

7. *Luna Polychrome*

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Wolfgang Haberland designated Luna Polychrome as the marker for the Santa Ana phase, which he considered the only phase of the Ometepe period on Ometepe Island in Lake Nicaragua (Haberland 1986:381). He estimated this time period at A.D. 1400 to 1550.

Because the type name has been equated with the expression *Luna Ware*, originated by James F. Bransford (1881:21) and formalized by Samuel K. Lothrop (1926:194-213), confusion has ensued. The term *Luna Polychrome* has been a catch-all for those Greater Nicoya polychrome ceramics of the late Ometepe period that have a light-colored slip and that cannot be accommodated easily within presently well-defined types, especially in the northern sector. A study was undertaken to define the characteristics of Luna Polychrome and to attempt to answer some long-standing questions regarding the origins, the distribution, the temporal placement, and the functions of the type (Knowlton 1992). The database consisted of 138 whole vessels in the collections of the Museum of the American Indian, the Peabody Museum at Harvard University, and the Smithsonian Institution. The pottery specimens chosen were any resembling illustrations in Bransford's (1881) chapter titled "Luna Terracotta," or in Lothrop's (1926) chapter titled "Luna Ware." This ceramic type has been labeled *Luna Polychrome* by Jane Day (1982, 1984a, 1984b, 1984c), Paul Healy (1976a, 1980), and Lydia Wyckoff (1971) or *Lunoid* by Frederick Lange (1971a, 1976) and Jeanne Sweeney (1975).

Analysis of the design structure and motifs led to the typing of eighty-five of the specimens as Luna Polychrome, in five varieties (Luna Polychrome:Luna variety, Luna Polychrome:Abstract variety, Luna Polychrome:Negative Red variety, Luna Polychrome:Moyogalpa variety, and Luna Polychrome:Altagracia variety [see Appendix]). Hereafter, to avoid undue repetition in referring to varieties of Luna Polychrome, the words *Polychrome* and *variety* will be omitted, e.g. Luna:Abstract. An additional ceramic type, El Menco Polychrome (seven specimens), was named but not defined in detail.

Vessel forms for Luna Polychrome are generally similar to other specimens in the study collection, which include ceramics identified as Banda Polychrome (n = 7), Bramadero Polychrome (n = 1), Madeira Polychrome (n = 2), Lago Black Modelled (n = 1), and several unidentified polychrome types. However, neither piriform jars nor truncated pear-shaped vessels were

seen in Luna Polychrome. The "ware" characteristics of the Luna Polychrome vessels, such as the colors of paste, slip, and paint and paste texture and inclusions, were found to be indistinguishable from most other vessels in the study collection.

RATIONALE FOR METHODOLOGY

In accordance with other ceramic studies in the Greater Nicoya Subarea, Luna Polychrome was defined according to the Type: Variety system. A structural analysis of the design was used to facilitate this process and to address questions stemming from the innovative style.

The Denver Ceramic Conferences of 1982 and 1983 correlated the work of archaeologists who had been classifying ceramics in the Greater Nicoya Subarea since the 1950s, using the Type: Variety system (Lange et al. 1984). Chronological and spatial parameters were defined for each type.

In the Greater Nicoya Subarea, design motifs often crosscut types, resulting in difficulty in defining the types and/or varieties (Accola 1978b:82; Day 1984c:84, 294; Lothrop 1926:105). Hypothetically, the number and placement of bands and the positioning of motifs should be more consistent. Ceramic studies using a cognitive approach (cf. Arnold 1983; Hardin 1983) conclude that the concepts regarding the areas of a pot that should be decorated, the structure of the decorative field, and the decorative designs that are appropriate in a given space are absorbed along with other knowledge related to ceramic manufacture and reflect the norms of an interacting group of potters. Arnold argues that the spatial concepts of a cultural group, determined by environment and social interaction, include those applied to the decoration of ceramics. Because the spatial paradigm is not consciously ascertained (Hall 1968), it is relatively resistant to simple changes in style. The analysis of the design structure, which is a division of the available space, is based on these hypotheses. This spatial analysis can also be used to address the suggestion that Luna Polychrome might have been the product of intrusive peoples from South America who simply copied the vessel forms and iconography of indigenous local people (Day 1984a:194; Sweeney 1975:339).

A diagram for the division of the design field was devised, based primarily on the vessels collected by Bransford (1881) (Table 7.1, Figure 7.1). Horizontal zones correspond to discrete design panels or the separations between them. In cases where the spatial pattern is aberrant, there is a question as to whether the specimen should be included in the ceramic type. An inventory of the motifs in specific zones allows vessels with unusual design variations to be identified readily.

TABLE 7.1 Definition of decorative zone codes

Code	Full Name	Type of Zone	Decoration
LP	lip	lip	lip motif
LP/EUB	lip to exterior upper band	space	no motif
EUB	exterior upper band	auxiliary band	minor motif
EUB/EMB	exterior upper band to main band	space	no motif
EMB	exterior main band	main band	major motif
EMB/ELB	exterior main band to lower band	space	no motif
ELB	exterior lower band	auxiliary band	minor motif
ELB/EBAS	exterior lower band to base	space	no motif
EBAS	exterior base	base	base motif or plain
LP/IUB	lip to interior upper band	space	no motif
IUB	interior upper band	auxiliary band	minor motif
IUB/IMB	interior upper band to main band	space	no motif
IMB	interior main band	main band	major motif
IMB/ILB	interior main band to lower band	space	no motif
ILB	interior lower band	auxiliary band	minor motif
ILB/ICEN	interior lower band to central disk	space	no motif
ICEN	interior central disk	interior bottom	major motif or plain

CHANGES IN CERAMIC TYPES

Lunoid Polychrome (Lange 1971a; Sweeney 1975) has already been renamed Banda Polychrome (Day 1984c:274-275). Day's Luna Polychrome:El Menco variety (1984c:302) has been elevated in this study to El Menco Polychrome. The design has strong structural affinities to that of Banda Polychrome, with some design features similar to Luna Polychrome (e.g., base figures and some minor motifs very like those of Luna:Altigracia). Luna:

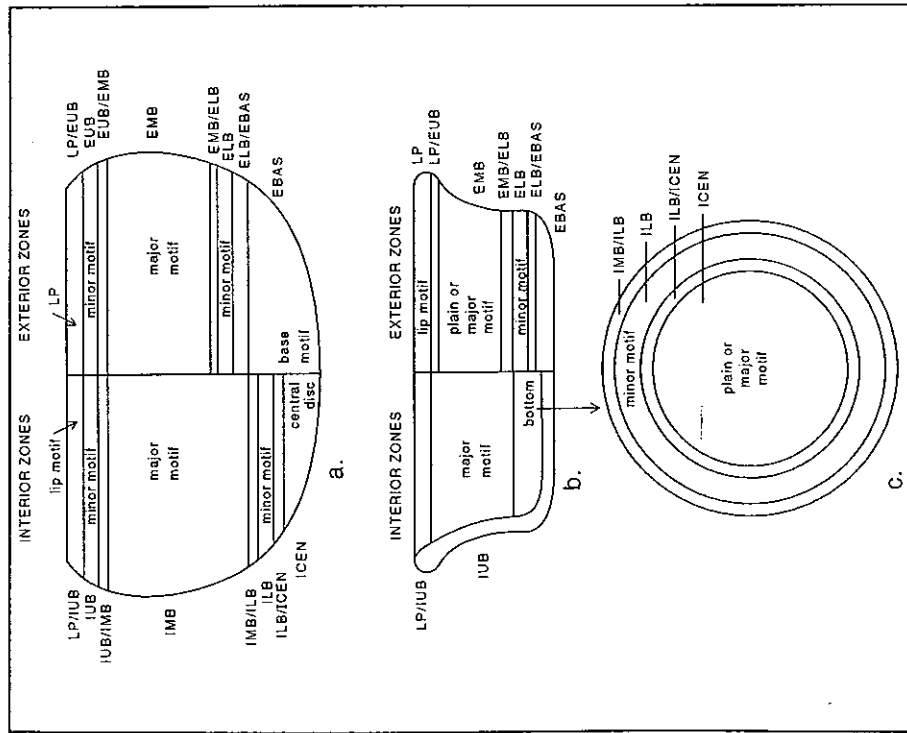


Figure 7.1 Structure of the design field in Luna Polychrome: (a) for bowls; (b) for dishes; (c) for the interior bottom of dishes. See Table 7.1 for key to codes.

Altagracia, which includes the vessels Day (1984c) illustrates as Luna Polychrome: Luna variety, has been created with some reservations; in many attributes it resembles untyped ceramics from Altagracia more than other Luna Polychrome varieties.

In personal communications, two other researchers have stated that they do not consider some of the newly designated varieties to be Luna Polychrome. Both Haberland and Day reject Luna: Negative Red. Day excludes Luna: Abstract, and Haberland suggests Luna: Altagracia may be Madeira Polychrome, an opinion that may be proved correct with future

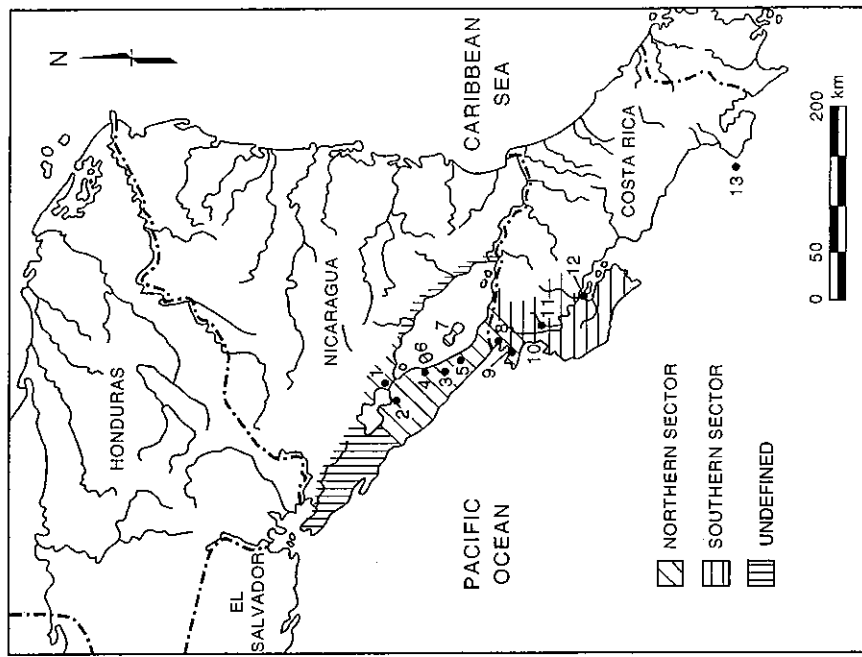


Figure 7.2 Map of the Greater Nicoya Subarea, indicating sites where Luna Ware, Luna Polychrome, or Lunoid Polychrome has been reported.

research. When using Haberland's or Day's data for distribution purposes, these differences must be kept in mind.

