Archaeological Investigations in the Nepeña Valley, Peru (Part A)

Donald A. Proulx

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ARCHAEOLOGICAL INVESTIGATIONS IN THE NEPEÑA VALLEY, PERU

by

Donald A. Proulx

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Department of Anthropology
University of Massachusetts
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INTRODUCTION

This report is the second dealing with my fieldwork in the Nepeña Valley on the north coast of Peru. In 1967 I began an archaeological survey of this neglected valley, and during the summer of that year 110 sites were recorded. The surface collections of ceramics allowed me to work out the chronological sequence for the valley and ultimately to make some observations on the settlement patterns of the various cultures represented there. In addition to supplying some data on the prehistoric inhabitants of Nepeña, the survey raised a number of questions, such as the nature of the Moche occupation of the valley, which could be answered only through additional fieldwork. The results of that first season's work were published in 1968 as Research Report No. 2 in this series, entitled An Archaeological Survey of the Nepeña Valley, Peru.

Due to lack of time and the inaccessibility of some parts of the valley, I was not able to complete the survey in 1967. In August of 1971 I returned to Nepeña for a period of three months with the main objective of completing the survey. I also wanted to attempt to answer some of the previously raised questions and to carry out a more detailed analysis of the ceramics. In all three areas the research was quite successful. An additional 110 sites were recorded in 1971 bringing the total for the valley to 220. The survey of the valley is now virtually complete, although additional sites undoubtedly will be recorded in the future, especially in the upper reaches of the valley.

Among the more important findings was the discovery of at least one preceramic site near the coast which may date as early as 4000 to 5000 B.C. A total of twenty Early Horizon Sites (1300-370 B.C.) are now known in the valley and reflect the spread of the Chavin culture to the coast. The Nepeña Valley appears to have been a major coastal center of this first Peruvian civilization. Several temples, elite centers, and habitation areas were examined. Most of the sites were located in the upper valley suggesting a direct migration over the Andes rather than along the coast from neighboring valleys.

In the Early Intermediate Period (370 B.C. to 540 A.D.) the valley was occupied by three successive cultures: Gallinazo, Recuay and Moche. The discovery of Gallinazo was made in 1971 through ceramics in private collections. Both Recuay and Gallinazo were small occupations terminated by the invasion of the Moche culture from the north in the second half of the period. Twenty Moche sites, mostly cemeories, were recorded all dating to Moche IV times. All are clustered near the ceremonial center of Pañamarca in the middle valley.

A population explosion occurred in the Middle Horizon (540 to 900 A.D.) with the invasion of the Huari culture. Of the 220 sites recorded, 102 had Huari occupation material. Huari sites are extensive, often covering more than one square mile. A number of important new habitation sites, cemeteries, and canal systems of this period were recorded in 1971. Two local ceramic styles, Nepeña Black-White-Red and Nepeña
Black-on-White, first described in the 1968 report, were further analyzed as part of the project. Chronologically they fall between the Middle Horizon and the latter part of the Late Intermediate Period. Additional data was collected on the Chimú culture of the Late Intermediate Period (900-1460 A.D.) and the Inca occupation of the Late Horizon (1460-1532 A.D.). A number of ancient roads, canal systems, defense walls, and petroglyphs were investigated, and progress was made in working out the settlement patterns of the various cultures.

A major disappointment of the fieldwork was my inability to secure a digging permit until my last week in the field. I had planned on undertaking stratigraphic testing at some of the sites in order to substantiate my seriation of the surface collections. This work will have to wait until the future. I did visit the site of Cerro Sechin in the Casma Valley, Chan Chan and Galindo in the Moche Valley, Pacatnamú in the Pacasmayo Valley, and Tucume (El Purgarío) and Apurí (in the Lambayeque system for comparative material. I examined ceramic collections in Trujillo and Lambayeque (Brunning Museum) for this same purpose. This material along with the study of the collections from Casma and from the Virú Valley that I made in the Field Museum in Chicago were of great value in understanding the ceramic development in Nepeña.

The fieldwork was also affected by the terrible earthquake which struck the northern part of Peru on May 31, 1970. I had originally planned to return to Peru to continue my work that summer, but the quake delayed my work for a full year. The Nepeña Valley, lying near the epicenter of the earthquake, was particularly hard hit. Virtually all of the modern structures in the valley were destroyed. The Hacienda San Jacinto, major population center of the valley, was ruined, including the sugar factory. Miraculously few local inhabitants were killed, and the rebuilding was accomplished in record time. Today the hacienda and factory are again functioning, but most of the construction is temporary. All of the historic churches and colonial buildings were destroyed, and a number of people left the valley immediately after the quake. Because of this catastrophe life is much more difficult in the valley than it was during my initial visit in 1967.

Most archaeological sites, on the other hand, survived the earthquake with only minor damage. Only those sites with massive architecture were affected, and hardest hit were those constructed of adobe. The worst damage I viewed occurred at the Moche ceremonial center of Pañamarca (PV 31-38), where most of the murals in the room in front of the main pyramid, including the famous "Bonavia Mural," were completely destroyed. Similar destruction was evident at PV 31-31 and at Huaca-tambo (PV 31-94).

Since this monograph is a continuation of my 1968 report, I will not attempt to repeat the sections on the geography, geology, and history of archaeological research in the Nepeña Valley. The reader interested in this information should consult my earlier monograph. Nor will I again describe the sites numbered 1-110; this report will describe only sites 111-220. I have, however, revised and expanded the sections on each chronological period for this volume, including notes on the
ceramics. These sections reflect my recent analysis of the data in view of the now completed survey. In these sections I present both raw data as well as hypotheses on the cultural development for each period. The hypotheses are simply attempts to explain certain facts based on the available evidence; in many cases they need to be tested before my explanations of cultural processes can be fully accepted. A great deal of additional work needs to be done in this valley before we can completely understand its role in the cultural development of the north coast of Peru.
BACKGROUND TO THE PROJECT

The Nepeña Valley is situated on the north coast of Peru, 393 kilometers north of Lima via the Pan American Highway. Thirty-one kilometers to the south lies the Casma Valley, separated from Nepeña by a barren desert. To the north, at a distance of 25 kilometers, is the city of Chimbote which was badly damaged by the recent earthquake. Seventeen kilometers further north is the Santa Valley, one of the largest on the coast.

The Nepeña Valley was chosen for study for a variety of reasons. Although it is a small valley, it lies in a strategic location on the north coast. It was a major coastal center of the Chavin culture; investigation in this area should reveal good data on the origins and spread of this early civilization. Nepeña also formed the southern boundary of the Moche tradition. The valley could provide a wealth of information on the nature of the Moche culture in a frontier area. Except for Julio C. Tello's excavations at the Chavin temples of Cerro Blanco and Punkurí in 1933, no scientific excavation has ever been done in Nepeña. A number of archaeologists had visited the valley, but the number of sites recorded in the literature was less than fifteen. No systematic survey had ever been undertaken, and it was with this object in mind that I began my investigations in the valley in 1967.

Aside from simply surveying the sites it was also my intention to reconstruct the cultural sequence of the valley through analysis of the ceramics. I was interested in seeing the extent to which the "classic" north coast cultures had penetrated into the valley, and what local variations might be present. With this accomplished I could then turn to the matter of settlement patterns and ultimately to constructing hypotheses on the role of this valley in the cultural development of northern Peru.

In 1971, as in 1967, I made my field headquarters at the Hacienda San Jacinto conveniently located in mid-valley. A number of changes had taken place since my previous visit. The 1970 earthquake had destroyed most of the former buildings, and the entire hacienda had been rebuilt on the ruins of the former complex. There had also been administrative changes. In 1967 the sugar production in the valley, including the Hacienda San Jacinto, was under the control of the Negociacion Azucarera Nepeña S.A., a Peruvian-managed but American-owned corporation. Since that time the Peruvian Government, under its agrarian reform program, has taken over the former sugar estates and converted them into cooperatives. Under the cooperative system all of the workers are shareholders in the land and operations. They elect officials to look after their interests, and the profits from the industry are put back into the local cooperative. All of the sugar cooperatives are managed through the Central de Cooperativas Agrarias de Produccion Azucareras del Peru, Ltda. (CECOAAPP) with headquarters in Lima.

The survey was accomplished by jeep and on foot. Many of the areas explored this season were in inaccessible locations: high on mountainous
plateaus, in the tributaries of the upper river where roads were non-existent, or in desert flanks with deep sand. The fieldwork was again facilitated by the use of aerial photographs which had been purchased in 1967 from the Servicio Aerofotografico Nacional. These sheets, at a scale of 1:19,000, were invaluable for locating and mapping the sites. Plastic overlay sheets were used to precisely record the limits and locations of the sites.

Surface collections were made at each site to aid in the dating and to work out the chronological sequence for the valley. An attempt was made to secure a systematic random sample at some of the sites, but this proved to be extremely time-consuming and not very profitable for the main objective of the survey -- the dating of the sites. It proved to be more advantageous to concentrate on decorated sherds and rim sherds while at the same time making a random sample of the undecorated ware. While this technique served the immediate purpose of establishing a rough chronology for the valley, the complete ceramic study must include seriational and stratigraphic analysis of the pottery.

Because of limited facilities, only the most rudimentary ceramic analysis could be undertaken in the field. Close-up photographs were taken of all the sherds collected, however, and these have been analyzed for this report. Hopefully, in the future, the Peruvian government will allow the removal of collections from the country for study. Two to three hundred vessels in private collections were also photographed for the ceramic study. Since all of these have valley provenience, they are quite useful for illustrating the local ceramic styles and variations.

The ceramic analysis undertaken for this study included the identification of the major styles in the valley and a seriation of the unique or local variants in order to fit them into the sequence. Emphasis was put on the fancy decorated pottery since it is more useful than utilitarian pottery for indicating chronological change. Fortunately the major ceramic styles for the Peruvian north coast have been worked out in other valleys, and most of the Nepeña styles could readily be recognized as variants of these regional styles. Those styles, such as Nepeña Black-on-White, which are unique to the valley, were chronologically placed in the sequence by seriation. This technique makes use of the correlation of certain design patterning with particular shapes. Ceramic styles which have a large number of design features and shapes in common are closer to each other in age than those which share few traits. By examination of the well-defined styles and/or ceramic traditions and a recognition of their regularities or patterns, other styles could be recognized and placed in a relative chronological position to them. Thus I was able to define and chronologically place in the Nepeña Valley sequence the Nepeña Black-White-Red style and the Nepeña Black-on-White style. The relationships of these styles and their chronological positions can be seen in Table 1.

The surface collections were deposited at the Instituto Nacional de Cultura and eventually will probably be stored at the Museo Nacional de Antropología y Arqueología in Pueblo Libre along with the collections made in 1967.
### Table 1

**Nepeña Valley Chronology and Ceramic Styles**

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<td>(Moche V influence)</td>
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<tr>
<td>Early Intermediate</td>
<td>370 B.C.-540 A.D.</td>
<td>Moche</td>
<td>Moche IV</td>
</tr>
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<td>Period</td>
<td></td>
<td>Recuay</td>
<td>Moche III (late)</td>
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<td></td>
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<td>Gallinazo</td>
<td>Recuay</td>
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<td></td>
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<td>Gallinazo</td>
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<tr>
<td>Early Horizon</td>
<td>1300-370 B.C.</td>
<td>Chavin</td>
<td>Chavin</td>
</tr>
<tr>
<td>Initial Period</td>
<td>2050-1300 B.C.</td>
<td>Local Cultures</td>
<td>&quot;Los Chinos&quot; Style</td>
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<td>Preceramic</td>
<td>?-2050 B.C.</td>
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Figure 1
General Distribution Map of Preceramic Sites
Preceramic sites have been found along the entire coast of Peru. In 1957 Frédéric Engel published an article describing thirty-two such sites which he had investigated. Since that time the number has been expanded through the work of Lanning, Patterson and others. The majority of the preceramic sites have been found in the north and central coastal areas, but there are also some on the south coast. In his 1957 article (pp. 74-75) Engel mentions no preceramic sites for the Nepeña Valley proper; he does list and describe two sites located between the Casma and Nepeña Valleys. One of these is Huaynuma located 10 kilometers south of Nepeña and 11 kilometers north of Casma. The site is a low shellmound 100 meters in diameter and 5 meters high in the center located some 30 meters from the present shore line. Here Engel discovered a layer of sand, ash and shell 1½ meters thick with stone scattered in the organic refuse. He felt it was a seasonal fishing station. Two kilometers south of Huaynuma is the site of Tortuga, an area of refuse covering 100 square meters over 1 meter thick in the center. It was composed of a mixture of ash, dark sand, shell and other debris and, like Huaynuma, is thought to have been a seasonal fishing station.

The shore area at the bottom of the Nepeña Valley is not particularly suited for preagricultural occupation (see Figure 2). The extensive central part of the valley bottom is composed of a beautiful sandy beach curving for a good five kilometers between rocky hills to the north and south of it. Although a portion of this playa contains a series of raised beach terraces, they are covered with blown sand, and no traces of any sites were discovered there. The winds that blow from off shore are strong at times, and the northern half of this beach exhibits high dunes which spread inland for almost a kilometer in places.

To the south of this beach, however, is terrain more ideally suited for hunting and fishing activities. From the southern edge of the playa southward for about two kilometers to the modern fishing village of Los Chimus* are two parallel ranges of hills paralleling the shore. One group of hills consists of a rocky escarpment rising sharply out of the water, providing no beach along its entire length. Today these hills are still used by fishermen who perch on the rocks and fish with long lines. A few hundred meters inland is a second range of hills paralleling the first; the area between the ranges forms a nice shelter from the cold sea breezes. Los Chimus is a small settlement facing a pretty bay with several white-colored islands directly off shore. Several hundred meters north of the town, on the eastern slopes of the coastal escarpment, is situated a preceramic site which I numbered PV 31-208 (Plate 21A). Since my return from the field I discovered that I was not the first to discover the site. In a report written in 1958, Frédéric Engel mentions the existence of preceramic sites "7 kilometers south of the mouth of the Nepeña River" (1958:9), which is approximately

*The government topographic maps call this village LOS CHINOS, and Engel follows this usage. The modern inhabitants of the valley call it LOS CHIMUS, and they corrected me on any number of occasions. I will use the latter designation throughout this work.
the location of the site I discovered. The identification is confirmed by Ishida et al. (1960:441 and 182, plates 1 and 2) who describe and illustrate a site they call Las Salinas. From the description and photographs it is obvious that this site is PV 31-208.

Las Salinas is a preceramic habitation site with both architecture and extensive refuse. The outlines of several rectangular stone structures could be discerned on the littered surface of the site (Plate 21B) and their identification as habitations is supported by the Japanese expedition's report. Shell litters the surface, and thick refuse consisting of shell, crab claws, fish bones, charcoal fragments, twigs, and some twined cord was found; the cord appears to be cotton. Neither sherds nor seeds were found in the refuse, leading me to believe that this culture was not only preceramic but also pre-agricultural (the cotton may be an exception). No date has been determined for the site.

High atop the cliffs on the south edge of the central beach were located the remnants of four rectangular stone structures; I numbered the site PV 31-209. There is some shell refuse on the site to a depth of several centimeters. There is some question as to whether the site is preceramic or modern. No sherds were found on the site, and I know of no comparable structures built by modern fishermen. I am inclined to believe the site is preceramic.

In spite of extensive searching, no other definite preceramic sites have been found in the area of the valley south of the central beach. The area between the two ranges of hills was thoroughly investigated because its sheltered location would be ideal for pre-agricultural societies, but in spite of intensive searching no refuse, artifacts or other indications of occupation were found. A little refuse was found on the slopes of the hills opposite (east) of Las Salinas but it probably belongs to that site. The area behind the second range of hills was also explored, but the only site discovered has a few weathered ceramics on the surface.

North of the central beach is another range of mountains rising from the sea and paralleling the curving coast for a number of kilometers up to the port of Vesique. The Nepeña River empties into the sea through a break in these mountains near the town of Samanco. There may have been some preceramic sites near the mouth of the river, but the floods of 1925 completely alluviated the area, and no traces of any early sites were found near here. The steep rocky cliffs north of Samanco afford no opportunity even for campsites until one nears the present port of Vesique almost four kilometers away. At Vesique there are a series of old marine terraces on which the modern town is built. Engel (1958:9) mentions the presence of refuse in the vicinity of Vesique. I found none within the town itself, but the modern construction may have destroyed any sites there; it certainly was an ideal location for a fishing economy.

Adjacent to Vesique the foothills of the mountains break, occasionally forming small isolated beaches with steeply sloping ground. I discovered two or three separate sites containing shell, fishbones and other
debris, but I did not list them as preceramic sites, for I could not be sure that they were not modern fishing camps. This entire area needs to be more thoroughly explored. Perhaps a better trained eye could pick up evidence which I missed.

The lack of preceramic sites in Nepeña may be the result of natural causes and/or poor surveying. I am inclined to believe, however, that there simply are not many early sites in this area. Besides myself, two teams of archaeologists, Engel's group and the Japanese, have surveyed the coast finding only the site of Las Salinas. To the south in the Casma Valley Collier (1960:441) reports that he found no preceramic sites in Casma Bay. The next closest site is a small site reported by Engel near the mouth of the Santa River.

The one or two sites in Nepeña as well as the sites of Huaynuma and Tortuga nearby all seem to fall in the late Preceramic Period. No dates have been determined for them, but they very likely fall between 5000 and 2000 B.C. No traces of any hunting camps or lithic workshops have yet been found in the area. The early fishermen in Nepeña were few in number and derived most of their resources from the sea. They appear to have lived in structures constructed of stone and perhaps some perishable material. The presence of twine at PV 31-208 (Las Salinas) suggests that fish nets may have been used and perhaps some elementary textiles manufactured. Beyond this little can be said of the first inhabitants of the area.
THE INITIAL PERIOD

The Initial Period saw the introduction of a variety of new elements in Peru: pottery, maize, and traits comprising the "Pan-Peruvian Tradition." It was a time of experimentation and cultural growth leading up to the appearance of the first true civilization in Peru, Chavin, which appears in the next period. Some of the major sites of this period are one of the levels at Huaca Prieta in the Chicama Valley, Las Haldas and its temple located south of the Casma Valley, La Florida in the Rimac Valley and Cerro Sechin in the Casma Valley.

Unfortunately, if there are Initial Period sites in the Nepena Valley, and I am sure there must be, I have been unable to recognize them. In my previous report on the valley (Proulx, 1968:138) I suggested that the site of PV 31-105, a shell midden area with surface ceramics, may be Initial Period in date. In his 1958 report (p. 9) Frédéric Engel mentions that there are a number of sites with early ceramics located near the shore area having crude pottery which he classified as "Los Chinos I to VIII." He does not describe or illustrate this pottery, but it sounds as if it may be Initial Period in date.

There are a great number of undated sites in Nepena which either have large quantities of undecorated pottery present or pottery which is undatable because of surface weathering. Since I did not have the facilities nor the opportunity for a full analysis of the pottery, I cannot be certain that some of these sites aren't as early as this period. Details concerning this important period are only now coming to light, and much less has been published on it than many of the later periods. Another problem is that some of the Initial Period sites may have been reoccupied, thus confusing the identification. My personal feeling is that there continued to be a very sparse population in Nepena at this time.
Figure 3
Distribution Map of Initial Period Sites

ARCHEOLOGICAL SITES
HIEPEÑA VALLEY, PERU

KEY
- SITES
- TOWNS -- HACIENDAS
- RIVERS
- CULTIVATION LINE
- MOUNTAINS

Figure 3
Distribution Map of Initial Period Sites
THE EARLY HORIZON

The Early Horizon corresponds to the time of the expansion of the Chavin culture in Peru. Julio C. Tello, the eminent Peruvian archaeologist, was the first to recognize this distinct culture when he investigated the site of Chavin de Huantar in 1919. As a result of his work there and his subsequent investigation of Chavin sites on the coast he hypothesized that the Chavin culture had developed independently in the Peruvian highlands (having been stimulated through contacts with the tropical forest area) and spread from there to the coastal valleys. Once the culture had spread to the coast he felt that it had undergone certain modifications or adaptations to its new environment. Tello argued that the center of this coastal development was the Nepeña Valley along with its neighbor Casma to the south. It is in these valleys that the most elaborate architectural manifestations of coastal Chavin were found, and the proximity of these two valleys to the center of Chavin de Huantar suggests a continuous and strong contact (see Tello 1942, 1943 and 1960 for discussions of his theories).

Tello was not the only archaeologist to regard Nepeña as an important center of development in the Early Horizon. The late Rafael Larco Hoyle hypothesized that the Chavin culture had actually originated in the Nepeña Valley, basing his argument on the "formative" nature of the sites in that valley. He argued that the more elaborate site of Chavin de Huantar and others in the Highlands must be later, evolving out of the earlier coastal sites (see Larco 1966 for this theory). Few professionals agree with Larco, and the most recent evidence coming from the Highlands and the Montaña supports Tello's earlier theory. Nevertheless, Nepeña retains its important role in the coastal development of the Chavin culture.

Tello's Work in Nepeña

In February 1933 Tello began work in Nepeña after learning about the existence of "certain painted walls" in the valley. The Administrator of the Hacienda San Jacinto, Mr. Harrison, had an album of photographs of sites in the valley, and one of these depicted a shell engraved with Chavin designs. Unfortunately the site from which it had come had been destroyed. Tello pursued his investigations and at the site of Punkuri (PV 31-10) he discovered in the fill some crystal (amethyst?) beads carved and polished in a distinctive manner. Apparently a huaquero had found identical beads in an olla in a wall which was of Chavin date.

Punkuri is a low mound on the valley bottom about 10 meters high and covering approximately 2000 square meters. The mound was terraced, and on the north side a platform measuring 19.70 meters wide, 5.45 meters deep and 2.90 meters high had been built. Five steps led from the ground level to this platform. At the back of the platform was a wall, 2.20 meters high, painted with frescoes in various colors. These paintings are not described nor has any photograph been published depicting them clearly. Tello suggests that one motif was the condor. In the center of this wall was a staircase of 8 steps leading to a platform 1.30
meters wide at the top of the mound. The staircase was 1.95 meters wide, and on the first step was a carved clay feline head and paws (Proulx 1968, Plate 21B). Buried in the platform directly below the head was the body of a woman, possibly sacrificed, accompanied by a stone mortar and pestle engraved in classic Chavin style (see Tello 1943, Figure 17a). On her pelvis had been strewn over one kilo of turquoise beads. Also found was an engraved conch shell (Stombus galeatus). Classic Chavin sherds were found in the fill of the temple.

The top of the mound contained several semi-subterranean rooms, one of which measured 4.70 by 5.20 meters. The function of these rooms is unknown, but the entire structure has been interpreted as a temple. (The description and figures were taken from Tello 1933a, 1933b, 1933c and 1943. The measurements vary slightly from one source to another.)

The Cerro Blanco temple was also excavated by Tello. Like Punkuri, Cerro Blanco lies on the valley bottom in the Middle Valley area. It consists of two parts, a large mound (PV 31-37) rising in several terraces and a lower mound (PV 31-36), separated from each other by the main road from San Jacinto to the Pan American Highway (formerly the bed of the railroad). Tello only excavated the small mound which consisted of several ornately carved platforms covered with feline designs. The lowest platform measured 11.80 meters long and 3.60 meters deep. In the center was a step 1.80 meters wide which led to another platform 4.0 meters wide and 3.80 meters deep enclosed by three walls painted with feline motifs. Carrion (1948) claims the entire temple is in the form of a condor with outstretched wings, but I have seen no proof to substantiate this.

