

CHAN CHAN: CHRONOLOGY AND STRATIGRAPHIC CONTENTS

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Introduction

As a result of the latest investigations carried out in Tschudi Palace, at the urban site of Chan Chan on the north coast of Peru, it has been possible to document stratigraphically-located ceramic materials which correspond to the sequence of growth of the city. This information modifies the earlier interpretations of "horizontal" growth that were based on the study of variations in architectural features in surface contexts as indicators of temporal change. The "horizontal" growth perspective resulted in a series of sequences which vary to different degrees. Systematically conceived studies of a "vertical"--stratigraphic--nature such as those reported in this paper must be continued to correct and enrich the schemes of growth which serve here as a basis for discussion.

Chan Chan

The metropolis of Chan Chan constitutes one of the most complete manifestations of Andean urbanism. It represents the highest level of evolution reached by the old cultural tradition of the north coast of Peru. The city is a testimony to the development of the Chimú culture (850 to 1470 A.D.) (Figure 1), which was absorbed into the Inka empire only 60 years before the arrival of the Spaniards in 1532.

Located in the lower part of the Moche valley, the site occupies an area of approximately 18 km² and contains a group of monumental enclosures called palaces or "ciudadelas", characterized by a peculiar and ordered system of plazas, administrative buildings, and storerooms, by water provisioning systems, by services, and by a burial platform destined for the king (see plans in Moseley and Mackey 1974; also Kolata 1982: 79-81, figures 4.4, 4.5, and 4.6). These great enclosures evolved into a pattern of tripartite internal distribution. The north sector of the palaces is dominated by a great plaza associated with the principal entrance, with U-shaped structures (or "audiencias") and patios with storerooms. This sector has a basically administrative character. The central sector has a larger number of storerooms and a smaller number of audiencias. Like the north sector, the central division has a plaza, but of smaller dimensions. In some cases, the central sector includes a burial platform, while in others (such as Tschudi Palace, Figure 2), the platform is found in the south sector. This final sector is called the "canchón" and contains a large open area with remains of rustic dwellings, which McGrath (1973) has interpreted as the residences of the palace servants.

These palaces coexisted with administrative areas called elite compounds or intermediate architecture (Klymyshyn 1976) and with residential zones or artisans' barrios on the margins of the civic center of the city (Topic 1977, 1982).

The characteristics of Chan Chan speak to us of a Chimú society managed by a state capable of ensuring the administration and investment of tremendous quantities of labor, mobilized through a tribute system, in constructive and productive activities; at the same time, this state carried out military campaigns that assured an economy of extraction utilizing conquered valleys that stretched from the vicinity of Lima in the south to the modern border with Ecuador in the north.

Previous work

The first large-scale investigations, and the first serious attempt to approach the problem of Chan Chan, were carried out by the Harvard University Chan Chan/Moche Valley Project directed by Michael E. Moseley and Carol Mackey from 1968 to 1974 (Moseley and Day 1982; Moseley and Mackey 1974). The abundance of data obtained concerning architectural features, crafts, rituals, diet, resource exploitation, etc., permitted the construction of sociological, cultural, and economic explanatory models which together constitute an indispensable source of information for any new approach to the multitude of remaining problems.

The first investigations were based on a methodological criterion of "horizontal" study, using features of surface architecture to establish sequences. The efforts made to interpret the history of the city from this perspective have resulted in useful starting points, so long as the stratigraphic possibilities are kept in mind.

One of the first studies was on the U-shaped structures common to the whole site (Andrews 1972, 1974, 1980). Because of their association with patios, storerooms, crafts workshops, and rural administrative sites, Andrews considered these structures as "audiencias" involved in controlling the receipt of tribute. In his analysis, Andrews employed a stylistic criterion, according to which the simplest audiencias were the oldest and the most complex were the latest. An additional, a geographic criterion allowed the correlation of space and style, showing that the palaces with the simplest U-shaped structures are found in the extreme south of the city and those with the most complex audiencias are located in the extreme north. In the central part of Chan Chan, a mixture of forms indicated an intermediate phase.

Later studies in the Rivero Palace (Day 1973) permitted a broader functional understanding of the internal structure of the great enclosures. Methodologically, Day summarized the strategy that would be followed in subsequent investigations:

"Despite the lack of stratigraphic relations, ciudadelas can be ordered in sequence on the basis of architectural variation" (Day 1973: 261-262).

With this criterion, Day proposed a scheme of the development of the city and a sequence of construction of the palaces based on the degree of variation of the tripartite internal division (north, central, and south sectors differentiated architecturally and functionally), on the disposition of annexes and "extensions", on the type of audiencias, and on other features. According to Day, the oldest

palaces present a tripartite division and the most recent ones have a quadripartite division in which the annexes are strongly connected to the palaces. In terms of the burial platforms, Day maintained that they evolved from the use of "tapia" (rammed earth) to "adobe" (mud-brick) as the construction material.

Conrad (1974) made a detailed study of the burial platforms using the same preconceptions, attempting to find architectural variations in order to obtain temporal correlations. The resulting seriation was based on the study of differences in accessways, in the disposition of entrance patios, in the form of tombs, and in other features of the platforms. Conrad (*ibid.*) was also the only member of the Project who ran radiocarbon dates on his material. However, he got the dates from canes located inside the large interior and perimeter walls of the monumental enclosures: in other words, the dates came from surface contexts. Not surprisingly, the results of the radiocarbon assays differed from the sequence which Conrad had established by seriating the burial platforms.

In a later article, Conrad (1982) presents a different sequence based on Kolata's (1982) scheme, which was derived from temporal variation in adobe types. Conrad's new sequence shows important changes with respect to his first attempt (see Conrad 1982: Table 1).

The concept of "horizontal" study, and the resulting lack of interest in stratigraphic content, were so strong that the work of McGrath (1973) becomes particularly interesting. McGrath carried out studies in the canchones in the south sector of the palaces, where on the surface he found rustic architecture which he considered to be the servants' residences. McGrath excavated in the canchones of each palace, finding in some cases as many as seven use surfaces. The discovery of domestic remains and utilitarian ceramics on the deepest levels as well as on the surface ones lead McGrath to interpret all of these levels as a diachronic manifestation of the history of a single palace occupation. This interpretation now seems too hasty, above all considering that a "tiahuanacoid" burial had already been reported from the Tschudi canchón (Iriarte 1977). This burial was associated with the deepest levels, evidently occupied some centuries before the construction of Tschudi Palace.

Only beginning with the 1972 field season were the Northamericans conscious of the stratigraphic contents of the site (Topic 1977: 282-283). However, they continued to use the criterion of horizontal expansion with the addition of some stratigraphic data. One of the most important objectives of J. Topic's cuts was to obtain a ceramic sequence and a master stratigraphic column (Topic and Moseley 1983). These excavations showed that the oldest use surfaces were associated with ashy midden. This occupation was typified as unelaborate; late in the sequence, the structures changed to "quite elaborate" architecture and then to "rather haphazard" architecture (Topic 1977: 350).

Topic (1977: 148) established five phases for the ceramics of Chan Chan, although he considered his Phase 1, the oldest, as hypothetical due to the lack of diagnostic material. He correlated these phases with the growth of the city and clearly indicated the superposition of monumental architecture in Phase 5 (the time of construction of Tschudi Palace) over buildings of Phase 3 (Topic and Moseley 1983: 161). The five ceramic phases also permitted identification of

Table 1. Comparative table of proposed sequences for the large enclosures (Palaces) at Chan Chan. Earliest (top) to latest (bottom).

Andrews (1972)	Conrad (1982)	Day (1973)	Topic (1977)	Kolata (1982)	Conrad (1982)
Phase A:	Chayhuac Tschudi Rivero	Chayhuac Tschudi Rivero	Early: Rivero Tschudi Bandelier Chayhuac	Local: Chayhuac Tello NW Early Imperial Phase: Uhle Laberinto	Early Chimú: Chayhuac Uhle Tello Laberinto Middle Chimú: Laberinto (sections) Gran Chimú Squier(?) Late Chimú: Squier(?) Velarde Bandelier Tschudi Rivero
Phase B:	Velarde Bandelier Laberinto Tello	Bandelier Laberinto Velarde Uhle	Late: Uhle Gran Chimú Velarde Laberinto (Squier)	Middle Imperial Phase: Gran Chimú Bandelier Velarde	Bandelier: Laberinto Squier Squier Tschudi Rivero
Phase C:	Uhle Norte Uhle Sur	Gran Chimú Squier			
Phase D:	Gran Chimú Squier		Late Imperial Phase: Tschudi Rivero		

the evolution of vessel forms (see Topic and Moseley 1983: 174-175, figures 4a and 4b), a study which--as shall be seen below--I have been able to enrich.

The Chan Chan/Moche Valley Project investigations of other aspects of the city (e.g., intermediate architecture [Klymyshyn 1976], reservoirs [Blanke n.d.], associated structures [Hart 1976], and friezes [Fang 1975]) were carried out to a large degree on the basis of the horizontal growth concept. Finally, the sequences for the growth of Chan Chan have different degrees of contrast, depending on the architectural feature(s) selected for seriation (see Table 1).

For his part, Alan Kolata (1978, 1982) affirmed that the stratigraphic superposition of the three basic adobe types (flat, square-ended, and tall)¹ found at Chan Chan seemed clear. Based on this chronology, it was evident that parts of one ciudadela were later invaded by another. He thus proposed that the city grew progressively towards the north, resulting in a chronological scheme different from the earlier ones. Perhaps as a consequence of the decay of the irrigation systems which blocked the recharging of the aquifer, the later palaces returned to the south side of the city, where subsurface water could be found. These later enclosures necessarily reoccupied earlier palaces (Moseley *et al.* 1983). Hoyt and Moseley (1970) had realized previously that certain parts of some palaces had been sealed and covered by other, later structures, as in the case of the Velarde Palace. Nevertheless, a systematic focus on vertical growth was not taken up, even though such a focus could have been taken into account to interpret--perhaps in a different manner--the history of the site.

Previous Investigations in the Tschudi Palace

In different chronological schemes, the Tschudi enclosure has been located both in the early phases (Andrews 1972; Conrad 1974; Day 1973) and in the late phases (Topic 1977; Kolata 1978; Conrad 1982) of the occupation of Chan Chan (see Table 1).

Cornejo (1980a) locates Tschudi in Late Chimú, arguing for the existence of "five reoccupations" and the absence of evidence for utilization during Inka times. Cornejo's report does not illustrate the materials which typify the five reoccupations, making it impossible to assess their chronological placement. Earlier, Conrad (1974) had reported Chimú Inka materials from the excavations in the Annex of the Tschudi burial platform. There he excavated five tombs, of which four were "Imperial Chimú" and only one was Chimú Inka. Unfortunately, Conrad does not describe or illustrate the materials from these tombs, limiting our comparisons.

The discovery of intrusive materials in the Tschudi burial platform is of particular interest. A Colonial Period burial has been found in the Annex (Cornejo 1980a), in addition to a child burial with a copper disk as its only offering located in the southern corner formed by the Annex and the platform (Narváez and Hoyle 1985). The latter burial was found immediately under the

¹ Kolata (1982: 69, Fig. 4.1) provides an illustration of the three adobe types.

floor, in a matrix of loose earth and structural debris. It is obviously intrusive and must date to some time in the Inka (Late Horizon) or Colonial Periods.

One of the most important pieces of information refers to the discovery of structures in the subsurface of the audiencias of the north sector. Cornejo (1980a) places these structures in Early Chimú, although the reports indicate that the ceramic materials correspond to Middle and Late Chimú (Cornejo 1980b). This contradiction leaves uncertain the date of the subsurface structures, which have fine plastering, ramps, and well-made floors.

The final data of great importance in defining the chronological aspects of the Tschudi Palace come from two excavation projects carried out between 1983 and 1984: the "Chan Chan Emergency Project" of the Peruvian National Institute of Culture/La Libertad Department Branch, and the "Tschudi Project" of the National University of Trujillo, in which I was an active participant (Hoyle and Narváez 1983; Nacarino and Valverde 1984; Narváez *et al.* 1984, 1985; Narváez and Hoyle 1985).

The Tschudi Project

During the Tschudi Project, my colleagues and I followed the strategy of using looters' pits and previous excavations in order to determine the chronological aspects of the Palace by comparing the stratigraphic superposition (Narváez *et al.* 1984, 1985). This approach allowed us to uncover information from all sectors of the Palace, including 'intangible' areas off limits to normal archaeological excavation. The looters' pit excavations sought to examine the superposition of materials from undisturbed zones on the profiles and below the pits, in order to obtain a single stratigraphy for the site. When necessary, the excavation was amplified. Happily, owing to the lack of materials considered "valuable" by the looters, in no case did the destruction affect the entire area of the pit: only the central parts were heavily affected. By vertically profiling the edges of pits, we were easily able to define architectural remains with interesting associations and definite proveniences for the recovered materials. Finally, the profiles showed the exact point reached by the looters' destruction. We maintained vertical control through the use of an arbitrary datum located in the north corridor near the principal entrance to the Palace.

The associated ceramics were classified by morphological features and descriptions of paste, temper, and surface treatment. (Narváez *et al.* 1984, 1985). This work was done taking into account the morphological classification carried out on the materials from the Chan Chan Emergency Project (Hoyle and Narváez 1983).

Sectorization of Tschudi Palace

For purposes of the excavations, we divided the Palace into six sectors labelled with capital letters and subdivided into subsectors identified with roman numerals, and, finally, into excavation units marked with arabic numerals. In this article, I will refer only to the principal data, describing certain excavations which have provided diagnostic materials and are crucial for indicating the

chronological sequence of occupation and construction of Tschudi. The excavations will be labelled according to the code corresponding to the relevant project (see Figure 2).

THE EXCAVATIONS

SECTOR A:

Unit SQ1-C0-T1 (Emergency Project)

Location:

Corridor of the "Birds and Fishes" on the west side of the principal plaza of the sector. The excavation was located in the extreme south of the corridor and covered the entire width. The trench measured 8 x 1.5 meters.

Stratigraphy (Figure 4a):

- a) Surface level composed of pieces of eroded alluvium on a level of loose, brown earth affected by salts.
- b) Level of structural debris (fallen adobes and fragments of mortar).
- c) Level of alluvial sediments.
- d) Earth with fragments of adobe, mortar, plaster, and friezes.
- e) Level of alluvial sediments.
- f) Archaeological floor (1 in Figure 4a) corresponding to a bench 3.70 m wide and 0.45 m higher than the corridor's floor level. Located along the entire west side of the corridor.

