

Language and Culture Archives

Sarayacu Quichua Pottery
Patricia Kelley and Carolyn Orr
©1976, SIL International

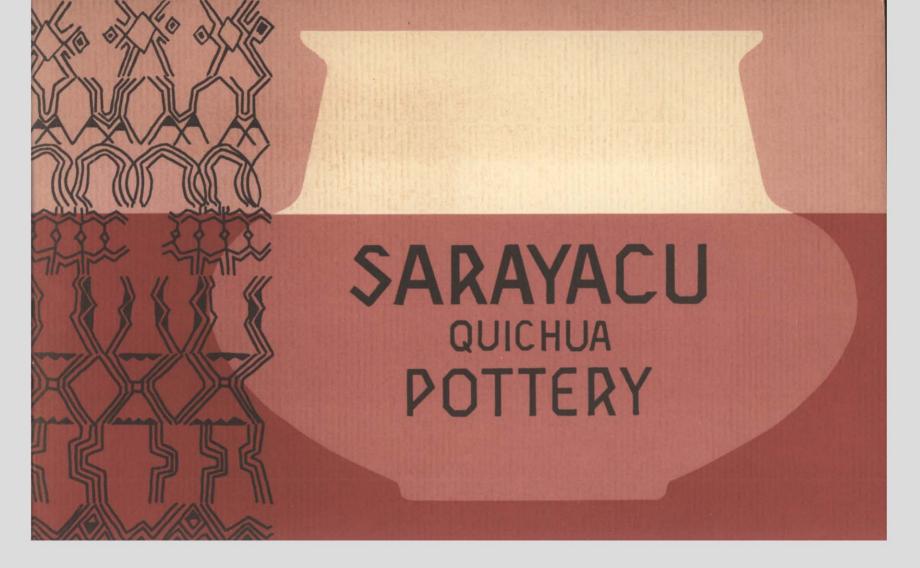
License

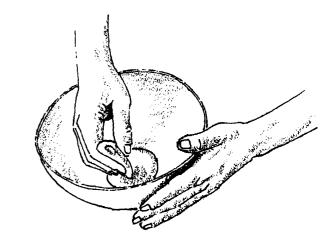
This document is part of the SIL International Language and Culture Archives. It is shared 'as-is' to make the content available under this Creative Commons license:

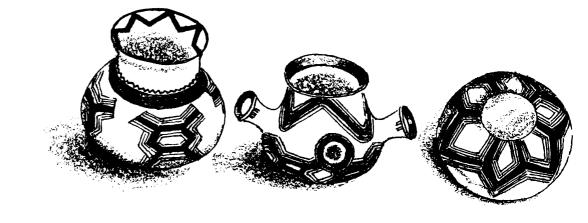
Attribution-NonCommercial-ShareAlike (http://creativecommons.org/licenses/by-nc-sa/4.0/).



More resources are available at: www.sil.org/resources/language-culture-archives.







SARAYACU

QUICHUA

POTTERY

SIL MUSEUM OF ANTHROPOLOGY - PUBLICATION 1

William R. Merrifield Museum Director

Irvine Davis Academic Publications Coordinator

Pottery designs on cover and pages 21 and 31 by Pepita Hualinga of Sarayacu, Ecuador.

Photographs by James Andrew (x, 2, 5, 9c, 11, 26, 29b), Robert Hettema (13f), and the authors.

Illustrations by LeRoy Frye.



SARAYACU QUICHUA POTTERY

PATRICIA KELLEY and CAROLYN ORR

SIL MUSEUM OF ANTHROPOLOGY Dallas, Texas and Quito, Ecuador, S.A.

SIL MUSEUM OF ANTHROPOLOGY 7500 West Camp Wisdom Road Dallas, Texas 75211 USA

©1976 Summer Institute of Linguistics, Inc.

Library of Congress Catalogue Card Number: 76-7849

ISBN: 0-88312-150-6

This publication is available in English and Spanish.

An exhibit of Sarayacu Quichua pottery, based on this publication, is being developed at the SIL Museum of Anthropology, Dallas. An extensive collection of Sarayacu Quichua pottery may also be seen at the Museo del Banco Central, Quito, Ecuador.





This article describes the process of pottery construction and how vessels are used by the Sarayacu Quichua of the Bobonaza region in southeastern Ecuador, who are known in literature as Canelos Quichua. The information contained in this description was obtained from various Sarayacu potters during three field trips by the authors.

