

ARCHAEOLOGICA
PERUANA 2

Arquitectura y Civilización
en los Andes Prehispánicos

Prehispanic Architecture and
Civilization in the Andes

Editores:

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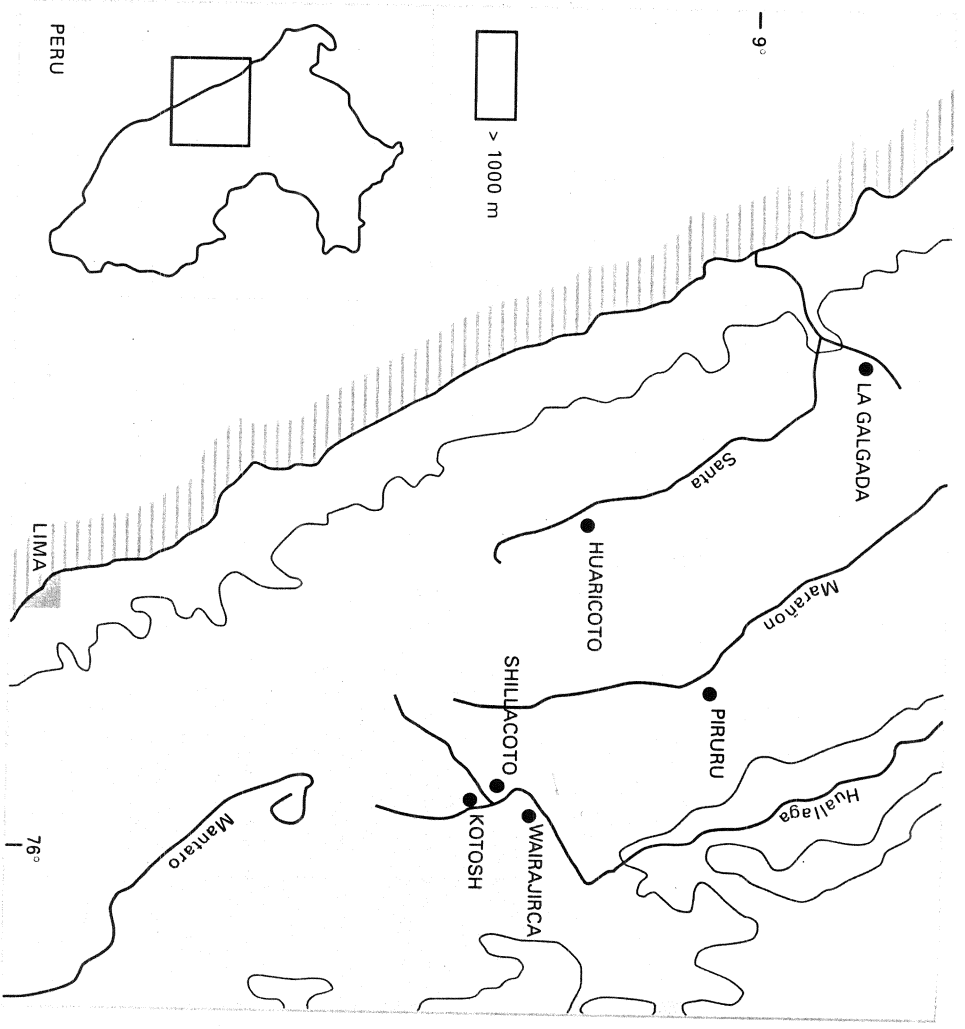
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1997

Sociedad Arqueológica
Peruano-Alemana

Reiss-Museum Mannheim

Fig. 1:
Late Preceramic sites with Pre-Mito
and Mito architecture.
Drawing: J. Diquand.



stratigraphic position within the sites where it has been found, the Mito tradition may be placed in the second part of the Late Preceramic period, between 2500 and 2000/1800 BC (Bonnier 1987; Bonnier/Rozenberg 1988). On the other hand, the dating of the Kotosh religious tradition which is defined by the ritual of burning offerings (Burger/Salazar-Burger 1980: 27–29; 1986: 65), is quite open-ended. According to Burger, the Kotosh religious tradition extends to the Chavín Horizon, although only one site, Huaricoto, would represent that timespan (Burger 1992: 194). As I have already pointed out (Bonnier 1987: 902–903), the definition of the Kotosh tradition is so general that a number of ceremonial structures or buildings of different architectural styles could legitimately bear that label through time and space, for the ritual offering of burnt goods to gods or ancestors is a continuing practice in the Andes.

This study of architecture focuses upon the Mito sanctuary³ at the KT mound, the biggest of the two Kotosh mounds, and relies on a re-examination of the evidence published in *Andes 4: Excavations at Kotosh* (Izumi/Terada 1972), chapters 2 and 3, on stratigraphy and constructions, respectively.⁴ Both chapters were written by Tsugio Matsuzawa; they are a mine of information. Compiling and putting together the data in a more syncretical way than it is presented in the original monograph lead to a renewed understanding of the architectural canons during the Mito period and a better appraisal of the construction sequence at Kotosh. Of course, new evidence gathered at more recently excavated sites makes this reading both easier and more fruitful. Some of the unusual or rare facts which were registered during the excavations at Kotosh and described just as they were originally observed, can now

be better understood when compared to similar occurrences at other sites; they enrich the data and improve our knowledge of preceramic architecture. One of the best examples of these “new understandings” is the selection of red soils discussed below, to be used as materials in the construction of the sanctuaries. Another example would be the placement and use of open-air ceremonial structures.

On the other hand, a more detailed study of the construction sequence provides a better chronological control of the many architectural variations at Kotosh. It also forces us to discard some unsustainable interpretations such as the notion of continued growth in temple size through time (Burger/Salazar-Burger 1986: 71; Burger 1992: 48; Fung 1988: 73). The stratigraphic evidence demonstrates that the biggest temples at Kotosh were in use at the same time as the smallest ones.

The new interpretation of the Kotosh-Mito data and the analysis and definition of the Mito architectural style would not have been possible without comparing and contrasting it with the archaeological evidence from the site of Piruru, valley of Tamamayo, on the right bank of the Marañón river (Fig. 1). At that site, a 200 m² area has been excavated showing the superposition of several occupation levels associated with architecture from the Late Preceramic to the end of the Initial Period.⁵ The sterile soil or bedrock was reached at a depth of 3.50 to 4 meters below the ground level in almost the entire excavated area, and the complete stratigraphic sequence has been recorded in most sectors. Along with the introduction of pottery, the transition from the Late Preceramic levels to the Early and Late Initial Period levels is marked by a change in architecture and a different matrix made of domestic refuse which replaces the very clean fill found in preceramic

³ The word *sanctuary* is used here according to its original meaning from the Latin *sanctus*: a consecrated place (Merriam Webster's Collegiate Dictionary, tenth edition, 1993).

⁴ In the present paper, all references with page, plate or figure numbers written in *italics*, refer to this publication.

⁵ The excavation program at Piruru was directed by Catherine Rozenberg and the author, with financial support from the Ministère des Affaires Étrangères, France, and the Institut Français d'Études Andines, Lima, Peru. Seven field seasons have been completed between 1980 to 1988, with an interruption in 1986/87.

strata. This has been interpreted by Rozenberg and the present author as the indication of a shift in function of the Piruru site from public and religious to domestic and profane uses. Because ceremonial architecture in the highlands apparently predates the construction of the first semi-permanent hamlets and permanent villages, we also argued that religion played a catalyzing role, not only in the rise of monumental architecture, but in the process of sedentism as well (Bonnier/Rozenberg 1988: 990, 994; Rozenberg/Picon 1990).

Only the preceramic architecture of Piruru will be discussed here, as needed for elucidation of the Mito tradition. For that purpose, the best area of the excavation to consider is the northern part, especially Unit V. In that sector, the stratigraphic sequence of preceramic levels is as follows (Fig. 8): upon the bedrock, four successive levels, each with one or two ceremonial buildings, were superimposed. All of this is prior to the construction of a typical Mito temple, which is the last, fifth level, ending the preceramic part of the stratigraphic sequence in that northern sector. This clear, unambiguous architectural superposition makes possible the identification of two different blocks of time, the pre-Mito and the Mito periods, each one with a different religious architecture, yet still sharing some similar characteristics. Within this chronological framework and through the construction sequence at Piruru, accurate comparisons can be made with other architecture at contemporaneous sites and such phenomena as technical innovation or creation of a new built form can be assigned to a specific period of time within the Late Preceramic period. Indeed, the comparative study of Kotosh and Piruru sheds light on some peculiar features of the early ceremonial architecture in the Andean highlands, not only during the Mito period,

but also before and after it. Those features which involve the building of floors and altars, and the use of red earth in their construction will be first presented. Then the Mito architecture at Kotosh will be analyzed from the design of the temples to the layout of the sanctuary at the KT mound. But before this, a close examination of the construction sequence, leading to the recognition of six phases and sub-phases, will allow us to better apprehend the architectural variability and the changes through time.