Associated materials:

The west and south walls of the corridor were originally decorated with rhomboids which were later sealed to provide a surface for a decoration of horizontal lines ("waves") with marine birds along the base of the wall. The runner between the floor and the bench is also decorated with marine birds, of which only the feet are preserved. The friezes were heavily eroded by a strong rain that has practically disfigured or deformed them (see Figure 4b).

The floor of the bench has clear signs of a strong rain; immediately under the waterlaid sediments were unidentified detritus, *Donax obesulus* (surf clam) valves, crabs, general midden, and potsherds.

Pottery associated with the floor:

- a) Ollas with angular rims and concave interiors (1D: Figure 14a).
- b) Jars with straight, everted rims and rounded lips (2B: Figure 14a).
- c) Plates with straight, everted rims, slightly beveled lips, and slightly convex bases.
- d) Arraybalus: 8 body sherds from a small arraybalus, approximately 16 cm wide (not including handles) and 23 cm high. One of the fragments includes one of the lateral handles. The vessel is decorated in bands of red (10R 3.5/6) delineated in black (10R 2/2), both on a cream base which oscillates between 5 YR 7/6 and 10 YR 8/4. The delineated red band is vertical, measures 11 mm in thickness, and runs near the handle; the black lines are 2 mm thick. The firing is good and the fragments have a fine paste, a polished exterior, and a striated interior (Figure 15).

Unit A III-1

Location:

Looters' pit located in the patio of Audiencia No. 1 (the first on the extreme west). The excavation defined a pit of 2 x 2 meters.

Stratigraphy (see Figure 5):

- a) Surface alluvial lumps.
- b) Archaeological floor corresponding to the patio of the Audiencia; it has a base of adobes.
- c) Artificial fill composed of loose, sandy earth and adobes, and retaining walls made of loose adobes without mortar.
- d) Level of eolian sand, 3 to 4 cm thick, very regular.
- e) Adobe structures and well-preserved floors. In the central part of the excavation, an adobe wall runs north-south; a second wall, which separates two rooms, runs east-west almost diagonally, without forming a right angle with the first wall. The floor on the north side of the east-west wall is a little lower than that on the south side. The north floor drops 18 cm down to the west; this part of the floor is associated with potsherds, camelid bones, crab and *Donax* shells, and other material. Ceramic forms associated with this deposit include ollas 1A and 1D and plates 3D, 3B, 3D-2, and 3G (see Figures 14a, 14b).
- f) Level of midden under the floor: abundant ash, remains of crab, fish, mollusks, and ceramic fragments.
- g) Level of midden. Differences with level f midden can be distinguished; both midden levels measure 10 cm in depth.
- h) Dark gray floor, associated with a pit measuring 20 x 40 cm in its minimum and maximum dimensions. The pit is capped by an adobe laid obliquely and is filled with ash, other debris, and potsherds, generally from blackware plates.
- i) Level of midden, ash, and ceramic fragments, with several hearths indicated by burnt earth and charcoal. The midden includes fish and guinea pig bones. Abundant snails (*Tegula atra*) and crab remains were recovered in an oval-shaped hearth measuring 30 x 40 cm. A small lense of midden and ash, containing the same kinds of materials, was also recorded.
- j) Floor of compact, dark gray earth. Unlike the previous floors, this level lacks midden; the excavated part was clean.
- k) Fill of earth and sand varying between 4 and 11 cm in thickness.
- l) Sterile soil of reddish sand and oxidized gravel, with irregularly shaped rock fragments.

Commentary:

Beginning with the midden level f, we began to document potsherds with a decoration of lines and black dots on an oxidized and polished paste. Among these sherds, fragments from one vessel were distributed from level f to level j. Thus, I am certain that we are dealing a single, very intense moment of occupation. The following ceramic vessel forms were found in this whole sequence of levels: ollas 1A and 1C; jar 2A; and plates 3D and 3D-2 (Figures 14a, 14b). Lab analysis of the sherds decorated in black was able to define two forms: a) a flat-based bottle with carinated shoulders and holes for two spouts, now missing but perhaps united by a bridge handle (Figure 12); and b) a small bowl, with convergent, straight rims and rounded lips; the equator is carinated and the base is convex (Figure 13). On vessel a, the decoration of circles and black lines appears in the upper part above the inflection. A black line deline-

ates the inflection and large, black dots appear above it. In the interior, lines of smaller dots complement the decoration. The holes for the spouts are also surrounded by black lines. The paint is not dense: some parts appear lighter than others and certain dots are grayish from loss of the original color. On vessel b, a black line was painted on the lip and was complemented with vertical lines and small dots on the rim. Both of these small bowls show polishing striations on the interior, and fingermarks at regular intervals around the inflection are indented in the interior and visible as extrusions on the exterior. Both vessels have a diameter of 9 cm (see Figures 12, 13).

SECTOR B

Unit B I-1

Location:

Looters' pit of 5 m diameter located in a patio towards the west of the plaza of the central sector of the Palace. A 6 x 8 m square covered the entire pit; we decided to excavate a trench along the south side of this square, allowing us to document the surface floors and subsurface structures.

Stratigraphy (see Figures 6a, 6b):

- a) Surface: Level of wall fall associated with ceramic fragments, plaster with cane impressions, one complete and a number of fragmented adobes, earth with ash and remains of animal bones.
- b) Level of alluvial sediments associated with concentrations of *Donax* shells, charcoal, and potsherds. These concentrations have been recorded in open spaces in other sectors of the Palace, where they are found (as here) practically on the surface and must date to the last occupations of the site.
- c) Use surface (floor 2 in Figures 6a and 6b) impregnated with *Donax* shells; the floor is yellowish and measures 2 cm in thickness. Ceramics are associated.
- d) Well-preserved floor (3 in Figures 6a and 6b), with abundant ash and domestic remains, including peanut, guanábana, lúcuma, *Donax*, and fish bones and vertebrae. Fragments of plaster with cane impressions indicate the existence of some nearby roof. It is probable that these structures were destroyed when the later, level c floor entered into use.
- e) Floor (4 in Figures 6a and 6b) with abundant remains; in places, this floor is joined with the level d floor, indicating contemporaneity.
- f) Fill of rock fragments, sandy earth, and loose adobes, 1.62 m thick. Associated with some Moche potsherds.
- g) Adobe structures: a wall with a pronounced talus, plastered on both faces. This wall runs east-west and is associated with a floor (5 in Figures 6a and 6b) on the north that is 29 cm higher than the floor on the south. The fact that the floor to the north of the wall is higher than that to the south perhaps implies the construction of a bench, which in turn would indicate different functional contexts for the rooms on either side of the wall. On the south side of the wall, stone foundations can be seen. The adobes measure 20 x 12 x 12 to 20 x 12 x 14 cm on average. The looters' pit affected the central part of the wall but did not reach the associated floors. In the profiles, it is clear that the upper part of the wall had also been destroyed prehistorically to make room for the floors located above the fill (levels d and e).

Commentary:

It is interesting to note that a level of quite fine, gray beach sand covers the floors of level g to an average depth of 3 cm and contains roots and stems of salt grass, indicating a moment of abandonment. The level g structures correspond to those described previously from Unit A III-1; unfortunately, we did not excavate to sterile soil in Unit B I-1; nevertheless, earlier deposits must exist below the level g floors, contemporary with the oldest deposits located on sterile soil in the north sector of the Palace.

Unit B II-1*Location:*

An enormous pit located in a niched patio on the east side of the plaza of the central sector. This patio is found immediately to the south of a patio with an audiencia. The pit does not have wall fall or debris; apparently all of the material has been removed. A similar phenomenon has been observed in other sectors of the Palace. As we shall see later, this pit (like the others) is part of construction activities carried out during the final moments of occupation of the Palace and is not the work of modern looters. A 4 x 1 m trench encompassing part of the niched wall was excavated into the north side of the pit (Figure 7a).

Stratigraphy (Figure 7a):

- a) Surface level consisting of pieces of eroded alluvium. Under this thin cap appears a level of earth turned brown due to salinity.
- b) Level of sediments which gets deeper as the slope of the pit increases.
- c) Level of fallen adobes, mortar, loose earth, and fragments of friezes and plaster.
- d) Level of sediments.
- e) Archaeological floor (1 in Figure 7a) associated with the niched wall. The floor has a base of adobes; its surface is of fine, gray clay. Small stains from burning were found on the architectural debris located on the floor.
- f) 4.80 m thick fill composed of the following materials:
 - Clean sand from the excavation of the Palace reservoirs.
 - Loose, sandy earth.
 - "Cajones" (boxes) or "celdas" (cells) of fill made of loose adobes without mortar, used to give consistency to the fill. The deposits have been trampled to give them greater consistency. We obtained information on three cells at different levels. At the base of the deepest cell we found a level of gray beach sand, apparently transported deliberately to the site. This level has a very regular thickness of 10 centimeters. The presence of *Donax* valves in the sand makes the human transport even more evident--these shells are found in the beach sand, but weigh too much to have been wind-transported to the Palace.
 - A 25 to 30 cm level of sandy earth and fine gravel as a base to all of the fill.
- g) Compact floor (2 in Figure 7a). Under the surface of this floor, we found the remains of an almost complete, flat-based plate (3D-2: see Figure 14b).
- h) 60 cm thick fill composed of sandy earth and gravel; the profiles show the dipping surfaces of the different loads of fill.

- i) Level of sediments in which are superposed levels of silt separated by thin strata of yellow sand containing small stones and some potsherds. Each silt level measures 5 cm in thickness. In total, level i is 20 cm thick and slopes down from south to north.
- j) Sterile soil: yellowish sand and no cultural material.

Commentary:

In this Unit, for reasons of conservation, the excavations were not amplified to expose either the floor or the wall plaster. Once the floor had been defined in the profile, we continued with the excavation because the object was to define the composition of the subsurface remains.

Unit B II-2

This unit encompasses an east-west dividing wall of the niched patio. We excavated a trench and found the same stratigraphy as in Unit B II-1. In B II-2, we did not reach sterile soil, and defined only a part of the fill under the surface floor (= level e in Unit B II-1). I mention Unit B II-2 here because of the discovery a level of sediments over a floor associated with an *in situ* frieze on the wall dividing this space from the niched patio (see Figure 7b). This is the first known occurrence of this type of decoration in the central sector of the Palace; previously, friezes were known only from the north sector in which the audiencias are concentrated.

SECTOR C

Unit C-1

Location:

This Unit was excavated in the extreme northwest of the north corridor of the "Wing" of the Palace. Here, a very large excavation could be observed (15 x 12 m maximum and minimum diameters), similar to that described in Unit B II-1. We cleaned a profile which cut the corridor from north to south; the excavation had an L-shape, so that the two profiles (northeast and southeast) presented in Figure 8 and summarized below are slightly offset (see Figure 2).

Stratigraphy (Figure 8):

- a) Surface: pieces of eroded alluvium on a level of loose, brown earth. Some fallen adobes on the surface.
- b) Level of sediments, with concentrations of wild bushes in the central part.
- c) Level of fallen adobes. This level gets deeper in the central part of the corridor and reaches its greatest depth (to sterile soil) in the extreme west of the excavation. The fallen adobes come from the perimeter and interior walls, located on the north and south sides of the corridor, respectively.
- d) Level of sediments which drops rapidly in the profile and covers the whole sequence of underlying, evidently destroyed floors.
- e) Small level of debris and loose earth.
- f) Archaeological floor (1 in Figure 8), compact and gray. On the northern end, only 79 cm are preserved; on the southern end, the profile shows 2 m of this floor, which is associated with the interior wall of the corridor--the base of the wall coincides with the floor.

- g) Fill of loose earth, with adobe fragments in the north part. The southern end has only sandy materials and fine, oxidized gravel from the excavation of the reservoir of the Wing of the Palace; in this case, the excavation of the reservoir must be prior to the construction of the interior wall of the corridor but later than the construction of the perimeter wall.
- h) Gray floor (2 in Figure 8), quite compact; only 80 cm are preserved on the north and 3.80 m on the south. The southeast profile shows a series of remodelings of the same floor (3-6 in Figure 8, southeast profile) with abundant deposits of ash and debris. The presence in the profile of adobes with mortar and exterior plastering identifies structures which have a direct association with the perimeter wall, and therefore date the original functioning of the Palace as such. We have been able to define five remodelings of floors.
- i) Fill, 1.20 m thick, composed fundamentally of loose earth with abundant potsherds; the profile shows notable accumulations of loose rock fragments.
- j) Level of loose earth, 30 cm thick, very uniform on the south side; part of the overlying fill.
- k) Use surface (floor 3 in northeast profile and floor 7 in southeast profile of Figure 8), compact in certain places, very regular. This level has a horizontal surface associated with non-diagnostic potsherds.
- l) Sterile soil, sandy earth intercalated with very compact sand layers, typical of the water reservoir profiles.

Commentary:

The excavation was limited to profiling parts of the edges of the pit; we did not broaden the excavation area to document associated material. We were interested in determining if the interior wall which forms the north corridor of the Wing was a very late modification in the functioning of the Palace, an hypothesis which turned out to be true. We also learned that the surface architecture of this sector is later than the excavation of the reservoir. Finally, we still do not know the features, dispositions, etc. of the original architecture associated with the moment of construction of the perimeter wall, which would date the construction of the Palace itself.

SECTOR D (Burial Platform)

Unit SQ 5-C1 Cut 3 (Emergency Project)

Location:

The excavation is located in the patio behind the Annex of the burial platform, right at the corner formed by both structures, and measured 2 x 2 meters. Earlier work to clean the architectural debris had eliminated the surface levels, so we could only record the strata described below.

Stratigraphy (Figure 9a, 9b):

- a) Surface level which includes a thick deposit of sediments, quite noticeable in the part of the pit corresponding to the Annex wall.
- b) Level of fallen adobes, earth, and loose, sandy material, lumps of compact earth, and fragments of mortar. In the central part of the cut we could define the burial of a child, with the following features:
- Flexed and lying on the right side. The face is oriented down and the back of the skull shows on the surface.

- The body is that of a child, buried among the architectural debris on the floor (1 in Figure 9a) associated with the walls of the platform and the Annex. An ordering of adobes along the sides of the body indicates prior preparation. The corpse was wrapped in simple cloths, which were almost completely destroyed by the salinity of the soil.
- Seed pendants and a copper disk were deposited as offerings. The disk consisted of a copper sheet, 2.5 cm diameter, with two holes in one of the ends.
- An 8 to 10 cm thick level composed of adobe lumps and loose earth separated the body from floor of the Annex (level c).
- c) Very compact floor (1 in Figure 9a) of gray mud with a number of depressions, especially in the part away from the burial. Several concentrations of gravel are stuck to the floor and form part of it.

