these inclinations. The body has both relief and modeling; there is a prominent foot, zoned with relief; side pieces project under the spouts; the bridge is arched, hollow, perforated, decorated with projections, and finally crowned with a head. The effect is quite rococo compared with the smooth belly, short spouts, and simple ribbon bridge which the original double-spout has in Proto-Nazca and largely maintains in Tiahuanaco ware.⁵¹

The stirrup-mouth jars, *k-s*, show similar impulses somewhat less concentrated: double bodies, attached fruits, buds, or projections on the sides, scalloped stirrup, everted mouth, heads superimposed on the stirrup; besides pressed relief in zones and panels. Compare also *i*, *j*.

Inca influence is visible in *e-h*, but it is notable that none of the aryballoid forms *e*,⁵² *f*, *h* are pure. The curious conglomeration shown in *f* has occasional parallels elsewhere on the northern coast: one piece from Lambayeque in the Peabody Museum, another from Casma in the American Museum.⁵³ The goblet *g* is of Inca, not Tiahuanaco type.

⁵¹ Cf. Putnam, *op. cit.*, pl. 24: 13, 15, 16.

⁵² Cf. Fuhrmann, pl. 47; Lehmann, pl. 88, from Cajamarca.

⁵³ Cf. d'Harcourt, pl. 63.

The smooth jar *d* appears to be a late form preserving Tiahuanacoid features; compare plate 67*h* from Pacasmayo, but also plate 64*a* from Moche site A, for general form, tapering spout, and concave ears.⁵⁴

AREA 4: COAST OF DEPARTMENT OF LAMBAYEQUE

This area is remarkable for having provided museums with abundance of Late Chimu or related ware but not a single specimen in Proto-Chimu style. Putnam has illustrated 54 pieces from Ferreñafe and 31 from Chiclayo now in the Davenport Museum; d'Harcourt, 20, and Seler, 8, from Lambayeque. Smaller lots from Chiclayo shown by Baessler and Fuhrmann agree.

The Peabody Museum has on exhibit two collections which classify as follows: Lambayeque, black 22, red 6, polychrome 3, uncolored 1, total 32; Saña, black 36, red 15, white or polychrome 6, total 57. The preponderance of blackware would alone argue lateness. None of the redware seems early. For instance, of the 15 red pieces from Saña, 1 is an aryballoid with painted pattern of Inca type rudely carried out with white lines in the northern coast manner; 4 vessels have a zone of impressed relief; 2 are double jars (condor, bat) with one spout and a flat bridge; 5 are stirrup mouths, of which 3 have the stirrup flattened or square, and 3 carry small monkeys or equivalents. Eight of the 15 show color besides red: 4 red-white, 3 red-black, 1 red-white-black. The 6 polychrome vessels include an aryballoid, a pair of goblets, and a goblet attached to a seated cat—all in red-white-black, plus yellow in the last; the ornament of all four is Inca.

The 85 Chiclayo-Ferreñafe pieces figured by Putnam include the following: Small cup-like jar with handle, a familiar Inca type, 1; aryballoids, 2; jars with mouth of aryballoid type, 6; stirrup mouths, 23, including 14 with monkey, bird, or lug on the stirrup, 3 below the stirrup, 3 with the stirrup set on a pair of figures, 3 on a cat head, 2 with fruits below the stirrup, 3 with flaring mouth on stirrup; human head jars set on a cone frustum foot, 2; jars with animal head emerging out of the belly below the neck of the vessel, 6; jar in form of recumbent animal, large lipless opening in the top, 1; jars with pressed panel relief, 2; jars with a flat handle, curved, 17, bridging, 5; double spout vessels, 3. A number of important features, such as relief stippling, flattening of stirrup mouth, color, cannot be counted with certainty on account of the reduction in Putnam's plates. But it is clear that the ware, except for some degree of added flamboyancy as in 18:5, 23:4, 7, 24:4, 12, 13, 15, is Late Chimu ware like that from Moche site B; and that there is nothing earlier. Tiahuanacoid motives as such are lacking. So far as they appear, it is in a form worked over between the Bolivian highland and the north Peruvian coast—the double-spout, for instance. Just so, it is characteristic that at Saña (as at Chepen) the goblets—an original Tiahuanacoid type—appear not with Tiahuanaco but with Inca proportions and ornament.

All the foregoing applies also to the vessels in d'Harcourt's plates 60-65; several of which are notable for their crude floridity.

⁵⁴ Also, Uhle, Pachacamac, pl. 8:10 from Lambayeque; Putnam, pl. 24:1-5; Seler, pls. 11:1 (Acon), 28:10 (Trujillo), 31:4 (Gran Chimu), 28:11, 29:12, 31:3 (Cuzco!?).

Anything different from Late Chimu pottery in the Lambayeque area therefore still awaits discovery or at least publication.

AREA 5: DEPARTMENT OF PIURA

So far as I know, Piura ware is represented only by a collection in the Peabody Museum. If this collection is representative, Piura ware is characteristically red; but its forms and ornaments show it to be allied to Late Chimu rather than Proto-Chimu. It is in fact essentially a Late Chimu pottery done two-thirds of the time in red with an occasional minor Proto-Chimu (or Middle Chimu) persistence.

Of the 104 vessels, 38 are black, 66 "red." The red comprise: all red, 37; red burned gray, 7; red with some white, usually stripes, 10; red with some black, usually fine lines, 9; white with some red, 1; all white, 2. All of the ware has a creamy smoothness. Thirteen vessels of the collection are reproduced in plate 69 by courtesy of the Peabody Museum.

Form and ornament show the following occurrences—the first figure given being for "red" and the second for blackware.