DISTRIBUTION OF LUNA POLYCHROME

Previous publications report examples of Luna Ware or Luna Polychrome from as far north as Managua, Nicaragua (Wyss 1983:71), to as far south as Isla Caño, Costa Rica (Finch and Honetschlager 1986:195, fig. 13.5a), and from east of Lake Nicaragua (Gorin 1990:474-476; Lothrop 1926:194) west to Ometepe Island (Bransford 1881; Healy 1980:135; Lothrop 1926:194) and the Tempisque River (Day 1984b) (Figure 7.2). Wyss's sherds are El

TABLE 7.2. Location of sites on Ometepe Island yielding identified specimens of Luna Polychrome			
Site Name	Site Location	Topography	Reference
Hacienda Baltazar	2 miles south of Moyogalpa	High lake bank	Bransford 1881:46
Luna Hacienda (Campo Santo)	0.5 miles south of Moyogalpa	Flat area: 80 yds. from lake	Bransford 1881:7
Luna Hacienda (La Dominga)	0.5 miles south of Moyogalpa	Flat area: 90 yds. from lake	Bransford 1881:11
Moyogalpa	Exact location not known	Not known	Flint:1878 notes
Nutting's Grave I	0.5 miles north of Moyogalpa	Cemetery area in "plantain patch"	Nutting 1885:912
Bovallius's site	1 km west of Luna Hacienda	Mound, 1.5 m high	Bovallius 1886:9
Chilaite	5 miles north of Moyogalpa	"Sandy soil near lake"	Bransford 1881:47
Richardson's site	"Ancient burial place, Ometepe Island"	Not known	Peabody Museum Museum:lot #96-39-20
Altagracia	"East side of Ometepe Island" ...	Not known	Flint: 1878; Peabody Museum:lot #78-42-20
Cruz site	0.5 km south of Puerto Gracia	One mound	Healy 1980:65
	2 km northwest of Altagracia		Haberland 1986:369

Menco Polychrome, and Gorin's is Banda Polychrome. The Isla Caño sherd, which may be Luna:Altagracia variety, is considered by the surveyors to be the remains of a trade vessel.

Among the vessels in the research collection, there are some problems with provenance (Table 7.2). Most of the specimens were excavated about a century ago. Contextual details of the excavation and exact site locations are usually unknown; site names are absent for many.

For this chapter certain assumptions have been made in respect to provenance. First, the Richardson collection, for which the site location is recorded as "ancient burial ground, Ometepe Island" (Peabody Museum Archives: lot #96-39-20), was excavated on the Moyogalpa Plain on the northwest side of Ometepe Island (Figure 7.3). In the iconography, the style of the painting, and the frequency of varieties, this collection is very similar to those from the Luna Hacienda and from Nutting's Grave I. Second, in view of the catalogue citation, all the material in the Richardson collection is

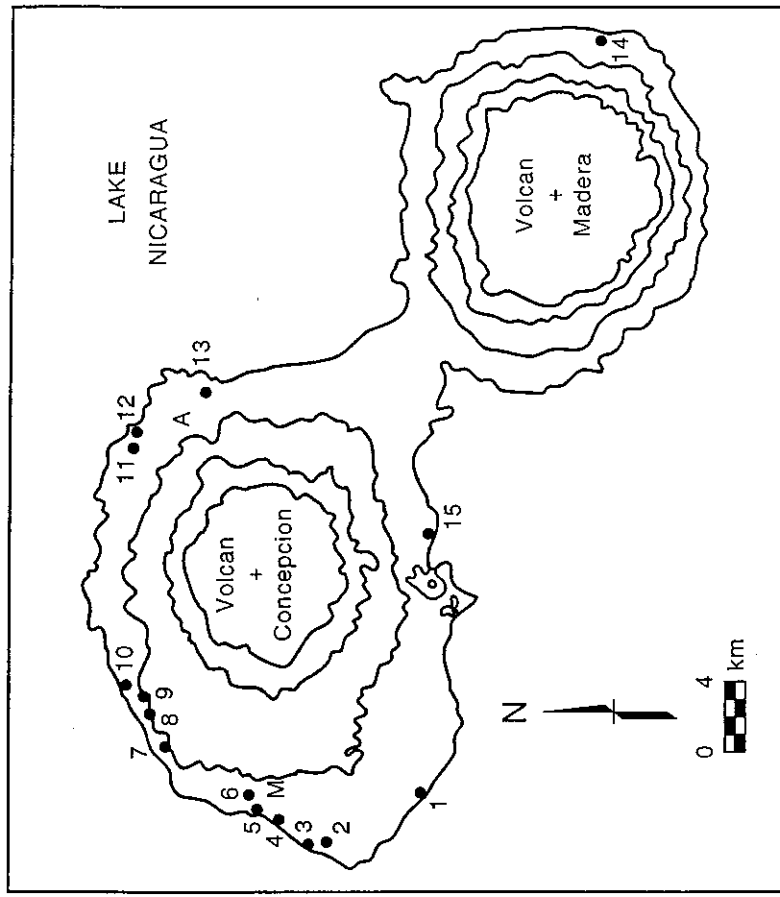


Figure 7.3 Map of Ometepe Island, showing locations of Late Polychrome period sites (adapted from Haberland 1966:fig. 25.1).

from a single site. Third, the term *Alta Gracia* refers to the district around the town of Altagracia on the northeast side of the island. However, Haberland (personal communication 1990) cautions that, although *Altagracia* probably refers to several sites in the vicinity of the town of Altagracia, the provenance label may simply indicate the port through which the pottery was shipped from the island.

The only large concentration of Luna Polychrome is on Ometepe Island in Lake Nicaragua (Bransford 1881; Healy 1980:137; Lothrop 1926:194). Luna:Altagracia vessels, excavated from burials in the Tempisque Valley in northwest Costa Rica, proved to be chemically similar to ceramics from the Rivas region in Nicaragua (including Ometepe Island) and are also assumed to originate in that area (Bishop, Lange and Lange 1988; Day 1984a). It was not possible to find illustrations for all references to Luna Polychrome; the odd specimen from further afield may yet be identified.

Three varieties of Luna Polychrome (Luna:Luna, Luna:Abstract, Luna:Moyogalpa) are almost exclusively confined to the Moyogalpa Plain. Four

sites, producing forty-two specimens, are located within 2.5 miles (4 km) of the town of Moyogalpa; the Richardson collection accounts for twenty-seven more vessels. Luna: Negative Red is found only here ($n = 3$). Haberland (1986, personal communication 1990) identifies three sites in the same area, none with composite dishes.

Haberland (1986:386) reports four Ometepe period sites on the coastal strip extending north from the Plain of Moyogalpa. Bransford (1881:47) excavated a Luna: Moyogalpa bowl from one of them, Chilaité. On examining selected photographs of our research specimens, Haberland recognized Luna: Luna sherds with the Earth Monster-1 motif, Luna: Abstract sherds, interiors with Type "A" monkey motifs, and many sherds and feet of the Luna: Altgracia variety.

In the study collection, all Luna Polychrome varieties are rare in the Altgracia area. One Luna: Luna and two Luna: Abstract bowls come from the region, but Earl Flint (1878:2) notes that the ceramics were different from those around Moyogalpa. This appears to be the center for the Luna: Altgracia variety. In many ways it is more similar to other (unnamed) types from Altgracia than it is to other varieties of Luna Polychrome. In Healy's (1980:65-73, 135-140) analysis of the ceramic sherds from the Cruz site, 2 miles from modern Altgracia, Luna Polychrome made up 0.4 percent to 1.8 percent of all the sherds in a particular level, with those from dishes being more common than those from bowls. His illustrations of Luna Polychrome portray examples of Luna: Luna bowls (Healy 1980:fig. 53, upper two and bottom), Luna: Altgracia dishes (Healy 1980:fig. 52), and possibly Luna: Moyogalpa dishes (Healy 1980:fig. 53, third from top). Haberland's (1986:386; personal communication 1990) two Ometepe period sites near Altgracia were defined on the basis of sherds, mainly of bowls, that were so badly eroded that almost no design remained; no rims were recovered. In my opinion, it would be very difficult to identify Luna Polychrome positively under these conditions.

There are no specimens from the Maderas (southern) part of the island. Bovallius (1886:10) tested the isthmus between the two parts of the island without success. From a surface collection, Haberland (1986:381) tentatively places Cairo I, on the east side of this section, in the Santa Ana phase (Ometepe period).

Two other bowls are provenienced to Ometepe Island, five other specimens simply to Nicaragua. In the study collection, only three Luna Polychrome vessels definitely came from sites not on Ometepe Island: two simple restricted bowls (one Luna: Luna and one Luna: Abstract) from Zapatera Island, north of Ometepe Island, and a very small Luna: Abstract bowl from the mainland near Rivas; all have aberrant features.

Luna Polychrome: Altgracia may have been the only variety of the type "exported." The only location with any significant number of such vessels is the Tempisque Valley of northwest Costa Rica (Day 1982:fig. 17a, 1984c:298, figs. B.17, B.18).

CONTEXTS OF LUNA POLYCHROME

Where location was recorded, most vessels in the study collection were reported as recovered from burial grounds. Both Haberland (personal communication 1990) and Norweb (Healy 1980:65) recovered sherds from what appeared to be habitation sites. The location of a single Luna Polychrome bowl in the same mound as a European figurine (Bovallius 1886:9) is a unique situation.

Burials, apparently without markers, were in cemeteries on level ground, located near the lakeshore on high bluffs or old beach lines (Bransford 1881:1, 7, 10-12, 47; Flint 1878:1; Haberland 1984b:31, table 7a; Nutting 1885). Interments took place in large plainware jars, often capped with a bowl and placed in close proximity to each other, sometimes with extended burials occurring between them (Nutting 1885:915); the latter may not be contemporaneous. The depth of burial was relatively shallow; bases of the urns rested at 75 to 210 cm below the surface (depending on their size), with the tops as close to the surface as 20 cm, so that "often cattle in walking sink into the upper ones" (Flint 1878:1).

At the Luna Hacienda, polychrome or monochrome bowls served as lids for 70.3 percent of the 164 large plainware burial urns (Bransford 1881:15-19). The latter have an average height of 43 cm (maximum 58 cm) and diameter of 51 cm (maximum 74 cm). The urns that accompanied the Luna Polychrome bowls were usually shoe-shaped with appliqué decoration, but globular urns occurred in the same areas. Small bowls of various ceramic types were found beside or within the urns. Skeletal material was often poorly preserved, and there is disagreement on whether the burials were primary (Bransford 1881:10, 14) or secondary (Haberland 1984b:31; personal communication 1990; Nutting 1885:915). Other grave goods were often nonexistent. Where they occurred, they were interred within the urn and usually consisted of beads of shell, clay, argillite, and rarely "green-stone" and/or gold, with the occasional flint flake, projectile point, net sinker, spindle whorl, or food item (fish bones, parched corn) (Bransford 1881:44-46, fig. 106; Nutting 1885:915). The manufacturing techniques and style of a small gold figure link this artifact to precolumbian Colombia (Bransford 1881:46).

CHRONOLOGICAL PLACEMENT

Because there are no known radiocarbon dates for the Ometepe period for Ometepe Island (Haberland 1986:381) or even for the Rivas region (Healy 1980:69, 72), dating is indirect. The relative chronological placement of Luna Polychrome is based primarily on the presence of sherds in stratigraphic levels and in association with other more firmly dated ceramic types.