Red Earth, Sacred Floors and Floor-Altars

The floors of the Kotosh-Mito sanctuary, either those of the ceremonial structures or those of the platforms, are a recurrent matter of study by the Japanese archaeologists through all of *Andes 4*, from the description of the stratigraphy (*p.* 32, 36–37, 39, 43) to the chapter of conclusions (*p.* 304), with a special treatment in the sections about Construction Techniques and Overlapping Constructions (*p.* 166–170, 173). Because of the way they are built with several successive layers of stones, clay mud and plaster, and the way they are tightly superposed one atop the other, the Mito floors are said to be multi-layered (*p.* 43, 166, 304). The best example given by the Japanese involves the several phases of building and remodeling structure ER-19 and its outside areas (for the exact location of the temples, refer to the second part of this paper and to figures 4, 5 and 6):

“It can be said that this type of construction, in which rocks are first brought in to fill an area and then earth and finally clay are spread over these rocks to make the surface of the floor, represents a *definite style of floor design, a style that*

appears over and over again in the floors of this pericost" (p. 167; emphasis E.B.).

In a previous paper on preceramic architecture in the Andean highlands, I drew upon the architectural evidence recorded at Kotosh to support two interrelated interpretations of floors in a Mito sanctuary (Bonnier 1987: 894–896): inside the sanctuary, floors are sacred surfaces, and inside the temples, the so-called split-level floors with a hearth in the center function as altars on which sacrifices are performed. To facilitate the description of the altars, I proposed calling the upper level *epicaust* and the lower level *pericaust* (Fig. 7). These neologisms that designate the two components of the Mito floor-altar are based upon the term *holocaust* which in Greek antiquity referred to the act of making a sacrifice by burning offerings.

Floor-Altars

The process of construction and the sequence of events during the erection of the Mito temples at Kotosh are interesting for different reasons. First, the multi-layer construction pattern shows that the floor-altars were built according to very specific rules involving the layering of different earthy materials, particularly stone and red soil, the latter being purposely selected for its color. Second, it can be observed through the descriptions of the architecture and the many published drawings – plans and sections – that the main walls of the temples have no excavated foundation, but were simply built on top of the surface of the epicaust floor. This suggests that the two-level floor-altar was conceived as an independent structure which may or may not have a building around it.

We will see later that the floor-altar could and did exist on its own. Finally, a lens of ash *around* the central hearth, beneath the floor surface or just under the final clay coating, is a recurrent feature. This feature has been observed so many times that it is considered by Terada as characteristic of the lower-level floor, or pericaust, of the Mito temples: "a layer of ash, a few meters in diameter surrounds the hearth beneath the floor" (p. 304). I have interpreted this elsewhere (Bonnier 1987: 896) as the remains of an initiation ritual performed before finishing the temple construction, sometimes even before the construction of the epicaust floor, as is well illustrated by the ER-11 building or Templo de los Nichitos. In that case, after building the hearth and the air ducts on top of the stone and red clay layers of the floor, "a row of stones is laid all around to form the perimeter walls to divide the upper and lower levels. Charcoal and ash can be seen on the surface of the lower level even at this point, indicating that the builders of the room had begun using the hearth even before the room was completed" (p. 176; emphasis E.B.).

All of these elements, along with the floor design which places the hearth in a central location, bring out the liturgical role of the floor in a Mito temple, the holiest place being the pericaust area *around* the fireplace where sacrifices were performed by burning offerings. At this point, I would say that the archaeological data so far do not support the interpretation that the epicaust floor functioned as a bench on which people could sit. On the contrary, the data point to the use of an extended surface all around the hearth for the ritual performances, not leaving enough space for people to move about the pericaust.

Floors as Sacred Surfaces

As indicated above, the floors of the platforms were built with the same construction techniques – and ceremonial rules? – as the floor-altars, although often on a larger scale. They were also carefully coated with a fine clay plaster. Furthermore, each time a temple was remodeled or replaced by a new one, the surroundings were rebuilt as well: the old floors were carefully sealed and covered by new ones, slightly changing the shape of the platforms, raising their height and altering stairs and passagesways. All those features are well exemplified at the Kotosh KT mound by the eastern area of platform 4 (*p. 42–43, 167, fig. 29, pl. 4f*). They point out the sacred quality of all of the floors inside the Mito sanctuary. Surrounding the holiest places, altars and temples, the floors define a ceremonial area, they delineate a stretch of sacred ground. More precisely, they constitute “sacrosanct surfaces”, borrowing the meaningful words used by Moseley to describe the early architecture on the coast (1985: 43). At any time, a portion of those sacred surfaces can be chosen to be the place of a new altar, the spot where rituals are going to be performed.

The sacred value of the floors has to be related to the cleanliness of ceremonial places (Burger/Salazar-Burger 1985). It also caused all horizontal surfaces inside the sanctuary to be included in the ritual of burying old ceremonial structures according to specific rules. This practice was first identified at Kotosh-Mito and qualified as “temple entombment” by the Japanese (*p. 176, 304*), but is not limited to the Mito tradition. On the basis of his observations at Batan Grande, Shimada (1986: 166–175) argued that the intentional burial of ceremonial floors, structures and buildings was a widely distributed religious practice which could take different forms,

from the Late Preceramic to the Early Intermediate Period. We will see that at the time of the Mito tradition, temple entombment was already a complex practice.

The Use of Red Earth in the Construction of Floors and Altars

According to the observations of the Japanese team (*p. 43*), the western wall of the KTH trench – probably dug by treasure hunters in colonial times – reveals a striking contrast between the Mito area in the north and later occupations in the southern part of the site (cross section 7, *p. 42–43, fig. 29*, see also a previous record of this section in Izumi/Sono 1963, fig. 3). The fill of the exposed Mito sector consists solely of soils and earth of a red and reddish brown color, whereas the southern half of the trench section exposes a brown midden fill. The limit between the two sectors is marked by the Chavin wall AW-21. The red color is typical of the Mito strata:

“To the north of this wall, the midden is primarily characterized by *lines of red, a feature characteristic of the Kotosh Mito Period*, but to the south black colors predominate, creating a distinct contrast” (*p. 43; emphasis E.B.*).

I had my attention drawn to this rather parsimonious remark because the same phenomenon presented itself in a recurrent way at Piruru, both in Mito and pre-Mito levels. Obviously, not only is the selection of red soils in building the Mito sanctuary at Kotosh intentional, but this custom has its origin in a previous tradition, as seen in Piruru. The typical layering of a sacred floor at Kotosh can be described as follows: first a layer of stones, second a layer of red clay in which hearth and air duct were built, third a fine layer of yellowish clay plaster coating

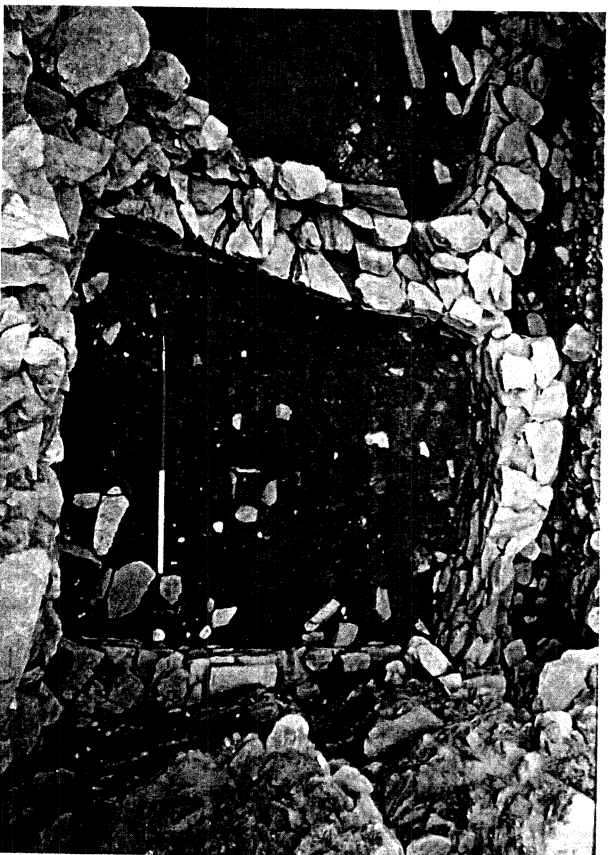


Fig. 2:
A Pre-Mito temple building uncovered at Piruru, Late Preceramic strata (structure sub 7/inv 14C, Unit V, 5.20 m below datum point). On the right, note the threshold of the doornay, located in the middle of the north wall (scale: 1 m).
Photo: A. Fétizon 1988.

the surface. In the middle of the pericaust floor, lenses of charcoal and ashes can be found interspersed between the second and third layer, marking the holiest spot of the altar. The layering of the epicaut floor would repeat the same pattern, but without charcoal lenses and fireplace.

Whenever the information on stratum color at Kotosh is precise enough, it appears that red earth was used on two different occasions: for the construction of the temple and platform floors, as well as for the sealing of an old floor or the filling of an old temple during the temple entombment procedure (p. 9–43). In other words, red soils were used at two important moments in the course of building and using a ceremonial structure. The first time is when a sacred area was initialized by building the floor-altar of a temple; as already noted, a first ceremony was performed at this point by burning something in and *around* the hearth before the construction was completed. The

second time is when the same structure became obsolete for whatever reason and had to be sealed before building a new floor or erecting a new temple, which implied a new initialization of the area. In this case, the same layer of red earth could at the same time seal the old temple and serve as the foundation layer upon which the hearth of the new floor-altar was built.