Aryballoids (pl. 69o), 1-0; relief stippling, 3-8; stirrup mouths (pl. 69d, f-i), 21-12 (square or flattened stirrup, 5-6, monkey, etc., 5-7); double jars, whistling type, 4-3; double spout (pl. 69j), 0-1; fabric marking (pl. 69n), probably an imitation made with a paddle, 4-0; jars with a long, flaring neck, with or without handle, a local type (pl. 69k-m), 5-0.

Shape of the body of the vessel: human figure, 7-5; monkey or other quadruped, 4-2; cat head, 0-3; bird, 1-5; fish, reptile, lobster, 1-5; squash or fruit, 5-3; cube, 1-2; cylinder, 2-0; lens, 2-1; cone (pl. 69h, i), 6-1; crescent (pl. 69g), 2-1.

The proportionate occurrences in the two series suggest that the red ware may average a little earlier than the black, or carry somewhat stronger Proto-Chimu persistences; but the difference is not certain, and seems not serious. In the main, then, the known Piura pottery is a prevailingly red local variant of Late Chimu, under some slight but positive Inca influence, unaffected by any direct Tiahuanaco or central Peruvian influences.

CERAMIC HISTORY OF THE FIVE AREAS

It is clear that Late Chimu spread much farther than Proto-Chimu. It occurs, with slight variations, in all five areas, constituting approximately half in the two southern, a heavy majority in the third, and all the ware found in the two northern areas. Proto-Chimu, on the other hand, is really characteristic only of the second or Trujillo-Chimbote

area; occurs sparingly in the two adjacent tracts, and not at all in the two northern ones. With all its aesthetic superiority, therefore, Proto-Chimu remained a local style. It evidently fell in a period of limited communications, probably of restricted political units. On the other hand, Late Chimu was the ware of an "empire" of several times greater extent, and in some degree rivaling that of the Incas. But, on the ceramic side at least, art had declined in the greater realm.

Direct Tiahuanacan influence has been traced as far north as the Trujillo area, but not beyond. Indirect Tiahuanacoid and central Peruvian influence was carried to the northernmost area of Piura by Late Chimu. Inca influence also penetrated all five areas, but diminished considerably beyond the fourth.

STYLE AND PERIOD IN PERU

It will be recalled that at least three and perhaps four styles are represented in the ceramics of Moche site A, but that the number of separate and successive periods of time represented by these is fewer—probably not over two and perhaps only one period. It is thus clear that the facts indicate what might be expected on theoretical grounds, namely, that a distinct style is not necessarily proof of a distinct period. It is entirely possible that several styles can coexist in a given population in a given time; and there is abundant evidence that they did repeatedly so coexist in pre-Hispanic Peru.

Thus, at Pachacamac, Dr. Uhle's "Tiahuanaco" and "Epigonal"⁵⁵ are certainly valid stylistically, but, as he himself says, are found in association.⁵⁶ That is, vessels in good Tiahuanaco manner and vessels in debased Tiahuanacoid manner were used not only among the same population but in the same household. Obviously Uhle's discrimination is valid and significant only aesthetically and subjectively. The objective historic fact is that pure and base, conservative and decadent examples of the Tiahuanaco style were used side by side. This fact does not militate against the almost inescapable inference that the first specimens in the debased manner must have been made after the pure manner was established. All that we know as regards Pachacamac, however, is that base and pure were contemporary there. To speak of two Tiahuanacoid "periods" at Pachacamac therefore substitutes certain more or less substantiated generalizations for an accurate description of a certain body of specific facts.

⁵⁵ Uhle, Pachacamac, pl. 4:3-4 and pl. 5:1-13.

⁵⁶ *Ibid.*, p. 22.

In the same way, it seems doubtful whether there is an actual difference of period between the two latest groups of ware discovered at Pachacamac. One of these is a mixture of Late Chimu with Late Central Peruvian style, plus some Inca influences.⁵⁷ The other is mainly good Inca with subsidiary Chimu-Central admixture.⁵⁸ It seems likely on general grounds that the bulk of the former of these two styles was prevalent somewhere in the area of Pachacamac before the second or nearly pure Inca style was introduced. But, so far as actually discovered material from Pachacamac is concerned, the Inca element which is common to the two styles, although slight in one and overwhelming in the other, leaves no choice but substantially to equate them in time. They must therefore mainly represent different groups or strata of the population.

On the contrary, there seems to be a possibility that two groups of material which Dr. Uhle obtained in separate cemeteries at Pachacamac but which he equated as pre-Inca, may represent some periodic distinction. One of these lots⁵⁹ is prevailingly in the red-white-black geometric style, and was taken from under the temple of Pachakamaj, that is, from the same site as the Tiahuanaco and Epigonal pottery, but from a higher level. The other lot⁶⁰ is in part red-white-black and in part black or monochrome ware, and was uncovered in a cemetery surrounding the temple. As there is nothing of a stratigraphic or associational nature to equate or differentiate the two lots of material positively in time, it is conceivable that they represent two overlapping or even distinct periods.

The result then is that instead of the excavations at Pachacamac revealing five periods, they have shown five or six distinguishable styles, which, on the basis of their physical association and identical elements, are interpretable as dating from three (or possibly four) successive periods of time.

A similar case of the error that is likely to result from interpreting style outright as period, occurs at Ica.⁶¹ Late Ica I is a well-marked local style that might be designated as red-white-black textile. It is wholly free from Inca admixture. So far as there are occasional resemblances, they impress one as being due to Late Ica I and Inca having been subjected to common influences, not to any influence of one on the other. At the same site T at Ica, but in separate tombs, there occurs a ware which is Inca; not the classic Inca of Cuzeo, in

⁵⁷ Pl. 13:1-17.

⁵⁹ Pl. 7:1-6.

⁶¹ This volume, p. 117.

⁵⁸ Pl. 18:1-12.