Healy's analysis of the Cruz site ceramics (1980:65-73, 305) confirms that Luna Polychrome appears only in the topmost levels of stratigraphic pits, in the Altgracia phase (Haberland's Santa Ana phase). Haberland

(personal communication 1990) confirms this situation. Ceramic types that are present previous to Luna Polychrome but continue with it at the Cruz site are: Madeira Polychrome, Granada Polychrome, Vallejo Polychrome, and late Papagayo Polychrome varieties. Although Castillo Engraved and Lago Black Modelled sherds occur at deeper levels than Luna Polychrome, the frequencies peak with the latter type (Bonilla et al. 1990).

In describing the pottery in burial contexts at the Luna Hacienda, Bransford (1881:fig. 83) included a Madeira Polychrome bowl in his "Luna ware" (Sweeney [1975:398] suggests that Coe may have done the same thing in defining his Ometepe period types at Chahuite Escondido) and illustrated examples of Castillo Engraved and Lago Black Modelled as associated monochrome ceramics (Bransford 1881:fig. 105).

One small Luna:Abstract bowl came from a mound, which also produced a European-style bronze figure of St. Christopher (Bovallius 1886:9, pl. 33-5; 1887:figs. 98, 99) (Figure 7.4). This find could confirm Haberland's end date if the bowl and figure were in close proximity, a condition that is not clear in Bovallius's report. Searches of the literature failed to corroborate a direct association between Luna Polychrome and glass beads. Some burial urns contain glass beads (Lothrop 1926:194, 423 [#16]), but no record was found associating these urns with Luna Polychrome.

ORIGINS OF LUNA POLYCHROME

Bransford (1881:21) first noted the visual resemblance between "Luna terracotta" and pottery of the Marajoara phase in the lower Amazon, but he also remarked on the different decorative technique and design structure. Day (1984c:193-194), though likening the appearance of the painted style of Luna Polychrome with that of the fine incising of the same South American ceramics, concedes continuity with earlier Greater Nicoya ceramics in vessel form and iconography. Day (1984c:194) and others (Haberland 1986:381; Norweb 1964:558) have suggested that intrusive populations might be responsible for the production of Luna Polychrome.

A literature search for illustrations and descriptions of ceramic manufacturing and decorative techniques in regions south of the Greater Nicoya Subarea failed to produce any evidence for migration. The ceramics of the Marajoara phase on Marajó Island in the lower Amazon River, which are purported to resemble Luna Polychrome, differ in iconography, in decorative technique, and especially in decorative structure (see Meggers and Evans 1957:398-418). The basic design field structure is that of a net rather than registers. Although funerary urns with bowls as caps are present, they are very different from those on Ometepe Island, being incised and painted jars with modeled faces on the neck. They were left sitting on the surface or only partially buried. Moreover, no pottery resembling these ceramics appears between the Amazon River and Lake Nicaragua.

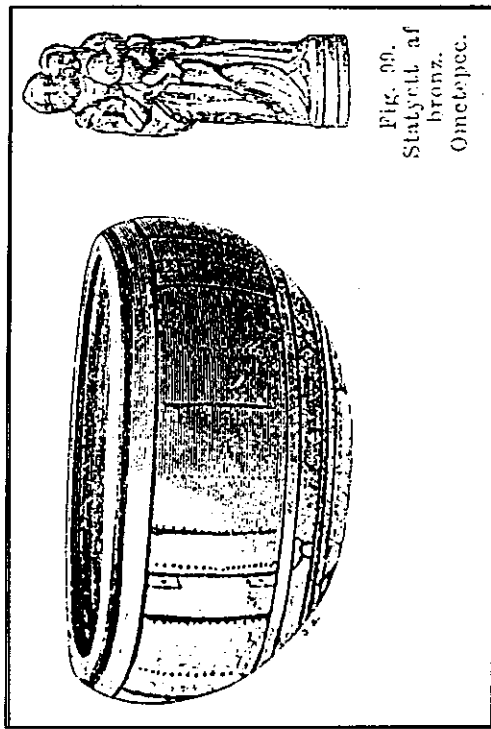


Figure 7.4 Artifacts recovered by Bovallius from a mound (Station 1) on Ometepe Island in 1883:

- (a) Luna Polychrome:Abstract bowl (after Bovallius 1886: pl. 33-5); (b) effigy of Saint Christopher (after Bovallius 1887:fig. 99).

More tantalizing are the ceramics of the Central Region of Panamá. Several techniques that converge in Luna Polychrome appear at earlier time periods in that area (Cooke 1976). If Panamá is the origin of these attributes, this is a case of diffusion. They appear in Greater Nicoya ceramics over an extended period of time, and are all in place when Luna Polychrome comes on the scene.

The most obvious explanation is that Luna Polychrome developed locally from previous ceramics, tending to be simpler in several aspects. Forms are similar to those of other Ometepe period types, such as Bramadero, Casares, Jicote, and Vallejo Polychromes and Castillo Engraved (Bonilla et al. 1990; Day 1982:figs. 4, 10b, 11, 12, 14, 15a, 19, 20; 1984c:82, figs. B.3-B.5, B.12, B.23, B.32, B.39, B.44-52; Healy 1976a:34, figs. 5a-b, g-i, k-p, 1980:figs. 27-29; Lange 1976:fig. 9b-d; Sweeney 1976:39), but the more complicated forms such as large globular bowls on a high ring base and piriform jars are absent. Paint colors also have a narrower range; the light orange and blue of Vallejo Polychrome and the dark red of Madeira Polychrome are not seen in Luna Polychrome. The observation that the fine lines in Luna Polychrome appear to copy paint-filled incising (Day 1982:52) applies as well to Vallejo Polychrome:Mombacho variety as it does to Marajoara ceramics. In addition, a sequence in styles of figures can be traced from Vallejo Polychrome motifs to Luna Polychrome (Figure 7.5). Despite previous assessments, the

and as far north as Managua, on other islands in Lake Nicaragua, and in the Tempisque Valley (Lothrop 1926:423-435; Wyss 1983). Although this practice may be ultimately derived from South America, the pattern most closely resembling that found on Ometepe Island occurs in west Mexico in the Azatlán Complex at Guasave (Ekholm 1942:39-42) and Culiacán (Hulse 1945). There, each large plainware jar (urn), capped with an inverted bowl (occasionally polychrome), was shallowly buried in the same areas where earlier extended interments had taken place. The position of the bones indicated secondary interment, but a few, such as vertebrae, were sometimes articulated. Polychrome and/or incised vessels (as a cover, within the urn, or beside the burial vessel) displayed many characteristics in common with both central Mexican (Mixteca-Puebla) wares and Ometepe period Greater Nicoya types, such as Vallejo Polychrome and Castillo Engraved. Other types of grave goods were rare and consisted of only one or two pieces, including small copper items. Ekholm (1942:130-131) estimates dates for the Azatlán Complex at A.D. 1350-1400. The direction of any contact is unknown.

DISCUSSION

Production of Luna Polychrome

The distribution pattern of Luna Polychrome varieties implies that the Luna:Luna, Luna:Abstract, Luna:Negative Red, and Luna:Moyogalpa varieties were manufactured and used on the northwest part of Ometepe Island. The simplicity of vessel forms, the minor variations in the style of motifs, the considerable differences in the quality of execution of the design, and the ubiquitous presence of the secondary design elements suggest a number of potters with the same concepts of design structure and motifs but with differing levels of skill. Luna:Altigracia variety, on the other hand, is more similar to dishes carrying other styles of the same symbol, in the northeastern part of the island. There, forms of dishes of different ceramic types are indistinguishable; identification is made by the style of the painted surface and the forms of tripods. The high quality and the great intricacy of the painted designs are comparable. The most logical explanation is that the dishes and tripods were both made with molds (certainly the tripods were) and probably decorated by specialist painters. At this time, the contemporaneity of the different varieties of these highly decorated dishes has not been established.

Evolution of the Style of Luna Polychrome

Luna Polychrome is not simply a copy of Vallejo Polychrome. Not only does the decorative technique differ in many cases but a metamorphosis of the iconography is also involved (Figure 7.6). Canouts and Guerrero (1988) note that, although vessels of Jicote Polychrome and Vallejo Polychrome have similar

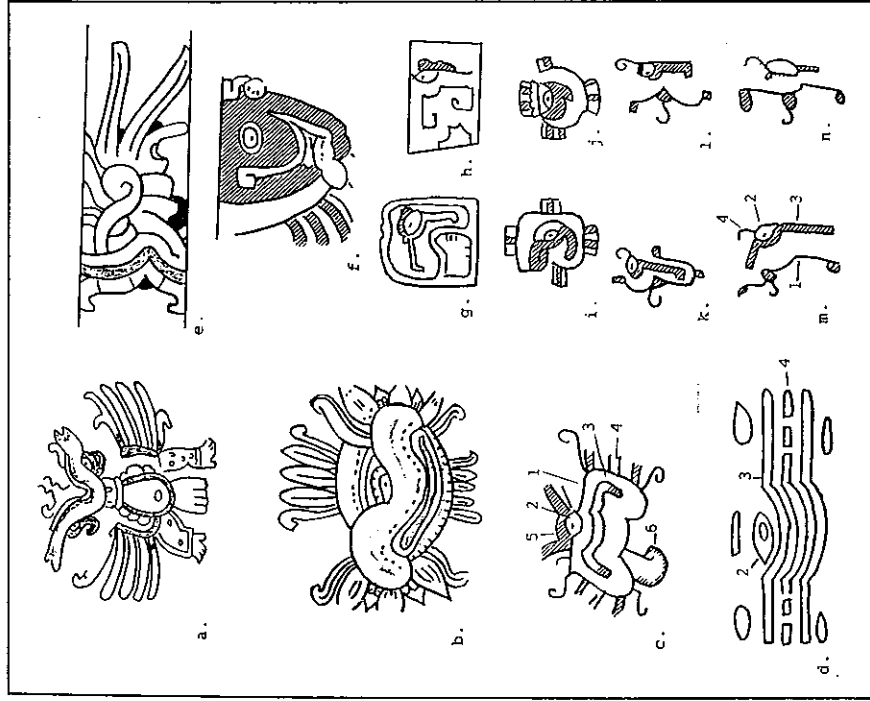


Figure 7.5 Proposed sources of derivation of the Earth Monster motif of Luna Polychrome. (a)-(b), (e) Vallejo Polychrome; (f) unnamed ceramic type from Altigracia; (g)-(h) Alligator-2 motif in Luna:Luna variety; (i)-(j) winged head motif. Essential elements are indicated for EM-1 (c), EM-2 (d), EM-3 (k-n). See Appendix for key to figures; (a) and (b) redrawn from Baudéz (1970:pl. 96, 65; (c) redrawn from Stone 1982:fig. 38; others drawn by author from research collections.

slip color of Luna Polychrome does not differ significantly from these other ceramic types (Knowlton 1992:107-109).

As an indication of foreign influence, the connection of Luna Polychrome with urn burials is of interest. This pattern of interment is not confined to Ometepe Island but occurs on the mainland west and east of Lake Nicaragua

cross-lines along their length, painted and modeled faces, and "breaks in the symmetry pattern."