Both Punkuri and Cerro Blanco were constructed in several stages, the earliest two of which belong to the Early Horizon. The lowest level at each site was constructed primarily of stone covered over with a clay plaster and decorated with carved clay figures in relief. Later the temples were rebuilt using a mixture of stone and conical adobe. Chavin sherds found in the fill confirmed the Early Horizon date of these levels. Tello hypothesized that the earlier architecture was an attempt to imitate Highland models, but as time passed the culture adapted to the coast and a distinctive new type of architecture appeared. Both temples were reoccupied in later times, and the upper layer contains sherds and some architecture more recent than the Early Horizon. It would be interesting to check whether Tello's hypothesis on these building stages holds true in other coastal valleys. There do seem to be parallels in the construction found in Cerro Sechin and Moxeke in the Casma Valley.

In addition to Punkuri and Cerro Blanco, Tello also felt that the sites of Kushi-Pampa (or Siete Huacas, PV 31-56), Pincha-Marca (or Paradones, PV 31-64), the fortress of Kiske (PV 31-46), the second huaca of Cerro Blanco (PV 31-37), Pañamarca (PV 31-38) and Huaca Partida were all Early Horizon in date. He based his conclusions not on the presence of Chavin ceramics but rather on architectural features. Each of these sites had finely cut massive stone architecture similar to that found at Chavin de Huantar and other Highland sites. My work
in the valley has tended to support Tello's dating of these sites, but much more must be done before a strict chronology for the period can be built.

Recent Early Horizon Discoveries in Nepeña

During my surveys of 1967 and 1971, a total of twenty sites (including those mentioned above) were recorded which probably date to the Early Horizon. All of them are located either in the Middle Valley or the Upper Valley; none have been found in the Lower Valley area. The seven sites in the Middle Valley (10, 27, 36, 37, 38, 125 and 192) are all small in size, and all except one are located on the valley bottom. Four of the sites have construction using conical adobes, and these adobes are found only in the Middle Valley sites. The only definite temples are found in this area also. The Upper Valley sites (46, 47, 48, 56, 60, 61, 64, 65, 155, 157, 159, 175 and 177) are all constructed of stone. In several cases the architecture consists of finely cut blocks (46, 56, 64 and 175 are the best) while the others are composed of split fieldstone. A good number of the sites are perched on high plateaus overlooking the valley bottom below; a few are situated on the peripheries of a formerly cultivated field which is now a dry pampa.

There is also a dichotomy in the form as well as the function of the sites in the Middle and Upper Valley areas. In the Middle Valley all of the sites are small mounds constructed either of stone or a mixture of stone and conical adobe. All of these seem to have a religious or ceremonial function; no traces of extensive habitation are found anywhere near them, although flooding of the valley bottom in the past may have destroyed such traces. The sites in the upper valley are all constructed of stone, some having finely cut entranceways and corners on their buildings. The functions are more varied: habitations, walled compounds with some internal religious construction, fortresses, terraced hilltops, and even a possible petroglyph site. The sites in the Upper Valley seem to be where the people lived, while those in the Middle Valley represent ceremonial sites. Perhaps further investigation will prove this interpretation wrong, but the present evidence strongly suggests it.

The Upper Valley, which stretches from Tomeque (just upriver from San Jacinto Hacienda) to the upper reaches of the river, is an interesting area topographically. The valley is quite narrow in the vicinity of San Jacinto (see map) but it balloons out into a large fertile pocket just past Tomeque. This large fertile area is formed by the confluence of the Nepeña and the Vinchamarca rivers. On the north side of this area, near the present Hda. Motocachy, is a deep level pampa which shows evidence of being extensively cultivated in the past. Remains of canals and former fields can still be seen there today. Several Early Horizon sites nearby (47, 48, and 155) suggest that it may have been irrigated as early as this time. Further up the Nepeña Valley the river bed narrows between the steeply rising mountains. Several small tributaries feed into the Nepeña, the most important of which is the Rio Salitre. On the plateaus overlooking this tributary are two large Early Horizon habitation sites, and close by, on other plateaus, are the sites of Kushi-Pampa (PV 31-56) and PV 31-60. The settlement pattern suggests to me that the Chavin people entered the Valley from trails over the
Figure 4
Distribution Map of Early Horizon Sites
mountains and settled in the protected Upper Valley area. They apparently ventured to the Middle Valley, but the occupation there was very sparse and this region was probably used primarily as a religious area. The location of the habitation sites in the Upper Valley also has the practical advantage of allowing the inhabitants control over the water supply. The Nepeña only carries water during part of the year, and in prehistoric times those living upriver would have control over its distribution.

All of the Early Horizon sites mentioned above are either described fully in the description section of this monograph or appeared in my previous work (Proulx, 1968). For the sake of summary, brief descriptions will be added here:

**Middle Valley Sites**

**PV 31-10 (Punkuri Bajo):** This site is a low mound in the Middle Valley area with at least three distinct stages of construction present. The lowest two levels date to the Early Horizon. According to Tello level 1 consisted of a small stone building while level 2 had construction of fieldstone and conical adobe. The site has been identified as a temple and the dating is confirmed by the artifacts found (see above).

**PV 31-27:** This site consists of a series of low mounds (four distinct ones) on the pampa known as La Carbonera. The largest mound has been looted and the cut made by the huaqueros has exposed split fieldstone as well as conical adobe. All of the other mounds surrounding it also have some conical adobe. Apparently Tello knew of the site and considered it to be Chavin. A large mound some 200 meters distant at the edge of cultivation (PV 31-192) may be part of this complex, but it was given a separate number because of its distance from the other mounds. The site was reoccupied during Middle Horizon times, and all of the ceramics found on the site date to this period. The dating is based on the conical adobes (Proulx, 1968, Plate 3A).

**PV 31-36 (Cerro Blanco):** This small temple has many similarities to Punkuri. It was constructed in several stages of construction according to Tello (see description above). The artifacts and the carved clay facade were used to date the site (Proulx, 1968, Plate 2B).

**PV 31-37:** Directly adjacent to the temple of Cerro Blanco is a large terraced mound which was constructed of earth and cut stone. Tello felt that this site was contemporary with and part of the Cerro Blanco temple complex, and the finely cut stone blocks used in constructing this mound seem to confirm this opinion. The architecture is badly destroyed, and the nature of this site cannot be determined without excavation. Like the temple itself, the site seems to have been reoccupied during Middle Horizon times. The dating is based on architectural considerations since no definitive Early Horizon sherds were discovered.
PV 31-38 (Pañamarca): Pañamarca is primarily a Moche ceremonial complex, but there is some evidence to suggest that it was occupied during the Early Horizon. Alan Sawyer discovered two or three Chavin sherds on the site, and Tello (1943:138) also believed some of the construction to be Chavin. In 1967 I discovered a pattern burnished sherd identical to those at PV 31-56 and PV 31-48. The stone architecture Tello referred to may in reality be Middle Horizon; his writings are unclear as to which part of the site he was using for this determination (Proulx, 1968, Plates 3B, 3C and 4).

PV 31-125: This "huaca," or mound, is on the valley bottom in the middle of a sugar cane field. It appears to be a stone faced terraced pyramid constructed of split fieldstone. The western face is best preserved, rising 12 to 15 meters high. The eastern side is terraced, and the entire mound is split by a deep cleft giving the ruin the appearance of two separated platforms. As no sherds were found, the dating is based on the form of the stone architecture (Plate 24A).

PV 31-192: This low terraced mound was discovered in 1971 near the site numbered PV 31-27. The mound is badly eroded but seems to have been terraced on the north and west sides. The construction consists of conical adobes, and on this basis and because of the proximity of PV 31-27 (also having conical adobes) it is dated to the Early Horizon.

Upper Valley Sites

PV 31-46 (Kiske): Kiske or Quiske is an extraordinary fortress opposite Tomeque at the juncture of the Middle and Upper Valley areas. The walls of the site can be described as megalithic and are composed of finely cut blocks of stone. The entrance ways have even finer construction. Tello felt that the site should date to the Early Horizon based on its similarity in construction to Kushi-Pampa (PV 31-56) and Pincha-Marca (PV 31-64) and ultimately to the construction at Chavin de Huantar. Meticulous searching failed to reveal any ceramics on the site (Plate 23B).

PV 31-47: This complex of mounds and enclosures is a multi-occupational site; the bulk of the ceramics are Middle Horizon. In 1971, however, probable Early Horizon ceramics were found at the site, and the members of the National Geographic-Peabody Museum Moche Valley Project who accompanied the author to the site remarked that the construction here was similar to Early Horizon structures in Moche. Most of the Early Horizon material was found in "Area A," a stone-walled compound with a stepped stone-faced pyramid. It is not known how many of the remaining areas or mounds date to this period (Proulx, 1968, Plate 6A).

PV 31-48 (Motocachy Ruins): This series of hilltop platforms or pyramids and the accompanying fortification walls was explored
in 1967. The ceramics discovered here are at least partly Early Horizon. The split stone architecture also corresponds with that found at other Early Horizon sites in the valley (Plate 26B -- Ceramics).

PV 31-56 (Kushi-Pampa or Siete Huaca): Kushi-Pampa is an extensive site situated on a high plateau overlooking the upper Nepeña. There are several parts to the site, an enclosed central area surrounded by a multitude of irregular stone house foundations. On an adjoining plateau are many more house foundations (PV 31-60) which may be an extension of this site. The central enclosed area, almost a kilometer in length, contains rooms, courtyards, fieldstone, and the entrance ways and corners of the edifice are of finely cut granite. There is some sculpture on the site which appears to be related to Chavin. The site is dated on the basis of the ceramics, sculpture and architecture (Plate 26A -- Ceramics; Proulx, 1968, Plate 5).

PV 31-60: This large habitation site is on a plateau separated from Kushi-Pampa by a deep ravine. The entire site is made up of hundreds of irregular house foundations, and it is probably an extension of PV 31-56.

PV 31-61: This is a small habitation site located on the northern outskirts of the town of Moro. The buildings are constructed of fieldstone, and several large walls bisect the site. It is dated to the Early Horizon on the basis of the ceramics.

PV 31-64 (Pincha-Marca or Paradones): Pincha-Marca is an interesting site on the valley bottom in the Upper Valley area. It is a complex of stone walled enclosures fashioned of finely cut stone with elegant cut granite entrance ways -- very much like Kushi-Pampa (PV 31-56) and Kiske (PV 31-46). Although the site was probably reoccupied, it is placed in the Early Horizon on the basis of its architecture (Plates 22A and 22B).

PV 31-65: There are scattered house foundations built on terraces up a mountainside at this multioccupational site. Some of the sherds appear to be Early Horizon, but there are Middle Horizon sherds present also. It is not known to which period the architecture belongs.

PV 31-155: This interesting petroglyph site is situated at the back of the pampa adjoining the Hda. Motocachy. At least two of the engravings appear to be Chavinoid (see Plates 29B and 30B; Figures 14-18).

PV 31-157: This site is an extensive habitation area covering the eastern plateau overlooking the Rio Salitre and the Rio Nepeña. The houses are similar to those found at PV 31-60 and surrounding the enclosure at Kushi-Pampa. The site is dated on the basis of the ceramics found there.
PV 31-159: On the western side of the Rio Salitre, opposite PV 31-157, is a stone walled compound consisting of several rooms. The ceramics suggest an Early Horizon date.

PV 31-175 West: This very interesting site was discovered in 1971 near the mouth of the Rio Vinchamarca River. Essentially it is a terraced mountain top surrounded by various fortification walls of cut stone. Scattered around the ruin were numerous Early Horizon sherds bearing the distinctive circle and dot design (Plate 25A and B).

PV 31-177: This is a small cemetery at the base of the mountain containing PV 31-175. Some circle and dot sherds were found on the surface, but the graves do not necessarily date to this period.

Chavin architecture varies from one site to another and between the Upper and Middle Valley areas. Stone is the principal construction material. In most sites fieldstone with flattened faces has been selected; in some cases the rock may have been split to form flat surfaces. In the larger sites (such as PV 31-56, PV 31-64 and PV 31-46) huge blocks of stone are used, and these have definitely been shaped. Doorways, lintels, and corners in these buildings are of specially selected stone, often granite. These stones have been cut and smoothed, and in one case, at Kushi-Pampa, a lintel had been sculptured. The walls generally have no mortar binding them, but rather, small pieces of stone are wedged in the cracks between blocks. Sometimes the stones alternate in large and small layers much as is the case at the site of Chavin de Huantar in the Highlands.

In the Middle Valley there are some sites where stone has been used (e.g. PV 31-125) but most of the sites are constructed of a mixture of stone and conical adobes. There are a number of parallels between these Nepeña Valley sites and the ruins of Cerro Sechin and Moxeke in the Casma Valley. Undoubtedly there are other similarities with the Early Horizon sites of Pallka, Sechin Alto, Chankillo, and Huaca Olivar in Casma, but the author has not visited the sites nor has he completed his research on them. These comparisons will be the subject of a separate paper.

The subject of settlement patterns has been touched on earlier. The Chavin occupants of Nepeña preferred to place their habitation sites in defensive positions overlooking the fields and water supply below. Most sites have some form of defense walls, and if the fortress of Kiske does indeed belong to this period, it is an excellent example of a purely military structure. The habitations of the commoners are generally one-roomed irregularly shaped structures constructed of fieldstone. Often they are clustered closely together as at PV 31-60, PV 31-56 and PV 31-157. A few of the sites have enclosed areas which may have served as elite centers. The huge compound at Kushi-Pampa is the best example, but there are analogous structures at PV 31-159, PV 31-64 and PV 31-47. The true function of these buildings cannot be fully realized without some excavation.
Most of the known Chavin religious sites were located on the valley bottom in the Middle Valley area. It is somewhat puzzling that they would build such sacred edifices in such an indefensible place. There may have been habitation sites in this part of the valley also, but none have been discovered. If they were located on the valley bottom they could very well have been destroyed by periodic flooding or by recent cultivation practices. The typical Early Horizon site in this part of the valley is a low mound, often built in several stages, constructed of stone and conical adobe. In most cases the sites here had been re-occupied.

Early Horizon Ceramics

The analysis of Early Horizon ceramics proved to be a formidable task for several reasons. First of all, Classic Chavin blackware with incised or modeled decoration is rare in the valley. A few examples have been photographed from private collections, and Tello reportedly found such sherds in the fill at the temples of Cerro Blanco and Punkturí (Tello, 1943, Plate XIV, a), but none have been found in the surface collections made at the various sites. A second problem is that the vast majority of the surface sherds appear to be from utilitarian vessels. While a good deal has been published on fancy Chavin pottery, there have been few studies of Chavin utilitarian vessels. Another problem has been that the Early Horizon ceramics from Nepeña exhibit certain traits that apparently are local. Some forms of decoration and shape have not been duplicated in the illustrations of similar material from other parts of Peru.

As with any surface collections the sherds I obtained from the sites I feel fall in the Early Horizon may be mixed. Many of the sites were reoccupied in later times, and in other cases the site continued to be occupied into the Early Intermediate period. One of my first problems was to determine whether or not my ceramics were indeed Early Horizon in date, and secondly whether or not all of the surface collections represented single occupation units or were mixed. I solicited the aid of Drs. John H. Rowe and Dorothy Menzel of the University of California, Dr. Donald Collier of the Field Museum of Natural History in Chicago, and Dr. Donald Lathrap of the University of Illinois to comment on my collections, since all have some familiarity with Early Horizon ceramics. Happily all agreed with my preliminary identification of the sherds as Early Horizon, although in the case of a few sites it was suggested that perhaps a mixture was present. Donald Collier saw definite similarities between many of my sherds and his Patazca style (Early Horizon) ceramics from the Casma Valley; there were some differences, however. The identification provided by these individuals was critical in my dating of the sites.

In order to determine which of the sherds were Early Horizon as well as to cross-date the sites, I looked for consistencies within the samples from each site as well as patterns in the samples from all the sites. The result was quite informative (see Table 2). Virtually every site which yielded a ceramic sample had sherds decorated with the unraised circle and dot design. The sites of Punkturí and Cerro Blanco are not included among these, for Tello illustrated only incised
sherds from Cerro Blanco. The circle and dot motif, however, was very likely present there also. This form of decoration, therefore, became one of the most important time markers of the period.

One of the most unusual decorative techniques associated with the Early Horizon is pattern burnishing in criss-cross geometric designs. It is a very prevalent technique at Kushi-Pampa (PV 31-56), but for a long time it posed an enigma because the vast majority of the sherds discovered there were undecorated redware. Identical pattern burnishing later was found associated with more typical Chavin decoration at the sites of Motocachy (PV 31-48) and PV 31-159. I now believe the evidence is strong enough to date this decorative technique to the Early Horizon. The criss-cross design is found incised into Chavin ceramics in other parts of Peru; the use of pattern burnishing seems to be a local Nepeña manifestation.

Other decorative techniques which apparently form a complex of traits during this period are the use of shallow incision, raised nodes or fillets decorated with short incised lines or punctation, short "dash-like" incised lines, and zones outlined by incision and filled with punctation. Although all the traits are not found in each of the sites, Table 2 illustrates the association of the traits among the various sites. Stratigraphic testing at the sites would be necessary to definitely prove the associations, but I feel that the comparison of the surface material has gone a long way to developing a range of techniques used during the Early Horizon.

Decorative Techniques

The Circle and Dot

The most common decorative element used on Nepeña Early Horizon ceramics is the unraised circle and dot design. This is made by stamping a hollow reed or similar implement on the surface of the vessel before firing. In the center of the circle thus formed a small dot or indentation is also impressed. The dots are most often single and placed in the center of the circle (Plates 25A and 26B). Occasionally the dots are off center (Plate 25B), and sometimes there are two dots present (Plate 26B). At PV 31-175 west there were one or two sherds with a short line instead of a dot within the circle (Plate 25B).

The dots are usually arranged randomly over a portion of the surface of a vessel. In other cases they are arranged in crude lines and sometimes the circles may overlap (Plate 25B). The vessel shape on which this decoration is most frequently used is a shallow bowl (or perhaps jar) having a sharp angle or gambrel. The circle and dots are often grouped on one or both sides of the gambrel. Usually the surface of the vessel has been polished somewhat before the circle is impressed. There are several cases, however, where the circle and dots have been executed on the unpolished surface on one side of the gambrel while the vessel surface on the opposite side is polished (Plate 25B).

One problem in analyzing pottery decorated with the circle and dot design is that this form of decoration was revived or reinvented
Table 2
Inter-Site Comparison of Chavin Ceramic Traits

<table>
<thead>
<tr>
<th>Site</th>
<th>PV 31-10</th>
<th>PV 31-36</th>
<th>PV 31-47</th>
<th>PV 31-48</th>
<th>PV 31-56</th>
<th>PV 31-56</th>
<th>PV 31-61</th>
<th>PV 31-65</th>
<th>PV 31-157</th>
<th>PV 31-157</th>
<th>PV 31-157</th>
<th>PV 31-177</th>
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<tbody>
<tr>
<td>Classic Chavin Incised Blackware</td>
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<td>Classic Chavin Modeled Blackware</td>
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<td>unraised circle and dot design</td>
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<td>shallow incision</td>
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<td>pattern burnishing</td>
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<td>raised nodes with incision</td>
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<td>short incised dashed lines</td>
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<td>incision with punctuation</td>
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<td>sharply angled wall on jar</td>
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<td>cooking vessel with handle</td>
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<td>stirrup spout</td>
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during the Middle Horizon, and it continued in use into the Late Intermediate Period. The Middle Horizon circle and dot has a different form than those of the Early Horizon (Plate 10E). The center of the circle is generally raised above the surface of the pot. This apparently is produced by jabbing the reed deeper into the vessel, thus forcing the clay up into the center of the hollow reed. Perhaps the clay was decorated when it was at a different consistency than those of the Early Horizon. In addition to the raised center, Middle Horizon circle and dots are often surrounded by zones or rows of punctations; this is never the case in Early Horizon examples.

The Early Horizon circle and dot has been illustrated from a great number of sites outside Nepeña. Tello (1956: fig. 16) illustrates examples from the Casma Valley, and in Tello (1960: figs. 151, 152 and 153) specimens from Chavin de Huantar are depicted. Willey and Corbett (1954: Plate VIIIa, and Plate VIIIa, c, d and e) illustrate examples from Ancon and Supe, while Izumi (1960: fig. 44, F:() and Plates 41d and 53a) has some from Kotosh. Reichlen (1949: fig. 4<1) has published an example from the Cajamarca area. Other sources could be mentioned here, but the examples would be repetitious. The circle and dot motif is widespread and quite homogeneous from one area to another.

Incision

Another common decorative technique used on Early Horizon ceramics is incision. This may be deep or shallow, broad lined or narrow. Incision is used on both fancy vessels as well as utilitarian. On the former it is used to form intricate motifs, while on the latter it most often is used for geometric designs or simply for borders. In Nepeña several types of incision are found:

1. Deep incision in both broad and narrow lines found on the fancy blackware from Cerro Blanco (Tello, 1943: Plate XIVa) and Punkuri (Plate 1A).

2. Shallow "scratch-like" incision in random patterns found at PV 31-56, PV 31-157 and PV 31-159.

3. Incision used for geometric designs or as borders for areas of punctation such as that found at PV 31-175 West, and PV 31-159 (Plate 25B).

4. Raised nodes or fillets decorated with incision or punctation such as found at PV 31-56, PV 31-157 and PV-175 West (Plate 25A).

5. Short incised dash-like lines found at PV 31-48, PV 31-61 and PV 31-175 West (Plates 25B and 26B).

Incision is so common that listing of references is a useless task. The reader is referred to Tello 1956 (e.g. Figs. 15, 16, 17, and 19), Tello 1960 (e.g. Figs. 154-157), Izumi et al., 1960, and Willey and Corbett 1954 for illustrated examples. The only method of incision
that is rare in other areas is the shallow "scratch-like" incision so common at Kushi-Pampa; the other types are widespread in Peru.

Pattern Burnishing

Burnishing is a general term used to describe the process of smoothing and polishing the surface of a pottery vessel while it is still damp before firing. The normal procedure is to use a small smooth pebble or similar instrument to rub the uneven surface of the vessel. The area the stone passes over becomes smooth and polished in comparison to adjoining areas. If one uses the stone to produce a design by polishing a restricted area, it is called pattern burnishing.

In Nepeña several Early Horizon sites have pottery decorated by burnishing lines which cross each other at right angles or nearly right angles in a criss-cross pattern (Plates 26A and B). The lines, having a higher polish than the remainder of the surface, stand out when the vessel is turned at a certain angle. This form of decoration is very common at Kushi-Pampa (PV 31-56) and is also found at PV 31-38, PV 31-48, and PV 31-159. From my rapid survey of the literature I have concluded that is unique to Nepeña. The criss-cross motif is found in other areas, but the design is incised into the vessel rather than pattern burnished (see Willey and Corbett, 1954: Fig. 73, f, j and k; Tello 1956, Fig. 19f).

Shapes

Early Horizon pottery appears in a great variety of shapes. The reader who wishes to get some idea of the range is referred to Larco Hoyle (1941: Plates 77 to 80) and Carrion Cachot (1948: Plates 12-14 and 22 and 25). The most frequently encountered shapes are stirrup spout bottles, long single-necked bottles, straight sided bowls, and ollas. These vessels were collected primarily from cemeteries, and we can assume that the utilitarian pottery included a number of additional shape categories. The vast majority of the ceramics from Nepeña are fragmentary. The analysis of shape presented here is superficial, to say the least. The author had insufficient facilities in the field to properly analyze the ceramics, and to date the Peruvian Government has not allowed the surface collections out for additional study. Although photographs were taken of all the sherds, it is difficult to determine shapes from them.