⁶⁰ Pl. 8:1-9.

fact much of it in Ica manner, but still with a definite Inca ingredient. One would almost inevitably interpret this situation in terms of succession of the two styles, were it not that the theoretically earlier one, Late Ica I, is accompanied by European glass beads.⁶² This style, accordingly, may have begun to flourish at Ica before Inca influence came in, but it certainly persisted after an Inca style had successfully established itself there. The instance is still more remarkable in that there is a third series of graves at site T whose content is transitional, that is, basically Late Ica I, perceptibly modified by Inca influence, but without any outright Inca elements such as aryballoids. This style has been called Late Ica II. Like the two others, it runs consistent to itself in the tombs in which it occurs. There can accordingly be no doubt that while these three styles may have begun at Ica at successive dates—the presumption is that they did—they nevertheless coexisted there in 1534. This again can only have been among different groups or strata of the population.

As regards periods traceable through a large part of Peru, not more than four are recognizable at the present time. This statement is of course not in opposition to the recognition of a larger number of temporal stages in specific localities, since abundant and differentiated material, accompanied by data as to the conditions under which it was found, may easily reveal substages of a general period,⁶³ much as it usually establishes local variants. The four general periods, or eras as we may call them, are these.

1. Pre-Tiahuanaco era. In this fall Proto-Nazca, Proto-Chimu, Early Ancon (shellmound), and probably the Supe shellmound or campsite style. Development is advanced in the north and south, backward in central Peru. The three principal styles are remarkably different. While Uhle has pointed out analogies which may prove important clues, the similarities are after all slight. Essentially the pre-Tiahuanaco era is one of local styles, some luxuriantly developed, others rude, all in the main uninfluenced by one another. The well-formed Proto-Chimu and Proto-Nazca styles presuppose an earlier era of development unless one is ready to accept more or less ready-made culture importations from Central America. Of the styles of this earlier formative era, no trace seems yet to have been discovered.

⁶² Many classes of objects other than pottery also seem indistinguishable in Late Ica I and local Inca graves.

⁶³ Thus the styles at Ica seem to fall into the following temporal stages: 1, Proto-Nazca; 2, perhaps Proto-Nazcoid; 3, Ica Epigonal; 4, Middle Ica I; 5, Middle Ica II; 6, perhaps Late Ica I (pre-Inca phase); 7, Late Ica I (terminal phase), Late Ica II, Inca.

2. Tiahuanaco and Tiahuanacoid (Epigonal) era. Probably to be included are: Tiahuanaco (at that site); Chullpa ware of the Titicaca region; sporadic occurrences from the Nazca area; Ica Epigonal; Pachacamac Tiahuanaco and Epigonal; Proto-Lima from Nievería-Cajamarquilla (Uhle points out Proto-Nazca derivatives, but there is also a definite Tiahuanacoid element); Middle Ancon I; an Epigonal ware at Chancay and Supe; part or all of the site A ware at Moche.

3. Pre-Inca era. This is, like the first era, a time of local styles. Some are vigorous and comparatively original, others sadly degenerate. Some, presumably falling in the main in earlier phases of the era, continue to show persistences of Tiahuanacoid influences, though these influences have in all cases been worked over; others have wholly emancipated themselves. In general, geometric decoration increases progressively, relief ornamentation gains in frequency, blackware becomes more numerous, and there is a shrinkage of color scheme toward three pigments. No sharp line can be drawn against the Tiahuanaco and Inca eras, but in the main the following styles seem to fall into this era: Chincha-Atacaman, Middle Ica I and II, and the beginning of Late Ica I and Late Chincha I (these may all be designated as varieties of Red-white-black Textile); Red-white-black Geometric at Pachacamac, Ancon (Late Ancon I), Chancay, Moche; and presumably the beginnings of Late Chimu in its various local forms, as well as of Black-and-white Chancay (Late Ancon II).

4. Inca era. In this there fall, besides the classical Inca of the highland, modified or mixed Inca styles like those of Ica and Pachacamac; also local styles pervaded by more or less Inca influence, such as Late Ica and Chincha II; further, styles essentially non-Inca and presumably formed in the main independently of Inca influence, but containing a minor Inca element—Late Chimu and Late Pachacamac (Uhle, pl. 13) for instance; and finally, styles preserving their local purity, but evidently at least partly contemporary with Inca, such as Late Ica and Chincha I, and Black-and-white Chancay and Late Ancon II.

The finer correlations in time remain in many cases to be worked out. But it appears that all the known styles of Peruvian pottery can be accommodated within the framework of these four eras. The styles of the developmental period that preceded them, the South American equivalents of the Mexican Archaic, are as yet undetermined.

EXPLANATIONS OF PLATES, MUSEUM NUMBERS OF SPECIMENS
ILLUSTRATED AND DIMENSIONS OF SPECIMENS

Plate 50. Map of ruins of Moche. By Max Uhle. Relettered to conform to designation of sites in Museum records. The capital letters are the ones used in Uhle's original notes, in the Museum catalogue, and in the present monograph.

Plate 51. The Huaca del Sol. *a*, south half of east side. The terrace on the left is site A. *b*, the pyramid as seen from its southern terrace, site A.

Plate 52. The Huaca de la Luna. *a*, looking from the south end of the Huaca del Sol, near site A, eastward across the plain in which lies site D, to the Huaca de la Luna, site F; the slope site E above it; and the Cerro Blanco whose summit constitutes site H. *b*, part of northern end of Huaca de la Luna, seen from the west, and showing adobe brick construction.

Plate 53.⁶⁴ Proto-Chimu figure vessels from site F. *a*, F16-3420, diameter 209 mm.; *b*, F6-2711, d. 142; *c*, F12-2942, height 221 mm.; *d*, F16-3069, d. 132; *e*, F27-3305, and F27-3307, d. 119; *f*, F32-3345, d. 122; *g*, F12-2972, h. 219; *h*, F5-2694, d. 83; *i*, F12-2935, h. 202; *j*, F26-3261, h. 220; *k*, F12-2938, h. 190; *l*, F12-2944, h. 197.