The design attributes in Luna Polychrome indicate a superposition of symbols of Late Postclassic Mesoamerican origin on local Greater Nicoya design canons. Even the symbols evolved to conform more closely with those of indigenous origin, the "plumed serpent" taking on attributes characteristic of the "alligator" motif found more commonly farther south and east (Lothrop 1926:172-173).

The ethnic affiliation of the makers of Luna Polychrome is problematical. A statement by one of the early chroniclers is nonspecific, but it appears to rule out speakers of two of the major language groups (Mangue and Nahuatl) in Nicaragua at the time, noting that on Ometepe Island they spoke another language (Ponce 1872:369).

The Nahuatl-speaking Nicarao, located on the mainland opposite Ometepe Island (Lothrop 1926:5-9) have been identified with Vallejo Polychrome (Healy 1980:152; Lothrop 1926:193). They displaced Chorotega-Mangue speakers who probably came from the Chiapas area of Mexico (Campbell 1979:970) and who were still dominant both north and south of the Rivas region at the time of the Conquest (Lothrop 1926:20-25). The previous population probably spoke a Chibchan language (Lothrop 1926:19; Stone 1972:133). However, there were several dialects of Chorotega-Mangue (Campbell 1979:916), and the one on Ometepe Island might have been quite different from those in northern Nicaragua or might even have been adopted by Chibchan-speaking inhabitants. Nevertheless, the design canons of Luna Polychrome are most similar to Sapoa period ceramics in the Greater Nicoya Subarea, within the Chorotega-dominated area.

Functions of Luna Polychrome Vessels

Some forms and decorative motifs are confined to certain varieties. This suggests specialized functions. The tripod dishes of the Luna-Altagracia variety, as well as dishes without supports, were probably serving dishes. Oviedo (in Lothrop 1926:46) described food served to Agateyte, the *cacique* ("leader") of Tecoteaga in Nicaragua, in a "three legged vessel of clay."

The low bowls from the Moyogalpa area are about the same size as the dishes but simpler in form and decoration. They are decorated with the same motifs as the pedestal cups; the two forms together constitute most of the Luna-Moyogalpa variety. These vessels call to mind a cup and bowl combination for food and drink. Because these vessels came from mortuary contexts, it is suggested they functioned as containers for food and drink in a funerary feast or as offerings for the dead.

The large, simple restricted bowls, especially the E-bowls, are replete with symbolism conforming to their function as mortuary vessels. The crocodilian motif goes back to Olmec times as a symbol of the earth and the underworld (Joralemon 1988:11), and the Earth Monster is an equivalent

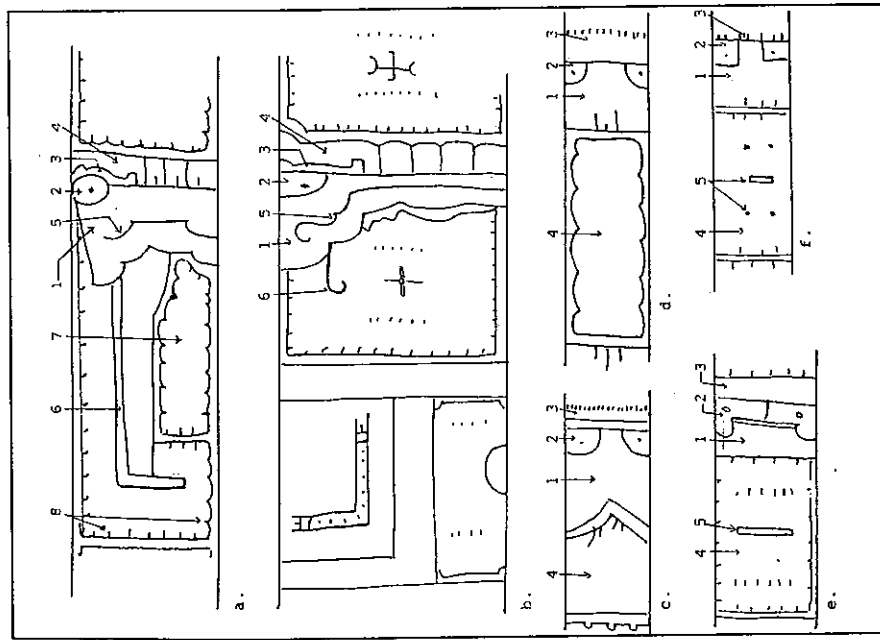


Figure 7.6 Elements of the three Alligator motifs in Luna Polychrome. (a) Alligator-1 motif; (b) Alligator-2 motif; (c)-(f) Alligator-3 motif. See Appendix for key to numbers.

motifs, design conventions differ between them, affecting the way in which design bands are laid out and in which Vallejo Polychrome motifs are realized on Jicote Polychrome vessels. They attribute this to the time depth and the strength of the Greater Nicoya tradition as manifested in the latter type, with features going back to the Sapoa and even the Bagaces periods. Some of the attributes noted for these earlier periods are common to Luna Polychrome: "typologically distinct banding," triangles hanging from a lower band line, the "frontal face" in the cleft between upright elements (over the "eye" in the Luna:Luna Earth Monster-1 motif), disembodied limbs with black dots or

Maya symbol. The faces that occur on so many of these bowls appear to be individual portraits ($n = 17/20$), perhaps a revival of the concept of "death heads" or "soul vessels" that Leibsohn (1988:140-141) assigns to the Bagaces period. No two of these faces are marked exactly alike. Red painted areas may indicate gold ornaments as worn in life, such as labrets, earspools, and strings of beads across the face (see Verswijver 1986:fig. 9, for this arrangement) (Day 1988; Leibsohn 1988:149). The bowls are slightly longer in one direction than the other, approximating the shape and size of the skull. As caps of urns, they would cover the head of the deceased. When inverted, the motif on the bottom of the bowl could be placed so that the ends of the "cross" pointed to the four corners of the earth, orienting the dead to assist his journey to the underworld. The stance of the monkey figure on the interior of nine bowls is very similar to that of the monkey as instructor of the dead in the Maya underworld (see Coe 1978:13, pl. 17).

The monkey motif may have another significance as well. In modern times, only members of the Monkey Clan could become chiefs among the Talamancan Indians of Costa Rica (Snarskis 1981b:213 #200). On Ometepe Island and Zapatera Island, large stone statues of humans surmounted by a limited range of animals, including both monkeys and crocodilians, are associated with pottery from the Sapoá period (Haberland 1986:379). When the making of statues ceased, marking such clan memberships would still have been important, especially in death.

Two small jars were made with holes at the rim, presumably for suspension. Containers for drugs or for lime to enhance the effects of tobacco or coca are suggested.

CONCLUSIONS

The definition of Luna Polychrome has led to the recognition of five varieties within the type and the exclusion of some ceramics formerly included therein. The ceramic sphere for Luna Polychrome is Ometepe Island and perhaps Zapatera Island. The style evolved locally, probably in imitation of the appearance of Vallejo-Mombacho Polychrome. The primary function of these ceramics as mortuary furniture, suggested by the context, is reinforced by the iconography. It has not been possible to state definitely that the type continued to Spanish contact. Although it was hoped that the structural and iconographic analysis of Luna Polychrome would allow some statement as to the ethnic identity of the makers of Luna Polychrome, the evidence is equivocal. The question as to whether the other ceramics from Altagracia are contemporary with Luna:Altagracia also needs to be addressed.

APPENDIX: CERAMIC DESCRIPTIONS AND GENERAL ATTRIBUTES OF LUNA POLYCHROME

All varieties of Luna Polychrome belong to the same ware, ceramic group, and ceramic complex. Three features (decorative treatment of lips, the base motif, and minor motifs) serve as identifying criteria for the type as a whole. Major motifs are the *alligator* and the *earth monster*, variant forms of which define different varieties.

The *alligator* motif refers to the profile view of a crocodilian, and the *earth monster* motif to a frontal view. It is not possible to definitely identify the species depicted on Luna Polychrome. The west coast of Central America is included in the range of the *common caiman* (the subfamily of the Crocodylia that also includes alligators) as well as the *American crocodile* (Ross, ed., 1989:63, 65). The two species are very similar in appearance, but they differ in size. The term *alligator* was used extensively by Lothrop (1926:91, 172, 177, 249-252) to define motifs both on statuary and on ceramics, perhaps because it most closely approximated the Spanish term *lagarto* used in the region. I have followed this usage.

Ceramic Ware: Nicoya Polychrome Ware

The attributes that define *ware* (Sabloff and Smith 1970:98), paste and surface treatment, do not provide a clear distinction between Luna Polychrome and Bramadero, Casares, Granada, Madeira, and Vallejo Polychromes (see Healy 1980:94, 125, 140-141, 242-243; Sweeney 1975:339). The creation of a separate ware category (Luna Ware), based on Luna Polychrome, does not seem warranted.

Ceramic Group: Luna Group

Following Gifford's (1976:17) definition of a ceramic group, the Luna Group designation has been retained. The number of forms is more limited than in the Madeira Group, and there is some question about contemporaneity. El Menco Polychrome has been included in the Luna Group because of its similarity to Luna Polychrome.

Ceramic Complex: Santa Ana-Altagracia

Haberland's (1986:381) Santa Ana phase is specific to Ometepe Island. Healy (1980:66) names the Altagracia phase, defined at the Cruz site on Ometepe Island, as the later of the two Ometepe period phases for all the Rivas region.

Ceramic Sphere

At present the ceramic sphere (as defined by Gifford [1976:12]) for Luna Polychrome is considered to be Ometepe Island. In view of the apparent difference in ceramics from Altagracia, a division into an eastern sector and a western sector may be appropriate at a later date.

Ware Characteristics of Luna Polychrome

Defined on 47 of 85 vessels (55.3 percent). Color of paste is 10R 4/2 (Munsell Color Code) on 23.4 percent of the sample, with a total of 59.6 percent in the same color range ("weak red"). Over half (55 percent) have a dark core (1/4 to 3/4 wall thickness), 32.5 percent are well fired, and one silvery gray, 7.5YR 6/0.

Nonplastic inclusions consist of very fine volcanic ash, quartz, or calcite and ferrous balls; each occurs in 75 percent of sample, all three in 46.2 percent.

The slip—Haberland (personal communication 1990) prefers the term *paint*—is thickly and evenly applied and covered with a glossy coating, probably a vegetable varnish (Lothrop 1926:197). It adheres well, with spalling usually only pinpoint in size. The Munsell Code for 30.0 percent of 67 vessels is 7.5YR 6/4; closely related readings produce a total of 64.2 percent appearing tan, buff, or dark cream. Thirty percent are lighter, matching the usual description of "white" to "light cream" (hue = 5YR, 7.5YR, 10YR; value = 7–8; chroma 2–4).

Paint colors are a rusty red, orange ("washed out red"), black, which is dark brown on thinner sections, and, rarely, a muddy brown. Codes for red are either 10R 4/8 or 2.5R 4/8 on 47.8 percent of the vessels. A total of 92.3 percent are within the Munsell "red" range, with orange readings in the same range. The majority (61.5 percent) of codes for black paint are either 5R, 3/1 or 10R 3/1 (Munsell "dark reddish gray"). Brown is confined to specific parts of monkey motifs and fret and "L" form minor motifs; codes are within the paste color range.