I know of only two stirrup spout bottles from the valley, and both are in private collections. The main features of these bottles are recorded here:

1. A thick-walled blackware stirrup spout bottle decorated with modeled geometric units that are lozenge in shape, perhaps representing a stylized plant or feline mouth without teeth. The lozenges are on both the body of the vessel as well as on the stirrup, and they are surrounded by zones of punctation. The vessel is reported to have come from the vicinity of Maquina Nueva (Plate 1D and 5).
2. A black to grey colored bottle decorated by shallow incision. Unfortunately the author's photograph of this vessel did not turn out, and detailed notes on it had not been taken in Peru due to lack of time. I recall the design as being basically geometric, perhaps pendant triangles with punctation. The origin of this piece is unknown.

Similarly, long single-necked bottles are infrequent in the surface collections. The only certain pieces are two vessels photographed in private collections:

1. A long single-necked bottle, red-brown in color, with a raised modeled snake coiled around the body of the vessel. The conical neck flares at the top, forming a lip. It is said to have been found at Punkuri (Plate 1C).

2. A blackware bottle decorated by broad line incision in the form of a feline mouth with outcurving fang. Some of the surface was stamped with shallow punctations. The neck is shorter and thicker than the previous piece. The origin of it is unknown (Plate 1A and B).

There are not too many recognizable shapes in the sherds encountered. The author freely admits he is no expert in determining shapes from sherds, particularly when dealing with unfamiliar materials. The most distinctive shape found at a number of the sites is a vessel having a sharply angled wall. It may be either a shallow bowl or perhaps a constricted neck jar of some sort. Larco Hoyle (1941) illustrates such a form in Figs. 77B and 78A, and Carrion Cachot (1948) in Figs. 12-3, 12-14, 12-16 and 13-7. The Nepeña examples come mainly from PV 31-175 West (Plate 25B), but they are also found at PV 31-48, PV 31-56, PV 31-61, PV 31-157, PV 31-159 and PV 31-177.

Another common shape in Nepeña is the olla or perhaps a smaller incurving rimmed vessel. These have been found primarily at PV 31-56 and PV 31-175 West (Plate 26A). Illustrated examples of this can be seen in Larco Hoyle (1941), Figs. 78A and 79A.

Other shape categories are hard to define from the evidence. Numerous rim sherds were found, some thick, some thin, belonging to vessels with little height. A few fragments of cooking and/or storage jars were found with strap handles. Hopefully a more complete analysis of the pottery shapes and designs can be accomplished at a later date.

Paste and Firing

One of the most interesting features of the Nepeña sample was the lack of blackware. One usually gets the impression that Chavin ceramics are all reduced blackware, but the Nepeña Valley utilitarian ware from the Early Horizon is predominantly redware, often exhibiting
uneven firing. Through the courtesy of Dr. Donald Collier I recently was able to examine a comparable sample of Early Horizon ceramics from the Casma Valley. These ceramics, classified by Collier as the Pataca-Style, were collected in 1956 as part of a surface survey of that valley. There are many close similarities between the Nepeña and Casma samples in paste, firing and design. The vast majority of the Casma sherds were also redware, the color varying somewhat from what I have found in Nepeña, yet similar enough to confirm my dating of them.

Early Horizon Cultural Reconstruction

The Early Horizon occupation of the Nepeña Valley by the Chavin culture was part of a larger phenomenon taking place in northern and central Peru. Chavin is the first true civilization in the Andean area, originating in the highlands perhaps through stimulation from the forest areas to the east. From the highlands the culture spread to the coast primarily by means of a military expansion, taking with it elements of the culture including its technology and religious beliefs. The Nepeña and Casma Valleys exhibit the greatest coastal development of the culture, perhaps because of their strategic geographic location near the primary center of Chavin de Huantar.

We don't know exactly when in the Early Horizon the occupation of Nepeña took place. The date could be determined more exactly if we had more art objects to compare with the highland sequence or if we could excavate some of the sites. Whatever the case, it seems apparent that there were few people living in Nepeña prior to the time of the "invasion" of the Chavin people. Few preceramic sites have been discovered to date, and even fewer Initial Period sites. This picture contrasts with the 20 or so Early Horizon sites described above -- some of which are of substantial size.

It was suggested earlier that the movement of peoples was through the mountain passes of the upper valley area. This interpretation is based on the large number of habitation sites in the upper valley pocket and the corresponding lack of sites in the lower valley. The migrants most likely passed down the mountain trails from the Callejon de Huaylas and upon reaching the fertile upper valley pocket established their habitation sites. The upper valley is in an ideal situation for defense. The bottleneck formed by the juncture of the upper and middle valley areas was guarded by the massive fortress of Kiske (PV 31-46). The habitation sites themselves were erected in highly defensible positions overlooking the fields. Against whom the Chavin peoples were guarding themselves is a puzzle; there do not seem to have been many local inhabitants to challenge the newcomers. If the sites date toward the end of the Early Horizon and the beginning of the Early Intermediate Period, as well they might, the enemy might have been some of the emerging cultures from neighboring valleys.

Secure in the upper valley pocket, the Chavin people lived out their day-to-day existence as farmers. There are no definite indications of elaborate irrigation works at this early period, but the Pampa
of Motocachy may have been cultivated. The upper valley was a much more advantageous area for insuring a constant supply of water. We can assume that corn was the staple crop, and that most of the known cultivated plants from the Peruvian area were known and grown at this time.

Social stratification, as evidenced by the elite center of Kushi-Pampa, was present. It is impossible to determine whether or not the local political set-up was a theocracy or not. Since the majority of the known religious centers are located in the middle valley, there may have been a separate class of resident priests to service them. At Kushi-Pampa there is a large enclosed area with open courtyards, palatial-sized rooms, and possibly some religious architecture. I interpret the function of this structure as an elite center. Surrounding the enclosure are the remains of numerous single family dwellings where the bulk of the population lived. Other sites such as PV 31-157 have similar differences in the architecture.

The Chavin occupation of the Middle Valley area is more difficult to reconstruct. To date only small religious structures have been found in this area, although several of these are quite spectacular. How extensive was the Early Horizon occupation of this part of the valley? Earlier I argued that perhaps the dispersed habitation sites were destroyed by alluviation, but the fact remains that the religious sites themselves are located on the vulnerable valley bottom and managed to survive the whims of nature. Why this dichotomy between the populated Upper Valley area and the sparsely occupied but religiously oriented use of the Middle Valley area? Were the temples of the Middle Valley exactly contemporary with the habitation sites of the Upper Valley? Unfortunately these questions cannot be answered at this time. Recent discoveries in the Moche Valley as well as the earlier work of Collier and Thompson in the Casma Valley may provide comparative material, but the real answers will only be made when the Nepeña sites are excavated.

No Chavin cemeteries have yet been discovered in the valley, but this is not unusual. Although stone carvings, engraved shell, turquoise beads, carved mortars and pestles and elaborate pottery have been found here, the number of items discovered has been small — certainly not commensurate with the position this valley must have had. Much needs to be done to enlarge our picture of the Early Horizon occupation of Nepeña.
The Early Intermediate period witnessed the return of regionalism in Peru. With the collapse of the Chavin empire, independent local cultures emerged. On the north coast a number of cultures appeared, and archaeologists are still disputing the interrelationships among them. There is the Vicus culture whose origins and main proliferation seem to be on the far north coast in the Piura Valley. It shows a blend of Chavin, Moche and perhaps Salinar features. There is the Salinar Culture (or Puerto Moorin) whose main form of decoration is white designs on a red background. The center of this culture seems to have been in the Chicama and Virú areas. The Gallinazo (or Virú) culture is basically a negative painted style, although not all vessels are so painted. It may have originated in the Callejón de Huaylas or Cajamarca areas. Recuay is another culture of highland origin with pottery painted in both negative and positive designs. It spread from the highlands to some of the coastal valleys. And finally, and most importantly, there is the Moche culture originating in the Moche-Chicama valley area and expanding to Lambayeque in the north and Nepeña in the south during the Early Intermediate Period.

In the Nepeña Valley there is evidence for the presence of three of these cultures in the Early Intermediate: Gallinazo, Recuay and Moche. Judging from the sequences found in other valleys it would appear that the earliest culture was Gallinazo, followed by Recuay and Moche. There may have been some overlapping among these cultures, and it is not impossible that two cultures may have shared the valley at the same time. A brief discussion of the local manifestations of each culture will follow, and finally some conclusions regarding the period will be presented.

The Gallinazo Culture

The Gallinazo Culture was named for a site in the Virú Valley (V-59) where it was first discovered by Bennett in 1936. Bennett (1950: 114) feels it originated in the northern highlands and spread from there to the coast. Gallinazo pottery has been found in the Chicama Valley by Bird (Bennett 1950: 17), in the Virú Valley (Bennett, 1939 and 1950), in the Santa Valley (Donnan Ms:18), and now in Nepeña. Bennett described the main features of this culture as follows:

The Gallinazo culture is characterized by a honeycomb habitation pattern. The walls of the closely clustered rooms are made of tapia, ball adobes, or rectangular mold-made adobes, both plain and cane-marked. Pyramids are sometimes associated. The sites today have the appearance of raised platforms or mounds which have resulted from the superposition of habitation constructions and refuse. The graves are simple pits and the skeletons, when preserved at all, are in both extended and flexed positions. The ceramic shapes are dominated by variants of large and small ollas, constricted collar jars, spout and bridge vessels, bird vessels, poppers, stirrup
spout vessels, spout and handle jars, and double vessels. Plain wares dominate, and are mainly of buff or reddish color finish. Among the decorated pieces, resist negative painting is typical, but incision, punch, applique strips, and modeled adorns are also distinctive. Objects of cloth, wood, and other such materials are rarely preserved. There are some nondescript stone and bone artifacts, some copper and gold work which shows a reasonable variety of techniques, characteristic hollow stub legged figurines and incised clay whorls (Benet, 1950: 15).

I hadn't realized that Gallinazo was present in Nepeña until 1971 when I discovered several good examples of this style in one of the private collections I photographed in the valley. Looking over the photographs I had made in 1967 I found three more vessels which are very likely Gallinazo. A brief description of the pottery is added here for the sake of recording it:

1. A double-chambered vessel with a single spout and bridge. One chamber is capped with a bird's head with eyes that are incised with raised centers and a small stubby beak. It could possibly be a whistling jar. The bird has two human arms and hands modeled in low relief on the vessel body. The other chamber is undecorated. There is no trace of paint on the vessel (Proulx, 1968, Plate 14a and Plate 2c).

2. A double spout and bridge bottle decorated with a negative or resist painted design. The spouts of the bottle are conical in shape; the design is in the form of triangles in rectangular zones (Plate 2D).

3. A double chamber bottle with a single spout and bridge much like number one. One chamber has a bird's head, the other has a single conical spout. There are traces of a negative design on the body of the vessel. The bird's head has small widely separated raised eyes and a small parrot-like or hawk-like beak. A slit runs across the head, perhaps part of a whistling device (Plate 2E). This vessel reported was found at Cerro Blanco. It was unclear whether this meant the site of Cerro Blanco (PV 31-36) or the actual hill.

4. A single spout and bridge vessel with bird's head connected to a single conical spout by a handle. The body of the vessel is globular with traces of negative painted designs (Plate 2A). This vessel is reported to have come from the vicinity of Pañamarca.

5. A double chamber vessel much like numbers one and three. In this case the bird's beak points a little higher than in the other examples. This vessel also is reported to have come from Pañamarca (Plate 2B).
Since these vessels come from two different private collections, I am inclined to believe that all came from the Nepeña Valley. I personally have not discovered any recognizable Gallinazo sherds in the surface collections from the sites I surveyed. While it is possible that my unfamiliarity with the material, particularly the plainware pieces, has prevented me from correctly identifying Gallinazo sites in the valley, I am more inclined to believe that they are few in number and probably were reoccupied in later times, covering the traces of them.

Bennett (1950: fig. 20) illustrates body sherds from Gallinazo sites which are decorated with wedge-shaped designs that have been punched into the clay. I have found similar sherds at several sites including the large cemetery at PV 31-39.

In Bennett's description of the Gallinazo sites from Virú, he indicates that at three sites he found mosaic decorated walls. By this he means that the walls were decorated by what I have been calling arabesque -- adobe bricks arranged in geometric designs so as to appear in relief. There are three major sites in Nepeña where this is present. PV 31-198, known as the Huaca del Inca, has one structure with the upper part of the wall decorated in this manner (Plate 23A). Another site with a complex wall mosaic is PV 31-11, Punkuri alto. The eastern side of this complex has an intricate design in it. The last site is PV 31-29, Mound B. Huuquerors have opened up this mound exposing construction with traces of wall decoration. Previously I assumed that these sites were Chimu, for this type of wall decoration is common during the Late Intermediate Period. I am not claiming now that these sites are not Chimu, only that they bear reinvestigation in order to determine whether or not they might be Gallinazo. Sherds were rare at all three sites and they are not very useful for making a temporal determination.

The Recuay Culture

What little has been written about the Recuay Culture is confusing and incomplete. Most Peruvianists believe that it originated in the highlands, for the most elaborate manifestations of the culture are found there. Bennett (1944:99) states that the style has been found in many parts of the Callejon de Huaylas, east of the Cordillera Blanca, west of the Cordillera Negra, and particularly around the site of Aija. He excavated Recuay sherds in the subterranean galleries near Wilkwain, in gallery refuse sites near Shankaiyan, and elsewhere. Some feel that Recuay may have developed on the coast because of the obvious similarities it has to the Gallinazo style (see Larco Hoyle, 1962). Although some connection does exist, Larco's argument is weak, and the highland origin theory is more frequently accepted.

Kroeber divided Recuay ceramics into two phases which he called Recuay A and Recuay B. He describes the "classic Recuay" or A style as follows:

The Classic Recuay (A) ware is marked by several features: linear painting, in general inclining to rounded right angles, often negative (the design in the lighter buff ground color); subjects of the painting often representative of branching-
plumed or horned cat-like animals, strongly conventionalized and supplemented by decorative design in the same manner; jar forms prevalent, with few stirrups; short horizontal spouts or projecting orifices; jar mouths frequently bearing a lip enlarged to a great horizontal disk; modeling, on the jar tops, always in small figures, mostly human, and generally several in number (Kroeber, 1930: 103-104).

The Recuay B style is defined as follows:

The Recuay B style is characterized by representative effects in modeling such as men leading llamas; is detailed, but clumsy in execution; and uses colors in combination with modeling rather than as separate ornament. Its colors are red, white, and black, sometimes with and sometimes without yellow; and the red is vivid (Kroeber 1926:36).

Undoubtedly the Recuay style can be further subdivided, and several people* have been investigating its manifestations, but to date nothing comprehensive has been published on it.

On the coast pure Recuay pottery has been found only in the Santa and Nepeña Valleys, to my knowledge. Larco also claims it is found in the Chao and Virú Valleys, but the reports fail to substantiate this. Apparently no Recuay has been found in the Casma Valley. Larco (1962) felt that the Recuay (he calls it "Santa") Culture developed on the coast in the Santa Valley out of the Gallinazo (Virú) style. He illustrates a number of vessels which indicate a mixture of the two styles which he interprets as an evolutionary stage in the development of Recuay out of Gallinazo. Both negative painted and positive painted Recuay ceramics are illustrated from Santa. In an earlier article, Clothier (1943) also illustrates several Recuay vessels from the Hacienda Vinasos in the lower Santa Valley. Two of the vessels were pedestal based bowls painted with positive designs; a third vessel was a black-ware modeled piece with Recuay modeling, and finally there is a silver pedestal based bowl.

In 1967 I discovered four Recuay vessels in a private collection I photographed on the Hacienda San Jacinto. Descriptions of these vessels are as follows:

1. A globular shaped jar with a flaring bowl-like rim decorated with several panels of "plumed pumas" in positive black paint on a white background. The rim of the vessel is decorated with small black pendant triangles (Plate 40).

* I wish to mention Mr. Ulf Bankmann of Berlin, Germany in this respect. Mr. Bankmann is preparing a thesis on Recuay pottery and has been most helpful to me in providing information about the nature and distribution of the style.
2. A globular jar with a modeled human head having a headdress terminating in a typical horizontal spout. On the left side of the vessel, at the same height as the human head, is a modeled feline head; the body of the feline is painted on the adjoining vessel body in red paint on a cream background. The top of the vessel is formed by a flat, saucer-shaped rim to which is attached a handle (Plate 4D and E).

3. A hemispherical shaped bowl painted red with white designs in the form of a forked fish head and parallel lines.

4. A modeled human head with headdress, part of a much larger vessel. This specimen has large napkin-ring ear spools, an open mouth exposing the teeth, and large circular eyes with an incised outline. The pupils of the eyes are unpolished as is the interior of the mouth; the remainder of the face is highly burnished. Certain aspects of this piece are reminiscent of the Gallinazo style, but the Recuay traits seem to predominate (Plate 4F).

A fifth possible Recuay vessel was found in another private collection that same year:

5. A fragment of the neck of a jar having a modeled human head attached to the neck. The head has incised circular eyes with a punctated pupil, a pig-like nose, and a slit-line mouth. On the opposite side, painted on the neck of the vessel, is a geometric design in white and black on red. Some aspects of this vessel appear to be Gallinazo, while the painting looks even Middle Horizon (Plate 4A and B).

I also discovered in 1967 a looted cemetery with fragments of three Recuay vessels lying on the surface. The site, which I numbered PV 31-73, is in the Lower Valley area, about 2.5 kilometers west of the ceremonial complex of Pañamarca. The cemetery was in a depression at the bottom of a large natural hill on the valley bottom. Built on the rocky projections overlooking the cemetery were two adobe pyramids. The vessels found are the following:

6. A white pasted pedestal base bowl painted with a series of birds. The method of decoration was negative painting, the birds being formed by the white background of the vessel being surrounded by black paint. The paint, however, does not appear to be the same scorched type of material usually used (Plate 4H).

7. A portion of a rounded bowl painted with bird in red paint on the white paste; the bird may be a Garza (Plate 4G).

8. Another fragment of a rounded bowl having a geometric crescent design in red on a white background (Plate 4I).
Shortly after completion of my fieldwork in 1967 I learned of a Recuay gravelot recorded in the Nepeña Valley by Dr. Michael Moseley of Harvard University. The site where the vessels were found was called "Tres Marias." I strongly suspect that PV 31-73, the cemetery where I discovered the surface Recuay sherds, is Tres Marias. I have examined the photographs of this gravelot and provide the following description for the record:

9. A pedestal base bowl painted with a parrot in red and black on the white paste. The parrot motifs are separated from each other by vertical lines. Inside the bowl is an interlocking geometric motif in red (Plate 3A, B and C; Figure 5).

10. A hemispherical shaped bowl painted on the exterior with white triangles and parallel lines on a red background (Plate 3D; Figure 6a).

11. A plainware dish with an "X"-shaped incision (potter's mark?) in the center made by the fingers (Plate 3E and F; Figure 6b).

12. A second plainware dish with two small potter's marks near the edge (Plate 3G, Figure 6b).

In 1971 I returned to PV 31-73 to seek further surface collections. I was disappointed to find no additional Recuay pottery there; the surface yielded a few unidentifiable sherds, possibly Middle Horizon. Aside from PV 31-73, the only other site that I have recorded in the valley that may have been Recuay is PV 31-59, Huancarpon. This site is located in the Upper Valley on a high plateau very similar to Kushi-Pampa. The architecture is of stone, and the central part of the site consists of a small stone pyramid. Some of the sherds found at the site have a white paste much like that of the Recuay style. One piece has a curious red on light red geometric design. No one who has looked at photographs of the sherds has been able to identify them, and I am only suggesting that this site be reexamined to investigate the possibility that it may be Recuay.

In light of this evidence I would have to suggest that the Recuay population, if any, was very small in the valley. It is conceivable that the Recuay pottery was imported as luxury items by the local inhabitants of the valley, but I consider this doubtful in light of the large number of vessels reported. We know very little about the Recuay peoples of Nepeña. No identifiable habitation sites have been found, only one small cemetery.

The Moche Culture

Of all the Early Intermediate Period cultures of the north coast, the most highly developed and powerful was Moche. Originating in the Moche-Chicama Valley Area, the culture eventually spread as far north
as the Lambayeque Valley and south to the Nepeña Valley. As a result of his carefully conducted excavations of Moche cemeteries on the north coast during the 1930's and 1940's, Rafael Larco Hoyle was able to divide Moche into five phases based on changes in the ceramics (Larco 1948). These phases, numbered I to V, were substantiated through careful seriation by others and have become the chronological foundation for our discussion of these people. Much has been written on the Moche, and it is not my purpose to describe all aspects of Moche culture here. The reader is referred to Uhle 1913; Kroeber 1925; Larco 1938-39, 1945, 1948 and 1966; Horkheimer 1961; Kutcher 1950 and 1954; Donnan Ms; and Benson 1972 for further information.

The Nepeña Valley is important in any discussion of the Moche culture, for it formed the southern boundary of their empire. Before discussing Nepeña specifically, it might be of some value to describe the situation in the two valleys neighboring Nepeña: Casma and Santa. A good deal is known about the Moche occupation of the Santa Valley through the work of Christopher Donnan who surveyed the valley in 1965 and again in the years 1966-67 (Donnan Ms). He recorded 85 Moche sites, 60 of which were cemeteries. Of the remaining sites 18 were large adobe structures (solid mounds and/or walled enclosures), and only 7 were habitation sites (Donnan Ms:20-24). Donnan attributes the lack of habitation sites to reoccupation of the sites in later periods, destruction by river meandering or cultivation, or the inability to identify Moche refuse deposits (Donnan Ms:24).

Moche sites were found in almost every part of the Santa Valley, but the majority were concentrated in three areas on the north side of the valley: the Pampa de los Incas, near the Hacienda Tanguche, and the Pampa Blanca (Donnan Ms:25-26). The burials were generally extended, wrapped in cane matting, and buried without particular orientation. The most elaborate graves were lined with stone or adobe and roofed with cane (Donnan Ms:112).

Donnan reports that most vessel forms found in the Moche-Chicama area are present in Santa. The main differences he sees between the areas is in certain forms of decoration and some shapes. He mentions that there is lack of fine line drawing (figure painting) in Santa, no specimens of reduced blackware, a cruder surface finish, and flaring bowls all having ring bases as opposed to the Trujillo area where only 50% have this feature (Donnan Ms:233).

The last major point that should be made in regard to Donnan's thesis on the Moche occupation of Santa is a few words about his theory of Moche expansion. The bulk of the ceramics found in Santa were Moche III and IV; a few pieces of Moche II and V were recorded. Donnan feels that the Moche culture developed in the Moche-Chicama area and then spread by military conquest beginning at the end of Moche II, bringing with it political, religious and military domination of the new areas (Donnan Ms:281-284).

I have gone into these details of Donnan's work in order to show similarities and contrasts with my discoveries in Nepeña. Before doing that it is necessary to say a few words about the Casma Valley.
The Casma Valley lies approximately 31 kilometers south of Nepeña. It has been surveyed by Collier (1960) and Thompson (1962a and 1962b) as well as by Tello (1956). Both Collier and Thompson report that they found no Moche sites nor Moche ceramics in their investigations. One or two Moche pieces attributed to this valley are from undocumented collections. Indeed no other Early Intermediate Period culture is represented in the valley (Gallinazo, Recuay, etc.), and both archaeologists contend that either the valley was abandoned during the Early Intermediate Period, or that there may have been a small rural population of completely local character (Thompson 1962a:198 and Collier 1960:415). This data substantiates the claim that the Nepeña Valley was the southern limit of the Moche tradition.