Plate 54. Proto-Chimu figures and heads from site F. *a*, F5-2695, h. 301; *b*, F18-3098, h. 250; *c*, F5-2693, h. 255; *d*, F23-3139, h. 238; *e*, F12-2946, h. 228; *f*, F6-2751, h. 233; *g*, F3-2680, h. 180; *h*, F12-2956, h. 173; *i*, F14-2995, h. 160; *j*, F12-2939, h. 275; *k*, F7-2778, h. 267; *l*, F26-3302, h. 270.

Plate 55. Proto-Chimu animal and human figure jars from sites E and F. *a*, F19-3111, d. 132; *b*, F12-2973, h. 190; *c*, F26-3282, d. 111; *d*, F26-3303, h. 217; *e*, F12-2941, d. 200 (end of tail to nose); *f*, E-232, d. 211; *g*, F11-2925, d. 185; *h*, F-2835, h. 172; *i*, F13-2986, h. 391; *j*, F33-3366, h. 175; *k*, F26-3269, h. 452; *l*, E-180, d. 59; *m*, F3-2758, h. 382.

Plate 56. Proto-Chimu blackware vessels and whistling jars from site F. *a*, F16-3077, h. 194; *b*, F11-2918, h. 247; *c*, F26-3262, h. 216; *d*, F12-2930, d. 202; *e*, F3-2686, h. 222; *f*, F12-2929, h. 201; *g*, F12-2940, h. 255; *h*, F13-2977, h. 209; *i*, F6-2720, d. 180; *j*, F33-3359, d. 180; *k*, F12-2936, h. 149; *l*, F26-3263, h. 162.

Plate 57. Proto-Chimu painted ware from Site F. *a*, F-2834, h. 185; *b*, F6-2712, h. 242; *c*, F8-2791, h. 250; *d*, F26-3273, h. 210; *e*, F26-3259, h. 245; *f*, F26-3272, d. 151; *g*, F3-2677, h. 234; *h*, F12-2947, h. 198; *i*, F4-2692, h. 224; *j*, F12-2980, d. 107; *k*, F9-2814, d. 131; *l*, F10-2896, h. 169.

Plate 58. Proto-Chimu stirrup-mouth jars with simple decoration, from site F. *a*, F26-3271, h. 202; *b*, F13-2988, h. 186; *c*, F26-3264, h. 222; *d*, F32-3383, h. 194; *e*, F14-2994, h. 215; *f*, F32-3384, d. 137; *g*, F26-3266, d. 148; *h*, F33-3372, d. 112; *i*, F26-3267, d. 163; *j*, F32-3352, d. 133; *k*, F16-3079, d. 157; *l*, F32-3376, d. 146; *m*, F32-3347, d. 140.

Plate 59. Proto-Chimu bowls, jars, and cooking vessels from sites E and F. *a*, F13-2989, h. 89; *b*, F20-3120, d. 153; *c*, F20-3123, d. 246; *d*, F20-3125, d. 171;

⁶⁴The site and grave designation is prefixed to the specimen number in place of the generic prefix 4- which the Uhle collections bear in the Museum records. Thus, F16-3420 instead of 4-3420. Diameter and height of the specimens are rendered by "d." and "h." respectively, and the number following expresses the dimension in millimeters.

e, F23-3172, d. 235; *f*, F14-2996, d. 156; *g*, F23-3198, d. 120; *h*, F26-3258, d. 233; *i*, F-2657, d. 144; *j*, F26-3268, d. 227; *k*, F26-3255, d. 243; *l*, E-189, d. 198; *m*, F12-2932, d. 160.

Plate 60. Late Chimu ware from site B. *a*, B-9, d. 226; *b*, B-8, d. 160 (of body); *c*, B-7, h. 153; *d*, B-26, d. 116; *e*, B-2499, d. 152; *f*, B-11, d. 112; *g*, B-2483, h. 222; *h*, B-13, h. 166; *i*, B-109, h. 123; *j*, B-6, d. 170; *k*, B-42, d. 221; *l*, B-33, d. 158.

Plate 61. Late Chimu ware from site B. *a*, B-112, d. 113; *b*, B-2497, h. 215; *c*, B-37, d. 190; *d*, B-2489, d. 140; *e*, B-2501, d. 170; *f*, B-2498, d. 168; *g*, B-2482b, d. 195; *h*, B-43, d. 115; *i*, B-40, d. 96; *j*, B-111, d. 140; *k*, B-2490; *l*, B-2482a, d. 242; *m*, B-2484, d. 170.

Plate 62. Three-color geometric ware from site C, graves 1 and 2 (*a-d*) and Late Chimu ware from site C, grave 3 (*e-f*). *a*, *b*, C1-133, d. 210; *c*, C2-135, d. 179; *d*, C1-129, d. 171; *e*, C3-136, h. 197; *f*, C3-137, h. 315.

Plate 63. Ware from site A; above (*a-e*), classed by Uhle as Tiahuanaco-like; below (*f-p*), sherds from three-legged bowls representing a separate style. *a*, A-2534, h. 138; *b*, A-2530, h. 227; *c*, 16-736, h. 75; *d*, A-2532, h. 82; *e*, A-2533, d. 144; *f*, A-2565, h. 62 (*g-p* in same reduction); *g*, *i*, A-2567 *b*; *h*, *j*, *n*, A-2657*c*; *k*, *l*, *m*, A-2567*a*; *o*, A-2567*d*; *p*, from Hacienda de Pampas, 3452.