This is well illustrated by the entombment of the UR-22 building or Templo de las Manos Cruzadas and the construction of the ER-11 building or Templo de los Nichitos on top of it (p. 32, 173, 176). Other examples of the use of red earth in Kotosh Mito construction are the red and reddish-brown soils specifically described for the floors of ER-23 and ER-20, two superposed temples on the lower platform 4 (p. 36), and the clumps of reddish-brown earth mentioned for the filling of ER-27, eastern building of the Templo Blanco, on the same lower platform (p. 37). Red color is also referred to for the floors and fill of structures MR-16/19 and MR-18, two other Mito temples found on the small KM mound, south of the KT mound (p. 285–287).

Comparing Pre-Mito and Mito Architecture

For comparison purposes, it is now necessary to briefly describe the architecture discovered in the Late Preceramic strata at the Piruru site. Throughout the excavated area, 13 complete or almost complete structures have been found in the preceramic levels. Those 13 constructions were well enough preserved to draw their full ground plan, to get good measurements and sometimes to estimate the height of their walls. In association with the buildings, many additional structures have been found in the

preceramic strata: small features like several hearths of different kinds and canal-like structures, as well as many separate walls or portions of walls. From that last group, two walls can be reasonably interpreted as the remains of two more temple buildings, which brings the total of ceremonial constructions uncovered in the preceramic levels to 15. The majority of them are above-ground buildings, one is an open-air structure, two are subterranean and one is semi-subterranean (Fig. 8).

Post-Mito phase: 1 small square platform
1 round temple building

Mito phase: 1 Mito style temple
(ca. 9 x 9 m, as big as the largest ones at Kotosh)

Pre-Mito phase 2 subterranean semi-
(4 sub-phases spherical structures
attested in Unit V): 1 open-air floor-altar
1 semi-subterranean
temple building
8 square or circular
temple buildings

Table 1: Late Preceramic architecture at Piruru

As Table 1 demonstrates, Piruru offers a fairly large sample of preceramic architecture. The number of buildings and other constructions is similar to that of the preceramic components at Kotosh and La Galgoda, making the Piruru sample quite suitable for comparison.

During the pre-Mito phase, ceremonial buildings at Piruru are one-room constructions, with a single opening, the entrance. Shapes may vary with round, square or rectangular ground plan (Bonnier 1987: fig. 4, 5, 7, 8). Sizes are small with an average of 3 meters by side or by diameter. Circular buildings are independent.

free-standing constructions, while two or even three square temples may be joined along their sides to form a multi-room structure (Fig. 2). Still each building keeps its own doorway, and there is no internal communication from one room to another. Most of the quadrangular buildings are oriented according to cardinal directions, with the doorway facing either north or south.

Despite the architectural diversity, the pre-Mito temples have several features in common. First, except for the two subterranean structures, all present a fireplace located in the middle of their floors. Lenses or thin layers of charcoal and ashes in the hearths and *around* them show that ritual burnings were performed on the floors, therefore pointing toward the liturgical role of the floor, which in pre-Mito temples also served as an altar (Fig. 2). Hearths may have well built firepits, 60 to 80 cm deep, with underground ventilation shafts, or they may just be outlined by small slabs of stone set upright; in this case they do not have any air duct attached. Second, as attested to in the entire excavated area, throughout the pre-Mito strata red earth is used to build the floor-altars, and to seal them before erecting a new temple. Figures 2 and 3 show an example taken from the pre-Mito strata in excavation Unit V. In the middle of a quadrangular temple, the hearth is outlined by four small slabs. The floor consists of a thick layer of red soil deposited upon a layer of stones (a reddish clay mortar is also used for the construction of the walls). This case exhibits the same combination of stone and red earth layers as in the floor construction in Kotosh, except for the final thin clay plaster coating which is missing. Finally, a third characteristic is shared by the pre-Mito temples: *they all have a single-level floor-altar*. As a matter of fact, the two-level floor-altar is found to occur, at Piruru, only after a long

period of building ceremonial structures with flat floor-altars, as attested in the excavation Unit V. The stratigraphic superpositions in that sector clearly show that the two-level floor-altar suddenly appears in the architectural sequence as a new built form (Bonnier 1987; 1988b). It is, on the other hand, very well represented in the numerous temples at Kotosh and La Galgada, although with some morphological variations. Therefore the two-level floor-altar can be considered as the hallmark of the Mito architecture and one of the major criteria, if not the best, to define the Mito tradition.

Summary

It is well known that the Olmecs, in Mexico, used multi-colored clay and sand, for ceremonial constructions (Soustelle 1979; Coe 1994). At the site of La Venta, floors were built and sealed with layers of red, pink and yellow clay

(Drucker et al. 1959). But this is the first time that a similar practice is documented for the Andean area.

The Piruru and Kotosh sites both show that red soils were intentionally selected for the construction of floors and altars during the Late Preceramic period, in pre-Mito and Mito sanctuaries. A careful review of the literature should bring out additional cases. At the site of Huaricoto in the Callejón de Huaylas, for instance, the two-level floor of structure XII – one of the three ceremonial hearths belonging to the Late Preceramic Chankayan phase – is made of a thick layer of red clay and slipped with a yellowish clay (Burger/Salazar-Burger 1980; 28; 1985: 117, 122). Also interesting is the fact that beneath that structure, a thick layer of red clay was found which provided the carbon sample for the oldest radiocarbon date reported for Huaricoto (Tx-3581: 2820 ± 200 BC, uncalibrated, Burger/Salazar-Burger 1985: 117). This red layer has been interpreted as predating the religious function of the Huaricoto site. In view of the evidence presented above, it can now be considered to indicate the earliest phase of ceremonial activities at Huaricoto, predating the Chankayan phase.

After the Late Preceramic period, ceremonial hearths – of a great variety of designs – were still being built at the same site of Huaricoto, but available information on the color of the construction material is scanty. For the early Initial Period Toril phase, the sample of architectural structures is very small, but “a series of colored clay floors” has been found (Burger/Salazar-Burger 1985: 125). Then, structure IX, from the Initial Period Huaricoto phase, has a white-slipped clay floor (ibid.: 125), and structure V, also dated to the Huaricoto phase, has a red floor (ibid.: 128, caption of fig. 7).



Fig. 3:
Floor-altar and hearth of the temple shown in figure 2. The floor construction is made of a layer of stone and a layer of red earth, covered by a thin layer of charcoal (scale: 20 cm).
Photo: E. Bonnier 1988.

From the archaeological evidence recorded at Piruru and Kotosh, it appears that the same kind of religious beliefs were probably shared by the pre-Mito and the Mito people and the same kind of ceremonies were performed.

In both periods of time, the rituals involved the burning of goods in and *around* a hearth. The ceremonies also required a special sacred place. That place, or altar, was the very floor of the religious building, built according to specific rules, one of which was the layering of red earth. All those elements predate the Mito phase in the Late Preceramic sequence at Piruru, as does the use of open air altars, the cardinal orientation of the square temples and the temple entombment practice. As suggested in previous papers (Bonnier 1987; Bonnier 1988b; Bonnier/Rozenberg 1988), the grand innovation, with the Mito architecture, was a new altar design, with two floor levels. This probably indicates the introduction of a new cult, or at least a new liturgy, involving two different planes or sacrosanct surfaces surrounding the hearth which still remains in a central location. This new, composite altar also provides a special place for small niches – another important feature of the Mito temple –, which can be now located in the low perimeter wall marking the step between the epicraust and pericraust floors.

The Mito Architectural Style at Kotosh

Before any further comments on the Mito architectural style as it can be seen at the site of Kotosh, it is necessary to review in detail the construction sequence during the Mito phase. In order to help the reader in following the construction events through space and time, I will briefly present the layout of the preceramic

sanctuary at Kotosh. KT mound. As has been noted, the Mito occupation is found in the northern sector of the mound. In colonial times, this area was badly damaged by the large KTH trench (*p. 42*) which cuts through the middle of the mound, totally destroying the upper platform (number 1) of the Mito sanctuary (*p. 132*), but leaving intact two main lower platforms, numbers 2 and 4, where the nine excavated temples have been found (*fig. 77, 78, 84, 85*, in this paper, see figures 4 and 5). On platform 2, the Mito people built the well-known Templo de las Manos Cruzadas (UR-22) and later-on the Templo de los Nichitos (ER-11). On platform 4, they built the temples ER-27 and ER-28 (dubbed the Templo Blanco), then the temples ER-20 and ER-24/26, still later the temple ER-23, and finally the temple ER-19.

The Construction Sequence at the KT Mound

Stratigraphy and the construction sequence at the Kotosh KT mound are extremely complex for two reasons. One is that the building activity, over time, consists of an intricate succession of major and minor events. Major events, of course, concern the construction of temples, the replacement of an old one by a new one, the reshaping of a platform and raising its height. Minor events involve refurbishing works such as laying a new floor some centimeters on top of an old one, or the slight remodeling of a building or passageway, staircase or ramp. The second reason that makes the stratigraphic sequence very complicated is that the major construction events took place on two different surface levels, i.e. on the upper platform 2 and the lower platform 4. The elucidation of the

different construction stages – and how they correlate with each another – therefore strongly depends on the construction sequence of platforms (Fig. 4). The superposition of stairs in that area is, indeed, a major clue for establishing the temporal relationships between the upper and lower temples, as Matsuzawa stresses repeatedly (p. 134, 138, 140, 170–171).