Moche Sites in Nepeña

My fieldwork of 1971 helped shed further light on the puzzling problem of the nature of the Moche occupation in Nepeña. A total of 22 Moche sites (out of 220) have now been recorded for Nepeña. Of these 22, 13 are cemeteries (10 mixed and only 3 pure Moche), 6 are mounds, 1 a ceremonial center, and only 2 are possible habitation sites. This ratio corresponds rather closely to what Donnan found in the Santa Valley. All of the sites are clustered within a few kilometers of one another in the Middle Valley area; none have been found in the upper valley, and only one is located in the upper portion of the Lower Valley. The Middle Valley is comprised of wide pampas on both the north and south sides of the valley, and several large groups of natural hills on the valley bottom. The sites are found in both of these locations.

The best known Moche site in the valley is the ceremonial center of Pañamarca (PV 31-38). Pañamarca is situated on the top and sides of a large natural hill within the valley bottom about nine kilometers up-valley from the Pan American Highway and about four kilometers southwest of the town of Nepeña. The site is on the south side of the highway, a few hundred meters from the small hacienda of La Capellania. It is an enormous ruin covering an area of 650 by 300 meters and rising to an altitude of between 60 and 70 meters above the valley floor. The main feature of the ruin is a large terraced pyramid of rectangular adobes built on the summit of the hill. It is ascended by a zig-zag stairway running up the face of the structure. To the east of the pyramid is a large courtyard that was used as a cemetery. The wall on the north side of this court contains the most elaborate group of murals on the site, the so-called "Freize of the Warriors and the Priests." The area to the north and northeast of the pyramid is covered with rooms and large walled courtyards, often having walls standing in excess of six meters. The roomed structure immediately to the north of the pyramid contains in its confines the second best group of murals of the ruin. Fragmented traces of other murals can be seen on other walls within the site. To the south of the main pyramid is a small stone structure, quite unlike the other architecture of the site. Schaede (1951a) believes that this structure was built in the Middle Horizon when the site was reoccupied.
Figure 7

Distribution Map of Early Intermediate Period Sites

ARCHEOLOGICAL SITES
NEPEÑA VALLEY, PERU

KEY

• SITES

TOWNS - HACIENDAS

RIVERS

CULTIVATION LINE
MOUNTAINS

Distribution of Moche Tradition on the north coast of Peru

(R) = Recuay (PV 31-73)
all remaining sites are Moche

-11-
The association of Pañamarca with the Moche tradition is evidenced by two separate lines of evidence. Burials containing Moche pottery have been found on the site; I picked up some sherds from a recently looted Moche cemetery on the west side of the complex in 1967. Moche style murals are also present on the walls of the ruins. The most extensive of these is the "Freize of the Warriors and the Priests" on the north wall of the large courtyard, and this is only partly uncovered. The exposed section is about ten meters long and consists of eight elaborately dressed individuals in a row. The top part of the wall has eroded away, leaving the figures headless (Proulx 1968: Plate 4B). These murals are almost identical to the figure painting found on Moche ceramic vessels from the valleys to the north. The other murals on the site are found on the north, south and west walls of a large room immediately in front of the large pyramid. An interesting feature about these paintings is that in two cases (those on the south and west) the freizes were covered up by later construction; they run at right angles to the face of the wall and were only uncovered at the expense of destruction to the structure. The exposed section of painting on the south wall consists of two warriors in hand-to-hand combat (Proulx 1968: Plate 4A). A new mural not reported by either Schaedeel or Bonavia is found under similar circumstances on the west wall. It is an elaborately dressed human figure, perhaps in procession like those in the courtyard. The extent of this mural is unknown because it too was covered by later construction.

The final area of important paintings is on the north side of the room. The figures are in two separate exposed areas. Duccio Bonavia's well-described freize of anthropomorphic figures and captives is on the upper part of the wall, near the east side of the room (Bonavia 1959). A representation of a mythical dragon-like creature can also be seen on this wall, but at a somewhat lower level and on the eastern end of the room. All the murals in this room were almost completely destroyed by the earthquake of May 1970. Only the mural of the warriors in combat still remains, and it is in very poor condition. For further information on Pañamarca the reader is referred to Proulx 1968 and Schaedeel 1951a.

The following is a list and brief description of the remaining 21 Moche sites in the valley:

FV 31-11a: A small cemetery located at the foot of the site of Punkuri alto. It is a mixed cemetery containing one sherd which appears to be a Moche flaring bowl.

FV 31-17: A moderate sized cemetery on the north side of the valley. Most of the graves are Middle Horizon, but six definite Moche sherds were collected there in 1967.

FV 31-19c: A mixed cemetery on the north side of the valley containing three Moche sherds.
PV 31-39: A large cemetery at the base of some hills adjoining the site of Pañamarca. Although the cemetery is mixed (Middle Horizon) most of the Moche sherds were found in a restricted area. Over 20 excellent surface sherds were found.

PV 31-40: A moderate sized adobe mound (pyramid) adjacent to Pañamarca. Although no Moche sherds were located there, it is likely that the site is Moche since virtually all of the other cemeteries and ruins surrounding it are Moche.

PV 31-69: A high artificial mound constructed of rectangular adobe located in the field of San Gregorio. No ceramics were found that could definitely date the site, but it is very likely that this mound and the nearby PV 31-70 formed part of a Pañamarca ceremonial complex.

PV 31-70: A second high mound located in the field of San Gregorio several hundred meters west of the main ruins of Pañamarca. No sherds were found here either, but the mound is similar in construction to that of Pañamarca, and its proximity to this complex suggests that it was part of it.

PV 31-103: This is a large habitation site known as Huambacho. The bulk of the construction at the site is Middle Horizon and/or Late Intermediate Period in date. A number of sherds were found there, however, which could possibly be Moche. All are badly weathered, and there are some inconsistencies. If there was Moche occupation here, it is the only site in the Lower Valley where this is found.

PV 31-108: A large mixed cemetery called Sute on the south side of the valley. Most of the graves appear to be Middle Horizon, but several Moche sherds were collected by me, including a portion of a vessel with a modeled deer in low relief. A string of spindle whorls, beads, and charms is said to have come from this cemetery, and they very well may be Moche.

PV 31-114: A pure Moche cemetery, small in size, located in the Pampa de Sute on the south side of the valley. Surface sherds included 47 Moche pieces including the modeled head of a figurine, portions of two spouts and handle jars and 4 necked jars.

PV 31-115: A mixed cemetery (with Middle Horizon) located on the Pampa de Sute on the south side of the valley. Ten sherds of Moche style were collected here.

PV 31-119: Another pure Moche cemetery located on the south side of the valley. Over 29 Moche sherds were collected here.

PV 31-121a: A Moche cemetery and possible habitation area located on a pampa on the south side of the valley. A complete Moche necked jar was found on the surface along with a number of sherds. The cemetery is adjacent to a rectangular stone walled structure that may belong to this culture.
PV 31-123: A mixed cemetery (with Late Intermediate Period) containing 15 Moche sherds located on the south side of the valley.

PV 31-187: A small cemetery with adjacent mound of adobe on the valley bottom. One Moche sherd was found in the cemetery area; it is not known whether the mound belongs to this culture.

PV 31-215: A mixed cemetery around the base of the hills adjacent to Pañamarca.

PV 31-216: A mixed cemetery around the base of the hills adjacent to Pañamarca.

PV 31-217: A mixed cemetery around the base of the hills adjacent to Pañamarca.

PV 31-218: A mound constructed on one of the hilly spurs near the site of Pañamarca.

PV 31-219: A mixed cemetery around the base of the hills near the site of Pañamarca.

PV 31-220: A small adobe mound immediately adjoining the hills on which Pañamarca is built. It is part of the Pañamarca complex but is given a separate number.

In Nepeña Moche architecture is almost exclusively constructed of rectangular adobe. Only at PV 31-121 is there a stone structure that may fall in this period. The settlement pattern in this valley is interesting. The center of focus of the Moche occupation is Pañamarca. This site formed a complex which included the mounds PV 31-40, PV 31-218 and PV 31-220. In addition to these the nearby mounds of PV 31-69 and PV 31-70 are good candidates for also being Moche. Finally the cemeteries which surround the base of the hills to the south of Pañamarca are also part of the complex: PV 31-39, PV 31-215, PV 31-216, PV 31-217, and PV 31-219. The other Moche sites listed above are found within a few kilometers of Pañamarca. It appears that the Moche occupied only a restricted part of the valley. Roads leading to the Pampa de Carbonera near the town of Nepeña on the north side of the valley may date back to Moche times, but there is no definite evidence for this.

Moche Ceramics

Knowledge of the Moche ceramic tradition from the Nepeña Valley was derived from a sample of 54 complete vessels photographed from eight different private collections, and approximately 150 Moche sherds obtained from the 20 sites described above. As might be expected, the bulk of the complete vessels can be classified as fancy pottery; collectors rarely want ordinary cooking and storage pots. Likewise there was some bias in making the surface collections, for decorated pottery is a much more secure indicator of chronology than plainware. Attempts were made to collect plainware that could definitely be attributed to
the Moche, but on mixed sites this often was very difficult. Thus the sample is far from complete.

Several general observations can be made at the start. The range of vessel shapes include most of the shape categories found in the Santa, Virú, Moche and Chicama Valleys. There are stirrup spout bottles of several types, spout and handle bottles, dippers, flaring bowls, collared jars, and face neck jars among the fancy varieties. Infrequent to absent in the sample are necked bowls (indeed bowls of any sort), ollas and other storage jar shapes. Decoration includes modeling, red-on-white geometric painting and press molding. Fine line figure painting is present on only one vessel, the one flaring bowl in the sample. No typical Moche figure painted stirrup spout bottles have been found. Donnan also mentions that figure painting is very rare in the Santa Valley. The situation is interesting in Nepeña, for the murals at Pañamarca are very similar to the types of motifs found on figure painted pottery; yet no such pottery has been found.

The breakdown of shape categories within the sample from the private collections is as follows:

<table>
<thead>
<tr>
<th>Shape Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stirrup Spout Bottles (classic shape; Plates 5A and B)</td>
<td>11</td>
</tr>
<tr>
<td>Stirrup Spout Bottles (human form with spout on back)</td>
<td>2</td>
</tr>
<tr>
<td>Single Spout and Bridge Bottles (Plate 5E)</td>
<td>7</td>
</tr>
<tr>
<td>Spout and Handle Bottles (pitcher shape; Plate 6C)</td>
<td>7</td>
</tr>
<tr>
<td>Dippers (Plate 6D)</td>
<td>3</td>
</tr>
<tr>
<td>Flaring Bowls (Plates 6E and F)</td>
<td>1</td>
</tr>
<tr>
<td>Collared Jars (unmodeled; Plate 6D)</td>
<td>4</td>
</tr>
<tr>
<td>Collared Jars (modeled; Plates 5C and D)</td>
<td>11</td>
</tr>
<tr>
<td>Face Neck Jars</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
</tbody>
</table>

Among the motifs modeled or press molded on vessels in the sample are seated humans, the anthropomorphic canine-toothed deity Ai-Apec, the
frog, spondylus shell, chitons or shells, a human skeleton, owl, duck, parrot, crab and dog.

From the surface collection certain shapes and/or methods of decoration could be ascertained. There are listed here for the record.

<table>
<thead>
<tr>
<th>Total identifiable Moche sherds</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV 31-11a: 1 fragment of a flaring bowl rim</td>
</tr>
<tr>
<td>PV 31-17: 2 spouts from pitchers 3 decorated body sherds 1 fragment with a modeled human leg</td>
</tr>
<tr>
<td>PV 31-19c: 1 bowl fragment with geometric design 1 fragment with modeled ears of corn 1 modeled fragment (unidentifiable)</td>
</tr>
<tr>
<td>PV 31-38: 1 fragment of the neck of a pitcher 1 portion of vessel with modeled peanuts 1 fragment of a spout</td>
</tr>
<tr>
<td>PV 31-39: 2 portions of flaring bowls 2 fragments of pitchers</td>
</tr>
<tr>
<td>PV 31-103: 3 fragments of stirrups with white paint</td>
</tr>
<tr>
<td>PV 31-108: 1 fragment of modeled collared jar with deer 1 string of beads, charms and spindle whorls</td>
</tr>
<tr>
<td>PV 31-114: 1 modeled head of figurine (?) 2 pitcher fragments 4 fragments of necked jars</td>
</tr>
<tr>
<td>PV 31-115: 1 fragment with modeled lizards 2 body sherds with w/r painting</td>
</tr>
<tr>
<td>PV 31-119: 1 fragment of a pitcher 1 portion of a collared jar</td>
</tr>
<tr>
<td>PV 31-121: 1 complete collared jar with w/r geometric design 1 body sherd with red-on-white</td>
</tr>
</tbody>
</table>
PV 31-123: 1 olla rim sherd
1 neck of a pitcher(?)

PV 31-187: 1 spout of a bottle

PV 31-215: 1 portion of a ring base bowl
1 spout or neck of small bottle

PV 31-217: 1 pitcher fragment
1 painted body sherd

Admittedly the sample from this valley is small, and one can never be completely certain that all of the vessels in the private collections have valley provenience. I personally feel confident that they do, for my sample includes eight separate private collections and there is a fair amount of consistency among them. I do not purport to be an expert on Moche ceramics. From my limited knowledge it appears that the great majority of the Moche vessels can be dated to Phase IV of the style. There very likely are some Moche III vessels in the sample, but the main period of occupation of the valley was in Moche IV time.

As is the case in the Santa Valley, the Moche vessels from Nepeña are more crudely made than their counterparts in the Moche heartland of the Trujillo area. There is no evidence of any fine vessels being brought into Nepeña from the far north; the Nepeña vessels were either made locally or at most brought in from the Santa Valley.

Moche Cultural Reconstruction

One of the greatest enigmas of the Early Intermediate Period in Nepeña is the nature of Moche occupation in the valley and its relationships with Gallinazo and Recuay. Since the Gallinazo and Recuay cultures are known mainly from pottery in private collections, virtually nothing is known about the settlement patterns of these people in the valley nor the nature of their sites. The evidence from neighboring valleys suggests that the Early Intermediate Period began with the spread of Gallinazo influence into Nepeña, replacing the influence of the Chavin culture which had collapsed. Whether or not this involved the movement of new peoples into the valley or simply the infusion of new ideas is now known. Whatever the case, the valley does not seem to have had a large population at this time; indeed there may have been less than there were in the Early Horizon.

Next came the intrusion of the Recuay culture, very likely over the mountains from the Callejon de Huaylas. I am more inclined to argue for an actual migration of people into the valley at this time rather than a diffusion of traits, for the pottery style is pure in
form, and an actual Recuay cemetery has been discovered. The location of this cemetery in the Middle Valley area, less than two kilometers from Pañamarca, may be of significance. The Recuay culture probably occupied portions of the valley until the middle of the Early Intermediate when the Moche culture moved in.

I am in complete agreement with Donnan's hypothesis regarding the spread of the Moche culture from the Trujillo area. His evidence in the Santa Valley suggested the sudden military occupation of that valley in Moche III and IV, replacing the earlier Gallinazo culture. The archaeological evidence from both the Virú and Santa Valleys supports the contention that it was a military conquest which brought along with it certain political, religious and social aspects (see Donnan Ms:280-286).

Much the same thing seems to have occurred in the Nepeña Valley. Moche pottery appears suddenly during Phase III of the style with the main thrust occurring in Phase IV. An actual migration of people into the sparsely settled Middle Valley area took place; their bodies have been found in the 13 recorded cemeteries near Pañamarca. Pañamarca was the focal point of this occupation. This magnificent ceremonial center was constructed in several stages, very likely on the remains of earlier religious architecture. In the rooms and courtyards facing the main pyramid evidence of this reconstruction can be seen: walls with beautiful murals covered by later construction of the same type, blocked doorways, and additions to walls. The true developmental sequence at this site will only be understood when detailed excavation is undertaken.

Why did the Moche come to Nepeña? To expand their empire? To found another ceremonial center? To establish a buffer zone at the southern limit of their territory? No answer can be made at this time. The construction of Pañamarca must have involved the labor of large numbers of people, but where did they live? Practically no habitation sites have been identified. Perhaps these were located on the valley bottom and were destroyed; in the Santa Valley Donnan was faced with the same question. Then again there may never have been a large permanent Moche occupation. Workers may have been brought in for construction of the ceremonial center and housed in temporary buildings near the site. Although this alternative is unlikely, it should be considered. Presumably the ceremonial center, once built, had to be maintained, and that would require the presence of at least a minimal number of people.

We do know that the Moche were restricted to a small part of the valley. Remembering that this was the frontier of their empire, the settlement pattern does not seem illogical. There may have been remnants of the Recuay peoples in the Upper Valley area which prevented the Moche's expansion up-river, but the more likely explanation is that the effort at colonizing this valley was minimal. The Santa Valley offered better agricultural land and a more secure water supply. Nepeña was an outpost whose growth was stifled by increasing loss of power from the central area at the end of Moche IV.
One major question remains unanswered. Why was such an important ceremonial center built in a frontier area? A parallel exists on the northern frontier of the Moche empire where murals have recently been discovered in a small mound known as Huaca Facho on the Hacienda Batan Grande in the Lambayeque Valley (Donnan 1972). The exact answer is not known at this time. If the political structure of the Moche was a theocracy, as well it might have been, the priests were also the secular leaders, and the ceremonial center would have served as both the religious and administrative center of the area.
THE MIDDLE HORIZON

The Middle Horizon (540 - 900 A.D.) was a second period of unification in Peru, the influence in this case coming from the southern Andes. Menzel (1964) divides the Middle Horizon into four epochs. There were three major centers for the expansion of culture at this time: Tiahuanaco on the southern shore of Lake Titicaca in Bolivia, Huari near Ayacucho in the southern highlands of Peru, and Pachacamac on the central coast of Peru. According to Menzel's reconstruction the initial spread of influences flowed from Tiahuanaco to the Ayacucho area in Epoch 1; the major impetus of this contact was religious in nature rather than military. The city of Huari was established before the end of Epoch 1 and it became the principal center for expansion throughout Peru rather than Tiahuanaco whose control extended throughout Bolivia, parts of Chile and southern Peru. The Huari empire grew through military conquests in Epoch 2, and a secondary center, Pachacamac, developed on the central coast. The height of centralized control occurred in Epoch 2, and by the end of that epoch Huari had collapsed, and Pachacamac had undergone a similar decline. This, however, did not end the Middle Horizon; indeed, it only marked the beginning of major developments on the north coast.

In the Nepeña Valley the Middle Horizon witnessed a major population explosion. Almost half of the recorded sites in the valley (102 of the 220) have evidence of Middle Horizon occupation. Large cities appear in the valley for the first time along with well developed roads, irrigation systems, and fortifications. Menzel (personal communication, 1967), who examined my slides of Middle Horizon ceramics from the valley, identified virtually all of them as belonging to Epochs 3 and 4 -- the periods following the collapse of centralized control and expansion from Huari and Pachacamac. This seemingly incongruous situation is not unique to Nepeña but seems to be true for all of the north coast of Peru. Menzel suggests (in the same letter) that this may have been due to several factors. Once the central control of Huari and Pachacamac had ended, the peripheral areas had a chance to exercise their independence. She feels that the flourishing of north coast culture beginning in Epoch 3 was concurrent with the introduction of Moche mold-making techniques in pottery. This mass production technique for pottery, coupled with the mingling of Moche and Huari religious themes, produced a special regional expression of religion which was propagated by the representations on the mass produced pottery. She readily admits that these are only some of the factors at work at this time; what is left unanswered is the source of the large populations which filled these valleys. I will make some suggestions at the conclusion of this section.

Middle Horizon Sites

A total of 102 sites in the valley exhibited evidence of Middle Horizon occupation. The following table makes some statistical comparisons of the sites to the three valley divisions:
Table 3
Comparison of Distribution and Building Material of Middle Horizon Sites

<table>
<thead>
<tr>
<th></th>
<th>Total Sites</th>
<th>Cemeteries</th>
<th>Habitation Sites</th>
<th>Ceremonial Sites</th>
<th>Forts</th>
<th>Adobe Construction</th>
<th>Stone and Adobe Construction</th>
<th>Stone Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Valley</td>
<td>18</td>
<td>6</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Middle Valley</td>
<td>45</td>
<td>27</td>
<td>11</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Lower Valley</td>
<td>39</td>
<td>25</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>102</td>
<td>58</td>
<td>32</td>
<td>11</td>
<td>4</td>
<td>10</td>
<td>5</td>
<td>30</td>
</tr>
</tbody>
</table>

Middle Horizon habitation sites are evenly distributed throughout the valley. They are most frequently constructed of fieldstone although rectangular adobe or a mixture of stone and adobe is sometimes found in the lower valley. The sites range in size from small settlements of one or two structures to what can only be described as small cities. There are five or six patterns into which the habitation areas fall: stone houses built on artificial terraces up steep slopes of hills, stone or adobe compounds with internal rooms, raised platform areas with indications of rooms, large settlements of stone houses on high plateaus, settlements in open areas protected by surrounding hills, and refuse areas where indication of architecture has disappeared.

The most frequently encountered of these types are the sites with houses built on artificial terraces up steep slopes of hills. Typical of this variety is PV 31-43 on the north side of the valley. Here hundreds of house foundations litter the side of the hill. Smaller hills were leveled, and larger buildings, either habitations for the upper classes or public buildings, were erected on them. An acequia cuts across the face of the site and extensive cemetery areas lie below. Other sites of this same type include PV 31-4, 14, 52, 63, 65, 145, 147, 151, 154, and 175E.

Rectangular or near-rectangular stone compounds, sometimes surrounded by smaller structures, also date to this period. One such example is PV 31-116 on the Pampa de Sute on the south side of the valley. Here a large rectangular enclosure is divided into a series of rooms and courts. Extensive cemeteries surround it. Other sites of this category are PV 31-5, 7, 47, 121, 124, 158, and 164. PV 31-93 is an adobe...
compound which produced Middle Horizon sherds but which may be a later construction.

Raised platform areas are rare, and their function as habitations is in question. They are found at PV 31-12 and PV 31-124. In the upper valley high plateaus were preferred as a location for habitations. Good examples are found at PV 31-111 and PV 31-158. In some parts of the valley Middle Horizon sherds were found over extensive areas with no indication of the site being a looted cemetery, but still lacking architecture. These refuse areas are classified as habitation areas on the presumption that the architecture has disappeared through natural causes. Sites in this category include PV 31-134, 178, 206 and 207.

Some of the largest sites are on relatively flat terrain but protected by surrounding hills. One such site is PV 31-6, a site of about one square kilometer in size located directly behind the Hacienda San Jacinto in the middle valley. The site can be appreciated only by climbing one of the nearby mountains and viewing it from above. It is situated on an alluvial fan between two projecting mountain spurs on the north side of the valley. Constructed entirely of fieldstone, the site is laid out in open courtyards of various sizes surrounded by agglutinated habitation structures of small dimension. Several defense walls cut through the site, and several old canals, probably for carrying off water from the infrequent flash floods, are on either side of the main part of the ruins. A cemetery area is on the west side as well as some terracing on neighboring hillsides. Water for the hundreds of people who may have lived here was provided by an acequia which ran down the north side of the valley terminating in the vicinity of the site (see section on ancient canals). Other examples are PV 31-13 and PV 31-149.

Naturally all of these habitation sites are not contemporary. A preliminary examination and seriation of the pottery suggests that many of the sites in the lower valley area are either very late in the Middle Horizon or are transitional to the Late Intermediate Period. The site of Cerro Samanco (PV 31-4) and the cemeteries of PV 31-144 are in this category. The significance of this distribution cannot be understood without additional information and a more thorough knowledge of the ceramic sequence.