Commentary:

The child burial must date to a time after the use of the platform and the Annex; although no diagnostic materials were present, this stratigraphic placement indicates that the burial corresponds to a time of reutilization of the structures during the Inka or Colonial Periods.

SECTOR E (Canchón)

Unit E 1

Location:

This excavation is found on the south of the wall which separates the principal reservoir from the canchón. There we found a previous trench which defined the first floor associated with the wall. Taking into account that this excavation remained open, we cleaned it and continued excavating. The results are summarized below.

Stratigraphy (Figure 10b):

- a) Surface level with a thin layer of compact material over a layer of loose earth with fine gravel.
- b) Level of alluvial sediments.
- c) Thick level of wall debris (fallen adobes, mortar, and loose earth).
- d) Level of alluvial sediments.
- e) Level of loose earth, 30 to 70 cm thick, apparently deposited deliberately. Densest near the wall, which we will refer to henceforth as Wall I.
- f) Thick level of sediments with a uniform, 10 cm thickness.
- g) Floor 1 (Figure 10b), quite uniform, somewhat deteriorated to the south. The previous excavation reached this surface.
- h) Fill of loose material, potsherds, and some organic debris. In the southern end of the excavation, this fill includes loose adobes, some of which had been deposited immediately on top of the floor of earlier structures. Some of the adobes measured 35 x 18 x 15 cm, while others were 38 x 21 x 23 centimeters.
- i) Floor 2 (Figure 10b), associated with two walls: Walls II and III, which form a right angle in the south part of the excavation (see Figure 10a). The floor is in a good state of preservation, as is the plaster. It is quite clear that both walls had been dismantled; thus, Wall I is older because it has deeper foundations than Wall II.

- j) Two floors (2a and 3, Figure 10b) separated by levels of fill; they join together with Floor 2 right at Walls II and III.
- k) Fill of gray, sandy earth.
- l) Floors 4 and 5 (Figure 10b), associated originally with Wall I. The first floor represents a remodeling of the second one.
- m) Fill composed basically of sand and rock fragments; Wall I was built on this fill. Only 15 cm of level m appear in the north profile. Two older walls appear immediately below.
- n) Walls IV and V, the former appended to and less deep than the latter. The adobes measure 42 x 20 x 25 cm on average. These structures are evidently dismantled. Wall V shows only three rows of adobes, continues under Wall I, and has a visible width of 1.50 m, which probably makes it part of a monumental structure. No traces of plaster are preserved; apparently, the adobes recovered from Floor 2 (associated with Walls II and III) correspond to this type of structure.
- o) Floors 6 and 7 (Figure 10b) are superposed but separated by a thin level of earth fill with gravel and sand.
- p) Fill of loose earth, lumps, and adobe fragments, with an average thickness of 45 centimeters.
- q) Floor 8 (Figure 10b), the original floor associated with Wall V. It is neither very elaborate nor very compact; small stones are present.
- r) Fill which passes under Wall V.
- s) Floors 9, 10, and 11 (Figure 10b), separated from each other by small stones and quite humid earth. No associated material was recovered.
- t) Dense fill, including rock debris and ceramic fragments in a rather humid, sandy earth matrix; this fill measures 1.70 m in thickness.
- u) Sterile soil: sand and clean gravel.

Commentary:

Floor 1 corresponds to the last phase of occupation of the site; as in the other sectors, this occupation had been affected by a strong rain. Floor 1 was occupied after the structures corresponding to Walls II and III had been dismantled. The ceramic vessel forms associated with the Floor 1 occupation are (Figures 14a, 14b):

Olla 1A
Jar 2A
Plates 3C, 3D, 3G
Urns 5C²

The structures associated with Walls II and III correspond to a time of construction of very elaborate architecture, considering the fine plastering and good condition of the associated floor (2). Also dating to this time, the lower floors (2a and 3) between Walls I and II are irregular and have domestic midden. Ceramic vessel forms associated with this occupation are (Figures 14a, 14b):

Jar 2A1
Plate 3D-2
Urn 5C1

² *Editor's note:* Figure 14c, which was to show the urn profiles and some of the olla profiles, was lost in the mail between Peru and the United States.

Wall I and Floors 4 and 5 constitute an earlier occupation. The rapid superposition of the two floors suggests heavy use. Study of the adobes in Wall I indicates that they are the same as those which appear in the fill sealing the structures of Walls II and III. These are square-ended adobes, easily distinguished from the tall adobes of the great exterior walls of the Palace. Wall I thus constitutes part of an older complex reutilized during the construction of the Palace, or at least one built of reutilized adobes. In either case, Wall I was in use at the same time as Walls II and III, although it began to function earlier (Floors 4 and 5) and remained in use during the final occupation of the area (associated with Floor 1). Following the occupation involving Walls I, II, and III, Floor 1 destroyed Walls II and III, and a heavy rain occurred. This is the same time as the strong rain associated with the find of Inka arribas sherds (Figure 15) in the north sector.

The ceramic vessel forms found on the original floors associated with Wall I are (Figure 14b):

Plates 3A, 3C, 3D-2

Finally, Walls IV and V, associated with Floors 6, 7, and 8, indicate a heavy use of the site, corresponding to the square-ended adobe architecture which continues under Wall I. It is quite clear that these walls were dismantled and their adobes reused in later structures. The following ceramic vessel forms were associated with Floors 6 and 7; no diagnostic materials were found on Floor 8 (Figures 14a, 14b):

Olla 1C

Plate 3C

Urn 5C1

Lamentably, we have not documented material for Floors 9, 10, and 11. Nevertheless, I can say that the thick fill between these floors and sterile soil is indicative of an important mobilization of labor to level the ground. This work took place prior to the construction of Wall V.

Finally, we found Moche pottery fragments in the fill under Floor 1 (level h) and in the fill on sterile soil (level t) (see Figure 11).

RESULTS

The excavation data permit me to propose four stratigraphically differentiated phases, all of which correspond to the Chimú occupation. Fragments of Moche ceramics come from the fill deposits in various excavation units, which allows the recognition of earlier (pre-Chimú) settlements in the urban area.

Kroeber (1926: 28-29 and Plate VI) provides related information in referring to a lot of seven whole pottery vessels from the sand mounds between the beach and the cemeteries of Chan Chan, towards the south of the site. This lot, from the Jacobs collection, includes two vessels identified as "Proto-Chimú" or Moche.

With the exception of a Moche IV vessel in the deepest levels of the urban area, on the southeast side of Laberinto Palace (Topic 1970), similar finds have not been reported. Topic thinks that the Laberinto find is an intrusive "heirloom" in use in a Late Chimú context (*ibid.*: 41, 46).

It is possible that the Moche sherds from our excavations came from a site within Chan Chan or from nearby areas. The immense labor involved in building the site, and the permanent remodelings, levelings, etc. must have destroyed any earlier settlements. Some such settlements could well have dated to earlier cultures than the Early Intermediate Period Moche, above all considering that sites such as Gramalote (Initial Period) and Padre Abán (Cotton Preceramic Period) are located on the same marine terrace as Chan Chan (Pozorski 1976, 1979). This fact implies that we are on the track of early settlements in the subsoil of Chan Chan, as does the discovery of a gold sheet with Moche designs in a Late Chimú site near the modern beach behind Chan Chan (S. Vásquez, pers. comm. 1985). The confirmation of such settlements would help clarify a latent historic continuity such as that suggested by Rodríguez Suy Suy (1968, 1972).

Stratigraphic Phases and Associated Ceramics

The phases discussed in this section are those which I have established for the occupation of Tschudi and should not be confused with Topic's (1977; Topic and Moseley 1983) phases for Chan Chan as a whole. In the following sections, I consider the correlation of the Tschudi system with other, more general chronologies, such as that of Topic.

Phase I consists of the first evidences of occupation on top of sterile soil. The excavations revealed floors with midden levels. Among the associated diagnostic features of the ceramics, I can mention black paint on polished paste. Regarding the bowl with carinated equator, from Unit A III-1 (see Figure 13), it is interesting to observe that Carol Mackey (1978) has also documented this form for the Chayhuac Palace. As she notes, this form has direct antecedents in Moche IV. At the same time, the flat-based vessel with carinated shoulders from the same context (Figure 12) has decorative elements in the Red-white-black style corresponding to Early Chimú. In general, the Phase I ceramics have much similarity with vessels from two Early Chimú burials (EC 21 and EC 22) at the Pyramids of the Sun and the Moon in the Moche valley (Donnan and Mackey 1978). At the Moche Pyramids, the relevant vessels are plates decorated on the interior with simple designs: lines, circles, S-shaped lines in black on polished paste. These comparative data permit us to date Phase I from the subsoil in Tschudi Palace as corresponding to Early Chimú. At present, these are unique materials for Chan Chan, especially considering their stratigraphic association.

It is interesting to observe that the vessel forms noted above are associated with the following other forms (Figures 14a, 14b):

Ollas 1A, 1C

Jar 2B

Plates 3D, 3D-2

Decorative elements include stippling and white paint on red paste. Traditionally, 1A ollas (incurving bowls) and the flat-based plates (3D-2) have been considered to pertain to Middle Chimú (Donnan and Mackey 1978: 289) or to Topic's Phase 3 (Topic and Moseley 1983: 174-175).

Units A III-1, A III-2, E 1, and F 1³ offer important information for Phase I. The first three cases produced associated ceramics; for the last case, I have only the reference to the "tiahuanacoid" burial in the deepest levels (Iriarte 1977). In units other than those listed at the beginning of this paragraph, we did not excavate below the Phase II deposits. As a result of these factors, Phase I material is quantitatively scarce although qualitatively important.

Phase II is much better documented. Our excavations have permitted me to identify this phase in the north, central, and south sectors of the Palace. In Units A III-1 and A III-2 in the audiencia area of the north sector, we have documented well-finished floors and structures associated with Phase II ceramic material. In the central sector, Units B II-1, B II-2, B III-1, and B III-2 provide important information. In the south sector, Walls I and II in Unit E 1 correspond to this phase. The associated ceramic forms are the following (Figures 14a, 14b):

Ollas 1A, 1D

Plates 3B, 3D, 3D-2, 3G

Important construction activity took place during Phase II. Later, the structures built in this phase may have been abandoned for an indefinite lapse of time. The discovery of beach sand in Units A III-1, B I-1, and B II-1 might indicate a moment of abandonment. However, these deposits could be part of a deliberate fill, such as I mentioned for Unit B I-1, perhaps for ritual purposes.

Phase III is a time of intense construction within the Palace itself. The Phase II structures are dismantled, filled, or reused. To the south of the principal plaza in the north sector, the "audiencias" are built on a fill almost 2 m deep; this fill continues south to the central sector. The significant artificial elevation created by the fill gives these structures a high status.

The Phase III structures are dominated by the use of tall adobes, although the reuse of older forms is also observed. The burial platform in the south sector and the structures associated with the original construction of the Wing of the Palace were built during this phase. As I have already described for Unit C-1, the Reservoir and the surface architecture in Sector C correspond to a final Phase III remodeling. The Annex of the burial platform must also have been built at this final moment of the phase. I suggest that the construction of the Annex and of the surface architecture in the Wing of the Palace are evidence for the presence of the king's noble heirs carrying out important construction activity on the death of the sovereign, as postulated by Conrad (1974).

The profusely decorated compounds of the north sector are complemented, in the central sector, with an architectural unit composed of a niched antechamber, a niched patio with an audiencia, storerooms, and two niched patios in which we excavated Units B II-1 and B II-2. In this area, we found friezes representing marine birds along the bases of several walls (Figure 7b). This

³ F 1 is the test pit excavated by Iriarte (1977). During the Tschudi Project, we limited ourselves to cleaning the profiles of Unit F 1 for comparative purposes; therefore, this Unit was not described in the section on excavations and is not shown on Figure 2.

discovery leads me to propose that this sector was the most important part of the Palace and was probably the residence of the Chimú lord, an idea supported by the following reasons:

a) Earlier, Day (1973: 61, 279) had proposed the central sector of Rivero Palace as the residence in life of the Chimú king. On the basis of the discovery in Tschudi, a comparison with other Palaces permits me to recognize a pattern. The Palaces considered to be latest (Bandelier, Velarde, Rivero, and Laberinto) have an antechamber, niched patios, and a patio with an audiencia, all linked to the plaza of the central sector. These data tend to confirm Day's hypothesis of royal residence in the central sector as a pattern which applies to all of the later Palaces (Narváez 1986).

b) In Tschudi Palace, the greatest number of audiencias is found in the north sector, and all are grouped and associated with storerooms. These facts suggest that the north sector had an administrative function, an interpretation supported by the connection of the north sector with the principal plaza and with the only entrance to the Palace.

c) The central sector is more isolated, it is located in the heart of the Palace, and it contains the largest number of storerooms. As Day (1973: 61) has suggested, the king would have been the "supreme administrator".

d) The architectural unit in the central sector is the only place other than the north sector which has high relief friezes. There is no other place as special or as well-located. The niches in the open patios, the antechamber, and the audiencia patio, the friezes, etc., convert this unit into the most important part of the central sector.

The majority of excavation units did not have materials associated with Phase III, as most units were in looters' pits and in previous excavations which had cut through Phase III deposits. Thus, most of our data on Phase III comes from the profiles of these pits. Nevertheless, we expanded some units and documented sherds which correspond to this phase and which corroborate previous data. The following forms were popular (Figures 14a, 14b):

Ollas 1D, 1A, 1E⁴

Jar 2A

Plates 3C, 3D, 3D-2, 3G

These forms come from Middle Chimú (Phase II) and continue almost without variation until Late Chimú, the Inka administration, and the earliest colonial epochs (Donnan and Mackey 1978).

Unfortunately, the materials from Cornejo's (1980a) excavations in a patio with audiencia and in the burial platform have not been analyzed; when studied, these remains will provide valuable comparative material.