Fig. 4:
Construction sequence at the Kotosh
KT mound during the Mito period
(Pla = platform, ER or UR = built-
ing, ESt or USI = stairway or ramp,
EPass or UPass or EPl = outside
areas, patios).

The Japanese archaeologists used the superposition of the Templo de las Manos Cruzadas and the Templo de los Nichitos on platform 2 as a “yardstick” (p. 132) to organize the data on the succession of events on platform 4. They defined two major construction stages for the Mito sanctuary, called TM and TN levels (TM standing for Templo de las Manos Cruzadas, and TN for Templo de los Nichitos). These two stratigraphic groups are used for the presentation

and description of the Mito constructions in Chapter 3 (p. 129–170), the TM level corresponding to the lower part of the Mito strata, the TN level to their upper part. In Chapter 9 (Conclusions), the existence of an earliest stage prior to the TM and TN levels is also suggested (p. 302):

“It can be hypothesized that there were three series or subphases of temples in this Mito Period; the latest series corresponds to the *Templo de los Nichitos* (ER-11) on the middle platform [platform 2] and ER-19 and ER-23 on the lower platform [platform 4], the two platforms being connected by USI-3, ESt-5 to -7; the second series consists of the *Templo de las Manos Cruzadas* (UR-22) on the middle platform [platform 2], and ER-20 and ER-24 on the lower platform [platform 4] connected by ESt-8 and -10 in the middle platform; and

PHASES	Pla 2	to Pla1	from Pla2 to Pla4	Pla 4
MITO III	d ER-11 <i>T. de los Nichitos II</i>	ES1 4a ↔ ES1 5 ↔ ES1 7 ↔ US1 3 ↔	EPass 19S (a)	US1 2b UPass 53 sup ER-19 EPl 19E (a) <i>Temple building</i>
	c ER-11 <i>T. de los Nichitos II</i>	ES1 4b ↔ ES1 6c ↔	EPass 19S (b) US1 2b UPass 53 int	ER-19 EPl 19E (b) ES1 9a <i>Temple building</i>
	b ER-11 <i>T. de los Nichitos I</i>	ES1 4c ↔ ES1 6abc ↔ ES1 8abc	US1 2a UPass 55	ER-19 Open-air floor-altar
MITO II	a ER-11 <i>T. de los Nichitos I</i>	ES1 4c ↔ ES1 8abc ↔ ES1 8abc		ER-20 ER-24/26
	MITO II <i>T. de las Manos Cruzadas</i>	HS1 3 ES1 10 ↔ ES1 8d		ER-20 ER-24/26
MITO I	UR-22 <i>T. de las Manos Cruzadas</i>			ER-27 ER-28 <i>Templo Blanco</i>

KOTOSH-MITO

KT Mound - Platforms 2 & 4

CONSTRUCTION SEQUENCE BASED UPON THE RELATIONSHIPS OF ASSOCIATION AND SUPERPOSITION BETWEEN BUILDINGS & STAIRS

Pla: Platforms

ER or UR: temple buildings

ESt or USI: stairs or ramps

EPass or UPass or EPl: outside areas, patios

it remains to be determined that the earliest series consists of the *Templo Blanco* (ER-27, -28) and a temple which is located beneath the *Templo de las Manos Cruzadas*.”

These three series I am calling the Mito I, II, and III phases, as shown on the left column of the sequence chart (Fig. 4). Mito I corresponds to the two buildings of the Templo Blanco group. There is not much more to say about this earliest stage of construction at the Kotosh Mito sanctuary; because the excavation was not continued either below the stairs leading from platform 4 up to platform 2, or below structure UR-22 (Templo de las Manos Cruzadas). A test pit through the floor of UR-22 only indicates that an earlier temple existed below that building, on platform 2, which was perhaps related to the Templo Blanco (p. 32).

Now, the compilation of the stratigraphic and architectural data presented so fully and consistently in chapters 2 and 3 of the *Andes 4* book, allows us to establish a more refined sequence for phases Mito I and III, dividing Mito III into four sub-phases (Fig. 4). Several points can be made from this analysis.

1. The Relationship between the Templo de los Nichitos and ER-20, ER-24/26 shows the uneven growth of platforms 2 and 4 through time.

It appears that the growth and elevation of platforms 2 and 4, caused by sealing the old temples and building new ones, are not parallel over time. A new building could be erected on one platform while the temple on the other platform was still in use. This is illustrated by the transition from Mito II to Mito III. Mito II corresponds to the Templo de las Manos Cruzadas (UR-22) functioning with the small temples ER-20 and ER-24, including ER-26 (see discussion of point 2, below). However, when the

Templo de las Manos Cruzadas is buried and replaced by the Templo de los Nichitos (ER-11), the same small temples continue in service on platform 4. This complex, chronological relationship between the two platforms is established through the construction sequence of the 5 staircases leading, at different times, from one platform to the other (ESc-5, -6, -7, -8, -10, p. 136-140, fig. 79, 80, 81). Stairs ESc-6 and ESc-8 are of special importance; each of them is made of several different parts (called a, b, c, or d), and they both show several remodelings.

“ESc-8, which is also related with ESc-6 and ESc-10, is one of the most important stairways connecting the different platforms; it serves as a major indicator by which the temporal relationships of the rooms ER-11 and UR-22 of Pla-2 and ER-19, -20, -23, -24, -26, -27, and -28 of Pla-4 can be conclusively determined” (p. 138, 140).

During the Mito II phase, the small temples ER-20 and ER-24/26 are connected to the Templo de las Manos Cruzadas through the stairs ESc-10 and ESc-8d.

“Beneath ESc-8c and the lower portion of ESc-8b is an older stairway, designated ESc-8d, which clearly was connected with ESc-10” (p. 138).

Then, at the beginning of the Mito IIIa sub-phase, the Templo de los Nichitos is built on platform 2. But on the lower platform, the temples ER-20 and ER-24/26 are still in use; they are now connected with the new upper temple by way of ESc-6 and ESc-8abc. This has been observed and stressed by Matsuzawa himself:

“There is the fact that ESc-6c and ESc-8b are connected with each other. This fact is of particular importance because it indicates that the rooms ER-11, ER-20+ER-24, and ER-26 are all contemporaneous” (p. 171; emphasis E.B.).

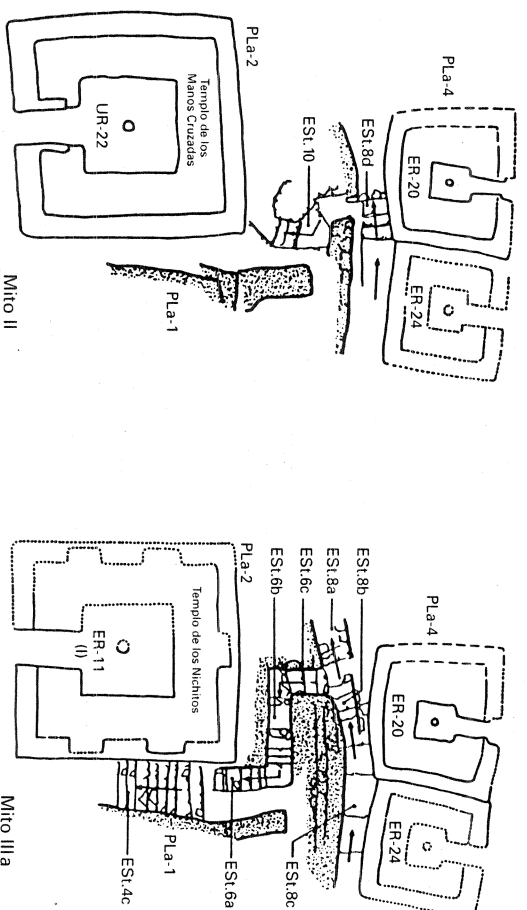
These stratigraphic facts bring about new insights on the "temple entombment" practice because they show that a single temple can be buried while other parts of the sanctuary still function with the same layout or, at least, with the same temples. The two pictures of the Korosh-Mito sanctuary (fig. 101–102), so often reproduced in the literature, actually represent the layout of the sanctuary at the two different TM and TN levels. *Levels*, not times:

"It should be kept in mind that in either case these levels [TM, TN] are employed only as a yardstick by which to compare, and to attempt to determine relative positions of, other constructions. Thus, for example, where a construction is described as being before TM, this only means that relatively speaking it is at a level lower than the *Templo de las Manos Cruzadas*, or if another construction is spoken of as being after TN, it simply means that in comparative

terms it is found at a higher level than the *Templo de los Nichitos*, and in either case *no real indication of time is given*" (p. 132; emphasis E.B.). In terms of relative chronology, the small temples on platform 4 are replaced at some point by a single, larger temple. The archaeological data show that this shift is not related to the entombment of the Templo de las Manos Cruzadas and its replacement by the Templo de los Nichitos at the beginning of the Mito IIIa sub-phase. Instead, it occurred later, during the Mito IIIb sub-phase (Fig. 4). The same data also demonstrate the continuing practice of using small temples along with large ones (Fig. 5).