Cemeteries are the largest category of sites, with 58 being recorded for the valley; about one-third of them are mixed, usually with earlier material. The location of the cemeteries follows the same pattern found for Early Intermediate burials. The sites are situated most frequently in the sandy pampas, often at the base of hills on either side of the valley. In a few cases the sites are higher up on the hills. Since no cemeteries have ever been scientifically excavated in Nepeña, details about depth, orientation and form can only be partially reconstructed from what huáqueros have left behind. Middle Horizon graves vary greatly in depth. Most are small pits in the sand one to two meters in depth, in some cases lined with fieldstone or rectangular adobe. Richer graves (at least we assume they are of upper class people)
Figure 8
Distribution Map of Middle Horizon Sites
are sometimes dug to greater depths of up to four meters, judging from the holes left behind by grave robbers.

Some of the cemeteries are immense in size. The recently looted cemetery known as "Dinamite" (PV 31-141) on the south side of the valley covers at least a square kilometer and has thousands of graves. A smaller but very interesting cemetery is PV 31-130. This was an unmixed cemetery having large quantities of painted ceramics in association with utilitarian ware. The associations found here helped to verify the range of ceramic types for this period. Other Middle Horizon cemeteries are PV 31-3, 9, 11a, 17, 18, 19c, 20, 22, 24, 26, 32, 35, 39, 62, 74, 78, 79, 81, 82, 83, 85, 86, 88, 93, 97, 98, 102, 104, 106, 107, 108, 110, 113, 115, 116, 117, 118, 124, 126, 130, 136, 138, 139, 140, 141, 144, 146, 147, 148, 149, 150, 165, 169, 172, 176, 177, 186, 203, 210, 211, 215, 217, and 219.

As is the case in most cemeteries in this valley, preservation is very poor. Mummies are practically non-existent although skeletons are numerous. The skulls frequently exhibit occipital flattening and the maxillae and mandibles as well as some of the long bones are often stained green from the presence of copper on the corpse. Grave goods include pottery, textiles, gourd containers, agricultural implements, thorn needles and other miscellaneous items.

Well-defined Middle Horizon ceremonial sites are rare. There are two possible explanations for this phenomenon. We know that the culture of this period possessed a complex religion. Representations from the pottery, the religious architecture and sculpture at Tiahuanaco, and the strong probability of the use of oracles attests to this. One explanation is that this religion did not require the use of elaborate public temples as seen in the Early Horizon and Early Intermediate periods. Shrines could have been small, perhaps located in individual houses. Another explanation is that the Middle Horizon peoples reoccupied earlier religious structures, the most notable being the Moche complex of Pañamarca. Richard Schaedel (1951) attributes a stone structure at Pañamarca to the Middle Horizon inhabitants. Indeed it is a fact that everywhere in the valley these people did reoccupy habitation areas and cemeteries. Perhaps in Nepeña Pañamarca continued to be the main center of religious orientation during the Middle Horizon. The only other possible religious structures are the small mounds of PV 31-143, 188, 189, 190, and 199, the raised platform of PV 31-144, a small enclosure with internal mounds at PV 31-150, and two adobe sites PV 31-31 and PV 31-74 which were probably built in earlier times.

Before anything more positive can be said about Middle Horizon religious architecture there must be a thorough examination of Pañamarca as well as detailed excavation in some of the larger habitation sites of this period.

There are four sites which appear to be Middle Horizon fortifications set up at strategic locations in the valley. PV 31-49 is a multi-roomed complex on a high pass overlooking the dry Rio Solivin. Adjacent
to the fort is a small town built on terraces up the hillside. PV 31-193 and 194 overlook two ancient roads leading into the middle valley area from the north, and PV 31-202 commands an imposing view of the defense wall system on the north side of the valley. The available evidence suggests that the system of low defense walls found all along the north side of the valley was constructed during this time period.

Middle Horizon Ceramics

Introduction

Middle Horizon pottery and the transitional styles leading to the Late Intermediate Period are the most difficult to classify in the entire Peruvian ceramic sequence. Although Menzel’s classic work (1964) has gone far to clarify the stylistic development in the south coastal and highland regions, the development of Middle Horizon and Late Intermediate pottery on the north coast has remained in a confused state. Here local stylistic traditions along with outside influences have combined with the Huari style to produce a myriad of different variations.

In 1926 Alfred Kroeber defined the following styles for his so-called "Middle Period," i.e., falling between Early Chimú (Moche) and Late Chimú (Chimu): Tiahuanacoid, Three-color Geometric, Cursive Tripod, Cursive Modeled, and Red-White-Black Recuoid styles. At that time he did not know whether all were contemporary, and he treated them as a unit in the time block comprising his Middle Period.

In 1944 Kroeber confessed that much confusion still existed in the separation of the various styles. He expressed the belief that as the wave of Tiahuanaco influence spread up the coast from the south, it brought with it many traits of local pottery styles along the way. It was Kroeber’s belief that the "Epigonal" or more crudely executed coastal Tiahuanaco ware may not be necessarily later than the more finely painted Tiahuanaco pottery. On impressionistic bases he felt that the Cursive Modeled ware was more recent in time than the Tiahuanacoid and Three-color Geometric, possibly being a form of Early Chimú or at least contemporary with it.

The first major attempt to sort out the chronology for the north coast was made by Rafael Larco Hoyle (1948) who sub-divided the Middle Horizon styles into Huari Norteño A and Huari Norteño B. Huari Norteño A was a relatively pure style with forms and decoration similar to that found at Huari and Pachacamac. Huari Norteño B is a disintegration of the classic motifs along with a mixture with local forms and motifs. Widespread use of white circles with black dots and "grotesque" representations of felines, human faces and other Huari themes is noted by Larco (1966:163).

Another attempt was made at the Lima Conference (Mesa redonda para regularizar la terminología arqueológica Peruana) of January 1953 to
sub-divide the styles. The Coastal Tiahuanaco style was split into Tiahuanacoid I, II, and III, based primarily on Richard Schaedel's work on the north coast. Unfortunately the divisions between the periods were not clear cut. An article which attempts to trace the development of these styles on the Peruvian coast was written subsequently by Louis Stumer (1956). The following section attempts to paraphrase and interpret this hypothetical development.

**Tiahuanacoid I (or Huari Norteño A):** During this period, which chronologically I would equate with the end of Menzel's Epoch 2B and the beginning of her Epoch 3, Huari influences spread to the north coast perhaps by military means. The route was from south to north, but a secondary invasion very likely came from the northern highlands. The Huari tradition merged with the remnants of the Moche V tradition. In the central area of Moche domination (the Chicama and Moche Valleys in particular) the Moche traits predominated and produced a strain called by Larco "Nohochca-Huari." Outside the central Moche area, in areas like Nepeña, the Huari traits predominated. The main influence of Moche on this strain was a greater tendency toward modeling than was the case in the classic Huari tradition. Tiahuanacoid I or Huari Norteño A pottery retains many of the classic Huari motifs, although not as well executed and with some local variation. According to Larco (1948:38) the forms include the Kero, globular necked bottles with lugs, double chambered modeled jars, and double spout bottles with tapering spouts. A discussion of this period in the Nepeña Valley will be given later.

**Tiahuanacoid II (or Huari Norteño B):** This period, which I would date to Menzel's Epochs 3 and 4 of the Middle Horizon, saw the breakdown of Huari influence on the north coast and a corresponding degeneration of the style along with increasing local variation and admixture. On the far north coast the Huari influence was almost completely obliterated by the newly emerging Lambayeque style and the Cajamarca style from the highlands. In Nepeña and adjacent valleys, however, there remained a strong Huari strain. Outside influences and local developments can be seen in the Nepeña ceramics from this period, but in general they conform to the "Coastal Tiahuanaco" type.

**Tiahuanacoid III:** This style or series of local styles is the most complex of the three. It is a time period when many varying local styles are formed through new developments in individual valleys as well as influences coming from outside the area. Huari stylistic influences have almost disappeared, and the stage is set for the emergence of the Chimú style. Chronologically I would place Tiahuanacoid III at the beginning of the Late Intermediate Period. In the Nepeña Valley there are two main strains, an earlier Nepeña Black-White-Red which develops directly out of Tiahuanacoid II (or Huari Norteño B, to use Larco's terminology), and a later Nepeña Black-on-White which shows a great deal of foreign influence. The former may technically fall in the latter part of Middle Horizon Epoch 4, but certainly the latter style is Late Intermediate in date. The chronological relationships I see for the development of the ceramic sequence during the Middle Horizon on the north coast are outlined on the following table.
Table 4
Ceramic Terminology and Sequence for Nepeña Valley
Middle Horizon and Late Intermediate Periods

<table>
<thead>
<tr>
<th>Menzel's Epochs</th>
<th>Krober's Styles</th>
<th>Larco's Styles</th>
<th>Lima Conference</th>
<th>Nepeña Valley Styles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LATE INTERMEDIATE PERIOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epoch 4</td>
<td>Three-Color Geometric</td>
<td>Huari Norteño B</td>
<td>Tiahuanacoid III</td>
<td>CHIMU Nepeña Black-on-White</td>
</tr>
<tr>
<td>Epoch 3</td>
<td>Tiahuanacoid</td>
<td>Huari Norteño A</td>
<td>Tiahuanacoid I</td>
<td>Huari Norteño A</td>
</tr>
<tr>
<td>Epoch 2B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epoch 2A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epoch 1B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epoch 1A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MIDDLE HORIZON</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epoch 4</td>
<td>Three-Color Geometric</td>
<td>Huari Norteño B</td>
<td>Tiahuanacoid III</td>
<td>CHIMU Nepeña Black-on-White</td>
</tr>
<tr>
<td>Epoch 3</td>
<td>Tiahuanacoid</td>
<td>Huari Norteño A</td>
<td>Tiahuanacoid I</td>
<td>Huari Norteño A</td>
</tr>
<tr>
<td>Epoch 2B</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Epoch 2A</td>
<td></td>
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<tr>
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<tr>
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</table>

The Nepeña Huari Norteño A Style

The transition from the Moche tradition of the Late Intermediate to the Middle Horizon styles in Nepeña is unclear. Although there is a reasonable amount of Moche IV pottery in the private collections from this valley, no definite Moche V vessels have been discovered. What type of pottery was being manufactured in Moche V is a mystery. There are a few vessels in the private collections which appear to be Huari Norteño A (falling in Epochs 1 and 2 of the Middle Horizon). One flask in the Ronald Gordon collection has been identified by Menzel (personal communication) as being in the Chakipampa stylistic tradition with affiliations with pottery from the Huari area and with the Nievería style from the Rimac Valley. Another blackware flask with an engraved motif seems to have a combination of Huari and Moche stylistic traits.

In 1971 a number of additional vessels from private collections were photographed, some of which may also be Huari Norteño A. A beautifully painted polychrome kero with square modeled face with bulging eyes,
similar to those found in the classic Huari areas to the south, is found in one private collection (Plate 7A and B). A flask with small lug handles is painted in almost pure Huari style and falls into this same early period (Plate 7C). A third vessel, a bottle modeled in the form of a bivalve with widely flaring, long-tapered conical spouts seems also to be a mixture of Moche and Huari traits (Plate 7D).

The problem of dating conical spouts should probably be discussed at this point, for there are a good number of vessels falling in this time period which have this trait. The placing of the vessels in the proper place in the chronological sequence would be greatly aided if the origin of the conical spout could be determined. Conical spouts are found in the Moche tradition in Moche V, but to my knowledge they are restricted to the spouts on stirrup spout bottles. No double spout bottles are present until their introduction by the Huari intrusion. Conical spouts are found in early Huari pottery, however, especially at Pachacamac and later in the Nieveria style near Lima. This conceivably could be the main source for this new innovation. Are then all vessels with widely flaring conical spouts early in the Middle Horizon sequence in Nepeña? The decoration on some of them is quite unique, lacking any Huari motifs. A complicating factor is the tradition of similar flaring conical spouts which are an integral part of the Lamayque style which dates to the end of the Middle Horizon and beginning of the Late Intermediate. Could some of the Nepeña vessels have been influenced by stylistic trends coming from the north at a later time? Until a more thorough analysis of the collection from Nepeña and surrounding valleys can be completed, these questions must remain unanswered.

There are a few more additional vessels, some modeled, which may also be early. One is a modeled llama head, painted on each sunken cheek with a snake's head and having widely flaring conical spouts. Two additional vessels are a pair with modeled humans, typical of Moche, with a woman carrying a jar on her back by means of a tump line over her forehead. The vessels are painted with Huari geometric designs. Aside from the private collections, polychrome sherds painted in pure Huari style have been found at only two sites, PV 31-108 and PV 31-186. In view of the small numbers of Huari Norteño A (or Tiahuanaco I) vessels in the valley, one wonders if some or all of those found in the valley may be imports. In any case one can say without qualification that the population explosion referred to above did not occur until the latter part of the Middle Horizon, judging from the ceramic evidence.

The Nepeña Huari Norteño B Style

A large portion of the Middle Horizon pottery can be classified as Huari Norteño B (or Tiahuanaco II) falling into Epochs 3 and 4 of the Menzel scheme. The majority of the sites classified as Middle Horizon contained pottery of this type although some have transitional styles which overlap between Middle Horizon and Late Intermediate. Fortunately many of the sites of this period are single occupation sites,
and we have excellent associations of the fancy painted ware with the utilitarian pottery. The following description does not intend to be a complete analysis of the pottery of this period but rather an interim report based on the presently available sample. For further discussion and illustrations the reader is referred to Proulx, 1968.

Two basic forms of Huari Norteño B pottery are found: fancy decorated ware, often painted in two or three colors but including press molded and modeled pieces, and utilitarian ware, unpainted and usually decorated with incised circle and dot decoration, incised lines, appliqué, or press molding. The utilitarian is naturally most prevalent, being found on the surface of most habitation sites, while the fancy pottery is usually restricted to cemetery areas. The two types, however, are invariably associated at all sites, and it is clear that the fancy pottery was not made only for the grave. The functions of the two classes of vessels simply varied.

The most predominant fancy vessel shapes found in the Huari Norteño B style are globular or "canteen-shaped" jars, face-necked jars, flaring bowls, pitchers, and an occasional double spout and bridge bottle. The globular jar with short cylindrical or slightly flaring neck is the most characteristic shape (Plate 8A to E). These jars are often flattened on the sides giving the appearance of a flask; the bottoms are also flattened. Many of these vessels were made in molds, a technique which is often attributed to Moche influence following the initial contact with this culture. A closely related vessel form is the face-neck jar which is identical to the former except that the neck of the vessel is in the form of a modeled human head (Plate 9). Both types of these jars are almost always provided with a pair of lugs on the upper portion of the vessel on either side of the neck. In the Huari Norteño B phase these lugs are large and thick, pierced by a small hole near the base (Plate 8B). They are placed high on the body of the vessel in contrast to their lower position in later styles. In a few cases they are in the form of bird's heads.

Decoration on the jars is confined to the upper one-third to one-half of the body of the vessel. The bulk of the designs are geometric; only the face-neck jars have anything approaching naturalism. When painted the designs are in three colors: black, white and red. The motifs include white circles with black dots on a red background (Plate 8B and C), "S"-shaped elements which evolve in the next period into two-headed snakes, and other scroll-like designs. The motifs often appear in rectangular zones outlined in white with black borders. A few of the jars (which are tentatively placed in this phase) are decorated by press molding. One has a highly naturalistic condor, almost pure Huari in style, and another has what appear to be humans and animals.

A second major shape category of fancy vessels is flaring bowls. These are small in size with flat bottoms and low, flaring sides (Plate 8F and G). Although they are often decorated on the exteriors, interior painting is characteristic of the period. Exteriors of bowls are often divided into rectangular areas which are decorated with white circles...
having black dots in the centers (Plate 8F). Another common form of exterior decoration is press molding, an easy task since all of these bowls were mold-made. The motifs include condors and condor heads, scroll designs (Plate 8G), and birds, along with other themes. When interior decoration occurs it is usually in two forms: semi-circular geometric elements drawn around the rim of the bowl, or groups of vertical lines running from the rim to the bottom of the pot.

The press molding which is found on the flaring bowls as well as on utilitarian collared jars is widespread on the north coast at this time. It is well described in the literature of the Virú Valley project where it is known as San Nicolas Molded (see especially Collier, 1955). It is also very common in the Santa Valley to the north of Nepeña as well as in Casma to the south. The florescence of culture which occurred in the middle part of the Middle Horizon was spurred by a fusion of Huari and Moche V traits. As suggested earlier the Moche V contribution to this amalgamation was the press molding technique along with some of the Moche iconography. While the Nepeña Valley pottery exhibits many examples of the press molding technique, Moche iconography is not strong in the Middle Horizon. Curiously the iconography is manifested more strongly as one moves south. In Casma the Middle Horizon press molded ware is more elaborate and varied than in Nepeña. It is most complex in the valleys of Supe and Huarmay (for examples from Supe see Kroeber, 1925: The Uhle Pottery Collections from Supe, University of California Publications in American Archaeology and Ethnology, Vol. 21, No. 6, especially Plate 71c, d and 3, and Plate 78a, b, m, n, and o). Huarmay apparently was a center for Middle Horizon press molding.

It is difficult to explain why Moche V iconography is lacking in Nepeña and is so strong further south. I would suggest that the iconography could have spread south on textiles rather than pottery. Recent discoveries of Chavin painted textiles in the Ica Valley and a re-examination of painted textiles from Pachacamac have shed new light on the process of diffusion of art motifs in ancient Peru. Still it is difficult to explain why Nepeña apparently did not receive or accept the elaborate Moche V iconography.

In addition to the flaring bowls just described, there are ring based bowls from a few of the sites. They are similar to the flaring bowls but have deeper sides, flare out more widely, and have a circular ring base about 1 inch in diameter. These ring based bowls gradually are replaced by true pedestal based bowls in the Nepeña Black-White-Red period which follows; there may be a few early examples of this type in our sample for this period. Finally we must mention the presence of a few tripod bowls in the collections from a few sites (PV 31-141, 31-81, and 31-4). Most of these are late, but examples from PV 31-141 are decorated with typical Huari Norteño B motifs.

There are a few pitchers (jars with one handle running from the body to the neck of the vessel) in the sample. Two of these are blackware, both having face-necks and angular bodies (Plate 9F and G). The decoration on both is press molding, one a condor head identical to press molded reliefs on many of the flaring bowls, the other a scene with
humans and animals. Miscellaneous shapes include examples of double spout and bridge bottles, and single spout and figure bottles (Plate 8H). The shapes mentioned in this paragraph are less securely placed in the Huari Norteño B style, for they appear only in the private collections and not in associations at the sites.

The major form of Huari Norteño B utilitarian ware is the collared jar with handles on either side; there are also fragments of large storage jars whose exact size and shape cannot be accurately determined from the fragments. The collared jars come in a variety of sizes and were used for both cooking and storage. The vessels for which we have good associations with the painted ware have relatively simple collars in comparison to the elaborate forms which follow in the next two phases. The collars are straight-sided but flaring (Plate 10A), or slightly beveled in the center. In this phase handles are often absent, and where present usually are small, located at the junction of the body and collar (Plate 10A, B and C). In this respect they are analogous to the lugs found on the fancy necked jars. Many of the cemeteries (particularly PV 31-29) have yielded very fancy forms of these vessels, but I feel the majority fall into the Black-White-Red period and the Black-on-White periods which follow. One form which may date to this time has a semi-circular bulge where the neck joins the body of the vessel which is often decorated with the circle and dot design (Plate 10B and C).

Decoration of the Huari Norteño B utilitarian vessels consists of the raised circle and dot design, zoned punctuation, press molding geometric incision, and appliqué elements which are also decorated with incision or punctuation. The circle and dot motif was common in the Early Horizon ceramics, but the revival or reinvention of this form in the Middle Horizon has a number of distinctive differences. The circles are formed by impressing a hollow reed or similar instrument on the surface of the vessel while the clay is still wet. In most cases the pressure was great enough to force the clay to raise slightly inside the reed, leaving a raised center to the circle. In the center of this raised circle a small dot was punctated. These circles are usually placed on the upper one-third of the body of the vessels, and often they are surrounded by radiating rows of small punctations (Plate 10B). This form of decoration is exceedingly common in Nepeña and seems to have been a local development in the north central coast area. Its range is from the Huarmay valley to the south (Donald Thompson, personal communication) through Casma where it is found in great quantities (Donald Collier, personal communication) as far north as the Santa Valley (Christopher Donnan, personal communication). It is not found in the Virú Valley nor in the Moche-Chicama system in spite of other aspects of Huari Norteño B being present there.

Another form of decoration which begins at this time and reaches its most elaborate manifestations in later times is appliqué. Appliqué consists of small clay elements which have been added to the surface of the vessel as embellishment. In the Huari Norteño B stage this consists of snake-like elements, lizards, birds, etc. (Plate 10D). In the following phases small animals often appear on the body of the vessel or appear as handles on the pots.
Press molding is found on some vessels which can be classified as utilitarian, but this technique was usually restricted to the fancy ware. Incision completes the inventory of decorative forms. This is used for delineating zones of punctuation or the circle and dot design. Pendant triangles outlined by incision are common, but there can always be distinguished from similar elements found on Early Horizon pottery by their context.

The Nepeña Black-White-Red Style

The Black-White-Red style from Nepeña was separated from the Huari Norteño B style on the basis of seriation. Chronologically I feel it falls in Epoch 4 of the Middle Horizon, although it may overlap slightly into the Late Intermediate Period. The sample (14 complete vessels from the private collections) is smaller than for Huari Norteño B, but enough differences exist to make the separation. This style can clearly be seen as transitional between the Huari Norteño B style and the Nepeña Black-on-White style of the Late Intermediate. A few sites have definite examples from this period: PV 31-4, Cerro Samanco, is one of the better examples; PV 31-82 and PV 31-149 are others. My impression at this time is that many of the Middle Horizon sites in the lower valley area date to this period.

Nepeña Black-White-Red vessel shapes include necked jars, pedestal based bowls and tripod bowls among the fancy variety and collared jars in the utilitarian pottery. The necked jar continues to be the most common shape in this period although there are a number of differences with earlier types. The bodies of the jars tend to be larger, although the tendency toward flattening on the sides continues. The thick lugs have been replaced by smaller handles placed lower down the side of the jar (Plate 11). Some of these handles are in the form of frogs, birds, monkeys, or other animal types. One of the major innovations at this time is the appearance of small modeled animals used either as handles or simply placed on the upper portion of the body of the vessel (Plate 11A and B). This appliqué modeling reaches its peak of complexity in the Black-on-White style which follows. The necks on the jars are much more variable than before. They tend to be taller; some are flaring in shape (Plate 11B); others are quite convex (Plate 12A and B). Face-neck jars decline sharply in the sample, and they have all but disappeared by the Black-on-White period.

From the limited associations we have at various late sites, it appears that pedestal based bowls have become the dominant form, slowly replacing ring based bowls and ordinary flaring bowls. Another type of bowl increasing in frequency is the tripod. Decoration on pedestal bowls is less elaborate than in the Huari Norteño B phase, often limited to bands around the rims of the vessel.

There are several new trends in painting which can be generalized here. Designs are basically geometric drawn in white with black outlines on a red background. Design areas are split up into rectangular
zones bordered by white bands outlined in black. The motifs drawn within the zones are also composed of bands of the same width and appearance (Plates 11 and 12). In many cases fine line geometric fillers are found within the bands. These are in the form of "S"-shaped elements surrounded by small dots (Plate 11) or angular straight lines (Plate 12A and B).