Finally, *Phase IV* corresponds to the reuse of the Palace during the Inka presence and into the Colonial Period. This occupation has the following characteristics:

a) The Palace loses its character as such. According to Conrad's (1974) scheme, after the death of the king, his noble descendants continued to reside

⁴ See footnote 2.

in the Palace, converting it into a royal mausoleum, while the heir to the throne built his own palace. If this was the case, it appears that the "invasion" of the interior of the Palace by the common people occurred at a time when the nobles still lived there. This situation recalls Cabello's (1951 [1586]: 319) statement that, faced with the presence of the Inka army, the people took refuge "uselessly" inside the great walls of Chan Chan. Shortly thereafter, Michancaman (the Chimú king) capitulated.

b) The Phase IV "domestic" occupation reused earlier structures which ought to have been for the exclusive use of the nobility. Rustic dwellings were built and food remains were deposited on the floors (Cornejo 1980a).

c) Large areas of the Palace were destroyed to obtain building materials. This characteristic is defined by large borrow pits with no architectural debris, cut into the Phase III and earlier structures, indicating massive removal of materials.

d) A strong rainfall episode, which would have caused major disruptions in the economy, health, dwellings, etc., severely affected Tschudi Palace during Phase IV. A thick layer of alluvial sediments which damaged floors, plaster, friezes, roofs, etc. has been documented immediately on top of the Phase IV floors (Figures 4a, 4b). The Inka arybaloid fragment discovered on the bench in the Corridor of the Birds and Fishes (Figure 15) permits us to date the rainfall event to the Late Horizon Inka occupation (Narváez and Hoyle 1985). The same alluvial level was also documented during the Emergency Project (*ibid.*) and by Cornejo (1980a) in the audiencia sector. Cornejo (*ibid.*: 23) reports that

"...the cleaning of the floor...had to be finished with a scalpel because of the presence of very fine layers of sedimentation stuck to the floor.

These fine laminae show deposition...in pooled water."

The footprints found in this case were erroneously interpreted as "impressed during the plastering of the floor" (*ibid.*: 24). The Emergency Project found deep footprints in mud-covered floors associated with the edges of an intrusive tomb in the northeast corner of the principal north corridor of the Palace (Narváez and Hoyle 1985).

The large pits made to obtain construction material also show the same rainfall sedimentation level overlapping the edges and following the contours of the pits (Figure 8). As is evident, these borrow pits cut the earlier floors and are clearly contemporary with the Inka arybaloid sherd. Conrad (1974) has proposed that burial platforms were built for the successors of Minchancaman (i.e., the Chimú "rulers" under Inka domination) until the arrival of the Spaniards. If Conrad is right, such structures would have been built during Phase IV, an idea supported by the presence of the large borrow pits in Tschudi Palace.

The final reoccupation of the Palace lasted until or shortly after the Spanish Conquest, with the exact date of abandonment remaining unclear. In this context, the remains of Phase IV burials documented in the burial platform are of particular interest. The presence of such burials suggests that the latest evidence of occupation in the Palace should date to the Colonial Period. Checking the materials excavated by Cornejo in the Burial Platform, I have found a small bowl (Figure 16) which has the remains of glaze on the interior and on parts of the rim exterior. This is the only case of glazed ware yet reported for Chan Chan. Although this piece comes from disturbed materials, it does corroborate the date of the Colonial burial reported by Cornejo (1983) and

supports the continued use of the Palace into the Colonial Period. Parts of an Inka sculptural vessel representing a bird (Figure 17) came from the same disturbed tomb context as the glazed vessel.

Concerning the ceramics, Phase IV does not show great changes from the preceding phases: the forms are basically the same as in Phase III, and some of these are continuation of forms present as early as Phase I (Olla 1A). The Inka arrybaloid sherd was associated with (Figures 14a, 14b):

Ollas 1A, 1D, 1E

Jar 2E

Plate 3H

In Units A V-1, B I-1, and F 2,⁵ the following forms were identified (Figures 14a, 14b):

Ollas 1D, 1C, 1A

Jars 2A, 2B

Plates 3C, 3D, 3G

Conclusions

The recent investigations in Tschudi Palace have demonstrated the possibility of establishing stratigraphic correlations which can serve as the basis for proposing schemes of growth and development of the prehispanic city of Chan Chan. In this context, the two most recent sequence for the growth of Chan Chan (Topic 1977; Kolata 1978) agree most closely with the data mentioned in this article. The next step will be to carry out a systematic study aimed at producing a master stratigraphy for the whole city and providing more data on the evolution of ceramic styles, information which is still largely lacking.

It seems clear that the placement of Tschudi Palace in the latest part of the Chan Chan sequence is correct. The data presented here make this chronological assignment much more secure, above all considering the discovery of Inka pottery in association with the removal of building materials and the presence of a strong El Niño event on the floors of the Palace structures.

The superposition of tall adobes in Phase III over Phase II square-ended adobes indicates the validity of Kolata's (1978, 1982) chronology, which was partially based on stratigraphic data.⁶ Nevertheless, to support his method, Kolata discounts the use of ceramics as chronological indicators at Chan Chan. The investigations which I have presented here show that ceramics can provide chronological information at the site.

⁵ Units A V-1 and F 2 are looters' pits which were cleared and amplified to reveal structures and floors of Phase IV. Because the work in these units did not extend to the earlier phases, I have not detailed the work in these units in the text, nor are they located in Figure 2.

⁶ The earliest occupation of Tschudi--Phase I--does not have architectural remains, but rather shows use surfaces, and therefore does not provide evidence relevant to evaluating Kolata's (1978, 1982) sequence.

The Phase I materials fill a gap in the forms indicated by Topic (1977) for his hypothetical Phase 1. The discovery in my Phase I of forms which have traditionally been considered as Middle Chimú calls for a reworking of the ceramic seriation, which ought to be based on stratigraphic contexts. The form of the vessel with spout bases, flat base, and carinated shoulders (Figure 12) in Phase I presents characteristics of the central coast tradition Middle Horizon Epochs 2A and 2B (Menzel 1968: Plate VIII, figure 22, Plate III, figure 9). However, as this vessel is located in Early Chimú, I agree with Mackey's (1982) placement of the Red-white-black style in Epoch 4 of the Middle Horizon, a moment in which Wari influence constitutes very late traces manifested in filler elements and not in mythico-religious elements.

If the end of Moche at Moche V Galindo has been proposed at 800 A.D. (personal communication of Bawden to Mackey, cited in Mackey 1982: 330), and the beginnings of Chan Chan are located around 850 A.D. (Topic and Moseley 1983: 159), one can suppose that the 50 year difference is completely germane to the central problem under discussion here, given that the urbanism manifested in Chan Chan has deep local roots. The presence of a vessel with certain traits linking it to the Red-white-black style in a Moche V tomb in site V-162 in the Virú valley (Strong and Evans 1952: 143, Plate XVI, figure H) suggests to me an indication of continuity which needs further clarification. Along these lines, we must remember the important information concerning a cemetery in Taitacantin, with child burials in extended position and associated ceramics in the "Tiahuanacoid-Epigonial" and "red-white-black Geometric" styles (Kroeber 1930: 101).

With the intensification of looting at Chan Chan, we have been able to observe cemeteries with abundant material in the red-white-black style to the south of the Rivero and Chayhuac Palaces. For this reason we must discard a focus based strictly on a "horizontal" study and bring such studies into line with a systematic stratigraphic review.

The data on Phases II and III corroborate the sequence of Donnan and Mackey (1978), with these phases corresponding to the materials known as Middle and Late Chimú respectively. However, the documentation of Inka ceramics for Phase IV fills a gap in the archaeological information which I am sure will be enriched in the future.

Finally, I have provided data from excavation contexts which corroborate Day's (1973) hypothesis concerning the location of the royal residence in the central sector of the palaces, an hypothesis which was based on surface observations in Rivero Palace.

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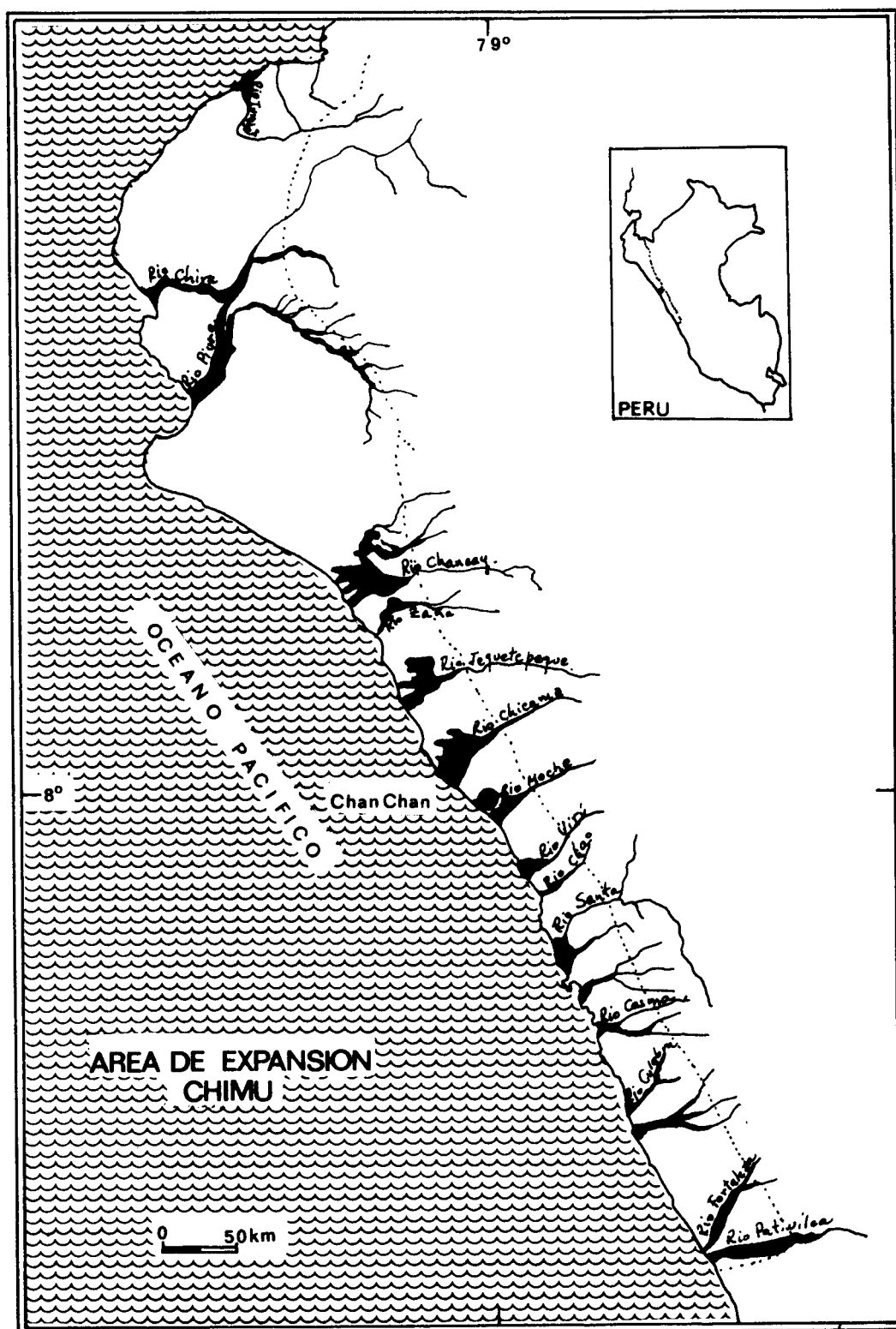


Figure 1. General map showing the extent of Chimú expansion and the location of Chan Chan.

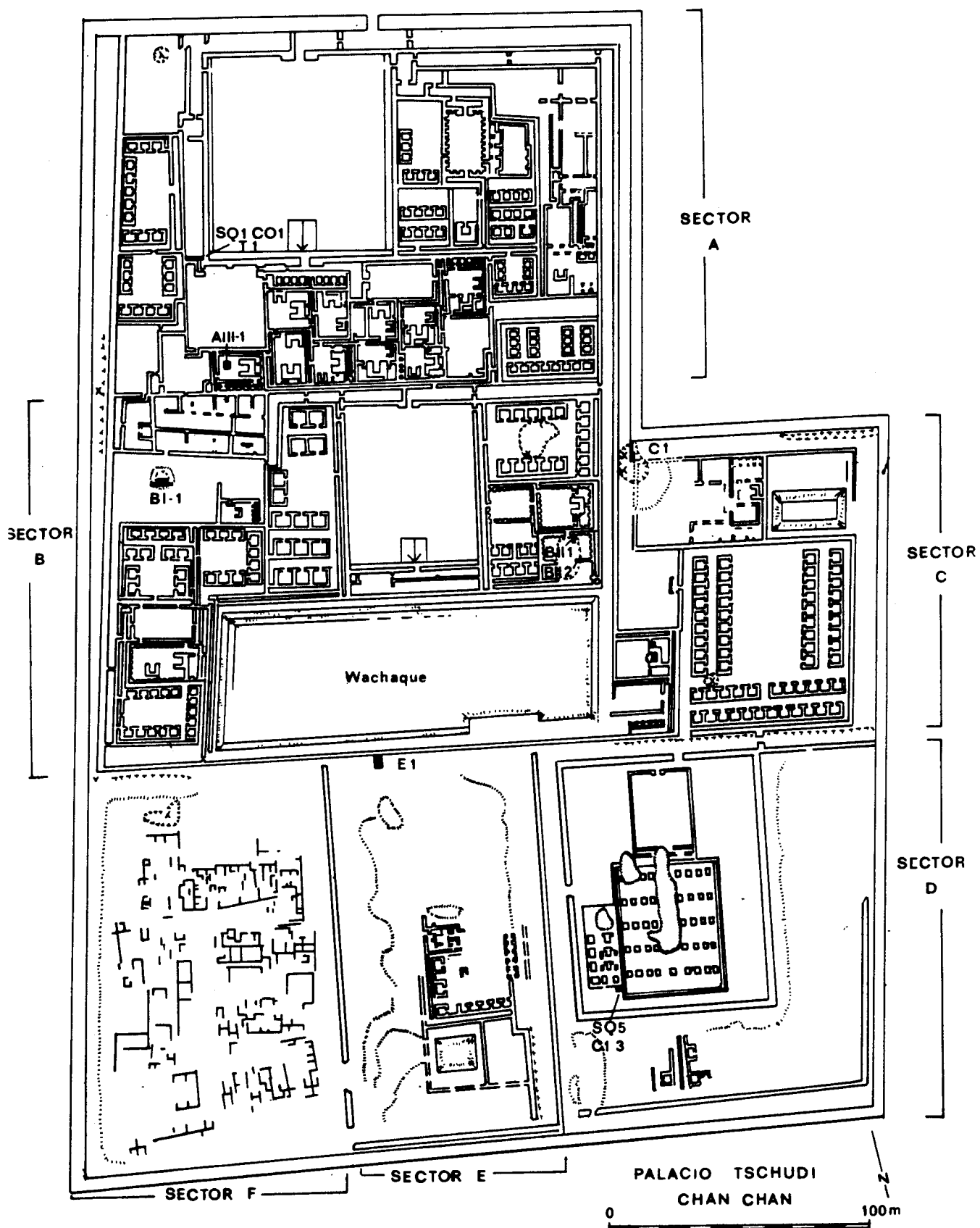


Figure 2. Plan of Tschudi Palace showing Sectors and the excavation units (blackened areas) described in the text.