2. ER-20 and ER-24/26 are not a twin building but a three-room two-level construction.

The excavation of structure ER-26 revealed one of the most interesting features of the



architectural history of the Mito sanctuary: a kind of a two-story building, early in the construction sequence. It appears that at the end of the Mito I phase, when the two buildings ER-27 and ER-28 — nicknamed Templo Blanco — were put out of service, only the western temple ER-27 was buried and sealed. The eastern temple ER-28 was remodeled inside by building new walls against its southern and western main walls. The result was a smaller room, ER-26, which continued to use the original floor-altar and entrance (p. 39, 160, 161, 170). Structures ER-20 and ER-24 were built on top of ER-27 and ER-26 (formerly ER-28), respectively. The archaeological data show that ER-20, -24 and -26 were used at the same time, functioning as a three-room, two-level construction. This relationship is established through the construction sequence of stairs, passageways and

patio areas, in front of the temples (p. 165, 166, fig. 99).

“By means of Est-17 and a passageway connecting to the entrance of the subterranean room ER-26 constructed underneath ER-24, it was thus possible to move from ER-24 and/or ER-20 to ER-26, and vice-versa, and it appears that at this point in time all three rooms were used simultaneously. In light of this relationship between the three rooms, *it is in fact therefore possible to consider ER-24 and ER-26 as being the upper and lower rooms of a two-story construction*” (p. 170; emphasis E.B.).

Two observations can be made based on this architectural evidence. First, the “not two but three” structures ER-20 and ER-24/26 are not the simple pair of temples they generally appear to be just looking at the ground plans. They do not repeat the twin pattern of Mito I phase temples ER-27 and ER-28. Consequently, they

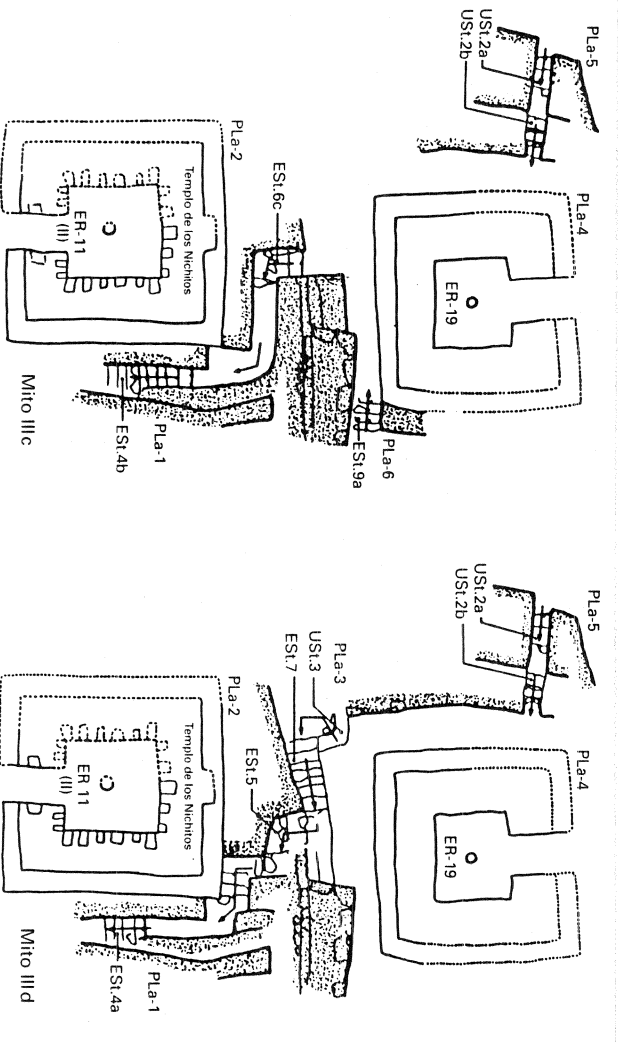
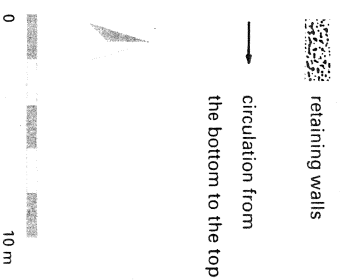


Fig. 5:
Kotosh: The layout of the Mito
sanctuary. Platforms 2 and 4 through
time.



cannot be used as additional evidence to infer the existence of dual organization in Korosh Mito architecture (Burger/Salazar-Burger 1993: 108–109). Second, the partial burying of the Templo Blanco – with ER-27 being sealed and ER-28 being remodeled and turned into ER-26 – brings out new information about temple entombment in Korosh and shows, once again, how elaborate and sophisticated that practice must have been in Mito religion.

3. The two building stages of the Templo de los Nichitos.

Another important result of the stratigraphic analysis involves the architectural history of structure ER-11 on platform 2, the Templo de los Nichitos, during the Mito III phase. The superposition of the several layers of its floor-altar, at the pericaust as well as epicraust levels, shows that the temple went through an important campaign of remodeling after its first stage of construction and use. The modifications consist of building a new floor-altar, and sealing the large niches in the main walls (*p.* 32, 148, 173, 176). While maintaining the same hearth, the surface of the pericaust floor was refurbished by a new clay coating on top of a layer of ash, which indicates that a ceremony took place before setting up the new altar. More work was done on the epicraust by building a new floor, complete with its three layers of stone, red earth and plaster. In the new perimeter wall between the two floor levels, 23 small recessed niches were built: 21 around the pericaust, and 2 more in the entranceway. At the same time, as observed on the preserved part of the east wall of the temple (*p.* 250), the two large niches in the eastern and western main walls were filled in with stones, after which the wall surfaces were newly plastered and painted.

“The large niches of the eastern wall of the room were filled in and a new floor was constructed over the first floor. Many small niches were built in the perimeter walls of the new floor” (*p.* 176).

These two construction stages of the Templo de los Nichitos are referred to in this paper as stages I and II. They can be related with specific events occurring on platform 4, during the Mito III phase (Fig. 4). Once again, the key to establishing the temporal correlations between the temples is found in the different sets of stairs leading from platform 4 to platform 2, and also from that latter up to the destroyed platform 1. Especially useful for understanding the building sequence at the northeastern corner of the Templo de los Nichitos, are the maps presented in *fig.* 79 (*p.* 135), showing the construction stages of ESr-4. The following Mito III sub-phases can be established:

- Sub-phase Mito IIIa: as already described, the three small temples ER-20 and ER-24/26 are still in use when stage I of the Templo de los Nichitos is built. Communication between platforms 2 and 4 is established by ESr-8 and ESr-6, this stair joining with ESr-4c to give access to the upper platform 1.⁶
- Sub-phase Mito IIIb: a new, single and bigger temple (ER-23) is built on platform 4, raising the ground level and eliminating the staircase ESr-8. Access to platform 1 does not change.
- Sub-phase Mito IIIc: at the beginning of this sub-phase, ER-11, on platform 2, is remodeled, becoming Templo de los Nichitos, stage II. On platform 4, an open air floor-altar is built (see below, point 4). Later, a building is erected around it (temple ER-19). The stairs leading from platform 4 to platform 1 are also re-modeled.
- Sub-phase Mito IIId: the Templo de los Nichitos, stage II, and the temple ER-19 remain

⁶ Sometime during the Mito III sub-phase, but before Mito IIIc, the roof of ER-26 and floor of ER-24 collapsed into the lower room.

unmodified on their respective platforms, but a lot of construction is done in the surrounding area (see below, ER-19, stage III).

4. The Earliest Floor of ER-19 is a temporary open-air altar.

In the area of platform 4, the superposition of floors, buildings and retaining walls on top of structure ER-23 is particularly complicated.

For that reason, the Japanese archaeologists paid special attention when digging in this sector during the 1966 field season (p. 36). Thanks to this meticulous investigation, three construction stages can be established for structure ER-19 and its surrounding area. The stratigraphic superpositions are shown in Fig. 6 compiled from fig. 20, 21, 22, 23 of *Andes 4*, with additional information gathered from the written description of the stratigraphy and architecture (p. 35, 36, 166–170). The ER-19 mini-sequence can be summarized as follows:

– Stage I: After demolishing and sealing temple ER-23, a floor-altar is built on top of it, and

put in service in the open, without any walls to enclose it.

“Turning to the walls of ER-19, an important fact is that the foundation of the two walls of the room that are well preserved, EW-76 and -78, rest on the first, most recent of the floors of the upper level and do not extend down to the level of the second [earliest] floor. This means, in other words, that the present walls of ER-19 did not exist at the time the second [earliest] floor was in use. Moreover, there are no indications that the bases of any other walls rested upon this second [earliest] floor” (p. 169; emphasis E.B.).

The boundaries of the open altar could not be clearly defined. Some observations made on wall EW-79, in the eastern area, led Matsuzawa to interpret the earliest floor of ER-19 as a temporary floor:

“... this fact serves as evidence to support the proposition, to be explained later in part V, that this second [earliest] floor had the nature of a temporary floor” (p. 169; emphasis E.B.).