Plate 64. Ware from site A, designated by Uhle as from "post-Tiahuanaco" tombs. *a*, A-2537, d. 96; *b*, *c*, A-2538, d. 123; *d*, A-2539, d. 125; *e*, *f*, A-2540, d. 118; *g*, A-2546, h. 106; *h*, A-2542, h. 125; *i*, A-2545, h. 109; *j*, A-2541, d. 98; *k*, A-2543, d. 180; *l*, A-2536, d. 91.

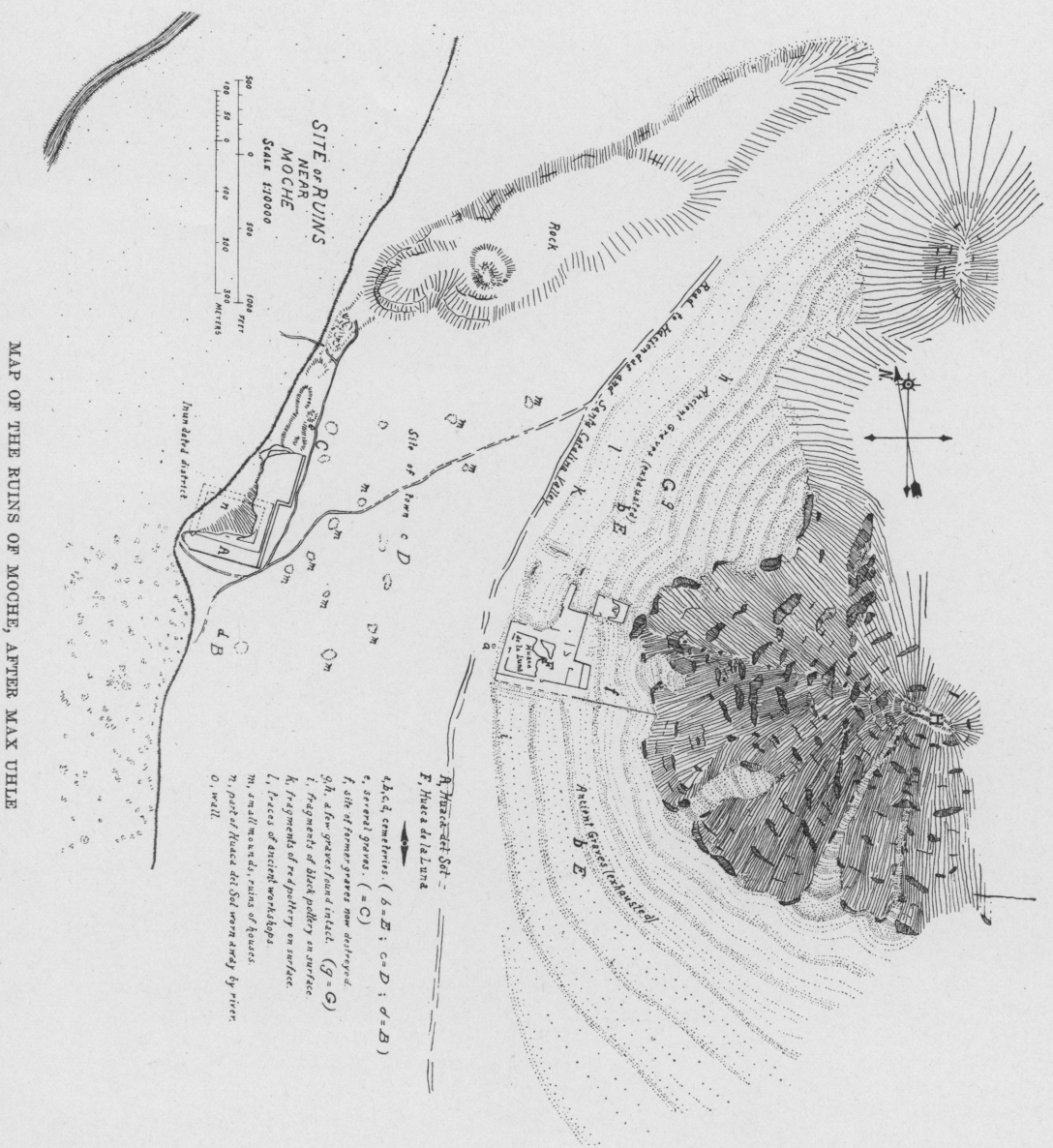
Plate 65. Incised or pressed ware from Site A, designated by Uhle as "non-Tiahuanaco" and not from tombs. *a*, A-2571a, h. 138 (*b-e* in same reduction); *b*, A-2572a; *c*, A-2571; *d*, A-2571*g*; *e*, A-2571; *f*, A-2562e, d. 71 (*g-j* in same reduction); *g*, A-2562*c*; *h*, A-2652*g*; *i*, A-2557; *j*, A-2563a; *k*, A-2553, d. 104; *l*, A-2571 (same reduction as *k*); *m*, A-2549, d. 118.

Plate 66. Modeled and painted ware from Site A, designated by Uhle as "non-Tiahuanaco" and not from tombs. *a*, A-2564*c*, d. 90 (*b*, *c* in same reduction); *b*, A-2564*b*; *c*, A-2564a; *d*, A-2570*b*, h. 59 (*e-g* in same reduction); *e*, A-2532*d*; *f*, A-2566; *g*, A-2552e; *h*, A-2550, d. 147; *i*, A-2552a, d. 76.

Plate 67. Various Proto-Chimu vessels from Moche site F (*a-e*); double jar from Chiquitoy (*f*); Proto-Chimu and Late jars from Pacasmayo (*g*, *h*). *a*, F3-2682, h. 256; *b*, F12-2937, h. 236; *c*, F14-3015, h. 110; *d*, F8-2970, h. 220; *e*, F22-3132, h. 260; *f*, 2527, h. 140; *g*, 2528, h. 257; *h*, 2529, h. 205.