An excellent example of the nature of this painting is found on the necked jars. The body of the vessels are divided on the upper half by trapezoidal zones, one on each side. The most common motif is a double-headed snake, sometimes rounded (Plates 11B and 12C), sometimes ending in a Huari-type head (Plate 11E) or more often in a semi-circular head (Plate 11A and C). White circles with black dot fillers often surround the snakes, another link with the older Huari Norteño B phase. Necks on these jars are painted white with black bordering bands on the top and bottom. In most cases geometric motifs are painted on this white ground: step designs, snake heads, chevrons, or other forms.

It is difficult to seriate the unassociated utilitarian pottery. It appears that the collared jar remains the principal shape category. Shape and decoration is much the same as in the Huari Norteño B phase, but there is a greater tendency to apply modeled elements on the exterior. The full range of variation in these vessels will be discussed under the Black-on-White style.

Cultural Reconstruction of the Middle Horizon

Small local populations who were the survivors of the Early Intermediate Period cultures occupied the Nepeña Valley for the first half of the Middle Horizon, well on the sidelines of major events occurring in the southern and central parts of Peru. Before Epoch 2 ended, however, Huari influence began to be felt on the north coast. We know little of the cultural dynamics involved in this initial contact. The intrusion of Huari influence was sudden; Huari ceramics are found associated with local styles in a number of places. Whether or not this intrusion was a military conquest or not cannot be answered positively. In other areas of Peru Huari conquest produced large urban centers and governmental administrative and storage areas. The site of Pikillaqta in the lower Cuzco valley and Wiraqocha Pampa near Huamachuco in the northern highlands are good examples of these storehouses. Rowe (1963:14) identifies a site on the Pampa de las Llamas in the Casma Valley as one of these storage areas. This and the above-mentioned evidence would tend to support some form of military conquest for the north coast, but the evidence at Nepeña is not conclusive.

In Nepeña there is little in the way of Huari Norteño A pottery which dates to Epochs 1 or 2 of the Middle Horizon. Nevertheless there was a major population explosion in the valley during the second half of the Middle Horizon, a time when the centralizing power at Huari and Pachacamac had ended. What forces were responsible for the sudden population growth? There does not seem to have been a heavy stream of migrants into the valley at the time of the height of Huari's power. We
discussed earlier Menzel's theory concerning the reasons for the spread of the Huari pottery tradition -- the taking over of the older Moche mold-made pottery technology which propogated Huari religious themes. Although this does attempt to explain the nature of the ceramic development, it does not say much about the forces behind the cultural changes.

Willey (1971:164) suggests that the concept of urban planning, the socio-political concomitants that go with it, and the large cities that were apparently introduced through Huari influence were responsible for the rapid development that occurred on the north coast at this time. Rowe (1963:13-14) disagrees that urban centers were lacking prior to the Middle Horizon on the north coast, but he does admit that a major fluorescence of urban sites did occur at this time. The evidence from Nepeña tends to support Willey's view. One is struck by the sudden appearance of huge sites in the valley at this time, some like PV 31-6 and PV 31-141 covering over a square kilometer. Huari Norteño B ceramics in association with these sites date them to the second half of the Middle Horizon. One can find Middle Horizon sites in all parts of the valley, in many cases built on the ruins of their predecessors. Huari graves are found in older Moche cemeteries, and there is evidence (Schaedel: 1951) that the Moche ceremonial center of Pañamarca was reused in the Middle Horizon.

The large populations we find in Nepeña may have taken several centuries to emerge, and certainly not all of the sites were contemporary. Nonetheless the urban sites built by these people suggest a complex stratified society which had managed to control its environment and its life by sound administration. The archaeological evidence shows us the canals they built to distribute the waters for irrigation. It gives us a picture of the roads leading north and south out of the Middle Valley area connecting this region with its neighbors. And finally there is evidence of the defense mechanisms needed by such large populations: long expanses of defense or boundary walls, fortifications, and other signs of military control.

Through the pottery of the Middle Horizon we can perceive a microcosm of culture change -- "the impact of forceful cultural contact, disintegration and change, and the reintegration of new forms" (Willey 1971:164). This can be seen throughout the north coast, but the picture is especially clear in Nepeña. The relatively unpopulated valleys of the north coast (such as Casma and Nepeña) provided prime areas for expansion and experimentation. They provide the archaeologist with an excellent laboratory to study the process of cultural contact and integration.
THE LATE INTERMEDIATE PERIOD

The Late Intermediate Period on the north coast spanned the years from approximately 900 to 1470 A.D. It was a time which again witnessed increasing regionalization in Peru and the emergence on the north coast of the Kingdom of Chimor. We normally associate this period with the Chimu who conquered the coast from Tumbez in the north to the Chillon Valley near Lima. Rowe (1948) estimates the beginning of this kingdom took place during the first half of the fourteenth century, roughly comparable in time to the development of the Inca culture in the southern highlands. We often forget the local developments which fall between the end of the Middle Horizon and the Chimu conquest, a period of several centuries. The dividing line between the Middle Horizon and the Late Intermediate on the north coast is a nebulous one. In most cases the transition among Huari-related styles was gradual until the sudden intrusion of the Chimu tradition.

In the Nepeña Valley there are two major cultural traditions which fall in the Late Intermediate Period: Tiahuanacoid III (see chart on page 57) in which I include the last vestiges of the Nepeña Black-White-Red style and the new Nepeña Black-on-White style, and Chimu which follows it. Kroeber's (1925) "Cursive" style, which is found on other parts of the north coast, is related to the Nepeña Black-on-White style and would date to this period also.

Late Intermediate Period Sites

Great difficulty was experienced in identifying the Late Intermediate Period sites in the Nepeña Valley, and particularly in distinguishing those which date to the Black-on-White pottery period. This problem is due to a number of factors. Most sites contain only utilitarian pottery on the surface, and the variation and development of this type of pottery has not yet been worked out for the valley. The raised circle and dot decoration, for example, continues into the Late Intermediate Period. Differences between the Middle Horizon types and those of the Late Intermediate can be seen on complete vessels, but dealing only with sherds, it is often impossible to make distinctions. Another problem in identification of sites is the fact that very little of the fancy Black-on-White pottery has site provenience; the bulk of the vessels in my sample are from private collections.

Chimu period sites are a little easier to recognize because of certain architectural features which are often found. In spite of this the same problem in distinguishing pottery exists at these sites. It appears that many of the Chimu sites were reoccupations of Middle Horizon cemeteries or habitations. We also are very uncertain as to who built the many fortifications in the valley. In the preceding section on the Middle Horizon I expressed the opinion that certain of the forts and defense walls belonged to that period, perhaps constructed to keep out the Chimu. On the other hand the Chimu themselves were a militaristic
people, and undoubtedly some of the fortifications in the valley were built by them.

The final solution to the confusion that now exists is the careful excavation of a few key sites in the valley and a more thorough analysis of the ceramics. Stratigraphic work is badly needed in this valley, for the surface collections, while telling us much, cannot be completely relied upon unless verified by stratigraphic proof.

Forty-two sites have been tentatively identified as Late Intermediate. This quantity may be higher than it should be since a number of the sites are of questionable date. This represents a decrease over the Middle Horizon sites, a trend also observed in the Virú Valley (Willey 1953:297) but just the opposite of what was occurring in the larger north coast valleys. In general this period witnessed a great expansion in the building of urban centers, sites like Chan Chan in the Moche Valley, Pacatnamú in the Pacasmayo Valley, and El Pergatorio (Tecume) in the Lambayeque region. Apparently this was not true in Nepéña. Although there are a number of large sites attributable to the "City Builders" of the Late Intermediate, most of the large sites seem to date to the Middle Horizon.

Virtually all of the Late Intermediate sites in Nepéña are located in the lower and middle valley areas. The six sites listed on the chart as falling in the upper valley are actually all located at the juncture of the middle and upper valleys, so that it can be said there are no identifiable Late Intermediate sites in the upper valley. Here again there are similarities with the settlement pattern in the Virú Valley and elsewhere. The Chimu in particular seem to prefer erecting their major sites near the sea.

As the chart below indicates, the types of sites are almost equally divided among habitations, cemeteries and sites which appear to have ceremonial functions; only one fort that definitely dates to this period has been recorded. None of these categories is mutually exclusive. Most of the habitation sites have attached cemeteries, and many of the ceremonial sites have habitations and cemeteries in association. The principal building material in this period was rectangular adobes, often plastered over with clay. There are a few sites constructed of stone, most located in the Tomeque area at the juncture of the middle and upper valley. The following table summarizes the data just presented (see page 67).

Little can be said about the sites dating to the first half of the Late Intermediate which correspond to the Black-on-White pottery period. The two sites most likely to fall in this period are PV 31-4, a large habitation area known as Cerro Samanco, and a cemetery near Tomeque numbered PV 31-45. Cerro Samanco is an extensive site constructed of fieldstone on the slopes of a group of rocky hills near the sea. The site is divided into a number of sectors, all of which have been described in my previous monograph (Proulx 1968:46-50). Rectangular buildings, one with a central corridor with identical rooms leading off of it (for storage or perhaps a garrison) are common. Pottery with fine line
black drawing was collected here, and the site dates either to the Black-White-Red period or the Black-on-White period.

Table 5
Comparison of Distribution and Building Material of Late Intermediate Period Sites

<table>
<thead>
<tr>
<th>Location</th>
<th>Total Sites</th>
<th>Cemeteries</th>
<th>Habitation Sites</th>
<th>Ceremonial Sites</th>
<th>Ports</th>
<th>Adobe Construction</th>
<th>Stone and Adobe Construction</th>
<th>Stone Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Valley</td>
<td>14</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Middle Valley</td>
<td>22</td>
<td>10</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Upper Valley</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Totals</td>
<td>42</td>
<td>16</td>
<td>15</td>
<td>11</td>
<td>1</td>
<td>15</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

The cemetery in the upper valley was inspected in 1967 after I had viewed Black-on-White pottery at the house of a huacuero nearby. Other private collectors indicated that their pottery of this type may have come from this area. The huacueros claim that under the Chimu period graves, which are quite shallow, the Black-on-White period graves are found at a greater depth. This evidence is only hearsay, and it should be checked out by scientific excavation if any untouched sections still remain of this cemetery.

There are several well-defined Chimu sites in the valley and a good number of others whose pottery suggests that they date to this cultural period. Chimu architecture is typically composed of rectangular adobes which have been covered over with clay plaster. Large enclosed compounds with internal rooms are frequent (good examples of this are PV 31-94, known as Huacatambo, PV 31-105 called Huambachito Viejo, and others). Within the compounds certain rooms are frequently decorated with square niches in the walls, sometimes with a projecting cornice running over them (examples are found at PV 31-11, PV 31-31, PV 31-94, and PV 31-100 -- see Plates 8a and 10a in Proulx 1968). Carved clay arabesque decoration, which is such a dominant feature at Chan Chan, is found at four main sites in the valley: PV 31-11 or Punkurí Alto, one of the mounds at PV
31-29 and PV 31-198 known as Huaca del Inca or Huaca Culebra (Plate 23A). Arabesque clay designs are not confined to the Late Intermediate Period. Willey (1953) has examples from the Gallinazo Period (Early Intermediate — see his plate 20 top) as well as the La Plata Period (Late Horizon — see plate 45). None of the pottery from these three sites was distinctive enough to clearly date the site to the Late Intermediate, but I strongly suspect that all three are of this date.

The fourth example is a beautiful square clay column located on a small mound near Tomeque, numbered PV 31-44. The column is decorated with carved pelicans, mythical humans, and other motifs (see Plate 28). I was unable to locate the column in 1967 because it had been buried to protect it from vandalism. In 1971 I did see part of it projecting from the west side of the mound. It was still covered with corn husks and only stuck out about one foot. The motifs are clearly Chimu, and the mythical humans look very much like the representations at Huaca del Dragon in the Moche Valley. The function of this column is unknown; the area surrounding the site has many traces of Chimu occupation (PV 31-43, PV 31-45 and possibly the sites of PV 31-41 and PV 31-42).

The Chimu favored the broad playas on the north side of the valley for their sites. There are a number of locations which have evidence of occupation at this time. The site of Huacatambo (PV 31-43) is one of these focal points. Located in the lower valley about one kilometer east of the Pan American Highway the site is a large rectangular compound 450 feet long and 250 feet wide. The interior is divided into rooms and courtyards quite similar to the "cuidadillas" or enclosed areas at Chan Chan. Members of the Peabody Museum-National Geographic Moche Valley Project who visited the site remarked about these similarities. One of the internal rooms has square niches in the walls (see Proulx 1968: plate 10a) and another area appears to be an "audiencia." On the playa to the east are smaller compounds at PV 31-93 and PV 31-95. Defense walls, possibly dating to this time, cross the back of the pampa. To the west of Huacatambo is a Chimu cemetery at PV 31-99 and another complex of ruins at PV 31-100. This latter site is extremely interesting and should be more thoroughly investigated in the future. It is described more fully in Proulx, 1968:130-134. There are three main buildings here constructed of adobe with architectural features similar to Huacatambo, and pottery which is definitely Chimu.

Another complex of closely related sites that were at least partly inhabited during Chimu times is located at the settlement of Tomeque, a small bottleneck in the valley which forms the upper limit of the Middle Valley area. There are five sites located here: PV 31-41, 42, 43, 44 and 45. The largest site is PV 31-43 known as Pierna Calzon. It is basically a habitation site constructed on artificial terraces and flattened hilltops of Cerro San Jacinto. The structures are mainly of stone, and the bulk of the sherds are Middle Horizon in style. Enough Late Intermediate sherds were found on the site, however, to suggest that it was reoccupied during the Chimu occupation. Nearby are two mounds constructed of rectangular adobe that seem more positively to have been built by the Chimu. PV 31-44, a small low mound, has been mentioned previously as the location of the decorated Chimu column. Another small
Figure 9
Distribution Map of Late Intermediate Period Sites

ARCHAEOLOGICAL SITES
MEPEÑA VALLEY, PERU

KEY

- SITES
- TOWNS - HACIENDAS
- RIVERS
- CULTIVATION LINE
- MOUNTAINS

[Map of archaeological sites in the Mepeña Valley, Peru, with various sites marked and labeled.

- ANCA
- TONQUE
- HUAMBACHO
- SANTIAGO
- SANCHOS
- LOS CHINOS
- MEPEÑA
- SAN LUCAS
- TUCUMANA
- HUARAHUAS
- CAYMA
- CHICAS
- CHIRPA
- RIOS
- LOS ANDES
- ECUADOR
- BRASIL
]
mound, included as part of the same site, is situated across the road from it. Nearby is a much larger mound or pyramid built of adobe. It is badly weathered and no distinctive sherds were found, but I strongly suspect it was built by the Chimu. Alpacote (PV 31-41) is a complex of stone rooms on the edge of cultivation only a hundred meters or so from PV 31-44. It could well have been a Middle Horizon storage depot; its date and function await excavation. Finally the cemetery PV 31-45 consists mainly of Chimu graves, although huaqueros claim graves belonging to the Black-on-White period lay below them.

Still on the north side of the valley but in the Middle Valley area is a third complex of ruins, numbered PV 31-29. The situation here is very similar to the Tomeque complex. The central focus of the site is a high hill which was strongly fortified with stone walls and ramparts. On top is a stepped pyramid of rectangular adobes. Sherds found on the site are a mixture of Middle Horizon and Late Intermediate styles. Like Pierna Calzon, this section of the site may have been originally built by the Middle Horizon peoples and later taken over by the Chimu. The huge stone complex of rooms known as Cayáán (PV 31-30; Proulx 1968, Plate 7c) is directly adjacent to this site and also seems to date to the Middle Horizon.

Surrounding the fortified hill of PV 31-29 are at least seven distinct adobe mounds and several cemeteries. One of the mounds had been bulldozed revealing an arabesque relief on the walls. The other mounds are badly weathered and some are occupied by huts of the local people. A huge cemetery to the northeast of the main hill is included as part of the site. It is called "Carbonera" after the playa on which it is located. Hundreds of graves have been opened here and the pottery is mostly Late Intermediate in date, although some Middle Horizon and even Late Horizon materials are reported from here. I personally collected over 40 complete utilitarian vessels left behind by the huaqueros; they will be described below.

This incredible complex including Cayáán (PV 31-30) should also be thoroughly investigated in the future. Among other things excavation would help to confirm my hypothesis that the stone architecture was Middle Horizon and that the Chimu with their adobe construction reoccupied many of the earlier sites. Other Chimu habitation sites are PV 31-103 (Huambacho Viejo), PV 31-63, 66, 68, 100, 175E, and 206.

There are 16 probable Chimu cemeteries in the valley, not including the burials sometimes associated with the habitation sites. These are PV 31-15, 16, 17, 24c, 25, 32, 45, 79, 86, 99, 122, 123, 126, 150, 210 and 211. Chimu graves are most frequently simple pits in the sand, although the use of adobes for lining is experienced in some sites (e.g., PV 31-99). Preservation in these cemeteries is better than in the older ones in the valley. One frequently finds coils of rope, textiles, gourds, and wooden objects. No well-preserved mummies are found on the north coast such as those from southern Peru, but the best preserved human remains in Nepéña date to this period. At the Carbonera cemetery (PV 31-29) skulls were frequently found with hair attached. Other bones sometimes
had traces of flesh. These findings, confirmed in other Chimú ceme-
terries, suggest that the climate in Nepeña was wetter prior to the Late
Intermediate Period. One also gets this impression from examining
Middle Horizon habitation sites. Often these sites exhibit low walls
for protection against flash flooding, and in some cases these walls
have been cut through by water-formed channels. Perhaps there is
another explanation for the well-preserved Late Intermediate remains,
for I have not done a thorough investigation of the climatic evidence
for the north coast. A comparative study of the evidence from the
adjacent valleys would easily prove whether or not the "El Nino" cycle
had been disturbed during these centuries causing more frequent rain-
fall to occur in the north.

A small number of sites in the valley seem to have had ceremomial
functions. PV 31-42, the large adobe mound or pyramid at Tomeque, is
one such example, as is the mound of PV 31-44 where the column was lo-
cated. Some of the structures at Punkurí alto (PV 31-11) may also fall
in this category. We have mentioned the numerous mounds at PV 31-29;
other small mounds are PV 31-182, 188, and 205. These latter sites
need not be religious in nature but could be house foundations in the
agricultural fields. Small pyramids at the compounds of PV 31-68, 100,
103, 112, and 150 could be Chimú.

Late Intermediate Period Ceramics

Two principal styles are present in the Nepeña Valley during the
Late Intermediate Period. One I am calling the Nepeña Black-on-White
style; the other is Chimú. Chronologically the Black-on-White style
precedes Chimú, developing out of the Nepeña Black-White-Red style of
the Middle Horizon. As was mentioned earlier this latter style may
also have overlapped into the Late Intermediate. The dividing line is
not clear-cut. There are also a number of vessels in the sample from
private collections which do not fit into either of the two major
stylistic traditions but which have certain traits which suggest a
Late Intermediate date. These will be discussed also.

The Nepeña Black-on-White Style

The Nepeña Black-on-White style (or Tiahuanacoid III -- see descrip-
tion under Middle Horizon Ceramics) is a purely local style which repre-
sents the merging of the surviving elements of the Huari tradition with
locally invented traits. Along with this merger is the influx of foreign
elements which when combined with the former produced a completely new
style. A good number of continuities can be seen with the Nepeña Black-
White-Red style out of which it developed, but there is much that is new
in the style. Its closest similarities are with the "Middle Period"
pottery from Taitacantin in the Virú Valley (see Kroeber 1930: plates
23 and 24; for examples from other valleys see Reyniers 1966: plate 252,
and Muelle 1938: plate 39a). The painting has strong affiliations with
the "Cursive" ware described by Kroeber (1926: plates 3 and 11). The
source of the "Cursive Style" has traditionally been placed in the north-
ern highlands in the vicinity of Cajamarca. Other traits of the Black-
on-White style have similarities to the Chancay Black-on-White style to the south. All in all the evolution of this style is a very complex one. Much more study is needed before the details can be sorted out. Stumer's article (1956) remains one of the best explanations for the development of north coast ceramics.

Unfortunately few good examples of the Black-on-White style, which is present in a number of private collections in the valley, have been found in situ or even in association with utilitarian ware. The sites which are the best prospects for investigation are PV 31-4, PV 31-45 and PV 31-97. There are, however, about 20 complete vessels in the private collections which can be used to define the style and give some idea of the range of variation of the fancy shapes. The utilitarian pottery will be discussed a little later.

The most common form of fancy vessel in the sample is the necked jar or flask which had its origins in the Middle Horizon. The shape is very similar to those described for the Black-White-Red style except that there is more variation. Most have flattened bodies (flask form), but a more globular shape appears (compare Plate 13A with 13D). Small lug-like handles identical to those of the Black-White-Red style are on either side of the neck, but now are even lower down the body of the vessel. Although ornamentation with appliqué modeled animals reaches its peak at this time, the use of modeled animals for handles decreases in the sample. Only two vessels have such supports; in both cases the handles are in the form of modeled monkeys whose tails form the loop handle (Plate 14C). Modeled animals are now frequently found on the bodies of vessels, always on the upper one-third. Monkeys are most frequently depicted, but small dogs or felines are also found in the sample (Plates 13 and 14). In a great percentage of the cases the monkeys are seated on the body of the vessel at the base of the neck and their hands are attached to the neck as if they were holding it up (Proulx 1968: plates 16b and d, and 18a; Plate 13D and E). The use of modeled monkeys at the juncture of the neck and body is a prelude to similar elements on Chimu blackware. Apparently this trait was adopted by the emerging Chimu culture, and it became an integral element of their pottery style. The origins of these modeled animals can be traced to the Middle Horizon ware in Nepeña, but the exact origins of it remain a mystery.

Aside from the modeled animals on these necked jars, each is painted with black designs on a white background. The design area in a few cases extends only down the upper half of the vessel as was the case in the earlier styles, but the more common technique was to cover the entire exterior. Most of the painting is geometric. Vertical bands of alternating wide and narrow widths are interspersed with fine-lined geometric elements. Lozenges with dots, "S"-shaped elements, triangles and wavy lines fill all the available space (Proulx 1968: plates 16b, c and d, and 18a; Plate 14B, 13A and B). On some specimens naturalistic themes are also found: humans, birds, fish, etc. (Proulx 1968: plates 17c and d; Plate 14B). The vertical banding and modeled elements which are so characteristic of this style have strong similarities to the Chancay Black-on-White style. Since little has been published on the
Late Intermediate pottery of the intervening area between Nepeña and Chancay, we do not know if there is a direct connection or not. At the same time the fine-line drawing on the vessels which Kroebert called "Cursive" developed during the Middle Horizon but only reached its flowering in the Black-on-White style. Whether it evolved from influences from the northern highlands or whether it was a local development on the north coast rising out of the Huari Norteño styles is not clear.

The necks on these flasks are quite variable in form. Some are flaring (Plate 13C), while others are convex (Plate 13D). The necks tend to flare more widely in this style than they did in the earlier styles. Most are decorated with step designs, checkerboard patterns or other geometric motifs.

The bowls of the Black-on-White period are quite distinctive. Of the fancy painted variety, pedestal bowls are most frequent. These have flaring sides, those with the widest flare being decorated on the inner rim, and those less flared on the outside rim. The painting on these pedestal bowl rams is only about a centimeter or two in width and consists of geometric elements, usually triangles or scalloped lines (Plate 15A). There is in the sample a tripod vessel with flat tabular legs and decoration consisting of triangular-headed fish painted on the exterior of the bowl (Plate 14D). This bowl may date to the Middle Horizon, but the manner of decoration suggests this period.