Major Identifying Features of Luna Polychrome

One of two motifs, each of which has three styles, appears in main bands on Luna Polychrome: the *earth monster* motif (Earth Monster-1 [EM-1], Earth Monster-2 [EM-2], Earth Monster-3 [EM-3]) and the *alligator* motif (Alligator-1 [AL-1], Alligator-2 [AL-2], Alligator-3 [AL-3]). For each motif the progression is from a more naturalistic figure to one that is more abstract (Figures 7.5c–d, k–l, 7.6). The style of the motif on the exterior of the vessel determines the assignment to a Luna Polychrome variety, except when there is only an interior major motif.

Three features (when present) apply to all varieties (Figure 7.7). First, with the exception of one miniature, lips are decorated with red bars edged in black, most frequently (77.2 percent of 83 vessels) alternating with narrower black bars. Second, bases of all simple bowls ($n = 53$) are decorated with a "four-armed" figure in the shape of a cross. The corners are extended to form a line that widens into a triangle or a rectangle, the base of which meets the lowest horizontal line on the vessel body. Third, the minor motifs, present on 62 of the 85 vessels, are unique to Luna Polychrome. They appear in two common types, the "A" form (58.1 percent) and the "Y" form (29 percent), but there are

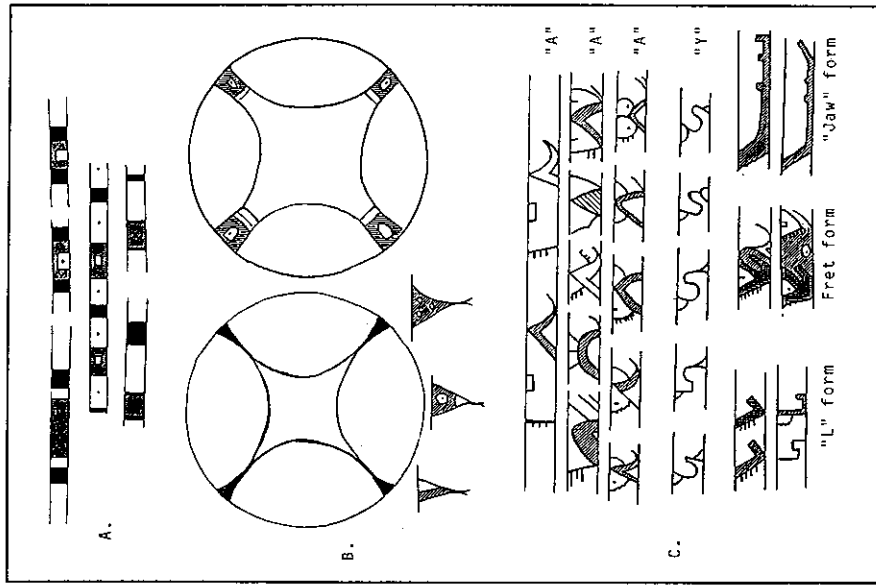


Figure 7.7 The three principal criteria for identifying Luna Polychrome in combination with major motifs: (a) lip decoration; (b) decoration on the base of simple bowls; (c) styles of minor motifs.

minor frequencies of the "L" form (6.5 percent), nested frets (8.1 percent), and a "jaw" form (3.22 percent).

LUNA POLYCHROME:LUNA VARIETY

Defined from 39 vessels with three styles of major motifs: EM-1, AL-1, and AL-2 (Figures 7.5, 7.6a–b, 7.8, 7.9d–f, i, l, s). Also see Bransford (1881:figs. 13–14, 16, 66–72, 74–76, 80–81, 84), Lothrop (1926:fig. 96, pla. 88d–e, h–k, n, s–t, 111d), and Healy (1976a:fig. 5E, 1980:fig. 53, top two).

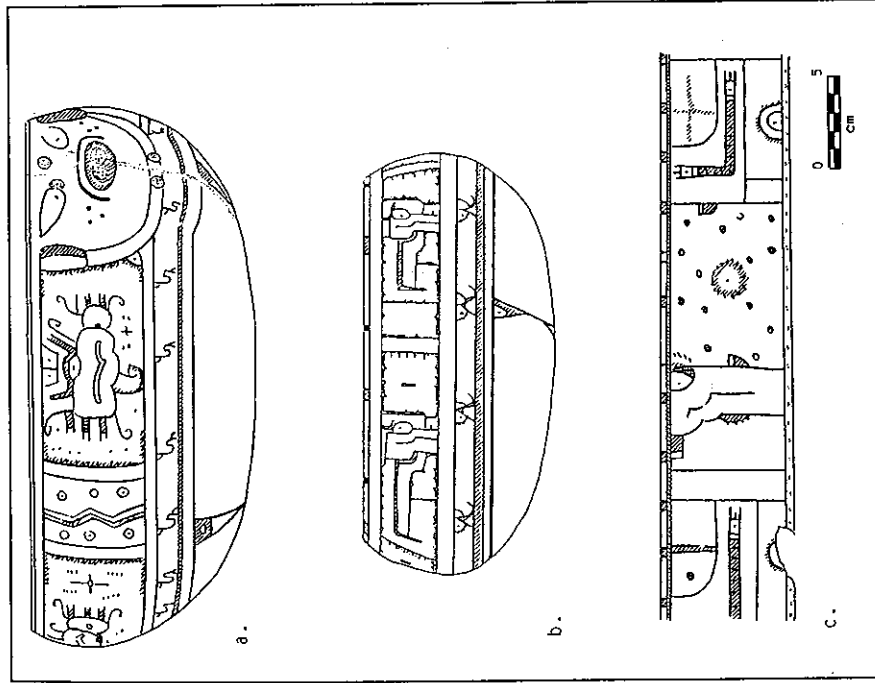


Figure 7.8 Bowls of Luna Polychrome: Lune variety: (a) EM-1 motif; (b) AL-1 motif; (c) AL-2 motif on IMB.

Vessel forms

The vessel forms in order of frequency are ellipsoidal bowls (E-bowls), hemispherical bowls (H-bowls), necked composite bowls (N/C-bowls), necked inflected bowls (NI-bowls), oval bowls (O-bowls), and 1 each of a complex bowl (C-bowl), a dish, a cylindrical cup, and a miniature jar (Figure 7.9, Table 7.3). The E-bowls comprise 41 (Table 7.3) percent of the variety, and H-bowls 30.8 percent.

Structure of the Decoration

The design field

The design field is the area of the vessel being decorated: the exterior, the interior, pedestal, tripod, or face. In Luna Polychrome the location of

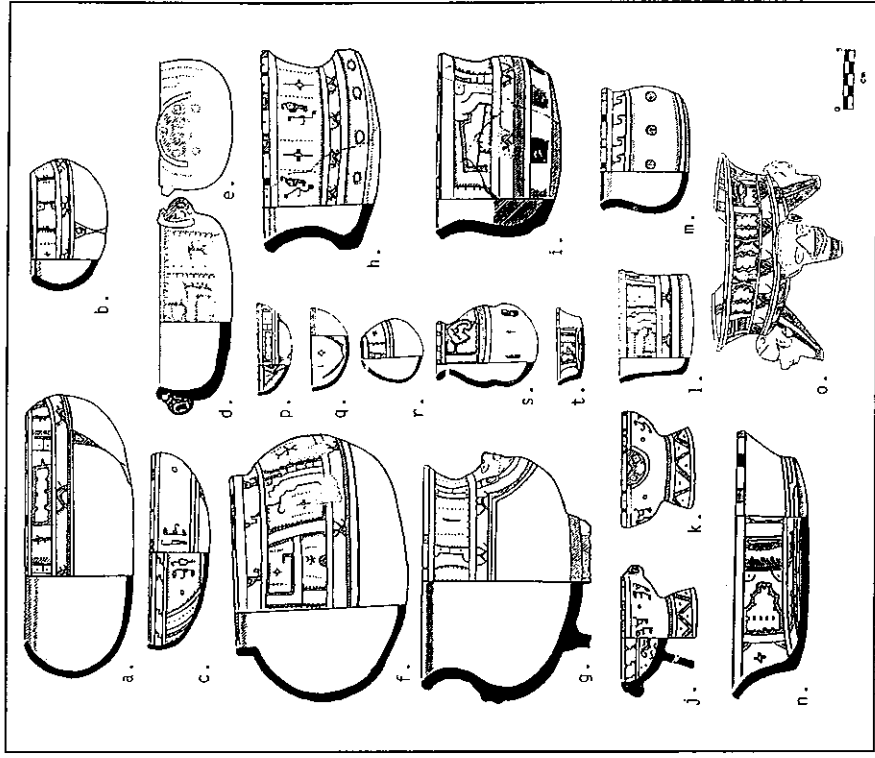


Figure 7.9 Vessel forms in Luna Polychrome: (a) ellipsoidal bowl; (b) hemispherical bowl; (c) low bowl; (d)-(e) oval bowl; (f) necked composite bowl; (g) necked inflected bowl; (h)-(i) complex bowls; (j)-(k) pedestal cup; (l) cylindrical cup; (m) barrel-shaped cup; (n) (composite) dish; (o) tripod (composite) dish; (p)-(t) miniature vessels.

decoration on the field depends on the form of the vessel. On 93.3 percent of Luna: Luna simple bowls (E-bowls, H-bowls, O-bowls), at least the upper two-thirds of the exterior surface is decorated with horizontal bands, and the base is always embellished with a separately structured zone. In contrast, only 30.0 percent are decorated on the interior with other than one or two red bands inside the lip. When motifs appear, all the interior surface is involved, though one-third ($n = 3/9$) have an undecorated disk in the center of the bottom.

TABLE 7.3 Form frequencies for Luna Polychrome varieties

FORM	L:L		L:A		L:NR		L:M		L:AG		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%
BOWLS												
<i>Low Unrestricted</i>												
L-bowl	0	—	1	3.7	0	—	6	42.9	0	—	7	8.2
O-bowl	2	5.1	0	—	0	—	0	—	0	—	2	2.4
<i>Restricted</i>												
H-bowl	12	30.8	12	44.4	2	66.7	0	—	0	—	26	30.6
E-bowl	16	41.0	6	22.2	1	33.3	0	—	0	—	23	27.1
<i>Necked</i>												
N/C-bowl	3	7.7	0	—	0	—	0	—	0	—	3	3.5
N/I-bowl	2	5.1	1	3.7	0	—	0	—	0	—	3	3.5
Complex	1	2.6	0	—	0	—	1	7.1	0	—	2	2.4
DISHES												
Dish	1	2.6	3	11.1	0	—	0	—	0	—	4	4.7
Tripod	0	—	1	3.7	0	—	0	—	2	100.0	3	3.5
Dish												
CUPS												
Cup	1	2.6	0	—	0	—	1	7.1	0	—	2	2.4
P-cup	0	—	0	—	0	—	5	35.7	0	—	5	5.9
MINIATURES												
Bowl	0	—	1	3.7	0	—	1	7.1	0	—	2	2.4
Dish	0	—	1	3.7	0	—	0	—	0	—	1	1.2
Ovoid	0	—	1	3.7	0	—	0	—	0	—	1	1.2
Jar	1	2.6	0	—	0	—	0	—	0	—	1	1.2
Totals	39		27		3		14		2		85	

NOTE: Percentages in variety columns indicate the proportion of the variety the form constitutes. Percentages in Totals column indicate the proportion of the Luna Polychrome type the form constitutes. Luna Polychrome varieties: L:L = Luna:Luna, L:A = Luna:Abstract, L:NR = LUNA:Negative Red, L:M = Luna Moyogalpa, L:AG = Luna:Alta Gracia

The cup and the C-bowl follow the same pattern as most simple bowls: the entire visible exterior is decorated, and there are simple red bands on the interior. On N/I-bowls, N/C-bowls, and the miniature jar, the bands cover only the upper two-thirds or less of the exterior of the vessel, and the base is not decorated; interiors show only red bands. On the dish, exterior decoration is confined to an auxiliary band on the lower third of the flaring wall, but the interior wall is fully embellished.