Plate 68. Ware from Chepen in the American Museum of Natural History, collected by Adolf Bandelier. *a*, *b*, red and white late (?) Proto-Chimu; *c*, *d*, *i-o*, *q-s*, Late Chimu blackware, flroid; *e-h*, Late Chimu with Inca influence; *p*, red and white Late Chimu. *a*, B-4900; *b*, B-4914; *c*, B-5227; *d*, B-5284; *e*, B-5098; *f*, B-5123; *g*, B-5290; *h*, B-5092; *i*, B-5055; *j*, B-5108; *k*, B-5224; *l*, B-5251; *m*, B-5244; *n*, B-5238; *o*, B-5219; *p*, B-5268; *q*, B-5226; *r*, B-5260; *s*, B-5253.

Plate 69. Vessels in the Peabody Museum of Harvard University. *a*, *b*, three-legged bowls from Trujillo area (Viru or Chicama valleys); *c-o*, blackware and red-and-white ware from Piura, apparently late.



MAP OF THE RUINS OF MOCHE, AFTER MAX UHLE



a



b

HUACA DEL SOL



a



b

HUACA DE LA LUNA



PROTO-CHIMU, SITE F, MOCHE



PROTC-CHIMU, SITE F, MOCHE



a



b



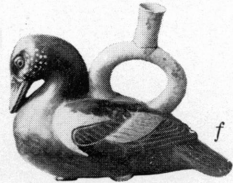
c



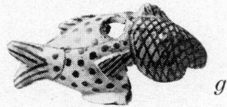
d



e



f



g



h



i



j



k



l



m

PROTO-CHIMU, SITES E, F, MOCHE



PRCTO-CHIMU, SITE F, MOCHE



PROTO-CHIMU, SITE F, MOCHE



a



b



c



d



e



f



g



h



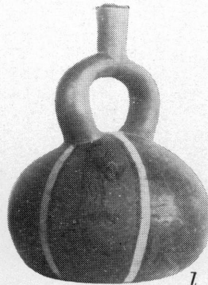
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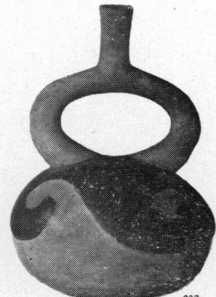
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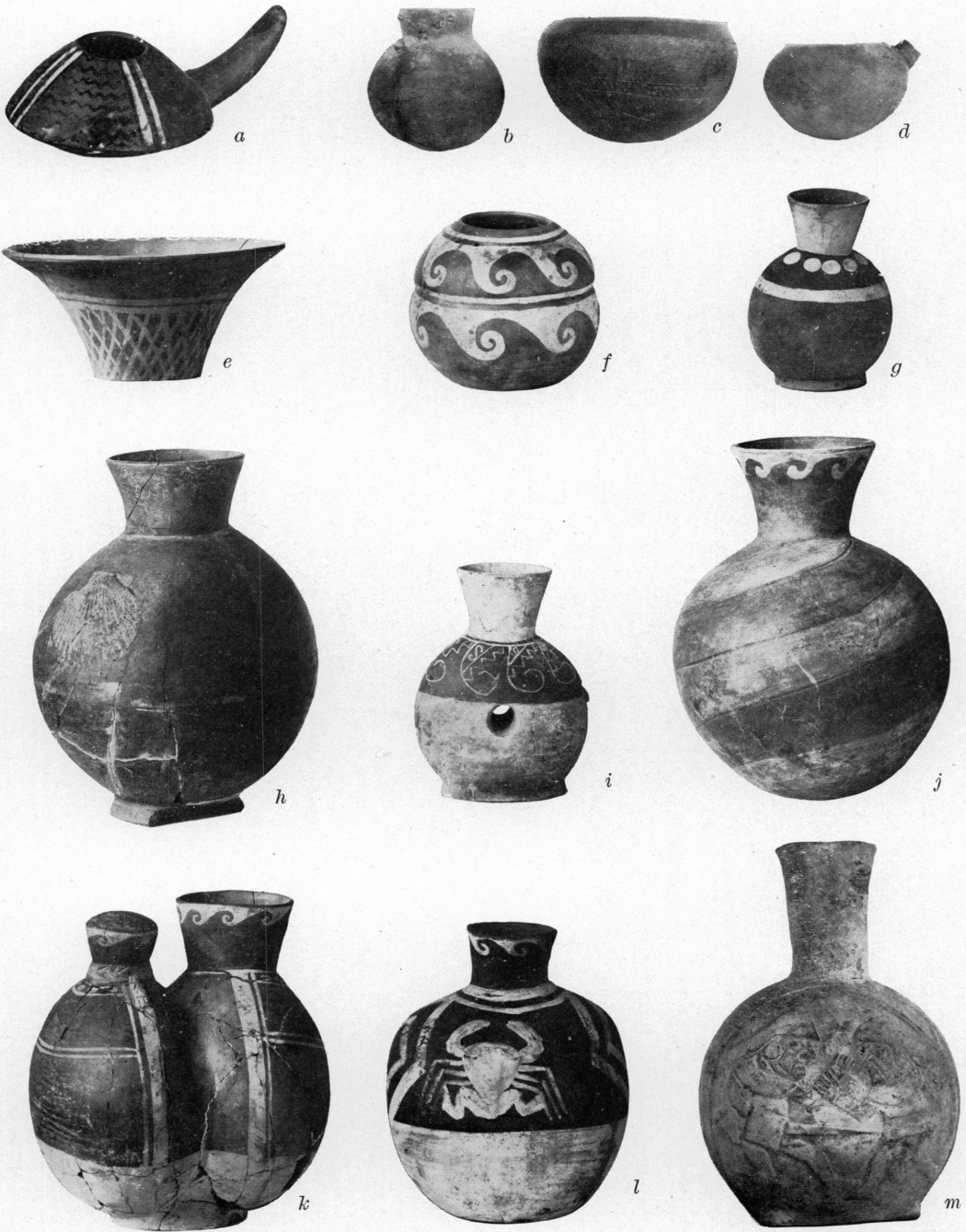
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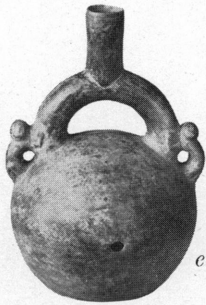
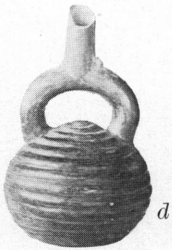
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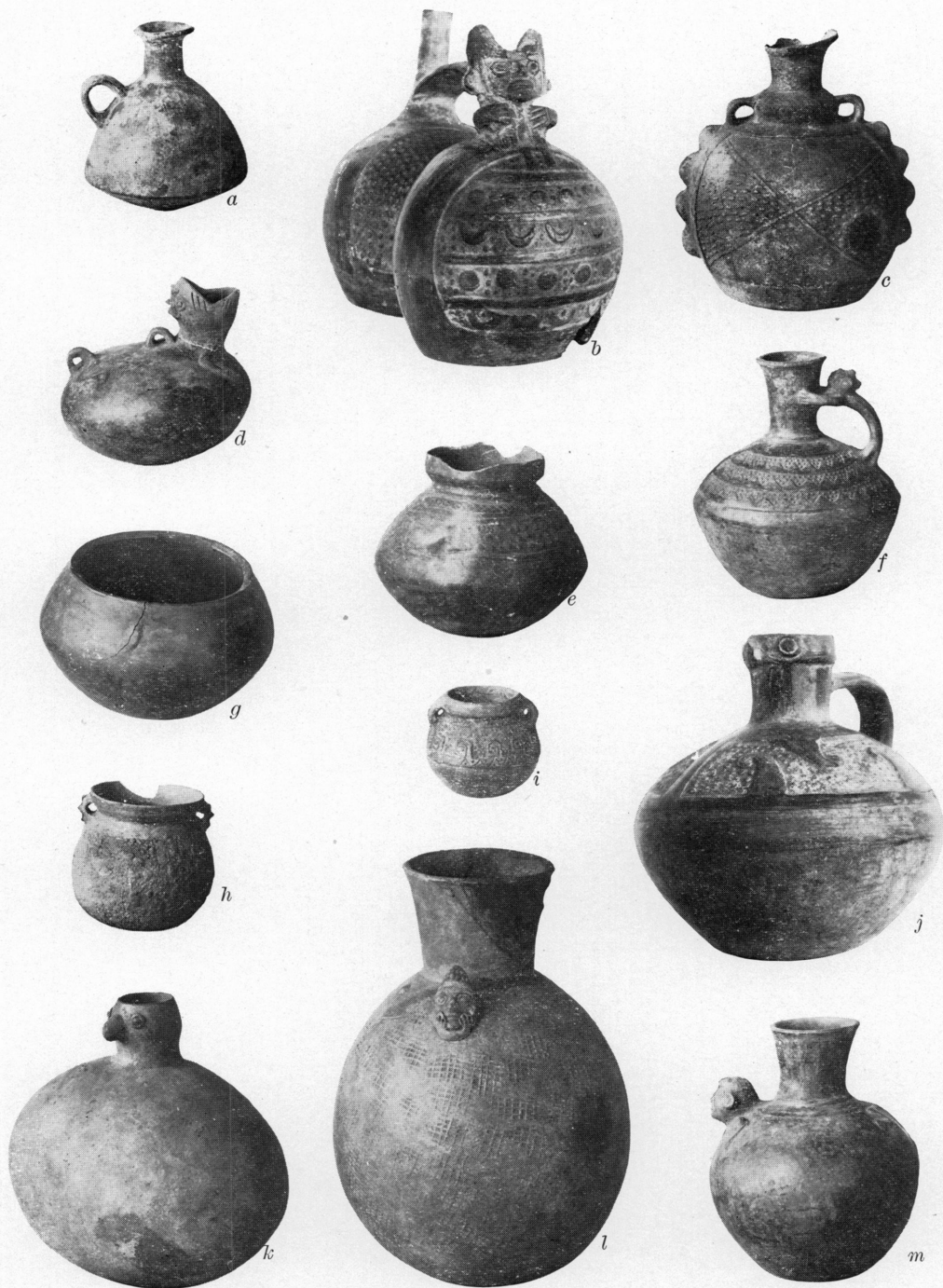
m