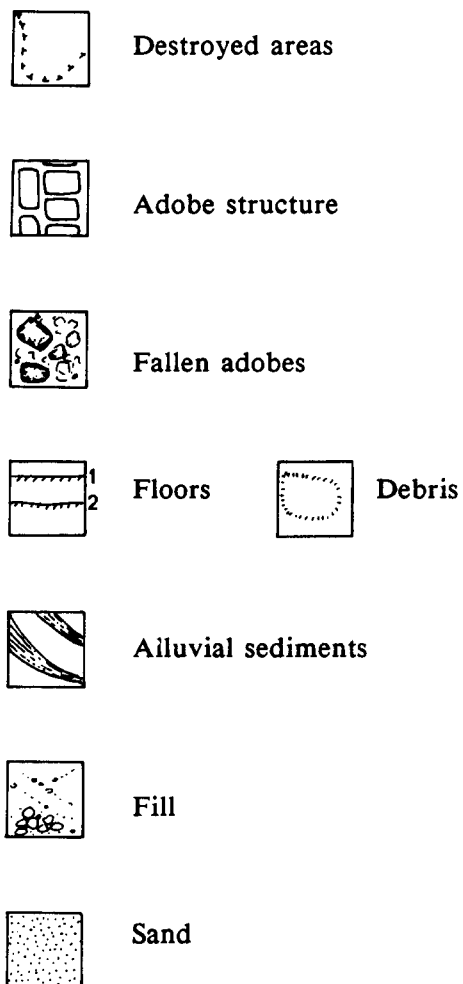


Figure 3. Legend for the profile and plan drawings from the excavations.

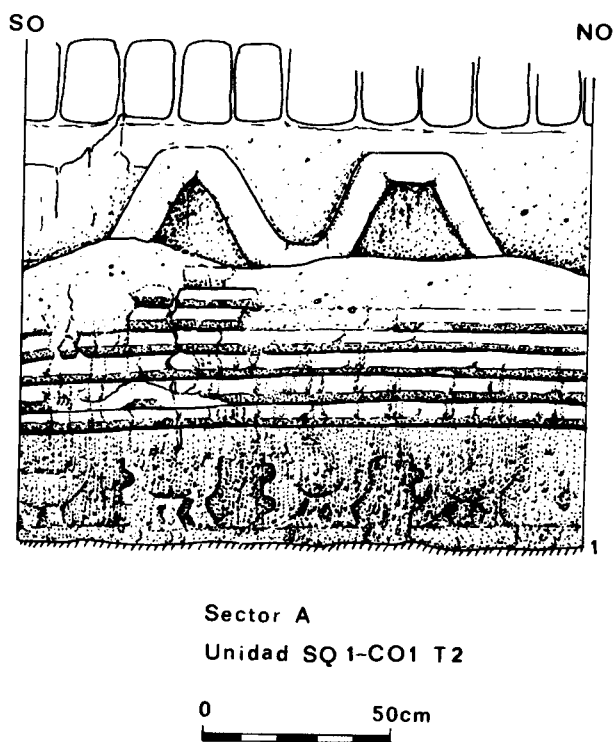
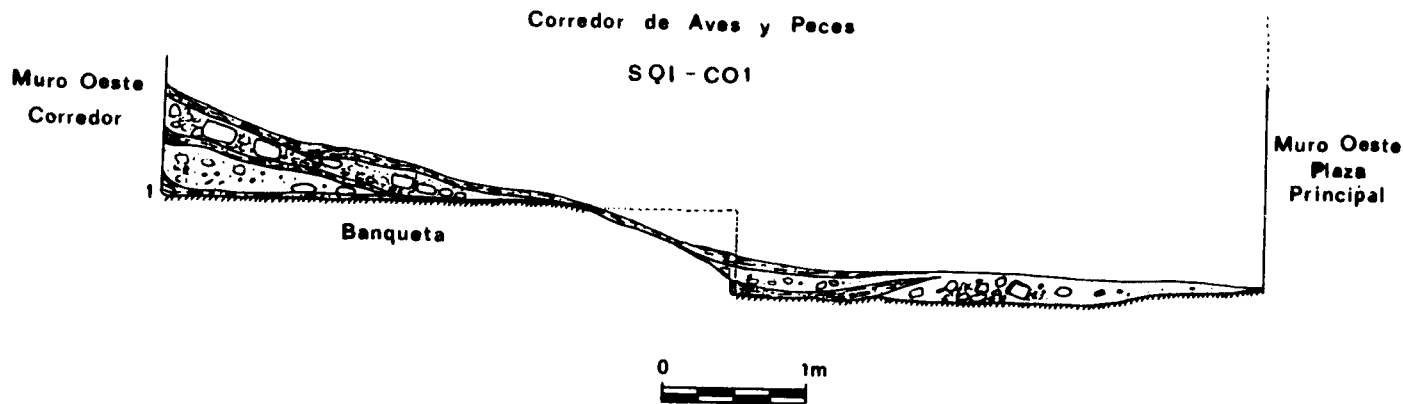


Figure 4a (*above*). North profile of the Corridor of the Birds and Fishes, Unit SQ1-CO-T1, Sector A, Tschudi Palace. See Figure 2 for the location of this unit and Figure 3 for the legend.

Figure 4b (*below*). Friezes along the runner of the bench in the Corridor of the Birds and Fishes, Unit SQ1-CO-T1, Sector A, Tschudi Palace. See Figure 2 for the location of this unit.

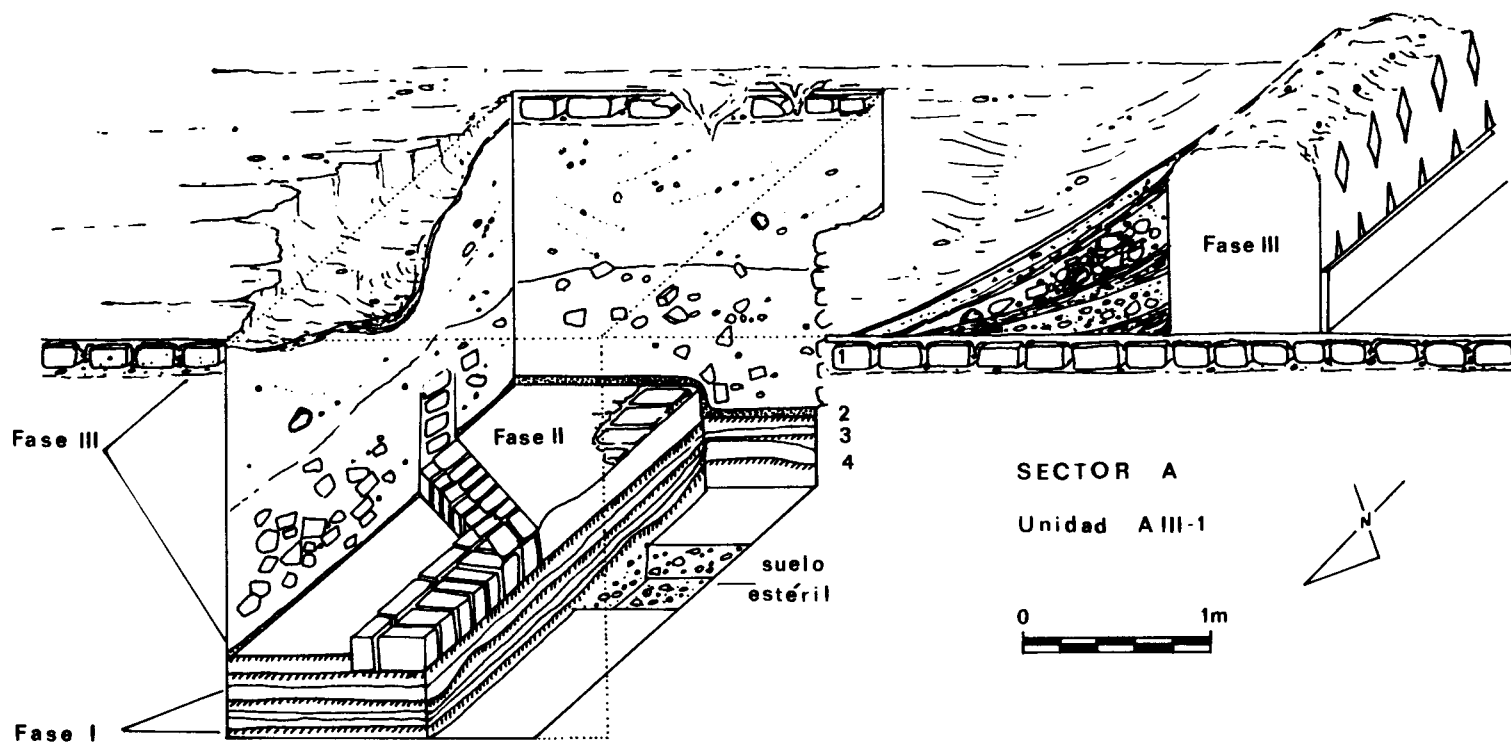


Figure 5. Profile and isometric view of Unit A III-1, Sector A, Tschudi Palace, looking south, showing deposits of Phases I to III. See Figure 2 for the location of this unit and Figure 3 for the legend.

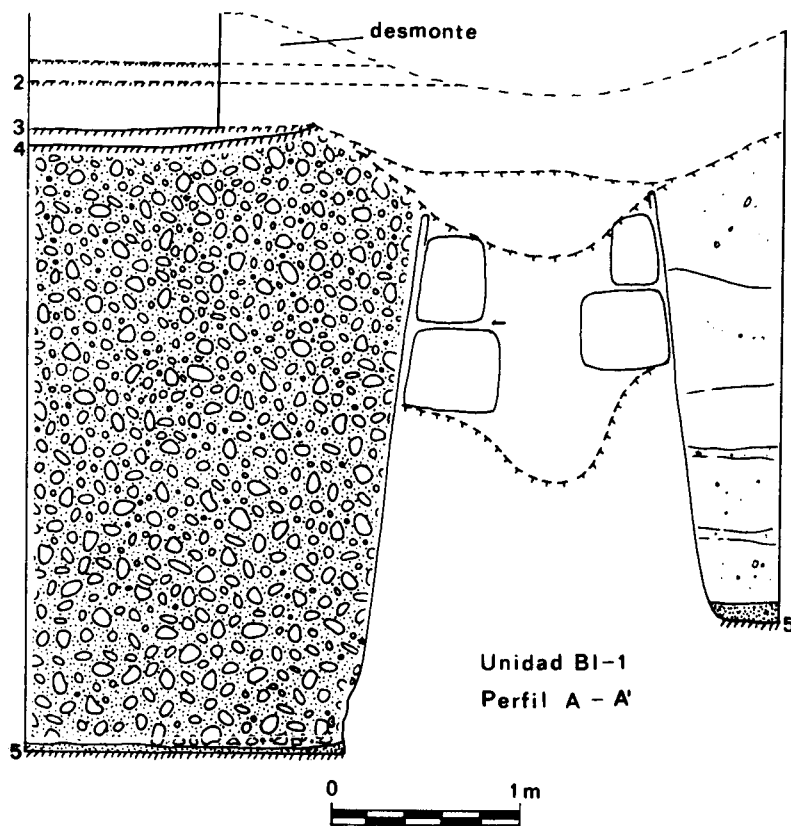
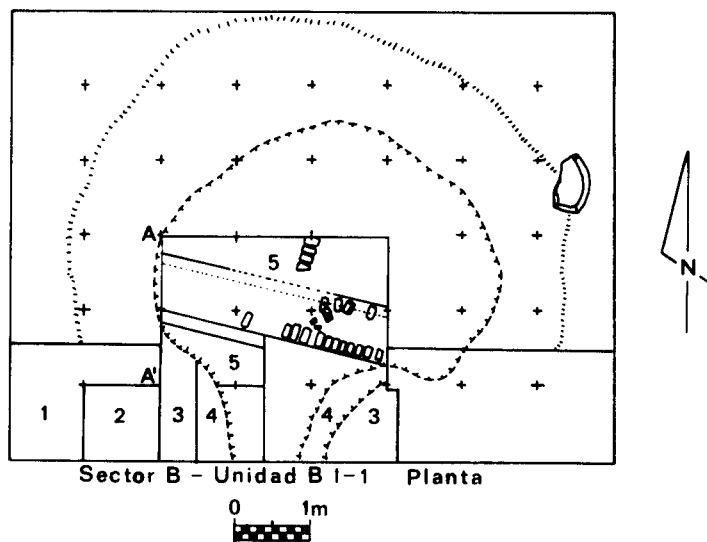


Figure 6a (above). Plan view of looters' pit and excavation of Unit B I-1, Sector B, Tschudi Palace. See Figure 2 for the location of this unit.

Figure 6b (below). West profile of Unit B I-1, from A to A' in Figure 6a. See Figure 2 for the location of this unit and Figure 3 for the legend.