Structure of the design field

The structure of the design field refers to the partition of the decorated area into zones, set off from one another in some formal way, such as lines and/or spaces (Figure 7.1, Table 7.1). The exterior surface of Luna Polychrome vessels is divided into horizontal decorated bands, separated by strips of plain background, with a definite boundary between these bands and the basal decoration, which is differently oriented. Zones decorated with motifs are never directly juxtaposed.

The exterior main band (EMB) is present in all vessels of the Luna:Luna variety except the dish, where only an exterior lower band (ELB) is present. The ELB is common in this variety (82.1 percent). Exterior upper bands (EUBs) appear on the short necks of N/C-bowls but are otherwise rare (Figure 7.9f). Of the 10 decorated interiors, interior upper bands (IUBs) accompany the interior main band (IMB) in 4 E-bowls; interior lower bands (ILBs) appear in the dish and 5 bowls.

Except for modeled faces, the main bands are of primary importance, and other design structures are oriented to them. However, motifs in auxiliary bands are not aligned with specific sections of major motifs in the main bands. Faces break the continuity of the main band, with complete design complexes in the band positioned between faces (Figures 7.8a, 7.10). On these bowls the ELB, when present, follows the contour of the face, and the ends of two of the lines on the base figure terminate under faces.

Design structure

The design structure is the manner in which the decoration in a zone is partitioned and in which the motifs and/or elements are arranged. In Luna Polychrome:Luna variety, main bands are subdivided with vertical lines, which form rectangular frames for motifs. The lip is broken into sections by blocks of color crossing the lip. Auxiliary bands, on the other hand, enclose a series of repeated figures that, although they touch both borders, do not appear to act as dividers. The design on the base of H-bowls and E-bowls partitions the zone (a disk) into a rhomboidal central section and four peripheral arcs. The interior central disk, when decorated, may carry one unified design or be partitioned into four sections. In contrast to main bands, faces are naturalistically rounded.

Asymmetry predominates in the designs and motifs of Luna Polychrome, major motifs usually facing left and minor motifs right. Frequently, especially on the exterior main band, one design complex will be much shorter than the others, either by shortening elements of the motif or by omitting parts altogether. There are usually fewer spaces above the main band than below, and with rare exceptions, color is applied only to the space between the horizontal decorated bands and the base. However, the EM-1 motif is bilaterally symmetrical, as are modeled faces. Radial symmetry characterizes the decoration on bases and on some central disks.

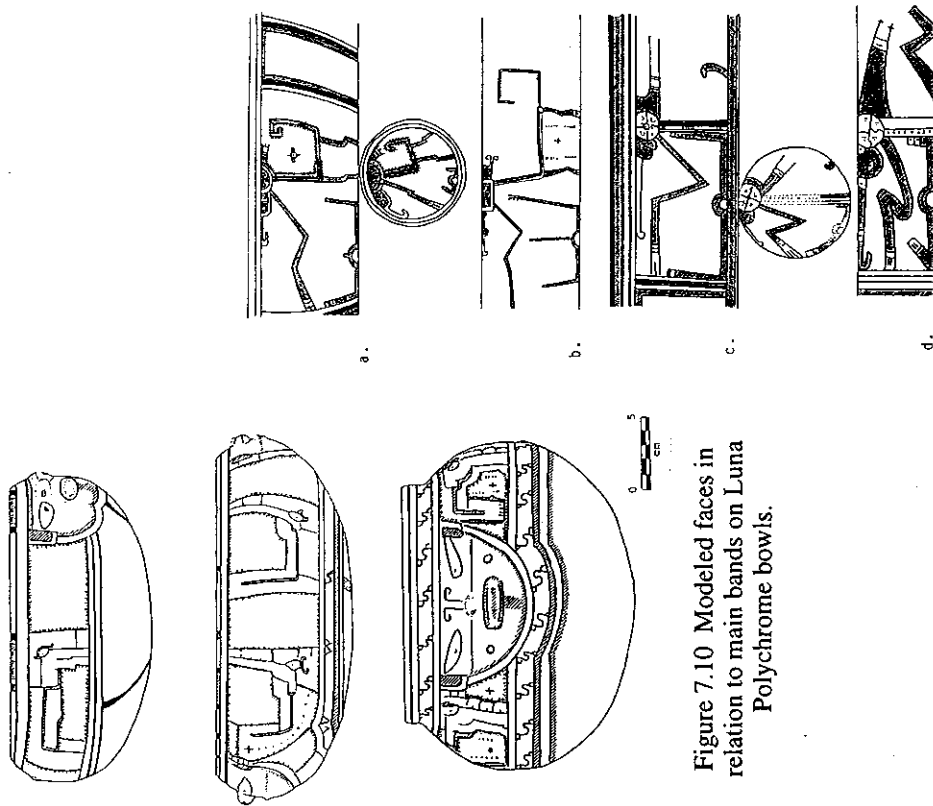


Figure 7.10 Modeled faces in relation to main bands on Luna Polychrome bowls.

Figure 7.11 Monkey motifs.

Decorative technique

There are no large blocks of color. Fine lines, some pencil thin, are painted in black (includes dark brown) and define zones and outline motifs. Bounding lines often vary in thickness and waver from the horizontal. The overall effect is that of a sketch, with the ground color being predominant. Red paint is used for filling in certain specific areas and outlining or overlying some outlines, especially borders. The inner edges of the borders of rectangles are usually decorated with "ticks," "bumps," or scalloped lines, more than one type often being present in the same design. These features appear on certain areas of the figure itself.

Decorative Motifs

Major motifs

The AL-1 motif appears on the exterior of 26 bowls of various forms and on the interior of 1 dish (Figures 7.8b, 7.9i and l, 7.10). This is the most comprehensive form of the Alligator motif (Figure 7.6a). It consists of (1) the head; (2) the eye; (3) the brow; (4) a wide vertical panel behind the head; (5) the cheek; (6) the upper jaw; (7) the mouth; (8) tick marks or bumps lining the inner edge of the mouth and also the upper, lower, and left edge of the frame, except where it contacts the head itself; and (9) the frame (outer border) filled or overlaid with red.

The AL-2 motif appears on the exterior of 6 vessels and the interior of 1 Luna:Abstract H-bowl (Figures 7.8c, 7.9f and s). It differs little from the AL-1 motif in the more comprehensive examples (Figure 7.6b). The (1) head, (2) eye, (3) brow, (4) vertical panel, and (5) cheek are all present, but (6) a curled line meeting the upper profile replaces the upper jaw. More abstract examples occur. The motif sometimes is very similar to the EM-3 motif (Figure 7.5: compare g-h with k-n).

The EM-1 motif appears to represent the head of the Vallejo zoomorph (Figure 7.5a-c). It appears on the exterior of 5 E-bowls and 2 O-bowls (Figure 7.8a, 7.9d-e). The essential elements are (1) the head; (2) one eye; (3) the jaw; (4) the plumes; (5) a red U-shaped bracket sitting on top of the head; (6) a rectangular mass, attached to the lower side of the head and extending to the lower panel border (perhaps originating as the earth monster's avian tail, it resembles a neck in this motif); (7) open dots filled with red or brown, or vertical rows of tick marks; and (8) usually, an accompanying panel bearing a zig-zag bar, with a vertical row of small open circles down each side.

The monkey motif in Luna Polychrome appears only on the interior of H-bowls and E-bowls (8 in this variety). The only example of the Type "B" monkey in Luna Polychrome was seen in this variety, all others being Type "A," the more realistic version (Figure 7.11). For Type "A-1," fine black tick marks edge the body and tail, probably indicating fur. These marks are absent on the Type "A-2" monkey, where it is more common for some elements to be split off and disassociated. All the Luna:Luna bowls with Type "A" monkeys are E-bowls with modeled faces on the exterior.

Minor motifs

Only the "A" form (at 70.6 percent), the "Y" form (at 23.5 percent), and the "L" form (at 11.8 percent) appear in this variety. The proportions are somewhat different with the EM-1 motif ("Y" at 50 percent, "A" at 33.3 percent, and "L" at 16.7 percent for 6 bowls).

Modeled faces

On 12 E-bowls and 1 N/C-bowl of this variety, clay has been applied to the surface of the bowl to represent human facial features (Figures 7.8a, 7.10). On 1 other E-bowl, there is an avian representation (Figure 7.12e-f), and those on the O-bowls resemble the latter more than the former and are also probably birds (Figure 7.9d-e). For the anthropoid faces, noses, lips-chins, ears, and eyebrows are formed by clay applied to the side of the completed bowl, the remaining features being defined by paint alone (also see Bransford 1881:figs. 91-99). The avian faces are defined by (1) a hooked beak; (2) eyes formed by flattened pellets of clay, painted with a disk of slip at the center, encircled by a band of red, the outer edges defined by black tick marks; and (3) a strip of clay, outlined by a black line, applied so that it appears to be draped over the eyes and hangs down beside them. A bump (lump of clay) is centrally placed just above this, on the forehead.

LUNA POLYCHROME: ABSTRACT VARIETY

Defined from 27 vessels, 21 decorated with the AL-3 motif on the exterior, 4 dishes with the AL-3 motif on the interior, and 2 bowls with minor motifs in the EMB (Figures 7.9a-b, g, n, p, r, t, 7.13a-c). Also see Bransford (1881:figs. 18, 57-65, 103), Lothrop (1926:103b-c), Lange (1976:fig. 4g).

Vessel forms

The vessel forms in order of frequency are H-bowls, E-bowls, dishes, 3 miniatures (a dish, a bowl, and an ovoid form), and 1 each of low bowl (L-bowl), an N/I-bowl, a tripod dish (Table 7.3). There are twice as many H-bowls as E-bowls; even excluding the miniatures, the average size of these vessels is smaller than in the Luna:Luna variety.

Structure of the Decoration

Structure of the design field

See Luna:Luna variety. There are differences to be noted. In 86.4 percent of the bowls of this variety, a maximum of half the visible exterior of the vessel is decorated, a reversal of the situation for Luna:Luna bowls. Regarding auxiliary bands, there are no EUBs, 1 IUB, and ELBs on only 44.4 percent of vessels. The lesser frequency of auxiliary bands, especially the ELB, may be due to the smaller size of many of these specimens. The 2 bowls with minor motifs in the EMB (Figure 7.13b-c) were also placed in this variety because the lip decoration, the base motif form, the minor motifs, and the pattern of spaces conform to those of Luna Polychrome.