PROTO-CHIMU, SITES E, F, MOCHE



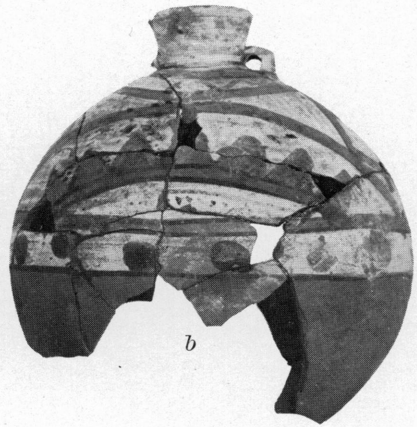
LATE CHIMU, SITE B, MOCHE



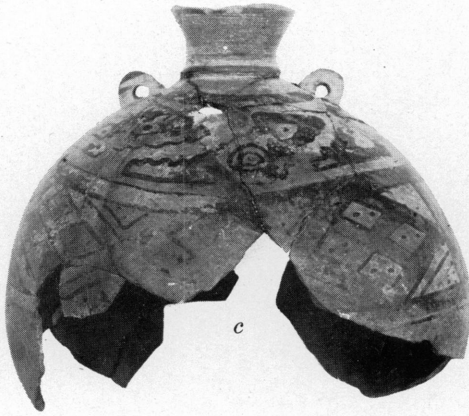
LATE CHIMU, SITE B, MOCHE



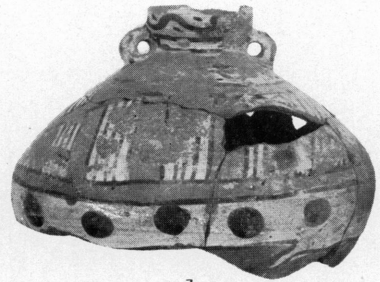
a



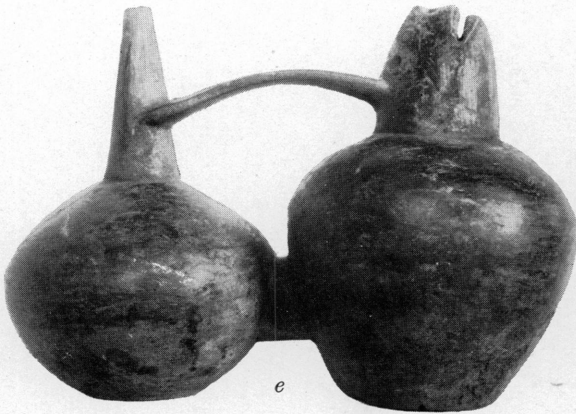
b



c



d



e

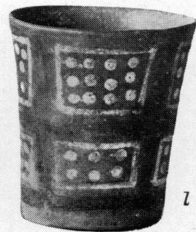
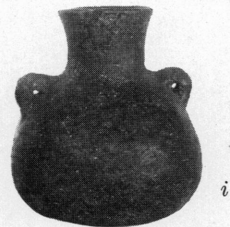
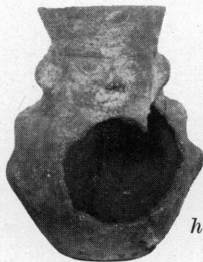
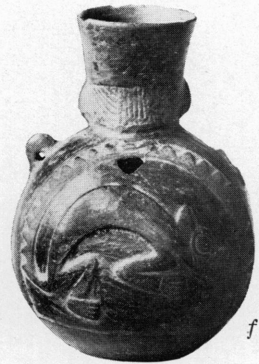


f

THREE-COLOR (*a-d*) AND LATE CHIMU (*e, f*), SITE C, MOCHE



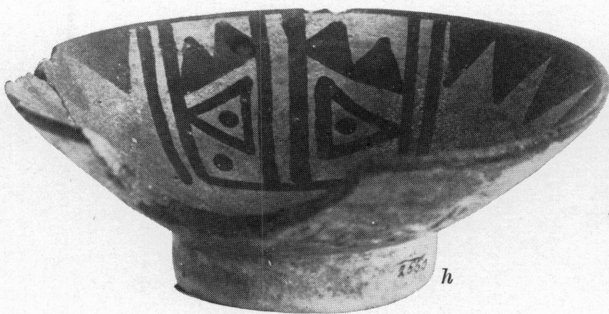
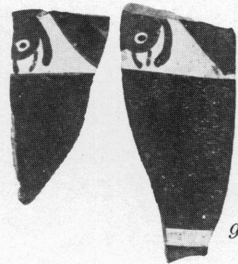
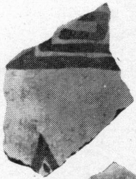
“TIAHUANACO” WARE (a-e) AND THREE-LEGGED STYLE (f-p), SITE A, MOCHE



“POST-TIAHUANACO” FROM TOMBS, SITE A, MCHE



“NON-TIAHUANACO,” SITE A, MOCHE



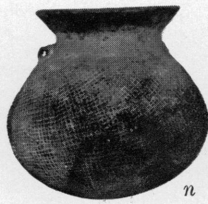
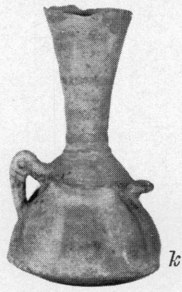
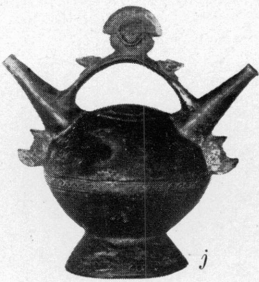
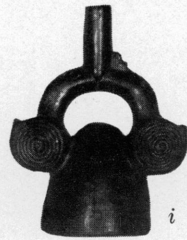
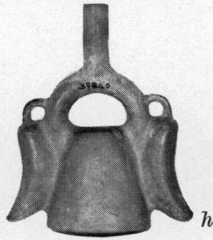
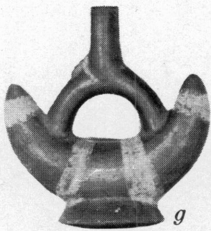
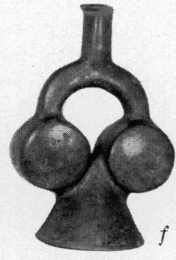
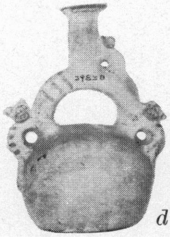
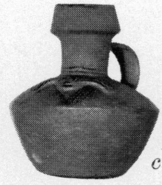
“NON-TIAHUANACO,” SITE A, MOCHE



MOCHE, SITE F (*a-e*); CHIQUITOY (*f*); PACASMAYO (*g, h*)



CHEPEN WARE, AMERICAN MUSEUM OF NATURAL HISTORY



PIURA WARE, PEABODY MUSEUM