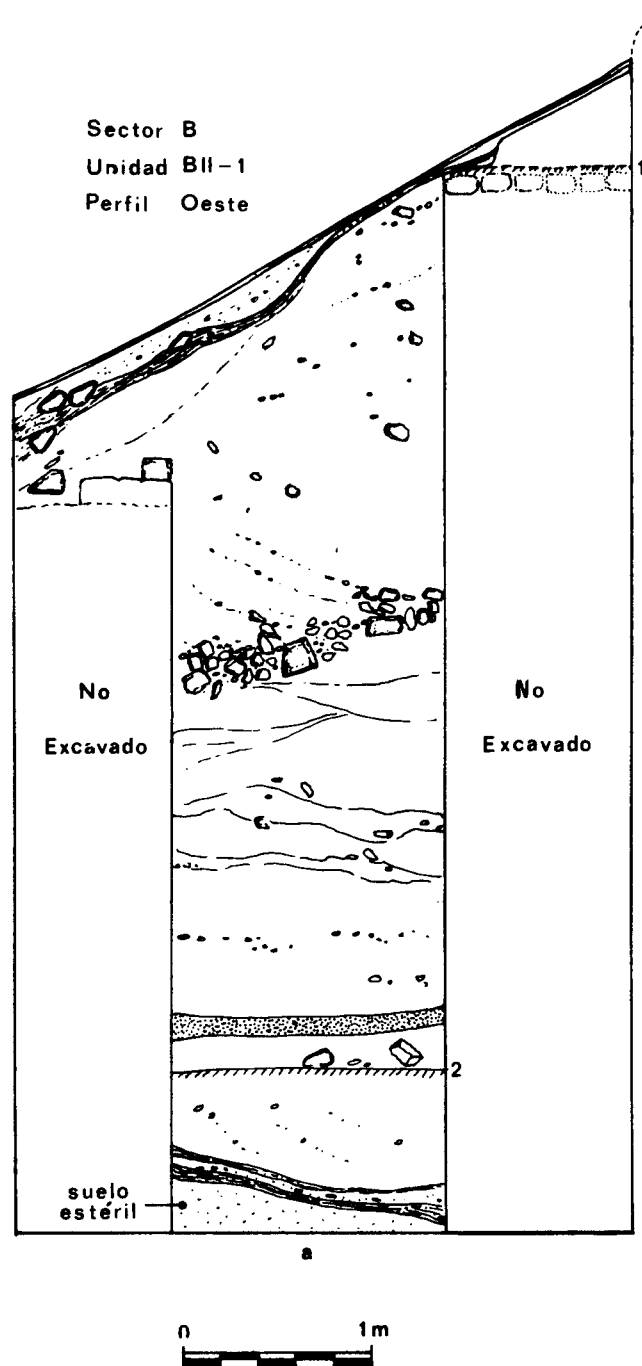


Figure 7a. West profile of Unit B II-2, Sector B, Tschudi Palace. See Figure 2 for the location of this unit and Figure 3 for the legend.

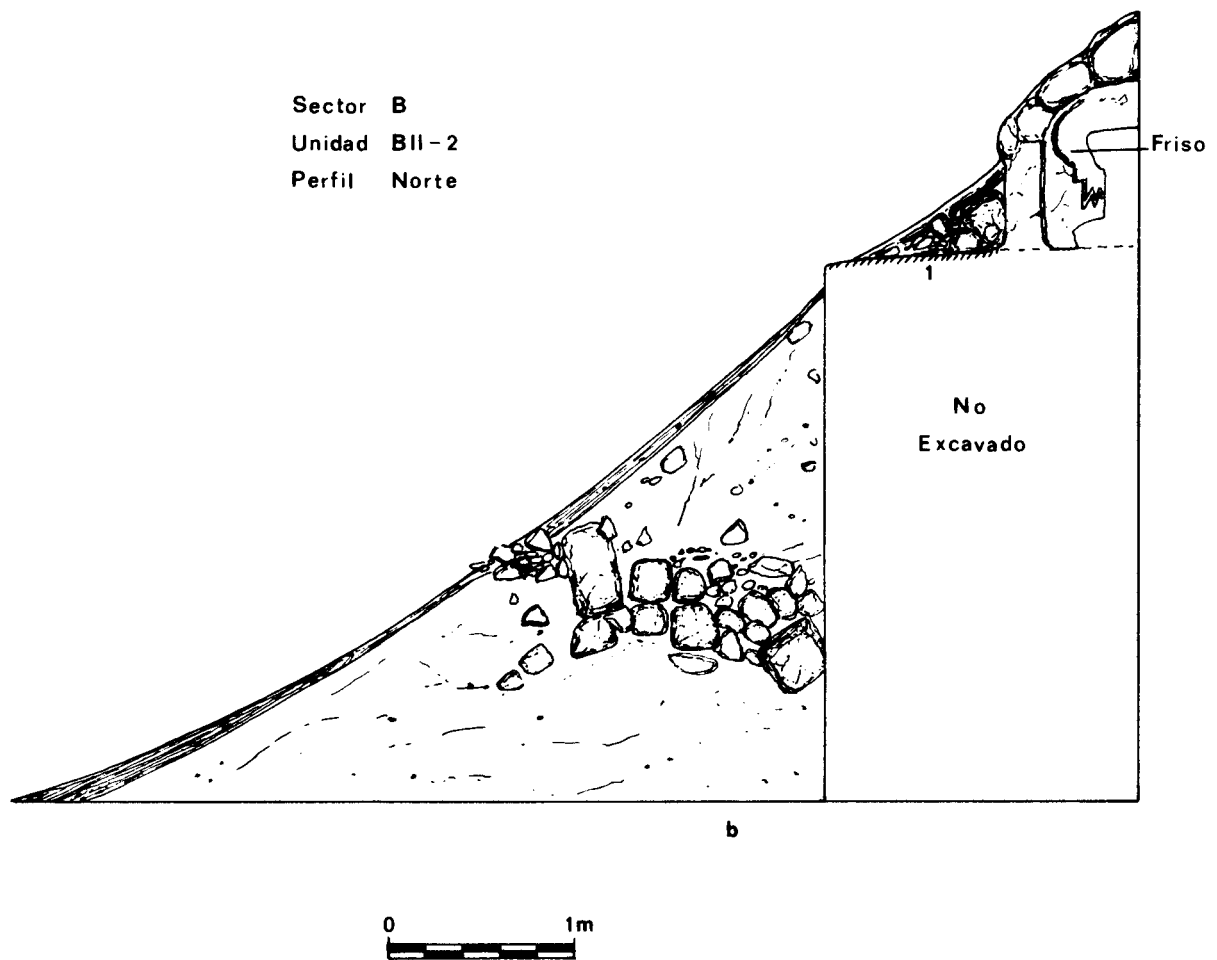


Figure 7b. North profile of Unit B II-2, showing location of frieze on dividing wall. See Figure 2 for the location of this unit and Figure 3 for the legend.

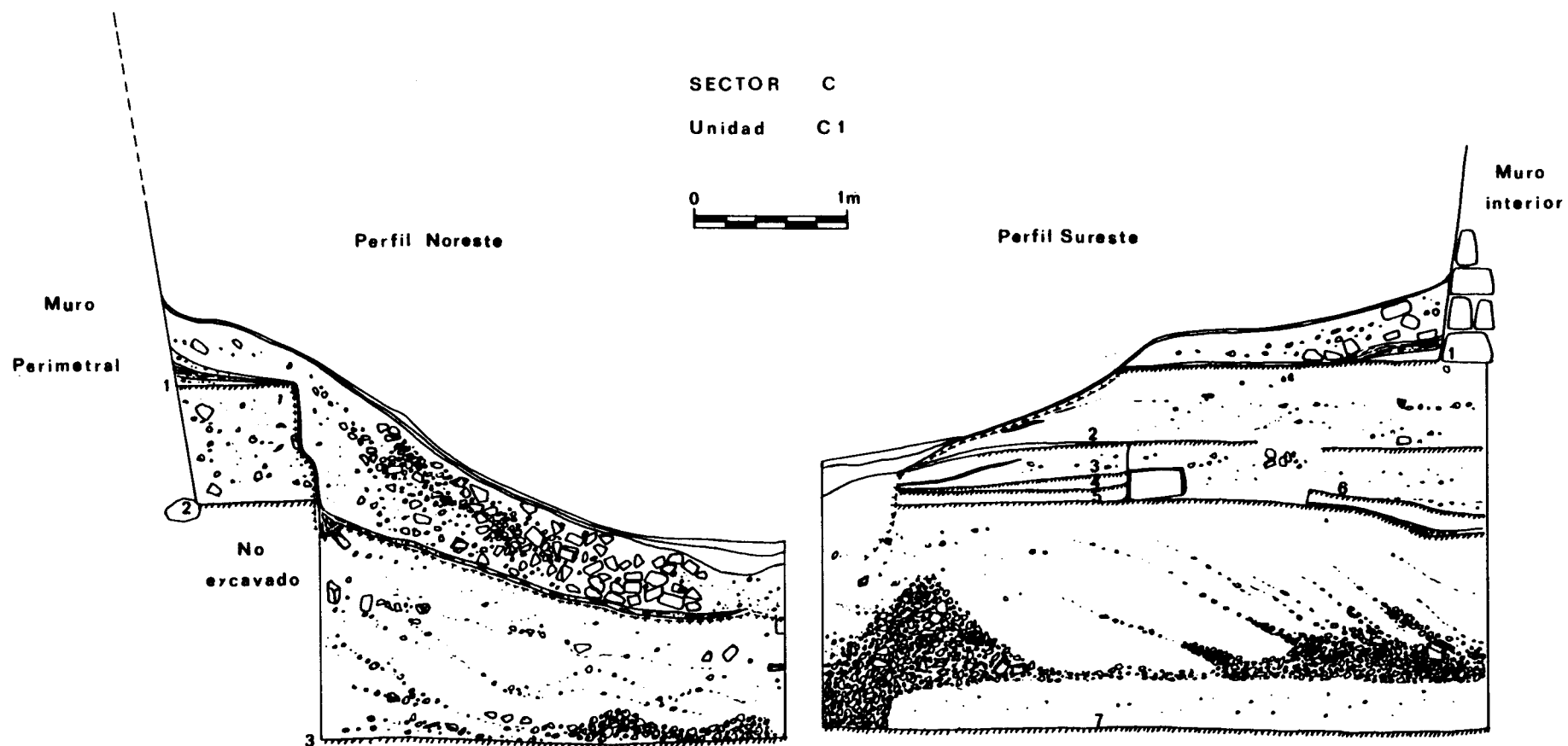


Figure 8. Northeast and southeast profiles of Unit C-1, Sector C, Tschudi Palace. See Figure 2 for the location of this unit and Figure 3 for the legend.

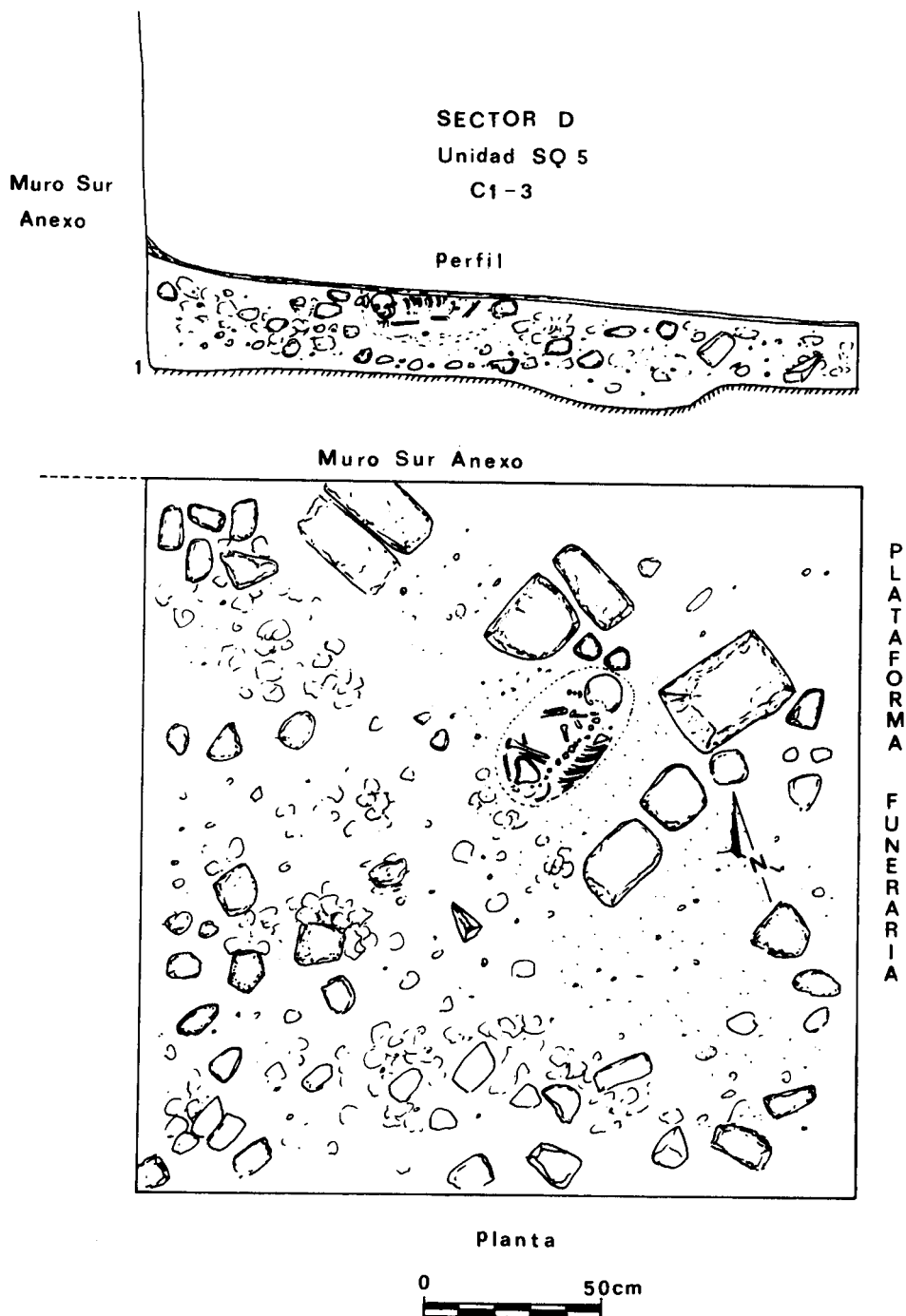


Figure 9a (above). East profile through the middle of Unit SQ 5-C1 Cut 3, Sector D, Tschudi Palace, showing burial. See Figure 2 for the location of this unit and Figure 3 for the legend.

Figure 9b (below). Plan view of Unit SQ 5-C1 Cut 3, level b, showing burial. See Figure 2 for the location of this unit and Figure 3 for the legend.