Decorative motifs

Major motifs

The AL-3 motif is much simpler than the AL-1 or AL-2 motif (Figure 7.6c-f). Any resemblance to a naturalistic figure is slight. The following

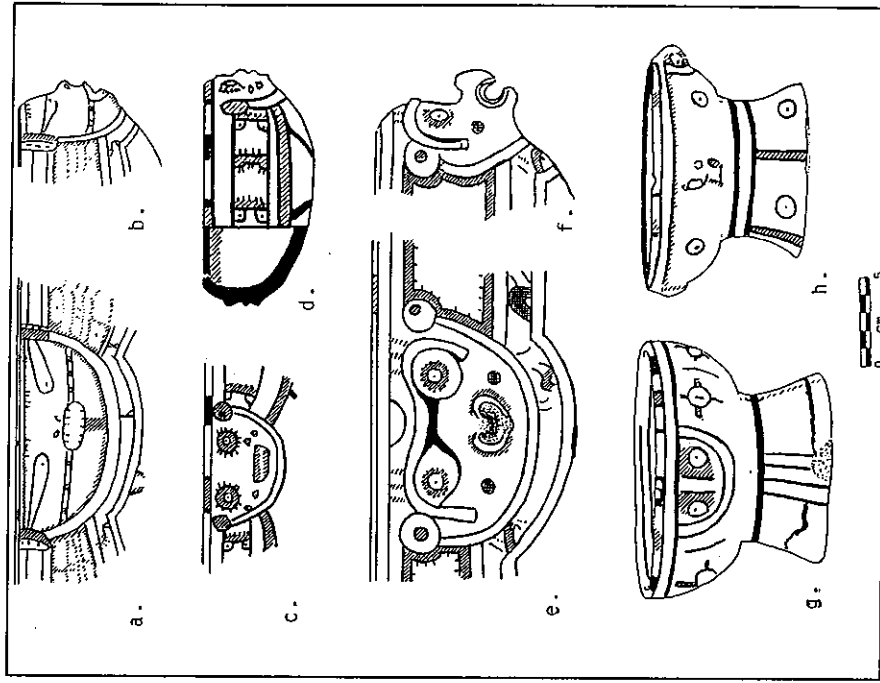


Figure 7.12 Types of modeled faces in Luna Polychrome:

(a)-(b) common form of anthropomorphic face; (c)-(d) anthropomorphic face with rayed eyes; (e)-(f) avian face; (g)-(h) face on pedestal cups. See also Figure 7.9 (d)-(e).

features are typical: (1) a *rectangle* (the remains of the head), the left side may be slightly concave or have a wedge-shaped depression; (2) the *eyes* (repetition of the single eye), which may join in the middle to form a vertical band; (3) a *vertical orange band* to the right of the eyes, sometimes with a narrow brown band between the eyes and the orange band; (4) another rectangle to the left of #1, edged in red or with red-filled borders, which have ticks or bumps on the inner edges; it may lack the top and bottom red edge; (5) this rectangle (#4) often contains elements as in the AL-1 alternate band. A striking aspect of this motif is the reflection across the horizontal axis (see Shepard 1980:fig. 37), an unusual design technique in this collection.

Motifs of other Luna Polychrome varieties appear on the interiors of three vessels: an AL-1 motif and an AL-2 motif in bowls and an AL-2 motif in the tripod dish.

Only 1 bowl in this variety is decorated with a monkey motif: a large E-bowl, with a Type "A" monkey on the interior and avian faces modeled on the exterior. The attributes match those of the bowls in the Luna:Luna variety with Type "A" monkeys.

Minor motifs

As in the Luna:Luna variety, the "A" form is the most common at 76.9 percent ($n = 10$), but there are more forms. One vessel has "Y" forms and 2 have "jaw" forms on the ILB and elongated frets on the ELB, which are similar to those on Madeira Polychrome.

Modeled faces

Only 4 vessels in this variety possess modeled faces. The vessel forms and sizes and the style of the face are varied. Besides the avian face on the E-bowl, there are three anthropoid faces, one with avian-style eyes (Figure 7.12c-d).

LUNA POLYCHROME:NEGATIVE RED VARIETY DEFINED

Defined from 3 vessels, all with the EM-2 motif on the exterior (Figures 7.5d, 7.12a-b, 7.14). Also see Bransford (1881:fig. 21) and Lothrop (1926:pl. 88m and p). These are all simple restricted bowls: 2 medium H-bowls and 1 large E-bowl. At least two-thirds of the exterior design field is decorated on all of them. The large bowl displays a dismembered Type "A" monkey motif and the "Y" form minor motif on all four auxiliary bands (Figure 7.14b). The smaller bowls are plain on the interior except for the usual red band inside the rim. The large bowl and one smaller bowl have anthropoid modeled faces (Figures 7.12a-b, 7.14b).

The major motif, a version of the earth monster motif, is unusual in the painting technique. This is not unique to Luna Polychrome. Several other vessels were seen decorated with this technique, especially with the Winged Head motif (Lothrop 1926:pl. 93).

LUNA POLYCHROME:MOYOGALPA VARIETY

Defined from 14 vessels: 10 by the EM-3 motif, 2 by motifs seen on other vessels of the variety, and 2 by form (pedestal cups [P-cups]) in conjunction with Luna motifs (Figures 7.5k-n, 7.9c, h, j-k, m, q, 7.12g-h, 7.15). See also Bransford (1881:figs. 17, 20, 45, 49-56, 77) and Lothrop (1926:pl. 88a-c, fig. 102d-f).

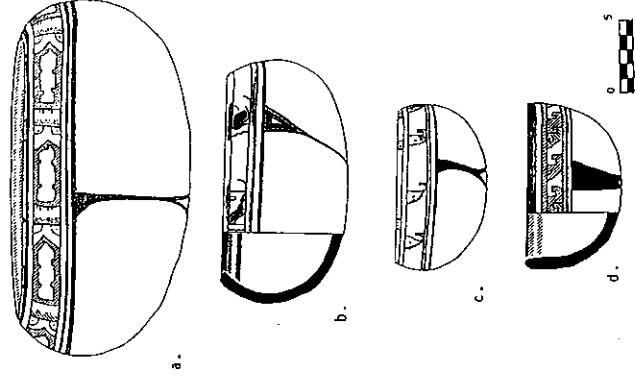


Figure 7.13 Vessels of Luna Polychrome:Abstract variety and comparison with Banda Polychrome: (a) with AL-3 motif; (b)-(c) with minor motifs in main band; (d) Banda Polychrome.

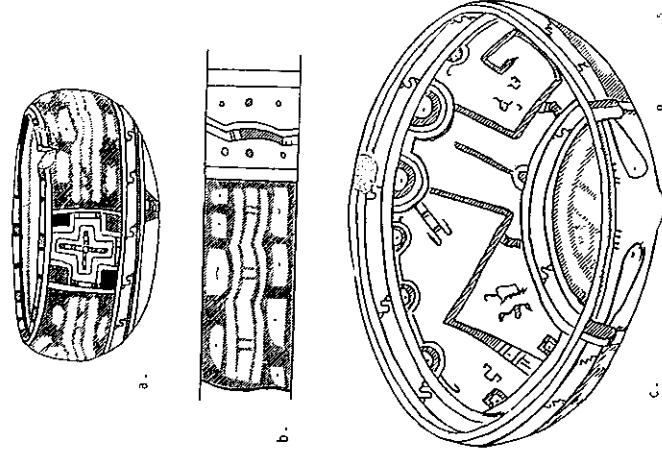


Figure 7.14 Vessels of Luna Polychrome: Negative Red variety.

Vessel forms

Forms in frequency of occurrence are L-bowls, P-cups, and 1 each of a C-bowl, a barrel-shaped cup, and a miniature unrestricted bowl (Table 7.3). These forms are almost unique to this variety.

Structure of the field and of the design

The interiors of all except the restricted forms (C-bowl and cup) are fully decorated. The design bands usually cover the exterior vessel body. The decoration on the pedestals of P-cups is separated from that of the body by a heavy black line or a red band and consists of vertical bands.

The EMB, with spaces on either side, usually fills the exterior design field. Auxiliary bands are rare on the exterior, but L-bowls usually have both

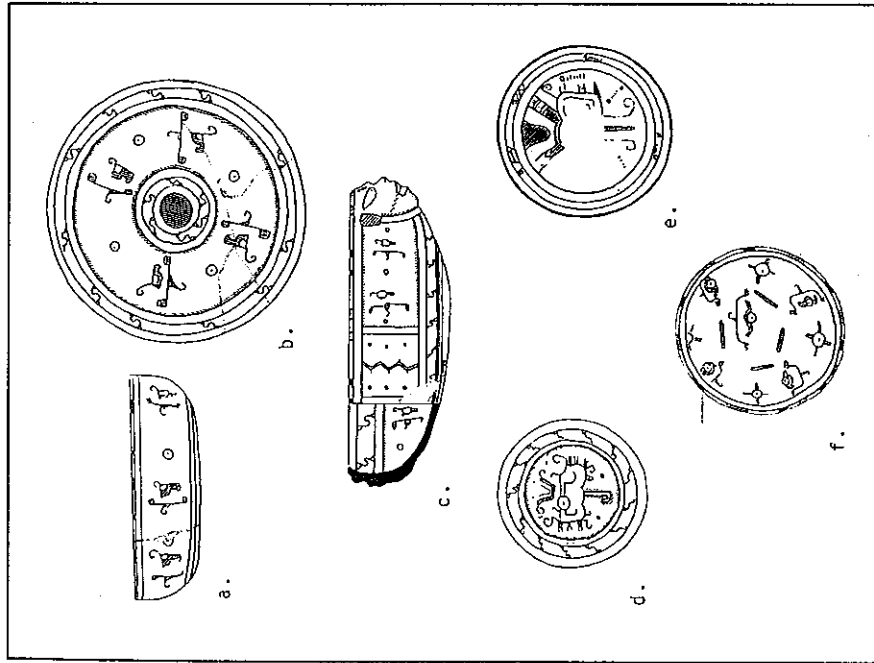


Figure 7.15 Vessels of Luna Polychrome: Moyogalpa variety: (a)–(b) exterior and interior of the same bowl; (c) low bowl with modeled faces (d)–(f) interiors of pedestal cups.

the IUB and the ILB (Figure 7.15a–b). In two P-cups there is no division of the interior into bands (Figure 7.15f). The design bands of Luna: Moyogalpa are less rigidly structured than in the other varieties. Division into boxlike units occurs in 4 cases (1 EMB and 3 IMBs). Usually the separation between repetitions of the major motif is effected by alternating them with minor elements.