Other shape categories of fancy vessels found in the sample include a beautiful tall jar that has the appearance of "stacked bowls." It is decorated with very fine painting and modeled felines (Plate 14A and B). A small canister, related in shape to the necked jars, has a mythical creature painted on it along with modeled monkeys (Proulx 1968: plate 16d). Those readers referring to the plates in my previous monograph will note that I have re-classified some of the Black-White-Red vessels into the Black-on-White category.

Unfortunately no utilitarian vessels have been found by me associated with the fancy Black-on-White pottery. The vessels I am about to describe are placed in this time period on the basis of their lateness as seen through seriation and by the similarity of the modeled elements with those found on the fancy vessels. The large quantities of complete utilitarian vessels collected in the Carbonera cemetery (PV 31-29) seem to fall in the Late Intermediate rather than in the Middle Horizon. Very few Huari Norteño B painted vessels were found in this cemetery, and local huaqueros claim they discovered much Chimú and Inca-Chimu material there. I feel, therefore, that my large sample of vessels dates to the Late Intermediate.

The Carbonera cemetery sample consists of about 25 to 30 complete cooking or storage vessels left behind by huaqueros who had collected only the fanciest specimens. They are all globular necked jars with handles on the side (Plate 15D to G). There is a certain amount of variation in the shapes and designs, and undoubtedly some of the pots are Middle Horizon, but the majority are Late Intermediate. Some handles are usually vertical attached either to the body (Plate 15D) or from the
body to the neck (Plate 15F). In a number of cases the handles have small animals (birds, frogs, etc.) perched on them. Similar modeled animals or parts of animals are applied to the bodies of some of the jars (Plate 15D and F). The neck shapes are quite variable in this cemetery. Those vessels which I think definitely fall in the Black-on-White period have a lipped rim surrounded by appliqued lozenges decorated with incised lines (Plate 15D, F and G).

The raised circle and dot decoration which was revived in the Middle Horizon continues to be a major element in Late Intermediate utilitarian ware. Naturally this confuses the picture since change is slow and the complete seriation of this type of vessel has not been completed. Donald Collier (personal communication) indicates that in Casma the same situation exists -- great quantities of circle and dot utilitarian ware in the Late Intermediate. In the Carbonera cemetery sample there are often horizontal bands of the circle and dots surrounded by zones of punctations (Plate 15D). Other decoration consists of incised triangular elements filled with punctuation (Plate 15E and G). The description of the utilitarian ware from this period should be considered tentative until definite associations can be found.

The Chimu Style

Chimu pottery forms the largest percentage of the sample in the private collections in the valley. Over 197 complete Chimu vessels have been photographed, not counting the many sherds found at the 40 Chimu sites in the valley. About 95% of the fancy pottery is polished blackware. This does not include a number of vessels which have Late Intermediate Period affinities but are not completely Chimu in style. Chimu utilitarian ware is another matter, and it will be discussed following the fancy ware.

The following shape categories have been devised to describe the forms present in the sample: stirrup spout bottles, double chambered vessels (with three sub-varieties), double spout and bridge, spout and figure bottles (with two sub-types), pitchers, necked modeled jars, necked press molded jars, and "football shaped" jars.

The most prestigious shape category in the Chimu repertoire is the stirrup spout bottle of which there are 64 in our sample. The most elaborate motifs tend to be found on these vessels. This vessel form can be traced back at least as far as the Early Horizon on the north coast, and it has always been one of the fanciest vessel types. Chimu stirrup spout bottles normally have globular bodies, a few endowed with pedestal bases. In many cases the body has been formed in a mold, and the surface may be decorated with a press molded design. The color of these vessels ranges from a deep black to a metallic grey. The stirrup as well as the spout which rises from it is often squared, a characteristic which helps to distinguish these vessels from those of the earlier periods. Another common trait found on the majority of the stirrup spouts is the presence of a small modeled monkey or bird's head at the juncture of the stirrup and the spout and/or at the juncture of the stirrup with
the body of the vessel (Plate 16A and B). The use of modeled monkeys in this position can be traced back to the latter part of the Middle Horizon, but the Chimu examples are quite distinct.

Double chambered vessels are the next most frequent category in the sample. On the basis of certain repetitive features I have sub-divided this category into three groupings. The first I am calling "head and spout double chamber bottles." There are 16 of them in the sample. The main chamber of this type is surmounted by a very distinctive human head which is bifurcated at the top, giving it a "horned" appearance (Plate 16G). The face is modeled in low relief as are the arms and hands. Aside from this no other body parts are depicted, the globular body of the vessel forming the "body" of the human. Often this main chamber is further decorated with press molding depicting geometric elements or mythical scenes. The second chamber is attached by a tube which links with the principal chamber; it is surmounted by a long spout which itself is connected to the back of the human head on the first chamber. In many cases these are whistling pots, constructed so that a whistle in the head of the main figure blows when water is poured from the spout or when liquid is shifted from one chamber to the other.

A similar type of double-chambered vessel has other modeled figures on the main chamber: sea lions or seals, other types of humans, etc. (Plate 16E). There are a total of 8 of these in the sample. In other respects they are identical to the head and spout double chambered bottles. The third type also has modeled figures on the main chamber, but instead of a long tapering spout on the second chamber it has a wider neck.

There are four double spout and bridge bottles in the sample. This relatively rare form is more common in the Lambayeque area to the north, but apparently it constituted a minor type in Nepeña. The body of the vessel is usually globular, although some examples have a sharp gambrel in the center of the vessel (Plate 16D). The spouts are long and tapering like the Lambayeque forms and flare in opposite directions from the sides of the bottle. The spouts are connected by a highly arched bridge which often is surmounted by a small bird, monkey or other group. Small modeled elements like bird heads are appended to the body in addition.

A pottery shape that is related to the double spout and bridge bottle but is much more frequent in the sample is the spout and figure bottle. In this type there is only one spout, the second spout being replaced by a modeled figure. In 13 out of 18 examples in the collections the figure is a modeled head identical to that described for the double chambered vessels (Plate 16F). The head is connected to the spout by a flattened bridge. The bodies of these vessels are globular and invariably have pedestal bases. The remaining five spout and figure bottles have modeled elements other than human heads, and I am placing them in a separate sub-type.

Pitchers are necked jars having one handle from the body to the neck of the vessel. They are a common form, with 12 being found in the sample. The bodies of these vessels are larger than those of most of the other
forms discussed. The most frequent form of decoration found on them is press molding. Modeling is very rare on this form; one example has a handle in the form of a lobster. A distinctive trait found in this valley is a small snake-like appliquéd element, about an inch long, placed on the upper part of the vessel body (Plate 17A). The necks on the pitchers are flaring near the top, some more than others. Handles are flattened and sometimes, as in the case mentioned above, modeled (Plate 17B).

Another large category of vessels (19 examples) are necked modeled jars. These are large vessels modeled into diverse shapes: gourds, potatoes and other plants, animals, etc. (Plate 17C). In other instances the body of the vessel is conventional but there is a large modeled head (human or animal) attached to it. The necks are slightly flaring, and there are examples of face necks in the sample. There are 7 examples of necked press-molded jars, identical to those just described but whose sole decoration consists of designs press-molded into the clay (Plate 17F).

Finally there are 4 "football" shaped vessels which apparently date to this period. They have an oval or elongated shape with press-molded decoration commonly found at each end (Plate 17D and E). The necks are flaring, similar to those of the necked jars. Small modeled monkeys or other animals often are located at the juncture of the neck and the body just as on many other Chimu forms. Curiously these vessels are most often redware, and their crudeness may qualify them as utilitarian ware.

At this point our knowledge of the nature of Chimu utilitarian vessels in the Nepeñe Valley is very poor. Aside from the Virú Valley reports (Ford and Willey 1949 and Collier 1955) little has been published on utilitarian pottery of this period. The picture is complicated in Nepeña by surface collections from mixed sites, lack of good associations and the absence of any stratigraphic work to date. At this time only a few general remarks can be made regarding these ceramics.

Chimu utilitarian ware includes a wide variety of shapes and sizes. The most frequently encountered forms are collared jars usually with handles, large open jars and cooking pots. Bowls are not well defined in the sample. The colors range from black to brick red with more vessels in the latter category than in the former. The collared jars range in size from those having diameters of 7 or 8 cms. to very large examples. One form has a low convex rim with tiny handles from the body to the rim. Larger forms often have handles on the bodies of the vessels, but these may be either horizontal or vertical; a great deal of variation exists. On some vessels there is a tendency for fancy handles -- notches cut on the top surface, etc. Decoration consists of press molding, circle and dot incision, or raised bumps produced by pushing the clay out from the interior of the pot.

Some of the very large storage pots are decorated with modeled lizards, human arms and hands, or bird heads. Others have raised bands which have been incised with diagonal lines. There are a great number of
vessels which I would consider utilitarian which have been decorated with modeled felines, seals, or other animal forms near the top of the vessel. Some of the cooking pots described under the Nepeña Black-on-White style may actually fall into the Chimu period. The use of raised nodes with incision on the flaring rims of jars has been found in some of the unquestionable Chimu sites (e.g. PV 31-25 and PV 31-100). Aside from these few remarks, however, I am unwilling to speculate further on these vessels at this time.

Other Late Intermediate Period Styles

Eleven vessels exist in the private collections which appear to date to the Late Intermediate Period because of the similarities of shape and/or decoration to either the Black-on-White style or the Chimu style but are distinct enough to be considered separate styles. About nine of these vessels are painted in red, black and white geometric designs, but they are quite different in shape and decoration from the Nepeña Black-White-Red style. They are very similar, however, to the ceramics found at Huaca de la Cruz in the Virú Valley and described in Bennett 1939. One vessel (Plate 19E), a double spout and bridge, is almost identical to a pot illustrated by Bennett (1939: fig. 10b). Another identically shaped double spout is partially painted in the same manner, but the body of the vessel is decorated with press-molded designs featuring two mythical birds facing each other (Plate 19F). A third double spout is similar in shape but the painted decoration conforms more closely with the vessels to be described below. Each of these double spout vessels has long tapering spouts with black bands painted around the tips. They are widely flaring and resemble the Lambayeque style. The third vessel described has a modeled bird on the characteristically highly arched bridge, another trait common to the north, and a pedestal base.

The decorative style found on the third double spout bottle and most of the remaining 6 vessels of this type is similar to that portrayed in Bennett 1939, figs. 9a, 10a, and 10c on vessels from the Huaca de la Cruz cemetery. This decoration consists basically of zoned painting in black, white and red on the upper portion of the vessels. Four of the vessels are large necked jars, one with a modeled feline head (Plate 19D); another is a football-shaped jar (Plate 19C), and the sixth is a figure and spout bottle.

Bennett was inclined to place the vessels referred to above from Huaca de la Cruz in the early part of the Late Intermediate Period prior to Chimu. I am inclined to agree with him for several reasons. The painting on two of the necks in the sample has fine line black-on-white decoration similar to the Nepeña Black-on-White style. The shapes of the bottles are closer to Middle Horizon and Tiahuanacoid III types than they are to Chimu shapes. It is hard to explain the probable contemporaneity of these strange vessels to the Nepeña Black-on-White style. If the huarqueño can be trusted that these vessels have valley provenience, then there remains much about the Late Intermediate which needs explaining.

There are two other vessels which do not fit into any of the other styles as they have been described. One is a vessel which can only be
described as a Chancay Black-on-White piece. Again the valley provenience is not totally certain, but if it is from Nepeña it may well represent a trade piece (Plate 20C). Finally there is a double chambered vessel depicting a house model with a man seated under the pillared roof (Plate 20A and B). There is some similarity of this vessel to Kroeber's Red-White-Black Recoid style (1926:34-36 and plate V). Just where it fits in is a mystery.

Late Intermediate Period Cultural Reconstruction

There was no sharp break between the Middle Horizon and the Late Intermediate Period in the Nepeña Valley. As Huari prestige and influence gradually evaporated, the vacuum was filled by local autonomy and innovations along with influences flowing from new areas outside the valley. These changes are best reflected in the ceramics where we see the Nepeña Black-White-Red style, which retained some Huari traits, replaced by the Nepeña Black-on-White style in the Late Intermediate. This new style reflects a number of local traits which developed out of Middle Horizon prototypes along with new elements that obviously came from outside. Attempts to trace these foreign elements are only now in their infancy; not enough is known about the Late Intermediate Period ceramics from neighboring valleys to determine the exact sources. For the origin of the black-on-white painting and the modeled elements we might look south to the Chancay area as a possible source. On the other hand the fine-line drawing has closer affinities to the northern highlands and to styles in the other north coastal valleys.

Since so few sites can be positively identified as belonging to the Black-on-White period little can be said about the culture of this period or the population size. It seems to have been a period of readjustment, confusion and a turning inward which lasted two or three centuries. The period must have ended in fearful anticipation of military conquest by the expanding Chimu kingdom. By the late 1300's the area was probably taken over by the Chimu. How violent this cultural intrusion was cannot be answered at this time. There are numerous defense walls in the valley, but we don't know definitely if they were built in the Middle Horizon or the Late Intermediate. Middle Horizon sites often exhibit defensive structures, and the site of PV 31-4 (Cerro Samanco), which may date to the Black-on-White period, is also well fortified. My opinion at this time is that the Chimu occupation was relatively peaceful. There were other more important valleys into which the Chimu could expand their energies.

Much has been written about the Chimu describing their cities, their administrative abilities and their crafts (see especially Rowe 1948, von Hagen 1964; Kauffmann 1964; Bennett 1937 and 1939; Holstein 1927; Schaedel 1951, etc.). Several books call them the "city builders" because of the great urban centers that were constructed at this time. The magnificent city of Chan Chan near Trujillo, covering more than six square miles in its central area, is a prime example, but other huge sites like Pacatnamí in the Pacasmayo Valley Tucume or El Purgatorio in the Lambayeque (Leche) Valley and Apurle in the Motupe Valley attest to the abilities of these
people. Chimu ceramics are a picture-book of life at this time, and this along with Rowe's (1948) historical reconstruction of the Chimú from the reports of the Chroniclers provide us with the most complete picture of a pre-Columbian culture in Peru other than the Incas.

Although up to 40 sites in Nepeña may have been occupied by the Chimú, the valley was never a major center of the Chimú like the valleys of Moche, Chicama, Pacasmayo and Lambayeque. No large Chimú cities or pyramids are known in the valley, and the upper valley area was sparsely occupied during this time. The main area of occupation centered around the site of Huacatambo in the lower valley, the PV 31-29 complex in the middle valley and the Tomeque region in the upper valley. All of these have been described earlier. Huacatambo may have been the local administrative center since it most closely resembles the elite centers to the north. The Tomeque complex (PV 31-41 through PV 31-45), on the other hand, may be both a habitation site and a religious center.

Jeffrey Parsons of the University of Michigan has surveyed a series of sunken gardens (Pukios) near the mouth of the Nepeña River (quoted in "Current Research," American Antiquity, Volume 37, number 2:276). There are three of them, roughly 500 meters in length, running parallel to the shore in the central beach area; sites nearby are thought to date to the Late Intermediate and Late Horizon periods (personal communication, June 1972). These sunken gardens and the associated site(s) were not included in my survey, but Parsons is probably correct in attributing them to the Chimú.

The Chimú dominated Nepeña for at least 150 years. Judging from the number and distribution of their sites and the large cemeteries, there was an extensive population at this time. The Chimú, apparently, never thought enough of this small valley with its poor water resources to make it a major component of their kingdom. The evidence suggests that the high point of urbanization in Nepeña occurred during the Middle Horizon and decreased during the Late Intermediate. A parallel situation is found in Virú, another small valley not unlike Nepeña. I would hypothesize from my limited knowledge of the Chimú heartland that this culture, although extending as far south as the Rimac Valley, concentrated its energies on the major valleys of Moche, Chicama, Pacasmayo and Lambayeque. Nepeña and its neighbors were on the frontier and not as thoroughly dominated as the central area. This, combined with its small size and poor resources, caused the population to decrease somewhat from the Middle Horizon high point. The Chimú were conquered by the Inca sometime between the years 1462 and 1470.
The Late Horizon on the north coast (ca. 1460 to 1532) corresponds to the period of Inca occupation. Inca history as recorded by the chroniclers tells the story of the conquest of the Chimu kingdom by Topa Inca who attacked by surprise from the north and marched through the length of Chimu territory. The Chimu king, Minchançaman, was taken to Cuzco and his capital at Chan Chan was sacked. Traces of the burning and destruction are now being unearthed there. By 1471 when Topa Inca succeeded to the throne the Incas were in control of the entire north coast. They established administrative centers and built their roads through the area in order to maintain their domination. The Incas learned much from the highly urbanized Chimu: town planning and administration, metal working, and mass production techniques. Von Hagen (1955:261) claims that a Chimu colony was established in Cuzco; there the Incas taught them their language, religion and other cultural traits.

The Incas controlled the north coast for only 50 to 60 years before the Spanish conquest, a time too short to completely eradicate all traces of Chimu culture. What we have in this area is an interesting amalgamation of Chimu and Inca culture. The Incas controlled the area politically but were vastly outnumbered by the Chimu. The Incas who actually lived in the area formed the upper classes and were concentrated in the administrative centers. While the Incas did meet with success in imposing their cultural traits on the Chimu, many of these institutions and styles merged with the older local traditions. This can be seen clearly in the pottery where Inca shapes were manufactured in local blackware of the Chimu tradition.

Late Horizon Sites

The Nepeña Valley seems to have been even less important in the Late Horizon than it was in the Late Intermediate period. No administrative center was established in the valley, and judging from the paucity of sites the population must have decreased. The main Inca coastal road crossed the valley more or less following the present course of the Pan American Highway. As described in the chapter on ancient roads in the valley, Victor W. von Hagen traced the road and examined the ruins of Huambachó Viejo (PV 31-103) which had been an Inca Tampo or way-station along the road. Nearby he found the ruins of Chimu settlements and defenses and the main defense wall (Chimu or Middle Horizon in date?) on the north side of the valley which had been cut through by the road.

The site of Huambachó Viejo is a large compound containing rooms, plazas and small pyramids (?). It seems to have been first built in the Middle Horizon and then reoccupied in both the Chimu and Inca periods. It is impossible to determine how much of the site can actually be dated to the Late Horizon. The adjoining pampa has traditionally been called the Pampa de los Incas.
Von Hagen (1955: map on p. 255) indicates that one of the lateral roads connecting the Inca coastal highway with the highland road passed through the N propaganda Valley; tradition also supports this view as does some recent archaeological evidence. In 1953 a Peruvian adventurer by the name of Antero Aspillaga Delgado investigated the mountainous upper valley between the town of Jimbe and the village of Colcap. Jimbe, at an elevation of 2000 meters, is the termination of the present-day automobile road, and my survey did not extend beyond this point. From Jimbe the mountains rise abruptly and the valley narrows into a deep gorge; passage is possible only on mule or on foot. Aspillaga (1953) recorded traces of stone steps along the trail, a common feature in Inca highland roads. He discovered two major ruins in the area. At Rocro, about three kilometers from Jimbe, he found traces of stone walls and a well-defined Intihuatana, a religious structure of the Incas. Further along the road near Colcap he found more stone structures which he calls the Palacio Colcap. The construction of cut stone he equates with the monumental architecture at Cuzco. Nearby were a series of terraces or Andenes with a reservoir for storing water. The ruins just described, while probably Inca, may date to other cultures. The few poor illustrations present in the newspaper article show well-cut stone blocks at Colcap, but the entranceways are not trapezoidal as was common in Inca architecture. Well-cut stone blocks are also found in the Early Horizon as well as in the Middle Horizon, so until these ruins can be further examined the date should not be accepted without qualification. No illustration is given of the Intihuatana at Rocro, but this structure is so distinct that if it truly exists, the date would not be in doubt. I am greatly tempted to accept this evidence as supporting the presence of the Inca lateral road.

Other definite Late Horizon sites in the valley are few and far between. Toribio Mejía (1963) states that ruins of the Inca period exist at Huacatambo (PV 31-94), Sute (PV 31-108) and Palenque (PV 31-106 and 107). The author has found no evidence at these sites to support Mejía's view. There are some definite Inca-Chimu vessels in the private collections in the valley, and one collector stipulated that some of them had come from the cemetery at Carbonera. This cemetery did contain vast numbers of Chimu graves, aad it is highly probable that some of the graves do date to the Late Horizon. Aside from these few traces no other definite Late Horizon sites have been located.

Late Horizon Ceramics

There are 10 Inca-Chimu vessels present in the private collections of the valley: 5 aryballoid shaped vessels, one beaker shaped olla with handle, one pitcher, one double chambered vessel, and one double spout and bridge bottle. The Aryballus was a typical Inca shape of the Inca empire. Those found in Nepeña show a mixture of Inca and Chimu traits. The shapes, while conforming in all the essential details, show some variation (see Plate 18A to D). The major features of the Aryballoid jars are round to square bodies having a pointed bottom and large strap handles on the lower body. In four of the five examples there is a small modeled lug on the upper body. The necks are cylindrical and have
Figure 10
Distribution Map of Late Horizon Sites
a flanged top from which pendant lugs are found. The shapes are more angular than the classic Cuzco polychrome example, and four of the five are polished blackware, a typical Chimú trait. The fifth vessel is a solid redware; no painting is found on any of these vessels. The provenience of the jars is not known.

There is a painted redware vessel whose shape has been referred to by Bingham (1915: fig. 43) as a beaker-shaped olla. Essentially it is a cup-shaped vessel with a large loop handle (Plate 18F). The specimen is decorated with black X-shaped designs in a vertical zone down the side of the vessel. It is a local imitation of Cuzco polychrome, but whether or not it was made in Nepeña or traded is not known. It is said to have come from the Carbonera cemetery.

Another painted redware vessel from the same cemetery is a pitcher painted with black chevron designs (Plate 18E). It has a globular body and a neck with a flanged lip. A blackware double-chambered vessel is also in the sample. Each chamber has a long spout, one of them surmounted by a modeled figure (Plate 19A). A colonial period glazed example has also been found at San Jose (Plate 19B). The final specimen is a double spout and bridge bottle that seems to date to this period. It has a shape similar to those described for the Late Intermediate (globular body with long conical spouts flaring from the body), but the bridge connecting the two spouts is very elaborate with modeled step-like elements.

Late Horizon Cultural Reconstruction

Evidence of Inca occupation, therefore, is very scant indeed. Part of the difficulty in recognizing possible sites is that Chimú utilitarian pottery may have changed little after the Inca conquest, and unless truly distinctive Inca-Chimú pottery were found on a site, it might be assigned to the Late Intermediate Period. I still support my earlier expressed view that the valley's population decreased during the Late Horizon and that little building activity occurred. Ruralization probably occurred with the remaining inhabitants living in scattered settlements under the watchful eye of the Inca provincial rulers.
A number of ancient roads were recorded in 1971, all located in the Middle Valley area. The best known of these roads are on the north side of the valley on the pampa facing the town of Nepeña, the western end of which is known as Carbonera. This is a deep pampa flanked on the east side by the Cerro de las Lomas and on the west by Cerro Prieto. The back of the pampa narrows to form two passes out of the valley toward the Santa Valley in the north; the only other exit or entrance to the valley in this direction is about 5 kilometers to the west in the area where the modern Pan American Highway cuts across the valley. The pampa behind Nepeña is the more direct entry into the valley and is still occasionally used as an alternate route to Chimbote.