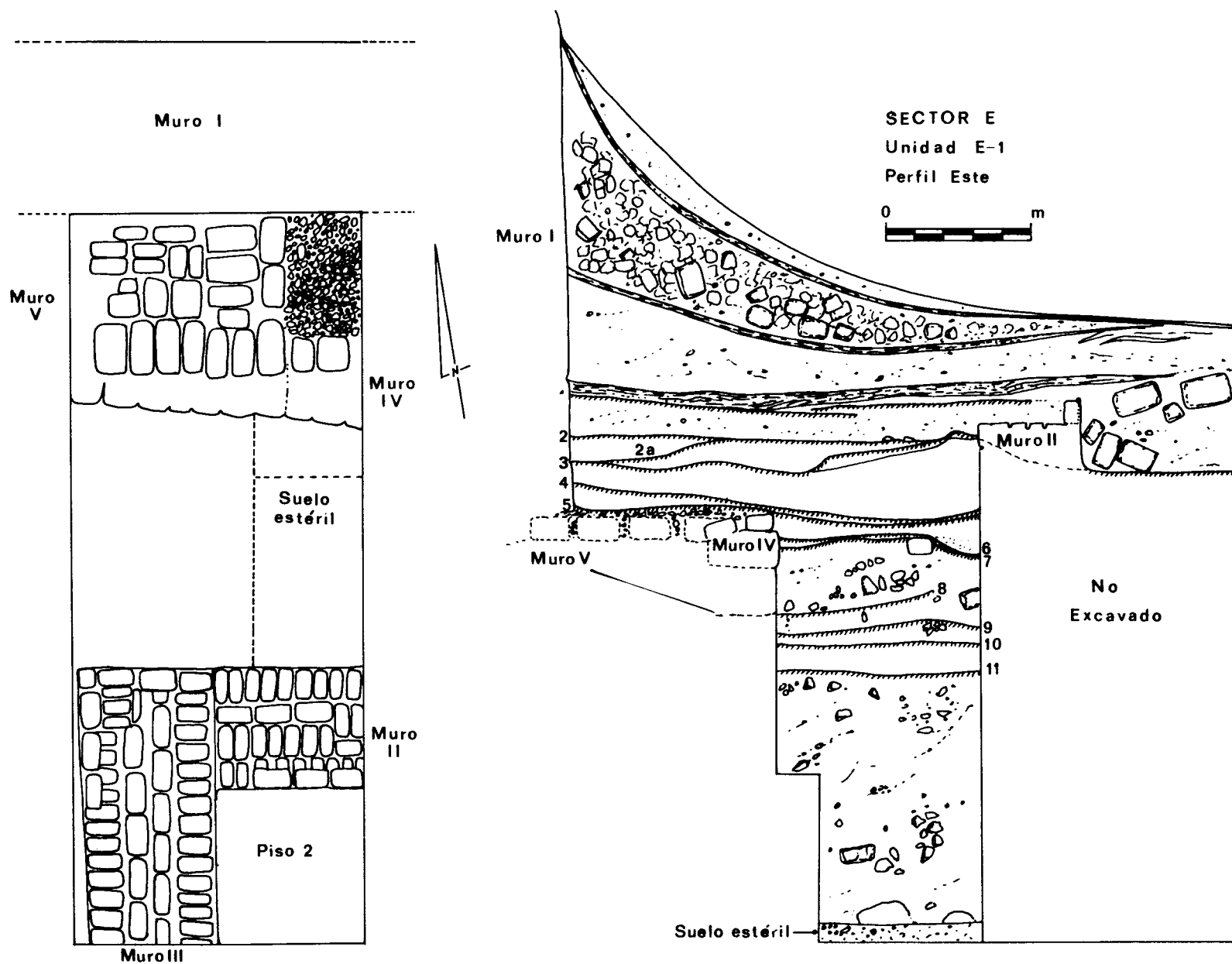


Figure 10a (left). Plan view of Unit E 1 after excavation. Walls were left *in situ*, as was floor 2 to the south of Wall II. See Figure 2 for the location of this unit and Figure 3 for the legend.

Figure 10b (right). Profile of Unit E 1. See Figure 2 for the location of this unit and Figure 3 for the legend.

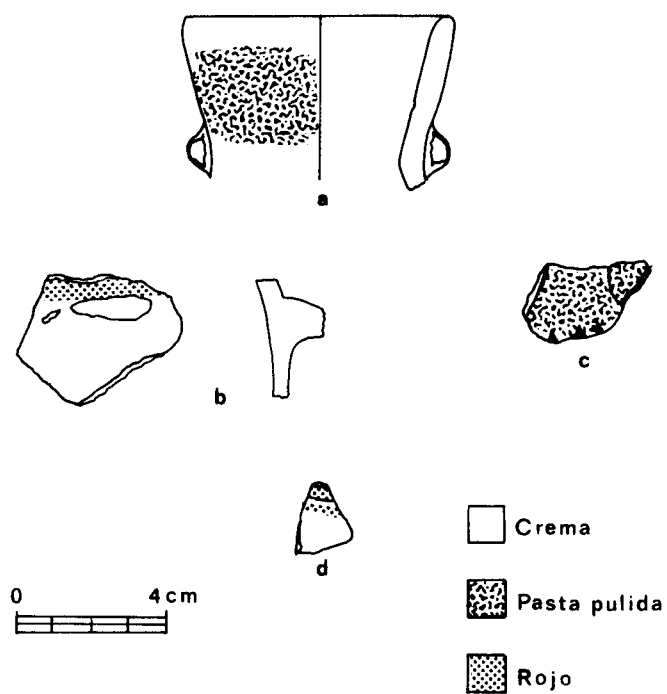


Figure 11. Moche potsherds from Unit E 1, Sector E, Tschudi Palace, levels h and t (see Figure 10b). "Crema" = cream; "Pasta pulida" = polished paste; "Rojo" = red.

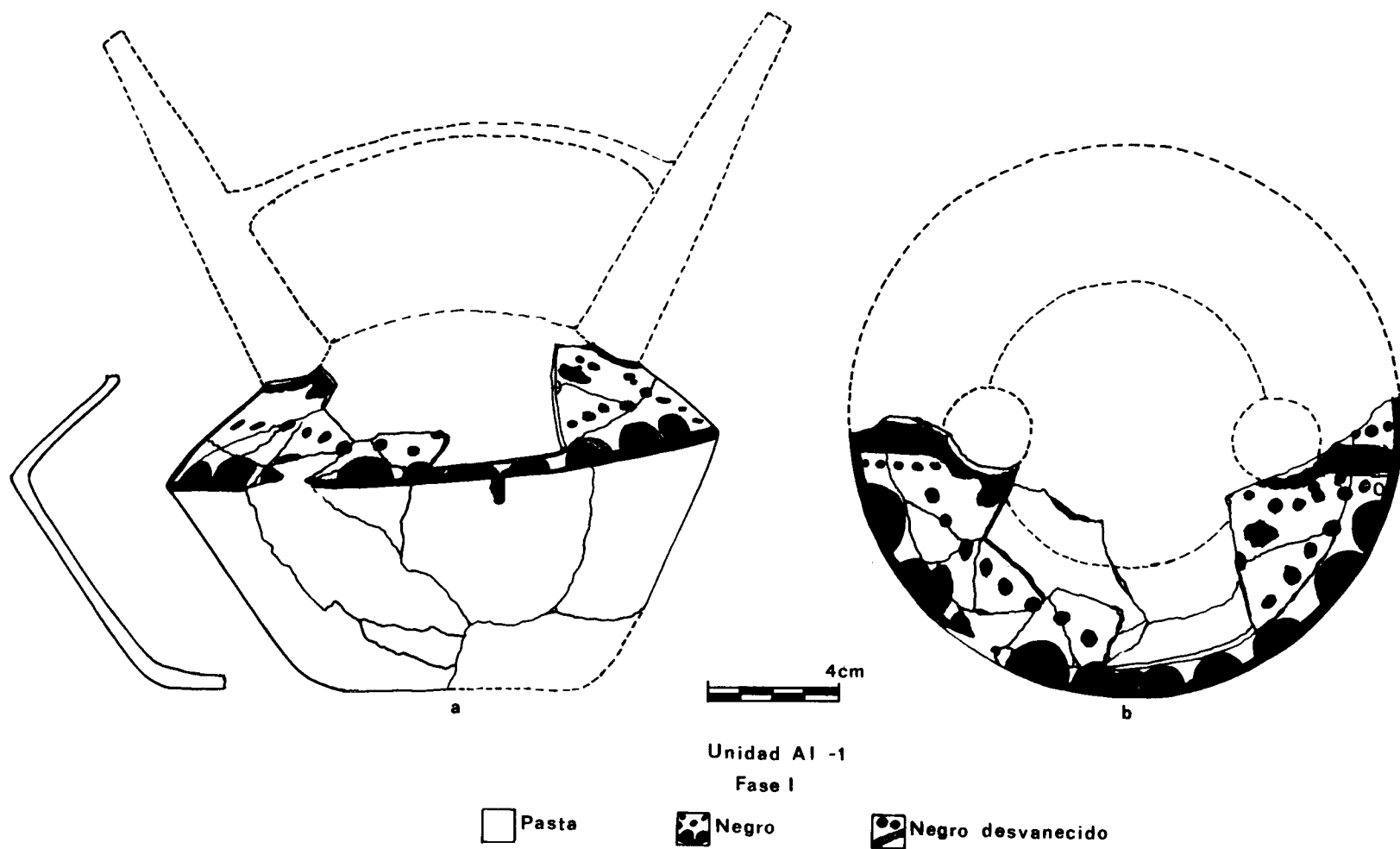


Figure 12. Phase I bottle, reconstructed from sherds found in levels f to j, Unit A III-1, Sector A, Tschudi Palace (see Figure 5).

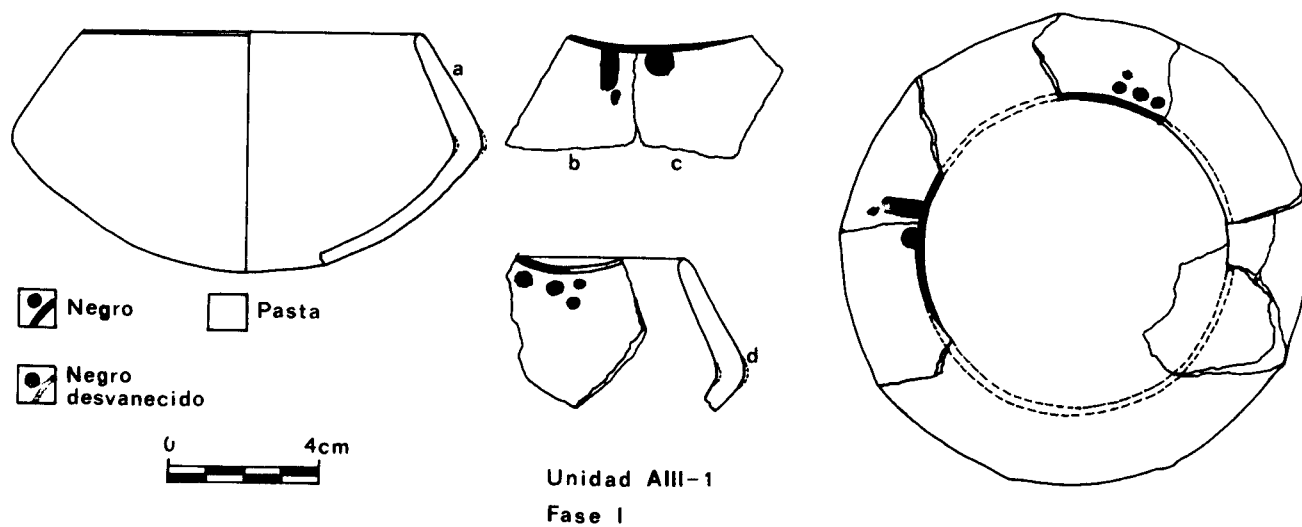


Figure 13. Phase I bowl, reconstructed from sherds found in levels f to j, Unit A III-1, Sector A, Tschudi Palace (see Figure 5).

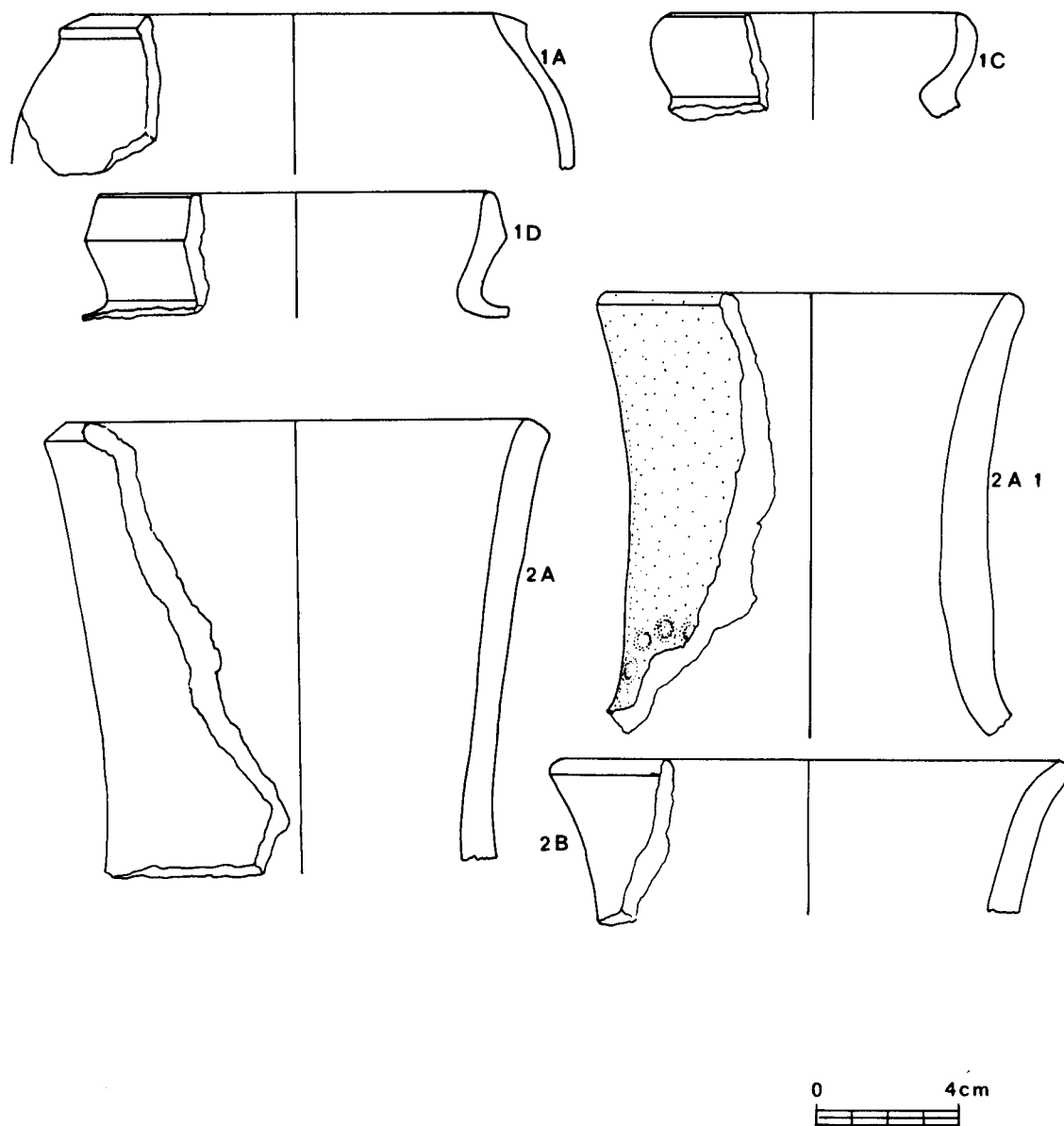


Figure 14a. Rim forms of pottery types from Tschudi excavations. Type 1 = ollas; Type 2 = Jars.