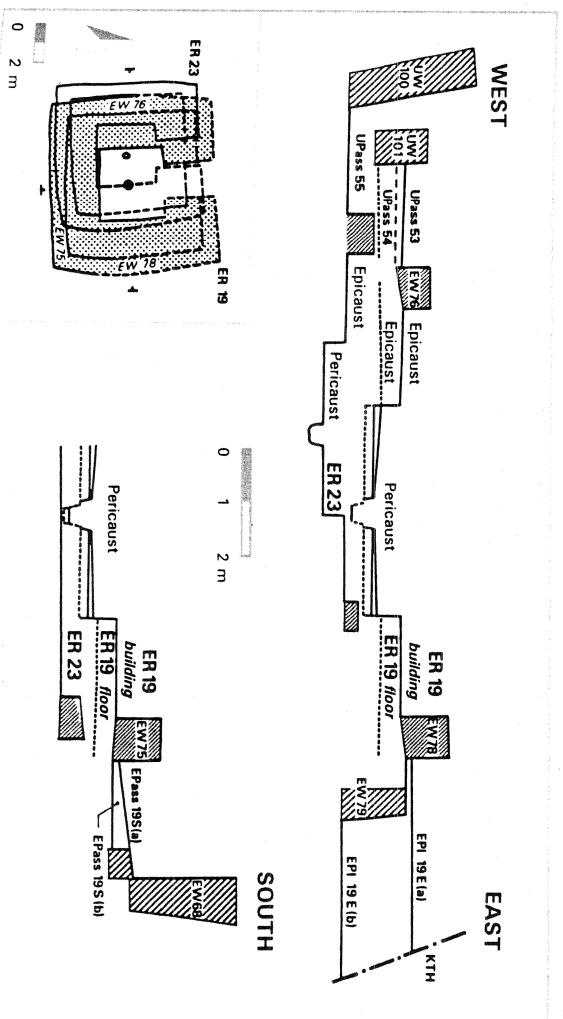


Fig. 6:
Kōnoh: Construction stages of structure ER-19 (schematic cross-sections of Platform 4 at the ER-23 and ER-19 levels, Mito IIIb to Mito IIId sub-phases).

Although Matsuzawa does not give us any further information on this interesting feature in Part V (*p.* 171–176), which is entirely dedicated to the description of the superposition of the Templo de las Manos Cruzadas and the Templo de los Nichitos, I would accept his interpretation, since the presentation of the archaeological data throughout Chapters 2 and 3 is so consistent. I would suggest that the earliest floor of structure ER-19 has to be related to the remodeling of the Templo de los Nichitos, stage II, and to the remodeling of stairs ESf-6 and ESf-4, changing the means of communication between the platforms 4, 2 and 1. The open altar at ER-19 would have provided a temporary place to perform ceremonies while those important construction projects were undertaken on platform 2.

— Stage II: A new altar is built on top of the earliest, temporary one; the hearth remains the same but it is made wider. The building ER-19 is constructed around the new altar. At that point, the layout of the sanctuary is the one which can be defined for the sub-phase Mito IIIc (Fig. 5). The remodeled Templo de los Nichitos, stage II, is in service on platform 2. From the south-eastern corner of temple ER-19, the ESf-9 staircase gives access to the lower platform 6. Communication between platforms 4, 2 and 1 is established by the means of ESf-6c and ESf-4b.

— Stage III: For the temple building itself, this third stage involves only some refurbishing in the periclast area of the altar by laying a new floor surface, the original hearth remaining in use. But at the same time, i.e. during sub-phase Mito IIIc, important construction work is undertaken all around (Fig. 5). On the east side, platform 4 is enlarged by building a new floor (EPl-19E(a)) one meter higher than the earlier one and the stairs ESf-9 disappear; on the west

side a new floor (UPass-53 sup.) is laid on top of the old one (Fig. 6). Communication between platforms 4 and 2 now takes a small detour by way of platform 3 (stairs USt-3, then ESf-7 and ESf-5). Access to platform 1 is also slightly remodeled (ESf-4a).

As can be seen, this detailed review of the archaeological data published in Andes 4 provides new insights and furnishes a more dynamic perspective of Mito architecture.

Mito Temple Design

As already demonstrated by the architectural sequence at Piruru, the two-level floor-altar is the very distinctive, new built form of the Mito ceremonial architecture. The Mito altar is used in two different ways. First, the ceremonial structure can be reduced to the altar itself, constructed in the open air. Besides the case of the earliest altar of structure ER-19, discussed above, two other open-air altars have been found at the Korosh Mito sanctuary (UF1-1 and EF1-25, both at the TM level, *p.* 161–162, fig. 95, 96, *pl.* 30b). I would suggest also that, because of its huge size, not easily roofed, the Mito ceremonial structure excavated at the nearby site of Shillacoto (S-R-7; Izumi et al. 1972) also could have functioned as an open altar.⁷ Second, the altar can be enclosed by four walls and roofed, making up the temple building. At Piruru, both forms of altars, open and enclosed, occur in pre-Mito times, although they had single-level floors. In the case of the unenclosed altars, the sacred space is totally open and stretches out from the hearth on horizontal planes. In the second case, the building of walls and roof limits the extension of the altar and creates another type of sacred and now volumetric space, at once very contained. At some point,

⁷ As extensively and scrupulously argued by the archaeologists who excavated at Shillacoto (Izumi et al. 1972: 73–76), the stratigraphic and architectural facts show that structure S-R-7 was built during the Late Pre-ceramic Mito period. It was re-used during the Wairinjira period (Initial Period), when the lower floor of S-R-7 was remodelled and the tomb S-R-6 was built on top of it. Consequently, and contrary to Burger (1992: 108), not the original construction but only the remodeling of S-R-7 can be assigned to the Early Initial period.

with more information and a complete inventory of the offerings, it would be interesting to see what difference, if any, existed between the sacrifices made or burned at the open air altars and those performed inside the walled temples (Bonnier 1988b).

Based on the data from Kotosh, La Galgada (Grieder et al. 1988) and Piruru – the three sites where temple buildings were found – the architecture of a Mito temple can be briefly described as follows. It is essentially a single-room construction with a roughly quadrangular ground plan and a single entrance (Fig. 7). At Kotosh, external sizes range from 4 m to 9.50 m on each side. The roofs were most probably flat. Walls and the two levels of the floor are carefully plastered and slipped with a light colored clay (yellow at Kotosh, white at La Galgada). The walls were probably painted on the outside, too. Most temples are independent, free standing buildings, although sometimes two of them can be joined along one side. All temples are oriented according to the cardinal directions, with the doorways facing north or south at Kotosh, south at Piruru and west or north at La Galgada. The sunken pericaust floors of the two-level altars are quadrangular in shape, almost square. Pericaust floor levels are lower than the outside floor: at La Galgada, access is provided by steps, at Kotosh by a sloping ramp. The central hearths are ventilated by underground air-ducts whose location is consistent at La Galgada, but not at Kotosh. Niches are placed in the interior walls, following a symmetrical pattern, but size and location are different at Kotosh and La Galgada.

The highly recognizable architectural form of the Mito temples follows two different canons. The first one is used at Kotosh. Here, the overall shape of the temples closely follows a square pattern, with the corners of the buildings showing quite

sharp angles. The second canon is found at La Galgada where the corners of the buildings are rounded and the temples exhibit a sub-circular shape on the outside. In both cases, the shape of the pericaust floor of the altar remains clearly square. The Mito temple at Piruru was built following the rounded corners canon. It is interesting that the Kotosh square canon is also present on the south mound at La Galgada. The best example is the nicknamed Square Chamber (Grieder et al. 1988: 53) which at some point was painted with a yellowish color as at Kotosh. Grieder interprets the presence of the square plan at La Galgada as a direct influence of people from Kotosh (*ibid.*: 198).

It seems as if two different niche patterns could be related to the two formal canons. At La Galgada where the sub-circular canon is dominant, the niches have approximately the same size and are evenly distributed in a single horizontal row, halfway up the walls. At Kotosh where the square canon occurs, the situation is more complex. Except for the Templo Blanco (Mito I phase) which does not show much regularity in that matter, there are three different sizes of niches: small, medium and large (Fig. 7). Small niches are located in the perimeter wall between the pericaust and epicraust floors, while large niches are located in the main walls. Information on medium size niches is provided by the Templo de las Manos Cruzadas, because of its good preservation due to the entombment practice. The medium size niches are located at midpoint on the main walls, in an alternating pattern with the large niches. It is below the two medium size niches in the northern wall that the famous crossed arms and hands have been found.