At the back of the pampa a small, isolated range of hills forms a rim-like barrier to the pampa, save for two small passes, one on the west side and the other on the east side (Figure 12). A stone defense wall, part of the famous "wall of Nepeña," runs across the back of the pampa and continues on to the northeast. This wall is only three to four meters high at most, but seems to be placed in the most vulnerable areas to outside attack. On the hills overlooking each of the passes are lookout stations constructed of fieldstone. And finally we have the roads, one traversing each of the two passes, cutting through the defense wall.

The road (labeled A on Figure 12) on the western side of the pampa is the larger and better known of the two. It runs from the vicinity of the town of Nepeña directly north across the pampa to the pass known as El Portachuelo. The road is delineated by a single row of stones on each side. The peripheries are now badly disturbed by recent vehicular traffic, but the stones had always been sparse and did not form an actual wall, only a crude boundary. This road appears to have been quite wide; no accurate measurements were taken because of the disturbances, but I would guess it reached a width of 12 meters in some places. The modern telegraph line from Nepeña to Chimbote parallels the edge of the road until well after it leaves the valley.

At the pass known as El Portachuelo the road cuts across a double defense wall constructed of fieldstone. High on the hill to the east of the pass is a small lookout station (PV 31-193) consisting of three small terraced rooms facing toward the open desert to the north. Pottery on the side of the hill is either Middle Horizon or Late Intermediate Period in date. Although it cannot be proved that the road dates to these periods, the evidence leans in that direction.

Beyond the pass the road heads in a northerly direction. The stones which lined its edges disappear, and it is no longer possible to trace its exact route to the north. In 1949 Paul Kosok attempted to follow the road but soon lost it in the desert. He felt that it may lead directly north to Cambio Puente in the Santa Valley, thus providing the shortest distance between the most important irrigated areas of the Nepeña and Santa Valleys (Kosok, 1965:209-210). Gene Savoy, on the other hand, flew over the area in a reconnaissance of the coast in 1963.
His map (Savoy, 1970:38-39) suggests that the road leads toward an area further up the Santa Valley, in the vicinity of the Hacienda Tanguche. Savoy felt that the road was constructed by the Moche and continued to be used by the Chimú. His descriptions have several flaws. For example, he puts the entrance of the road into the Nepeña Valley near the Hacienda San Jacinto (p. 36). This is impossible, for the valley edge for many kilometers east and west of the hacienda consists of a high, impenetrable range of mountains. The road could only have entered the valley in the pampa near the town of Nepeña.

A third possibility is that the road may have turned sharply westward after crossing the desert for some distance. This would bring it out somewhat to the south of the present town of Chimbote on the coast. The modern vehicular traffic which has occasionally used this road out of the valley has taken this route. It must be remembered that in prehistoric times there was no Chimbote, and it would be more logical for the road to lead to ancient population centers rather than to the sea. Of the three routes I am inclined to agree with Kosok's.

On the eastern end of the pampa facing the town of Nepeña is a second road (Figure 12B). In contrast to the road just described, this road is narrower (about 7 meters wide) and is lined on either side by a low wall of fieldstone about 40 centimeters wide. The wall has the appearance of being a double line of stones (Plate 27A). The road connects with the main road into the valley about one kilometer out into the desert to the north of the passes into the valley. From this point this secondary road enters the valley via the second pass, another narrow entry way between rocky hills. Overlooking this entrance is another stone-walled lookout station (PV 31-194) consisting of a three-roomed structure facing the desert. The sherds found here suggest a Middle Horizon date.

After crossing the pass, the road winds between the hills and enters the pampa. Near this point the road cuts through the defense wall mentioned above. In this part of the pampa the wall skirts the foothills of the mountains forming the rim of the valley. The road takes a southeasterly route across the pampa, heading toward the point of rocks forming the edge of the pampa. This road seems to be headed up valley; however, the mountains on the eastern edge of the pampa prevent a more direct route from being taken. The wall bordering the road gradually disappears as it crosses the pampa, so the exact route cannot be determined. The point to which the road seems to be headed contains the site called the Huaca del Inca or Huaca Culebra (PV 31-198). This site was probably built by the Chimú, but the exact dating is questionable because of the lack of pottery. This road may have been constructed to service this site, yet another road which leads up valley across the Pampa de San Jose seems to be a logical extension of this road. The location of PV 31-198 could be purely coincidental; much depends on the accurate dating of the road and the site.

This stone-lined road is one of the most beautifully preserved in the valley. Gene Savoy has illustrated a section of it in his book
Antisuyo (p. 33) along with a part of the "wall of Nepeña." Even though this road seems to branch off from the main road into the valley, they need not have been contemporary. The widths of the roads are quite different as are the walls that line them. It is quite likely that the wider road may have been built first and then continued to be used by a later group who then built the secondary road.

The Pampa de San Jose on the north side of the valley forms a natural corridor up-river toward the Hacienda San Jacinto. A number of large urban sites and ceremonial centers are found in this part of the valley. The pampa is situated between the Pampa of Nepeña and the Hacienda San Jacinto. It is topographically different from the sandy Nepeña pampa in that alluviation has covered its surface with small rocks. In spite of this, roads were cut across it by removing the rocks from the surface, laying bare the gravelly soil underneath.

There are two main roads across the pampa (see sketch), one near the edge of cultivation, the other much deeper in the pampa. Both roads merge together near the site of Punkuri alto (PV 31-11), and a single road continues up to the vicinity of the Hacienda San Jacinto. Although there are no sites in the Pampa de San Jose proper, the road passes or leads to the large urban sites of PV 31-6, 31-7, 31-8, 31-11, 31-12, 31-13, and 31-14, and the ceremonial complex of PV 31-12. Since the bulk of these large urban centers are Middle Horizon in date, the suggestion posed earlier that the road was built at least in part at this time is strengthened.

The road closest to the edge of cultivation (Figure 12C) is most likely the continuation of the secondary stone lined road in the pampa behind the town of Nepeña. Although it is not directly connected with that road, the road in the Pampa de San Jose would be a logical continuation of it. The road at the back of the Pampa de San Jose (Figure 12D) aims toward a point deep in the pampa where the defense wall mentioned earlier cuts across the upper reaches of the pampa. Just where this road is leading is not clear. The area appears to be quite mountainous, but there may be a pass leading into the adjoining pampa. The aerial photos do not cover this area, and the maps are incomplete. If there is such a pass, it must have led into the pampa near Nepeña, for the only passes into the valley are found there.

There is a third road in this pampa (Figure 12E), a small section about 500 meters long between the site of PV 31-202, high on the hills flanking the eastern end of the pampa, and a rocky hill in the center of the pampa. There does not seem to be any logical function for this road. There are no sites on the hill in the center of the pampa, and PV 31-202 is some distance from the western end of the road. It is indeed a mystery -- a road beginning and ending nowhere.

On the south side of the valley, opposite the Pampa de San Jose, is a broad sandy plain known as the Pampa de Sute. There are few habitation sites in this part of the valley, yet this was a prime area for cemeteries, and many were located here. Slightly to the west is the vast Pañamarca ceremonial complex, and a few small habitation sites are situated on the
pampas nearby, including Sute. The Pampa de Sute occupies a break in the coastal ranges between the Cerro Santa Lucia to the east and the Cerro Huambacho to the west. There are isolated hills between these two mountains which form one or two additional pampas like Sute, but most of the roads leading south out of the valley seem to emanate from this particular pampa.

The roads on this side of the valley are somewhat different from those on the north. None is stone-lined, although they may have been in the past. They can be readily seen on the aerial photographs as sandy streaks running across the scrub-like vegetation that lies at the back of the pampa. Drifting sand has shifted across the former surface of the road, and the details are less clear. There are two roads leading south out of the Pampa de Sute proper. Unfortunately the aerial photos do not cover the area far beyond the edge of cultivation, but it appears that the two roads eventually merge not far from the pampa and form one major route leading to the Casma Valley. An attempt was made to follow the roads, but the sand soon got too deep to allow passage of the jeep.

The road on the western end of the pampa (Figure 12F) can be seen clearly from the hills nearby. It seems to lead directly to the site PV 31-l16, a large compound of stone and adobe. This site has been dated to the Middle Horizon, a fact which again fits well with the evidence from the north side of the valley. As the road enters the valley it passes between two small hills or perhaps mounds on the pampa proper before it reaches the site.

The second road (Figure 12G) runs approximately down the middle of the pampa, forming a fork as it enters the sandy plain. It heads in the general direction of PV 31-108, a huge cemetery dating to the Early Intermediate Period and the Middle Horizon. It seems unlikely that this had much significance, and the true destination of the route seems to be up-river, where only two or three kilometers away another important road can be seen. This new road (Figure 12H) runs parallel to the river in an easterly direction. It runs along the back of the narrowing Pampa de Sute ascending in elevation as it crosses the hills at Palenque, finally terminating in the small pampa directly opposite the Hacienda San Jacinto. It passes directly by the site PV 31-68, a combination habitation and ceremonial site at least partly datable to the Middle Horizon.

South of the Pampa de Sute is a smaller pampa facing the fields of Sute bajo. A Moche habitation site (PV 31-l21) occupied the center of this pampa, and Middle Horizon and Late Intermediate Period cemeteries are located nearby. A road (Figure 12I) runs out of this pampa in a southeasterly direction toward the main road to the Casma Valley. It joins this road deeper into the desert than the juncture of the two roads from the Pampa de Sute.

A fourth road (Figure 12J) leading out of the valley is indicated on the government maps (Casma sheet, scale 1:200,000). It originates on the south side of the valley opposite the Hacienda San Jacinto in the
vicinity of the fortress of Kiske. It leaves the valley via a quebrada between the cerros Chispe and Santa Lucia, joining the main road to Casma. This area behind Kiske was not explored in the survey, and the presence of this road cannot be verified.

Where do these roads lead? Apparently all four merge in the desert into one main road leading to the Casma Valley to the south. The government map indicates a trail (our ancient Road?) leading out from the Pampa de Sute in the Nepeña Valley, following the Quebrada Grande Seca in the desert, and terminating at the Hacienda La Huaca at the edge of the Casma Valley. This route avoids the hills and mountains and also is the shortest route between the cultivated areas of the two valleys, save for a route directly along the coast. Gene Savoy places the road further east, cutting across the Sechin Branch of the Casma Valley approximately at Buena Vista and then crossing the Casma Branch at Yautan (Savoy, 1970:37 and map, 38-39). This is substantiated by Tello (1956:34) who discovered a road adjacent to the Early Horizon ruins of Pallka on the Upper Rio Casma. This road, which was over five meters in width, turned westerly from the ruins and followed the left bank of the river. According to Tello's informant, Don Julio Ortega, the road continued for two leagues where it divided, one branch leading to the Quebrada Moxeke, the other branch turning north, passing Buena Vista and terminating near the fortress of Kiske in the Nepeña Valley.

I find it hard to believe that the road could have followed the route out of the valley through Buena Vista as claimed by Savoy and Tello. A glance at the topographic maps shows a series of hills bordering the north side of the valley in this area. Perhaps there are passages through these hills, but the least difficult and shortest route between the valleys begins at the Hacienda La Huaca further down the river.

The roads that have been described above do not appear to be part of the main coastal road of the Incas. Although no physical traces remain of the Inca road in the valley today, evidence suggests it was located in the lower valley area along the route which the modern Pan American Highway (Figure 11) takes through the area. It is in the lower valley that we have other passes cutting through the mountain ranges flanking the sides of the valley. The Chronicler Pedro de Cieza de Leon passed through the valley on the Inca road in the year 1547. He mentions a night lodging house on the road at Huambacho (Chap. 70) which was "two days' journey" from the Santa Valley. "All I have to say of it is that it is of the sort and manner of those we have seen, and had lodgings of the rulers, and that from the river that runs through it they drew water in ditches to irrigate the fields they planted" (Van Hagen 1959:326). A further hint at the importance of this Inca way station is in the name of the valley itself. It formerly was called "Guambacho" -- Huambacho -- before it was called Nepeña.

One last road (Figure 11) should be mentioned at this point. Victor von Hagen (1955:255) presents a map of the Inca road system in the northern part of Peru. On this map one of the lateral roads connecting the main coastal highway with the major road through the Sierra passes
through the Nepeña Valley. I had heard the same story from the present inhabitants of the valley. They told me passage was possible up the valley into the Callejón de Huaylas. To my knowledge it is now impossible for a car to pass beyond the town of Jimbe, about 50 kilometers up the valley. From this town the road turns into a trail, and I do not doubt that it is possible to reach the callejón by means of it. Archaeology bears this out. There appear to be many Early Horizon sites in the upper valley area, many more than in the lower valley. Assuming that the center of this culture was in the highlands, they must have entered the valley by means of this route.

As stated earlier in this report, in 1953 Antero Aspillaga Delgado, an adventurer and explorer, investigated the upper valley area from Jimbe to the town of Colcap. He reported (Aspillaga, 1953) stone steps along the trail, a feature often found in Inca highland roads. Two possible Inca ruins also were found in the vicinity of the road; Rocro which contained remains of stone walls and an Intihuatana, and the Palacio Colcap which was also attributed to the Incas. Andines or terraces along with a reservoir found nearby are also claimed to be Inca. In light of this evidence I am inclined to agree with von Hagen's placement of a lateral highway in Nepeña.

Thus there are four main road systems in the Valley. In the Middle Valley area there is a complex of roads (Figure 12A through E) on the north side which form part of a system leading out of the valley through the back of the Pampa of Nepeña. This system ultimately leads to the Cambio Puente area of the Santa Valley, the shortest distance between the major cultivated areas of Nepeña and Santa. Within the valley these various roads head up-river to the vicinity of the Hacienda San Jacinto.

The second major road system is also in the Middle Valley area but on the south side of the valley. This complex of roads (Figure 12F through J) leads south out of the valley toward the Casma Valley. The exact terminus of this road system is in dispute; it could be either the Hacienda La Huaca area or the Buena Vista area. Within the Nepeña Valley different roads comprising this system lead out of various pampas and join the main road to Casma: F, G and H from the Pampa de Sute, I from the smaller pampa facing the fields of Sute bajo, and J from the vicinity of the fortress of Kiske further up-river.

The main Inca coastal road (Figure 11) forms the third important road system, cutting across the lower part of the valley approximately following the modern Pan American Highway. And finally, the Inca lateral connecting road passes up the center of the valley into the highlands forming the fourth major road system.

If the Inca highway passed through the lower valley, who then were the builders of the multitude of roads in the middle valley area? There is no way to directly date the roads, but some inferences can be made on the basis of the cultural periods of the sites to which the roads led. On both the north and south sides of the valley the majority of the sites near the roads were Middle Horizon in date. Others date to the following period, the Late Intermediate Period, particularly the Chimú culture.
suggest that the roads date to one or the other of these periods. I disagree with Savoy that the Moche built the roads. In the first place there are only a few traces of Moche occupation in this valley, and the roads are quite some distance from them. And secondly, the roads leading out of the valley to the south to Casma could not be Moche, for the Moche never occupied Casma. If they are not Moche nor Inca, they must be Middle Horizon and/or Chimu. The first roads may have been constructed by the militaristic Middle Horizon peoples who took over the entire north coast. Later the Chimu may have reused the same roads, expanding them for use in their own conquests.
THE WALLS OF NEPEÑA

In 1931 the Americans Robert Shippee and George Johnson discovered the "Great Wall of Santa" while making one of the first aerial photographic missions over the coast of Peru. It was an impressive defense wall running along the ridges of the mountains on the north side of the Santa Valley. The wall was constructed of stone and stood 15 feet high in places. Shippee and Johnson discovered a total of 14 fortresses spaced at irregular intervals on both sides of the wall; some were rectangular in shape while others were circular (Shippee 1932:1-14 and 1933:80-89). In 1962 Gene Savoy re-examined the wall from the air and traced it further up-river than had Shippee and Johnson. The coastal section of the wall was constructed of adobe while that further up the valley was of stone standing some 18 feet high and 6 feet wide. They traced the wall as far as Tablones and discovered 28 additional fortresses besides the 14 previously known (see Savoy 1962 and 1970:28-32).

Others have also explored the wall. In 1934 Cornelius Van S. Roosevelt, accompanied by Julio Tello and Richard Cross, undertook a ground survey of the wall. They discovered that the character of the wall changed from location to location. In places it was quite low (three feet). Near the coast it was constructed or rectangular adobe with a stone rubble core. Up-river it was generally constructed of uncut stone with gravel or stones as a rubble core. In places a ditch ran parallel to the wall, while elsewhere smaller secondary walls ran parallel to the main wall (Roosevelt 1935:21-32).

The interest in the "Great Wall of Santa" spurred others to seek similar walls in other valleys. Roosevelt (1935:figure 2) illustrates a long expanse of wall in the Nepeña Valley but does not mention it at all in his text. Savoy (1970:32) claims to have discovered the "Great Wall of Nepeña" evidently not aware of the previously published photograph. The wall is situated on the north side of the valley, as was the case with the Santa Valley wall. Savoy claims "it originated near the coast with a group of walls that coursed inland over rolling hills and finally narrowed to a single wall that ran across the coastal desert among spurs of the Andes, where it was lost in the uplands beyond Moro" (Savoy 1970:32). On page 33 of his book he illustrates an interesting section of the wall where it is cut through by an ancient road. The impression Savoy leaves is that the wall formed a continuous unit from the coast to the upper valley. My own investigations on the ground do not bear this out.

There are indeed many miles of walls in the Nepeña Valley, virtually all located on the north side of the valley. Contrary to Savoy's proclamations the walls do not form a continuous unit but are made up of numerous sections, all of which may not be contemporary. For years scholars have speculated on the function of these walls; most assumed that they were defensive in nature. In reality the walls probably served several functions. Some indeed were defensive, for they are situated at strategic passes into the valley and are guarded by fortified lookouts. Other
walls, running for miles across the flank of the valley, may simply represent boundary walls of a particular people or social unit. It is difficult to argue that these had a basic defensive nature because of their location, size and lack of fortifications. A defense wall would require large numbers of soldiers to maintain it. Some of these walls have no such evidence. Finally, a few of the walls may have functioned as barriers erected against occasional flash flooding. Rain is infrequent on the coast of Peru, but when it does occur much destruction takes place as the water runs off the barren rock. Habitations and agricultural fields could be partially protected by precautionary walls of this type.

There are several areas of boundary walls in the valley. One section of wall is found in the lower valley at the back of the sandy pampa on which is located the Chimú complex of Huacatambo. Low walls stretch across the back of the sandy pampa, perhaps delineating the former area of cultivation. Somewhat further up-river there is a long expanse of wall which runs from the vicinity of PV 31-14 on the east to the foothills of Cerro San Cristobal on the west. This mountain forms the eastern edge of the Pampa de San Jose. This wall, too, is quite low and lies between the valley bottom and the sites behind it, thus affording no protection to the inhabitants of these settlements. Near the eastern terminus of this wall is a perpendicular wall erected in three tiers. It lies between PV 31-13 and PV 31-14 and ends near PV 31-12 (see Proulx 1968: Plate 9A for illustration). This is one of the most elaborate and well-preserved walls in the valley, but its function -- whether for defense, as a boundary wall or for channeling water -- is not known. It certainly is not part of any "great wall" system, but rather was part of one or more of the three sites mentioned above.

Walls which appear to be truly defensive in nature are found in the Middle Valley area. The most impressive section is found at the back of the pampa near the town of Nepeña. Here is located one of the major passes out of the valley to the north. The back of the pampa is closed by mountains except for two or three small passes through which ancient roads passed (see section on ancient roads in this report). A double defense wall of stone cuts off the passes except where the roads cut through them (see photo of the area by Savoy 1970:33). On the hills above are two small lookout, PV 31-193 and PV 31-194. The sherds found nearby suggest a Middle Horizon date for them. From here the wall appears to cross over the low hills and it emerges in the eastern part of the same pampa (Plate 27B). At this point the wall suddenly changes direction and turns NNE running for almost three kilometers before it disappears at the base of Cerro de los Lomas.

There are no large expanses of walls between the Hacienda San Jacinto and the area of the Hacienda Motocachy in the upper valley. There is no need for defenses here, for the high mountains on the north side of the valley act as natural barriers to any invasion to the north. The only walls of importance in the upper valley are on the Pampa of Motocachy. This pampa overlooks the Rio Solivin, a dry quebrada which more or less parallels the valley of the Nepeña. The Solivin could provide a passageway to the upper valley, and a huge fortress (PV 31-49) is
situated on the pass leading down to it. A few stone defense walls are also located in the pass and on the back of the pampa where another pass provides access to this quebrada.

Contrary to Savoy's statements, there is no wall near Moro, nor are there any major walls in the upper valley area. The main defenses guard the passes into the Middle Valley area from the north. Curiously, there are no walls on the southern border of the valley. Whatever people is responsible for building the walls was concerned mainly about invasion from the north.

The dating of the Nepeña walls remains a mystery, as does the dating of the "Great Wall of Santa." The Chimu are most often given credit for its construction, for it is claimed that the walls represented successive southern boundaries of the Chimu kingdom. The evidence, however, tends to discount this view. The position of the walls, in both Santa and Nepeña, is on the northern edge of the valley. If the Chimu were attempting to consolidate their territory as they expanded southward they would undoubtedly build their defenses on the southern fringes of a newly captured valley. If they feared attack from local inhabitants they certainly would not have built walls in the territory of their enemy with miles of desert separating them from their nearest occupied territory.

It is much more logical to assume that it was the inhabitants of the valley who built the walls to protect themselves from invaders to the north. If this is true we can examine the cultural history of the area to determine who those invaders might be. There were three major invasions of the valley from the north, one in the Early Intermediate Period when the Moche conquered part of the valley, the second in the Late Intermediate Period when the expanding Chimu kingdom incorporated the Nepeña Valley, and finally in the Late Horizon when the Incas conquered the Chimu territory from the north.

If the Nepeña walls were erected in the Early Intermediate Period to keep out the invading Moche, it would have to have been constructed by either the Gallinazo culture or the Recuay Culture. There is no evidence for large occupations of either of these cultures in the valley, so that would seem to argue against them. On the other hand, the photo in Savoy (1970:33) clearly shows a stone-lined road cutting through the wall. Could this photo tell the story of a successful Moche invasion into the valley through the walls of the defenders? I have argued elsewhere in the paper that the road does not seem to be Moche but rather Middle Horizon in date. I still agree with this view.

Turning to the Late Horizon one could argue that the walls were built by the Chimu who were retreating before the invading Inca in the late 1400's. I think this hypothesis can be refuted by looking at the overall picture at this time. The center of the Chimu culture was at Chan Chan in the Moche Valley, some one hundred kilometers north of Nepeña. Most of the large Chimu urban centers were situated on the far north coast in the valleys of Moche, Chicama, Jequetepeque and Lambayeque.
If the Incas successfully captured all of these urban centers, there would be little left to fight for. It seems unlikely that elaborate defenses would be erected in a minor valley like Nepeña to stave off an Inca attack, especially after the centers of this culture had been eliminated.

I would hypothesize, therefore, that the walls were built in the latter part of the Middle Horizon or the early part of the Late Intermediate by the remnants of the Huari culture, to protect the valley from invasion by the Chimu. The Middle Horizon witnessed the greatest population expansion in the valley, and even in the early part of the Late Intermediate there would be a sufficient labor force to construct these works. The predominant architectural style in the Middle Horizon was fieldstone construction, and this fits in well with the hypothesis. The road which cuts through the wall in the Pampa of Nepeña could be contemporary with the wall, and both seem to date to the Middle Horizon. The sherds scattered near the base of the hills containing the lookouts of PV 31-193 and PV 31-194 are Middle Horizon too. So it seems that the people of the Middle Horizon erected the walls, roads, and fortifications.