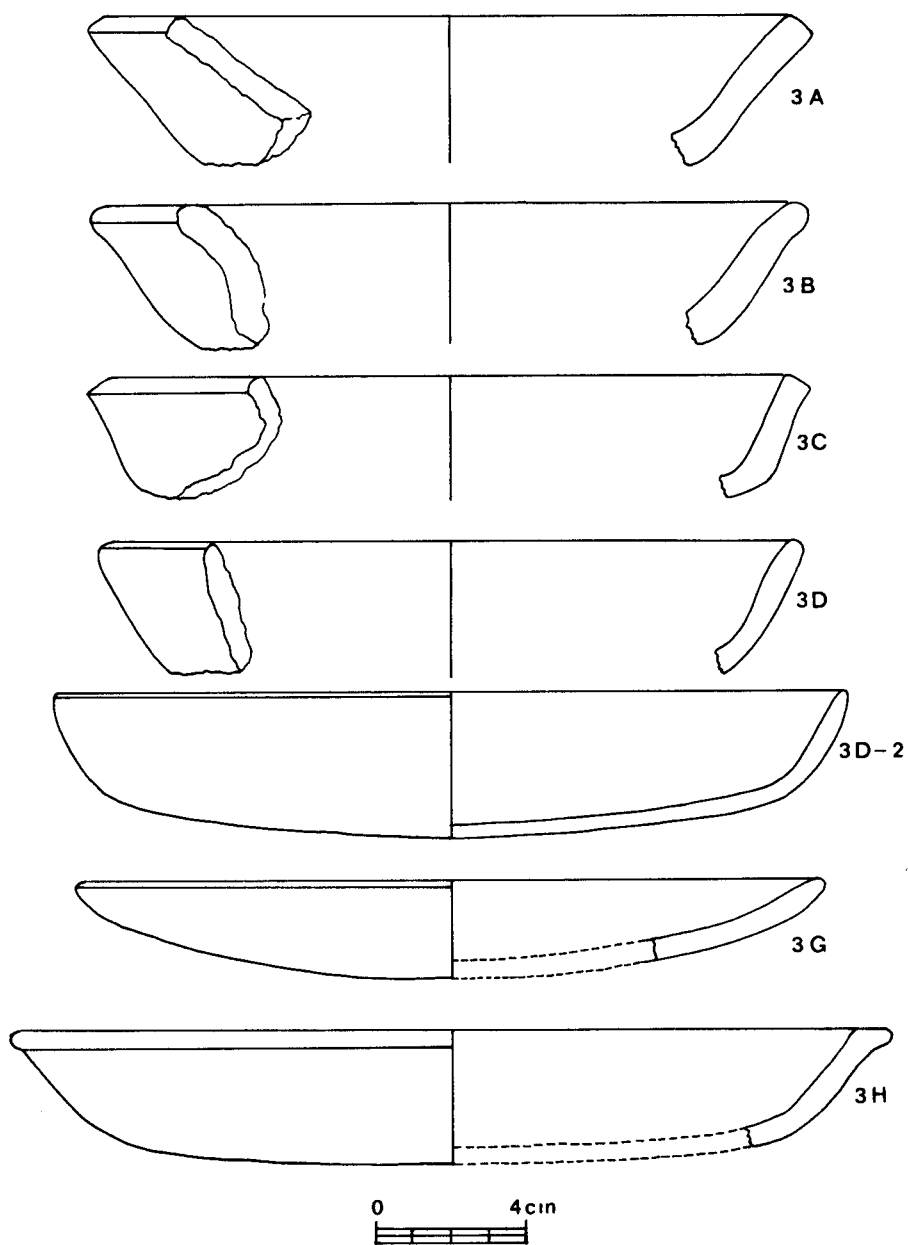


Figure 14b. Rim forms of pottery types from Tscudi excavations. Type 3 = plates.

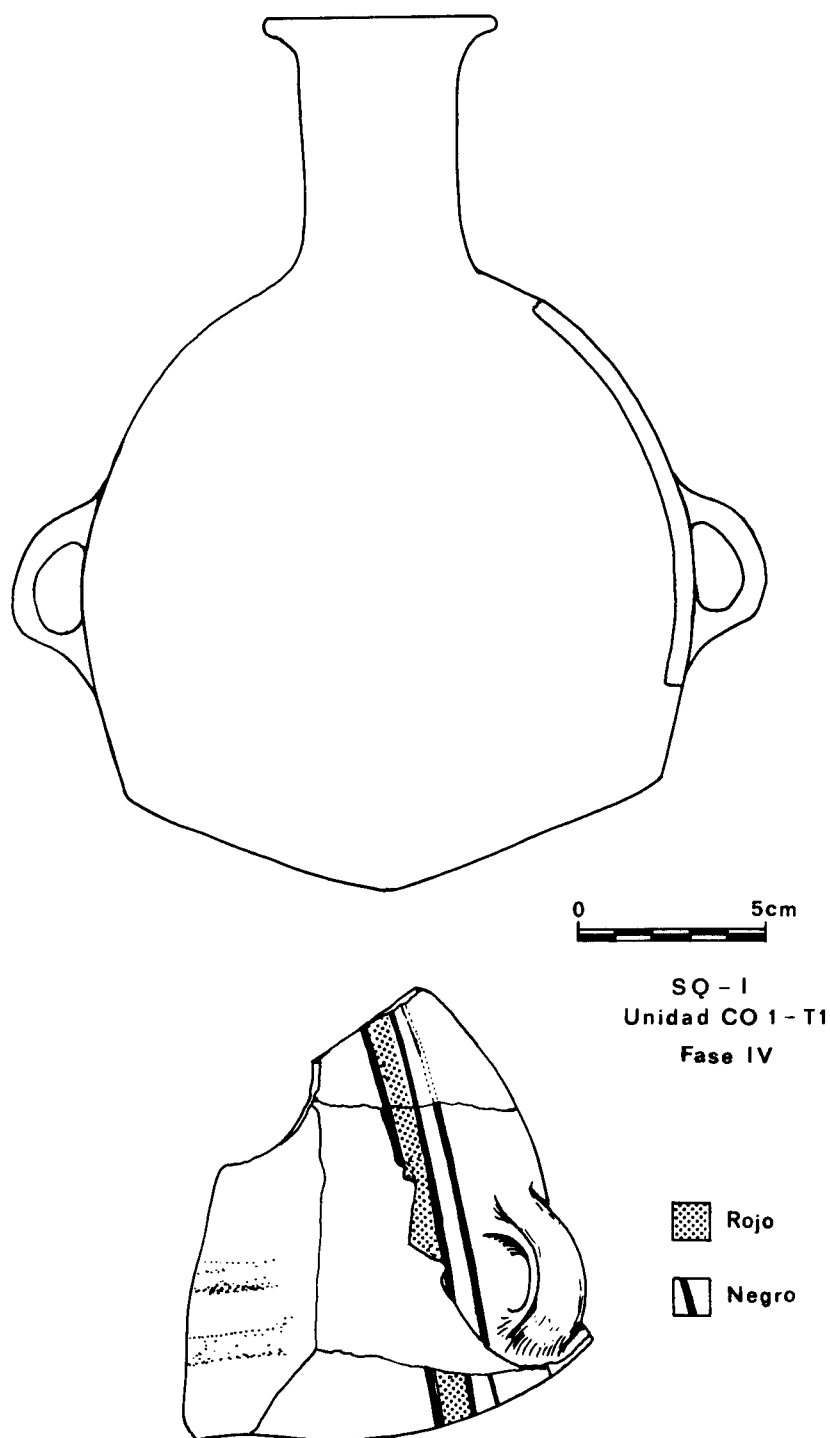


Figure 15. Inka arrybalus from floor 1, Unit SQ1-C01-T1, Sector A, Tschudi Palace (see Figure 4a).

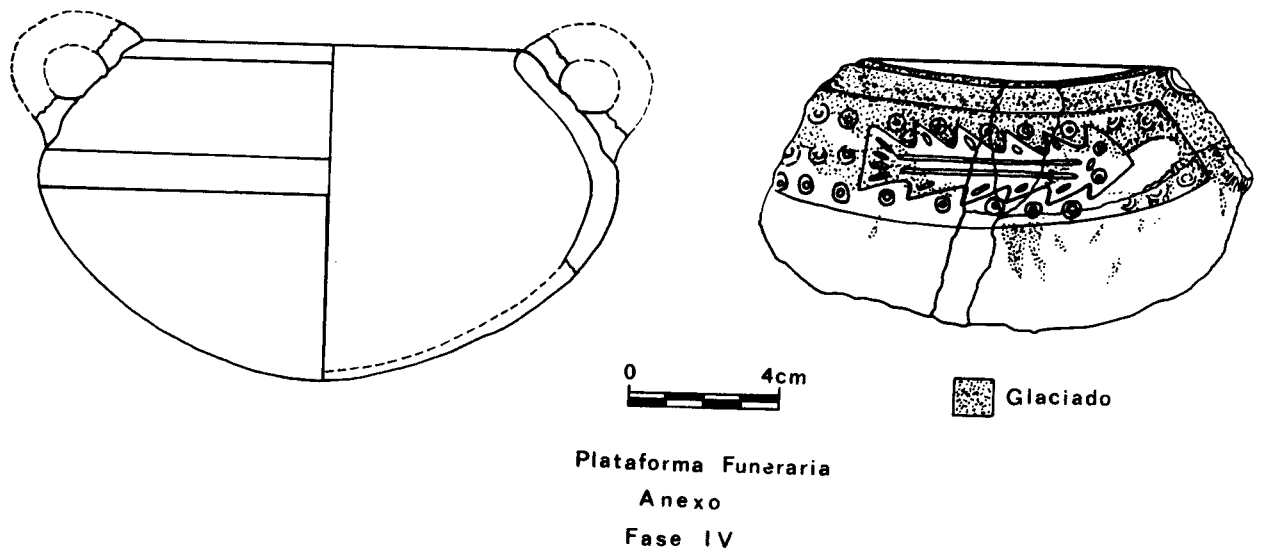


Figure 16. Bowl with glaze from disturbed deposits in the Annex of the Tschudi Burial Platform. Recovered by M. Cornejo (1980a). "Glaciado" = glazed.

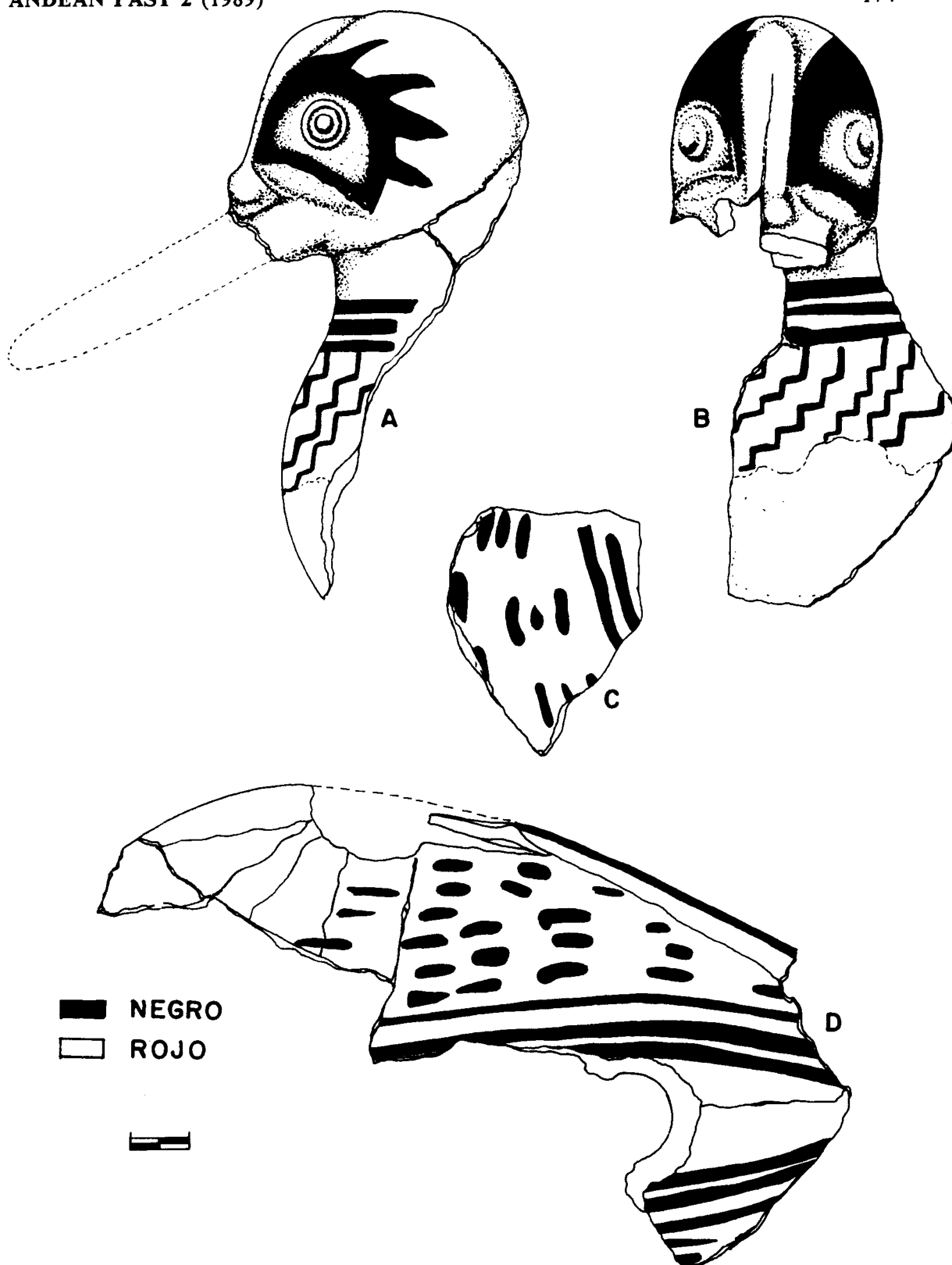


Figure 17. Inka sculptural vessel from the same disturbed deposits as the Figure 16 bowl, from the Annex of the Tschudi Burial Platform. Recovered by M. Cornejo (1980a). "Negro" = black; "Rojo" = red.