The niche distribution shows some recurrent patterns (*fig. 98*). First, there is always one large niche in the middle of the main wall, in front

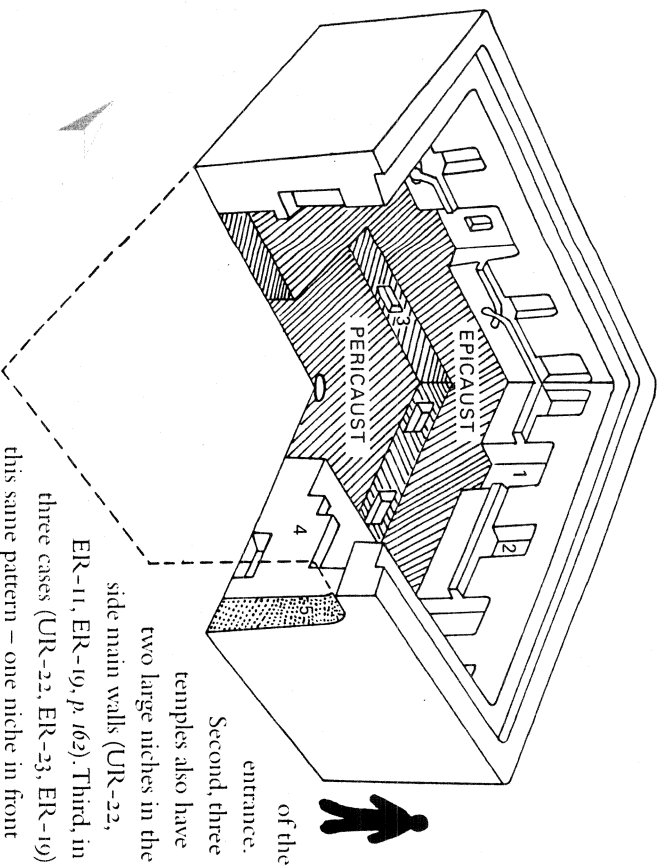


Fig. 7:
Design of the Mito temple at
Kotosh.

of the entrance. Second, three temples also have two large niches in the side main walls (UR-22, ER-11, ER-19, *p.* 162). Third, in three cases (UR-22, ER-23, ER-19) this same pattern — one niche in front of the entrance and two on each side — is used to place small niches in the perimeter wall of the altar. There is no doubt that niches play an active role in Mito liturgy, although the nature of this role remains unknown. When remodeling the Templo de los Nichitos, the large niches in the side walls were sealed, but the one in the middle of the wall in front of the entrance was kept in service. At the same time, a lot of small niches were put in the perimeter wall of the new floor-altar. This example shows that size and placement of the niches in a Mito temple correspond to certain liturgical rules which change over time.

Although relatively simple in shape and construction techniques, the Templo de las Manos Cruzadas shows that the Mito temple is a fully achieved building. Finishing involves the plastering and painting of all surfaces both on walls and the floor. The temples could be decorated with clay reliefs and painted motives. A white-painted human figure was found on the south wall of the eastern building (ER-28) of the

Templo Blanco (*p.* 160, *fig.* 94). Besides the low-reliefs of crossed arms, the Templo de las Manos Cruzadas shows two different uses of paint (*p.* 154). First, two animal motifs (?) have been drawn in white paint on both sides of the large niche in the middle of the north wall. Second, a kind of arch was painted at the entrance in red color (Fig. 7). The same temple presents a small flanking wall on each side of the entrance, channelling the access into the building toward the periclast floor and the central hearth. The remains of similar flanking walls have been found in ER-11 (Templo de los Nichitos) and ER-27 (Templo Blanco west). Also, the doorways of ER-28 (Templo Blanco east) and probably ER-20 were framed with a clay molding. As all of this suggests, considerable aesthetic achievements are manifested in the architecture of the Kotosh Mito temples, particularly as regards the treatment of entrances.

Temple Entombment and the Burial of Floors and Altars

When summarizing the architectural superposition at the Kotosh KT mound, Matsuzawa distinguishes between two groups of buildings according to the way the old temples are buried and replaced by new ones (*p.* 168).

First, there is the specific “temple entombment” which is exemplified by the burial of the Templo de las Manos Cruzadas before building the Templo de los Nichitos on top of it (*p.* 171–176). The roof of the old temple was taken off, the two low-reliefs of crossed arms were specially protected by black sand, the doorway was blocked up, and the building filled up to the top of the walls. Astonishingly, this filling repeats, on a huge scale, the floor construction pattern: a deep layer of stones (clean river cobbles)

covered by a thick layer of red earth. The old temple is literally trapped in the layer of stone and sealed by the layer of red earth. Enclosed in a sort of enormous chest by the construction of new sustaining walls, the temple is entombed in what is becoming the new floor of platform 2 and the new altar of the Templo de los Nichitos. The Templo Blanco exhibits the same kind of entombment in the sense that the walls remain at their full height, but the filling is made up of the superposition of several layers of different color and texture, without any layer of stone (*p. 37*). Moreover, as noted above, of the two small temples which constitute the Templo Blanco, only the western building (ER-27) was buried at the end of the Mito I phase.

The second method to bury an old temple is to demolish its walls almost entirely and to seal the floor-altar before building on the new surface. The temples ER-11 (Templo de las Nichitos), ER-19, ER-23, and ER-20/ER-24 were buried that way. Because there are more occurrences of this second kind of temple burial, Onuki (1993: 78–82) suggested in a recent publication that the act of rebuilding and renewing temples was more important and more significant than the entombment itself.

However, the analysis of the architectural sequence, especially the earliest construction stages of ER-19 and ER-11, demonstrates that a third way to replace an old ceremonial structure can also be recognized. The open altar of structure ER-19 was rebuilt and a temple building erected around it. The first altar of ER-11 (Templo de los Nichitos I) was rebuilt and the temple itself remodeled (Templo de los Nichitos II). In both cases, the same hearth remains in use showing some sort of continuity between the older ceremonial structure and the new one.

This review of the different ways to replace temples and altars at Kotosh indicates that the burial of old ceremonial structures in a Mito sanctuary is a far from simple affair – not to mention the complications at a site like La Galgada where human burials were part of the process (Grieder/Bueno 1985; Grieder at al. 1988; Grieder, this volume). The analysis of the construction sequence at Kotosh has shown that the temples of any one phase or sub-phase were not buried or entombed at the same time, indicating a dynamic relationship, through time, between the different parts of the sanctuary.

Planning and Layout of the Mito Sanctuary at the KT Mound

As pointed out by the Japanese archaeologists (*p. 133*), platforms 2 and 4, along with the destroyed platform 1, probably formed the core of the Mito sanctuary which was designed as a three-level area and built up on the slope of a small natural mound. The surrounding platforms step down from the main sector, apparently without supporting any buildings. Only platform 3 had a small, partially excavated room (UR-40, *p. 161*) at one point of the construction sequence (Mito II phase?). Although without reaching the sterile soil, the entire extension of the Mito platforms has been excavated, except in the KTA area where later Kotosh Chavin strata overlap the Mito occupation (*p. 132*). Assuming that the colonial KTH trench did not cut off too much of the northern eastern boundary of the Mito occupation, the total area of the preceramic sanctuary may be estimated conservatively to have extended over 2000 m². The extension of platform 4 varies, through time, from 220 m² to 150 m²; above it, platform 2 was a 200 m² area at the time of the

Templo de los Nichitos (*p.* 132). It is not adventurous to estimate a similar surface area for platform 1, which means that the temples and other ceremonial structures were concentrated on only half of the sanctuary area.

These figures are important because they show that the Mito architecture is definitely not limited to the building of temples and altars. As a matter of fact, the site of Kotosh, as well as the site of La Galgada, clearly demonstrate that other important construction works were carried out at the Mito sanctuaries. Terraces, platforms, staircases and ramps were built to outline and shape the ceremonial areas, and to give them a spatial organization which could vary from site to site (compare the layouts of Kotosh and La Galgada).

Although the whole configuration of the Kotosh sanctuary remains not well known, especially the eastern part, it seems that the lowest platforms along with the associated stairs and ramps had the function of providing a progressive and rather sinuous access up to the main area where the temples were standing in a prominent location. The pattern of circulation never exhibits a system of central access to the temples at any point of the construction sequence. On the other hand, the Japanese archaeologists wondered about the absence of what could be recognized as "plazas" (*p.* 166). It is true that the overall layout of the sanctuary does not show any central or larger area where people could have been gathering, and in relation to which circulation could have been organized, and temples distributed. But this should not be interpreted as a lack of planning or even an unclear pattern of arrangement (Burger 1992: 52; Quilter 1991: 424). At Kotosh, a clear pattern of spatial arrangement is manifested in the orientation of the temples: to the north on platform 4, and to the south on

platform 2. This indicates a north-south axis in relation to which the built space was organized. The bi-polarized structure of the sacred space, at Kotosh-Mito, was probably highly meaningful. It lasted throughout all the construction sequence remaining intact through whatever kind of remodeling, rebuilding, or temple entombment that occurred (Fig. 5).

Conclusions

In 1972 Terna da could write in the concluding chapter of the Kotosh monograph:

"at present, there are no sites comparable in sophistication with Mito constructions as seen in each building and as shown by the harmony manifested in the entire arrangement of the buildings on different platforms" (*p.* 305).

Although our knowledge of the early ceremonial architecture in the Andean highlands has improved a lot during the past two decades by the discovery and study of new archaeological sites of the Late Preceramic period, the Kotosh site is still a major reference for the definition of the Mito tradition and its architectural style. Because the constructions excavated at the KT mound and their stratigraphic context are so extensively and consistently described in *Andes 4*, a re-examination of the archaeological data from Kotosh still brings out valuable new information, especially when compared and contrasted with the evidence reported from the contemporaneous sites of La Galgada, Piruru, Shillacoto and Huaricoto. Excavations made at the site of Piruru also uncovered an impressive sample of ceremonial architecture in the Late Preceramic pre-Mito strata. The comparative study of the architectural sequences of Kotosh and Piruru sheds light on the chronology of the Late Preceramic period in the highlands. It

provides new insights on early ceremonial architecture in the Andes, and leads one to sort the archaeological data and to separate out the common features of the early architecture from the specific features of the Mito style.