Major and minor motifs

The EM-3 motif consists of two elements that occur together (Figure 7.5k–n). They appear to represent (1) the *jaw* of the Earth Monster or Fire

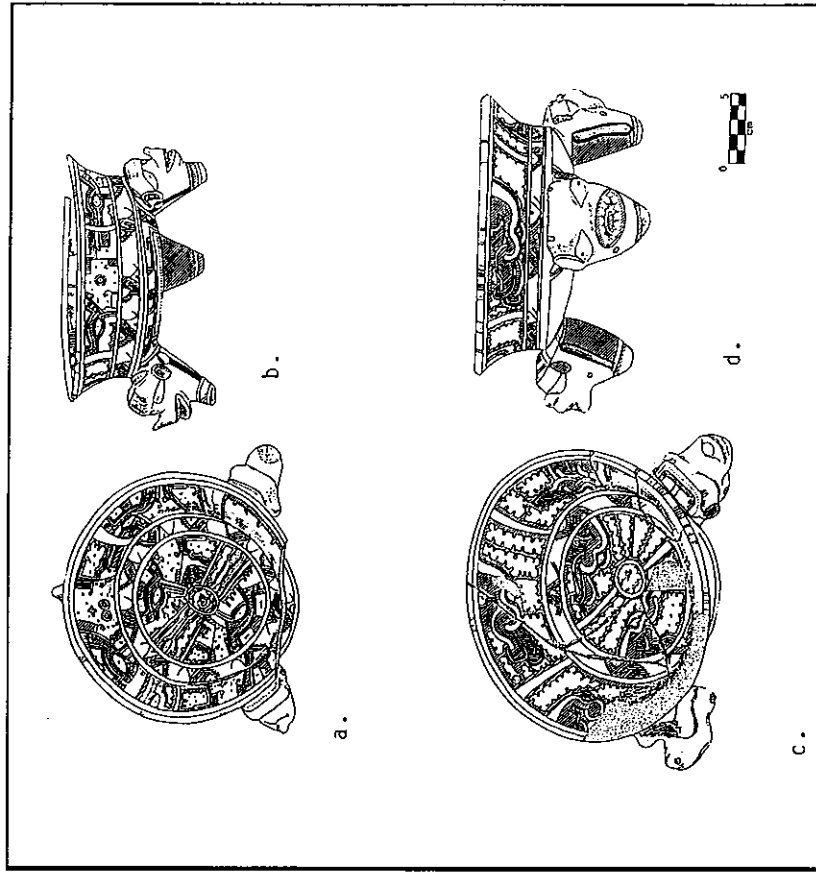


Figure 7.16 Tripod dishes of Luna Polychrome: (b)–(c) exterior and interior of the same vessel.

Serpent; (2) the *eye*; (3) the *brow* or a second *jaw*, attached to the *eye*; and (4) a *tendrill* rising from the *eye* (a *feather*?).

The long axis of the EM-3 configuration is vertical. Adjacent sets are separated from each other by a circle, a cross with a circle at the center, a zigzag bar, or a “stick man,” a single vessel displaying only one of these forms. Two P-cups are decorated on the interior with a rendition of the EM-1 motif, clearly demonstrating the affinity of this variety to the Luna: Luna variety (Figure 7.15d–e).

In minor motifs on nine vessels, the “Y” form is most common for this variety (66.7 percent; $n = 6$), with the “A” form present on 2 and a Madeira-type stepped fret on another.

Modeled faces

One L-bowl is decorated with faces identical in style and placement to those in the Luna:Luna variety. However, at or near the rim of all the P-cups, a lump of clay was affixed on either side and later defined by paint (Figure 7.12g-h). All 5 are virtually identical, depicting the features of an animal resembling an amphibian, a reptile, a fish, or possibly a monkey.

LUNA POLYCHROME:ALTAGRACIA VARIETY

Defined on the basis of 2 vessels with a combination of characteristics of design structure and motifs appearing in other varieties of Luna Polychrome and on the orientation of the tripods (Figures 7.9o, 7.16). Also see Lothrop (1926:figs. 93, 97a; pl. 92) and Day (1982:fig. 17a; 1984b:fig. 8; 1984c:fig. B.17 [all appear to be the same vessel]).

Vessel form

Although dishes without supports would logically occur as well, only the 2 tripod dishes were seen. These dishes are shallower than those of some other ceramic types from Altgracia, with a body height-diameter comparable to L-bowls. The outward curve of the wall is greater than for "classic" Madeira tripod dishes, which otherwise resemble them closely in form. As with the other ceramic types, the three supports on any one vessel are identical and were probably mold-made. In Luna:Altgracia, the dish is supported on the back of the head of the figure, the face is oriented on a horizontal plane, and the neck rests on the surface. Both modeled figures are zoomorphic in this sample.

Structure of the design field and the designs

In this variety, all available space on the interior, as well as the exterior wall, is covered with decoration. This differs from most other Luna Polychrome dishes but concurs with the Luna:Abstract tripod dish. The base of the dish in Luna:Altgracia is more elaborately decorated than either other Luna Polychrome varieties or other ceramic types. Both tripod dishes have an ELB and an ILB, following the pattern for Luna Polychrome as a whole, rather than many other dishes from Altgracia.

The main bands of Luna:Altgracia are partitioned as in Luna:Luna, but background tends to be filled in, with many small elements in one case, and by unpainted areas serving as part of the figure in the other. Borders are filled with red and have projections at intervals, but these are more formal than in most other Luna Polychrome varieties.

Decorative motifs

One tripod dish is decorated with a mixture of motifs (AL-3, AL-1/EM-1), appropriate to other Luna Polychrome varieties (Figure 7.16a-b). The minor

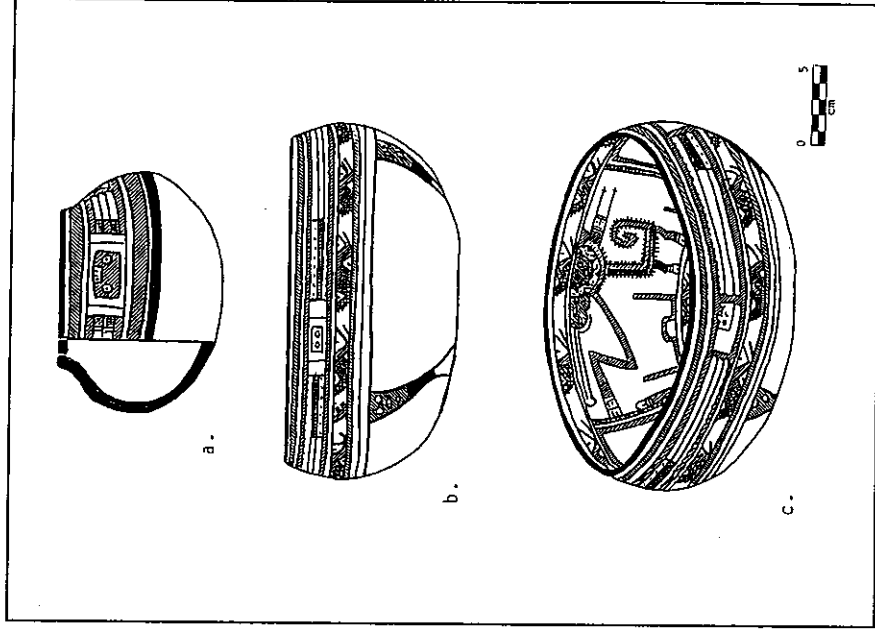


Figure 7.17 Vessels of El Menco Polychrome: (b)-(c) exterior and interior of the same vessel.

motif is a stepped fret resembling an elaborate "A" form. The other tripod dish carries a motif akin to the AL-1 motif, but it is composed of flowing curves that fill the space (Figure 7.16c-d). However, borders are the typical red-filled, projection-edged form seen in Luna Polychrome. The barred lip, the form of the minor motif, and the orientation of the tripod were the deciding factors in this case.

EL MENCO POLYCHROME

Provisionally defined; needs more study. Seven vessels with the angular Winged Head motif comprise the sample (Figure 7.17). See also Lothrop

(1926:figs. 95b, 104b [under Luna Ware] and Day (1982:fig. 17b, 1984c:fig. B.20 [labeled Luna Polychrome:El Menco variety]).

In physical characteristics, forms, and general appearance, this ceramic type very much resembles Luna Polychrome. The differences that determined its rejection as a variety of the latter type are noted here.

Vessel forms

H-bowls, an E-bowl, 1 large dish, 1 tripod dish. A globular bowl has a short vertical neck that meets the vessel body in a smooth curve (i.e., inflection) rather than in a sharp angle (i.e., corner point), as is the case for such necks in Luna Polychrome (Figure 7.17a).

Structure of the field and the design

The areas of the design field decorated are essentially the same in El Menco Polychrome and Luna Polychrome. However, auxiliary bands are present only on 1 bowl and the large dish. Colored (orange or red) bands frame the main band in a symmetrical way not observed on Luna Polychrome, where the color is confined to the band below the design bands.

The major motif itself is bilaterally symmetrical. Thin black lines are used to outline blocks of color, rather than to define the details of figures. There is more filling of space with color, which makes the design stand out (the bars on the wings, the red "face"). The lighter brown is used regularly on parts of the major motif.

Decorative motifs

The major motif for this ceramic type is the Winged Head motif composed of rectangles. Two large bowls have a monkey on the interior: 1 a Type "B" monkey, the other a more ornate and sturdier Type "A-1" monkey than appears in the Luna Polychrome bowls (Figure 7.17c). The rare minor motifs are akin to a very elaborate "A" form, somewhat like those on Luna:Altagracia tripod dishes (Figure 7.17b-c). Although 1 small bowl has red and black bars across the lip, the lip on 4 specimens is black and is a solid red on another. Two large bowls have the four-armed base design, but the ends of the extensions are wide and black. In this feature, in the black lips, and in the arrangement of bands, El Menco Polychrome resembles Banda Polychrome.

8.

Preliminary Research in Chontales and the Lake Managua Basin, Nicaragua

DOMINIQUE RIGAT and RAFAEL GONZÁLEZ RIVAS

Mutual cooperation among the Center for Mexican and Central American Studies (CEMCA), supported by the French government, the Cultural Patrimony, and the National Museum of Nicaragua has made possible the development of the "Chontales" project (1984-1988) (Gorin 1990) and subsequently the creation of a second project, the CLM Project, from 1989 to 1991 (Figure 8.1), emphasizing the basin of Lake Managua. Nicaragua has previously been the focus of numerous archaeological investigations (Norweb 1961, 1964; Haberland 1966, 1986, 1992; Magnus 1975, 1976, 1978; Wyckoff 1971, 1976; Wyss 1983; Lange et al. 1992), and it is considered essential to continue such investigations. Studies carried out by Haberland (1986, 1992) on Ometepe Island were the basic framework for the selection of Chontales as the primary source for our research.

THE CHONTALES PROJECT

The Chontales project focused on the western part of the Chontales region (between Lake Nicaragua and the Chontales mountain range). The primary goal of the project was to evaluate the precolumbian remains of the area and to assess the impact of possible cultural contacts with Mesoamerican and South American regions and their influences on local development. Such evaluation required the development of a cultural chronology for the area. This cultural sequence allowed researchers to determine that there were cultural influences coming from the Gulf of Nicoya during the Ometepe period (A.D. 1350-1520). This influence may be related to the arrival of the Nicaraos to the area (Gorin 1990). Other sources of information have been collected as well, among them lithics from different occupational periods (Rigat 1992), stone figures (including a radiocarbon date associated with one of the statues at the Juigalpa Museum [Rigat 1992]), petroglyphs (Rigat 1992), interment types (Gorin 1990), and long-distance exchange of exotic goods (Gorin 1990).

Despite the excellent results obtained from the Chontales research, continuation of the investigation in the area of Boaco (inland Chontales) was restricted by the civil war. The research focus thus turned toward the Lake Managua basin.