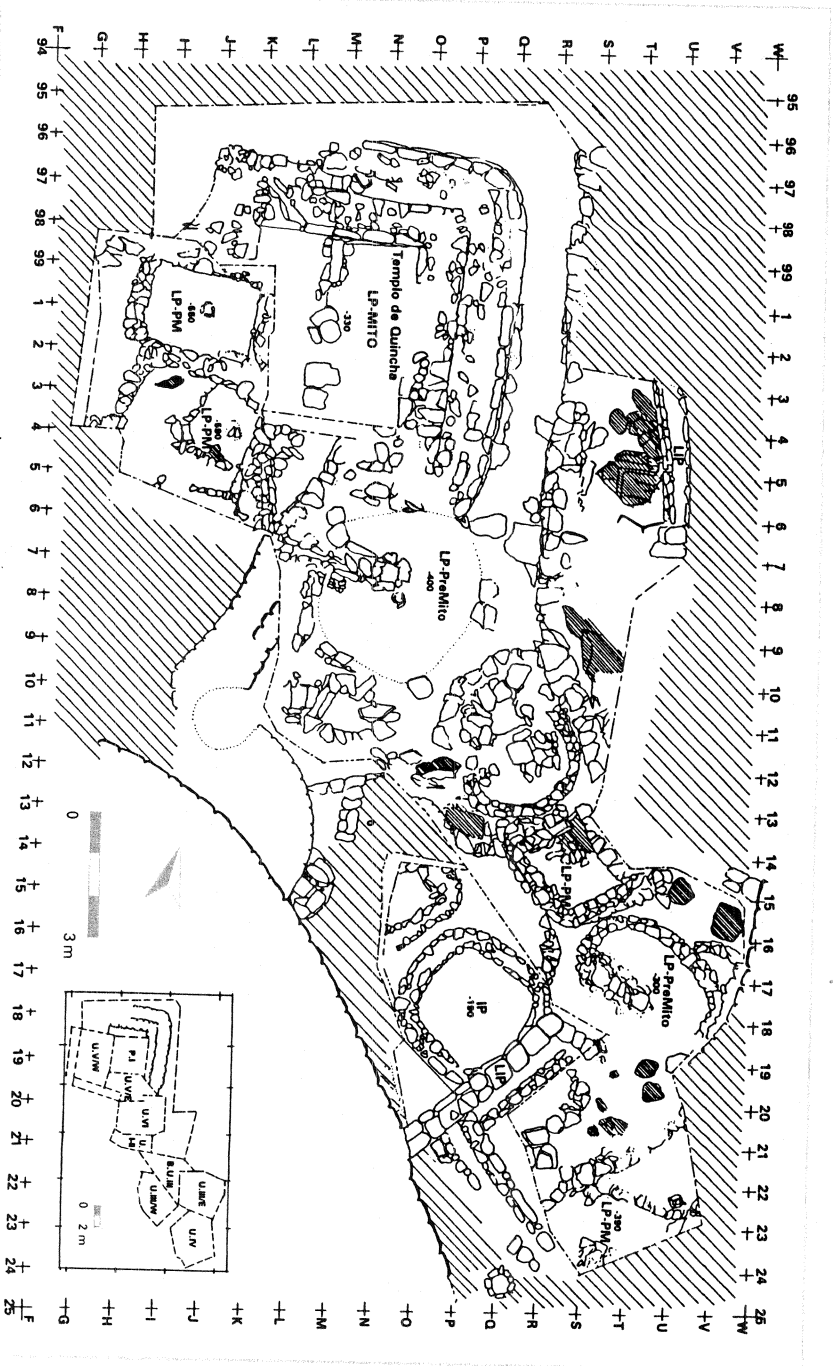
At Piruru, after a long succession of ceremonial architecture, a Mito temple is built almost at the end of the Late Preceramic sequence. Therefore, in terms of relative chronology and in the field of ceremonial architecture, the Late Preceramic period can be divided into two different blocks of time: a pre-Mito period and a Mito period. Within that chronological framework, architectural features of different site stratigraphies can be analyzed and assigned to the appropriate periods to which they belong.

In the present state of our knowledge, it is not possible to make definite assertions about pre-Mito architecture. The sample from Piruru is quite rich and diverse. But beyond that diversity, some architectural characteristics are clearly recurrent, which appear to be common features of the pre-Mito and Mito ceremonial architecture. The archaeological evidence shows that rituals of burning offerings and spreading ashes are performed directly on the floors of the temples, both in the central hearths and upon the surrounding floors. In other words, the very floors of the religious structures function as altars. A similar liturgical function of the floor surface is found in the Moguegua drainage of southern Peru, at the site of Asana (Late Preceramic component, Quina phase; Aldenderfer 1991). At that site, ceremonies of different kinds involving clay-surfaced basins and surface hearths were conducted right upon the ground floor. Prepared-clay floors and platforms were also built, although the construction works at Asana are far from the scale and achievement of the pre-Mito and Mito architecture in the northern highlands.

The sacredness of the floors inside a sanctuary and their liturgical function are probably widely dispersed values in Andean religion, which can dictate different architectural manifestations depending on local traditions. The archaeological data from Piruru and Kotosh indicates that, in pre-Mito and Mito times, the ceremonial floors are built following precise rules concerning the layering of different earthy materials, especially stone and red soil. At Piruru and Kotosh, red earth is associated not only with the construction of floors and altars, but also with their ritual burials. The use of red pigment in human burials and the selection of red materials for making ornaments show that this color had a special value among Andean peoples since very early in the Late Preceramic period (Quilter 1989; 1991).

One of the major differences between the pre-Mito and Mito architecture is the altar design. Pre-Mito temple buildings use single-level floor-altars while the two-level floor-altar is the defining characteristic of Mito religious architecture. Although the Mito altars can exist in the open, they are mostly contained in buildings walled on all four sides. The outer shapes of those temple buildings present two different morphologies: the square canon which is found at Kotosh and La Galgada and the canon with rounded corners found at La Galgada and Piruru. It is hypothesized that the ceremonial Mito structure at Shillacoto functioned as an open-air altar. The case of the Huaricoto site remains unclear. Compared with the Mito architectural style, the three ceremonial hearths unearthed in the Chaukayán phase strata of the Late Preceramic period are atypical. The radiocarbon dates appear to be consistent with the possibility that the Chaukayán component of the Huaricoto site could be assigned to the pre-Mito period, or at least

Fig. 8:
 Piruru Site – Excavated Area.
 LIP = Late Intermediate Period;
 IP = Initial Period; LP-Mito = Late Preceramic – Mito Period;
 OP-PM or LP-PreMito = Late Preceramic – Pre Mito Period.
 (Final Drawing: Julie Barris)



to the transition between the pre-Mito and Mito periods. The stylistic evolution of the Mito altar is probably the key to tracking the emergence of the Mito architectural style. It appears that the earliest temples at La Galgnda could have had a flat floor-altar (Grieder et al. 1988: 58, 195), which would confirm the architectural evolution documented by the Piruru sequence. On the other hand, the earliest two-level altars at Kotosh (Mito I phase) and La Galgnda exhibit a very low step between the pericaust and epicaustr floors. It seems as if the design of the Mito altar becomes more strongly defined through time, especially at Kotosh where the

perimeter wall between the two floor levels is used for the placement of small niches. The culmination of that process is seen in the Templo de los Nichitos, stage II (Mito IIIc and III d sub-phases). In the context of the stylistic evolution of the Mito altar and its combination with niches, it is meaningful to observe that the last ceremonial structure to be built at Shillacoto at the end of the Mito period (S-R7) also exhibits numerous small niches located in the perimeter wall of its floor-altar, in the same fashion as the Templo de los Nichitos, stage II, which is the last Mito temple built on platform 2 at Kotosh (Izumi et al. 1972: 47–48, 75).

Although the first construction stages at Korosh and La Galgada remain so far unknown, both sites show a genuine, long lasting development of Mito architecture. Tight contacts between those two sanctuaries are indicated by the presence of square-canon temples at La Galgada.

On the other hand, the Piruru site, where the Mito temple is of a fully achieved style, provides evidence for the spread of the Mito religion away from its main sanctuaries. As pointed out by the Japanese archaeologists (Izumi 1971; Izumi et al. 1972; Onuki 1993), after the Mito period, the archaeological sequences at Korosh, Shillacoto and Wairajirca are disrupted by the appearance of new phenomena such as pottery and new kinds of architecture. Something similar can be said about Piruru. La Galgada, and even Huari-coto. It seems that the Mito tradition ends at the beginning of the Initial Period. At that time, in the Huanuco area, the Mito sanctuaries cease to be used and the Mito architectural style disappears (Onuki 1993: 83). Although much remains to be discovered about the Mito people, their culture and their religion, the archaeological data already at hand show that the Mito religion flourished during the second half of the Late Preceramic period and unified the area of the Santa, the Alto Marañón and the Alto Huallaga river drainages in the north-central Andes.

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