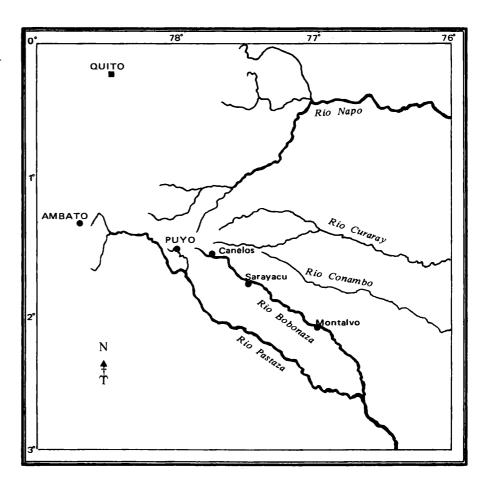
We describe the various types of pottery and general usage of each, and discuss the procurement, storage, and use of the clays, paints, and glazes. Each type is then described in terms of its construction, painting, firing, and glazing. Specific sources and mineral components of the clay and paints, properties of the glazes, origin of this type of pottery, innovations, the evolution in trends of pottery design, and the implication of the pottery in social activities remain to be treated in further studies.

We would like to express our appreciation to the many Quichua, especially Dina Hualinga, Erlinda Manjia, Estela Tute, and Simona Canelos, who answered our many questions and demonstrated the various stages of construction of each type of vessel.

The Quichua orthography used here is based on a linguistic analysis and is adapted to Spanish as follows:

$$\langle \xi' \rangle \rightarrow ch$$
, $\langle \xi' \rangle \rightarrow sh$, $\langle w' \rangle \rightarrow hu$, $\langle k' \rangle \rightarrow c$, qu , $\langle c' \rangle \rightarrow ts$, $\langle ly' \rangle \rightarrow ll$, and $\langle h' \rangle \rightarrow j$.

SARAYACU QUICHUA EASTERN JUNGLE OF ECUADOR SOUTH AMERICA











CONTENTS

Foreword	vii
Introduction	хi
Basic Materials	1
The Storage Pot	3
Making the Storage Pot	4
Firing the Storage Pot	8
The Cooking Pot	10
The Drinking Bowl	16
Making the Drinking Bowl	14
Painting the Drinking Bowl	20
Firing the Drinking Bowl	24
The Soup Bowl	26
Fiesta Pottery	27
Making Fiesta Pottery	29
Appendix I	32
Table 1: Bowl Sizes	33
Table 2: Pot Sizes	34
Appendix II	
Word List	36

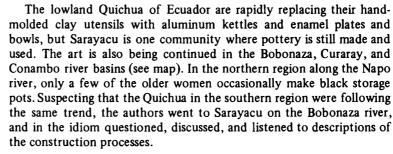


Chicha storage pots in use.



Size comparison of drinking bowl, soup bowl, cooking pot, and storage pot.

INTRODUCTION



Not only are the older women still making the painted pottery, but their daughters and granddaughters are learning and continuing this sophisticated art. We found them at work in their homes, sitting on a plank, a low stool, a bench, or sleeping platform. When we asked, How did you learn? Who taught you? their answer was, When mother rolled and pressed the coils of clay, we ourselves watched and pressed and thereby learned. Nucanchi ámumi casna ahuái llutasha mama ahuaucpi ricusha llutasha yachanchi. While the older women mold the vessels, the young girls observe and imitate each step of the process, making their own miniature vessels.

TYPES OF VESSELS

Five types of vessels are made in the area, each type having a specific function: the storage pot tinaja, the cooking pot yanuna manga or simply manga, the drinking bowl mucahua, mucaja, or simply muca, the soup bowl callana, and fiesta pottery puru.





Pots stored on shelf-like platform in house.



Separate shelter specifically for storage of pots.

The large, colorfully painted storage pot is a receptacle used to store chicha, a mash made by boiling, mashing, and masticating manioc. The Quichua say that it takes three basketsful of manioc made into chicha to fill a storage pot. After the storage pot is filled, the top is covered with large leaves and tied with a vine until the mash is fermented.

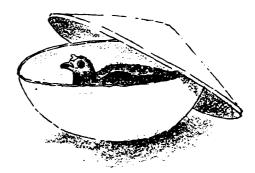
The black cooking pot was previously used to boil all food, but today is used primarily for boiling manioc. Soup and plantain, in most homes, are now cooked in an aluminum kettle and served in an enamel plate.

The chicha drink of fermented mash mixed with water is served in the painted drinking bowls. When not in use, bowls and pots are stored upside down on a large shelf-like platform, or the pots may be stored in a shelter apart from the house.

Small pottery vessels called puru, representing animals, birds, reptiles, fish, people, inanimate objects, or miniature storage pots and drinking bowls are used in fiestas. The Quichua say that they fill these with chicha drink and pour it over one another. While historically this may have had some significance, the Quichua now explain that for no real reason, laughingly we play yanga asisha pugllanchi.



Broken and damaged pottery is considered to be discarded jichushca, although it still serves various purposes in the economy. The base of an old pot, for example, is often used as a storage bin for plantain, as a nest for a setting hen, or as a portable kiln for firing a bowl. Damaged pots are used as a shelter for baby chickens or as support stilts for a new pot being fired. Old or broken drinking bowls are used as containers for paints when painting freshly made pottery, or serve other practical functions such as being hung on a cord above dried corn as a shield to prevent rodents from eating the corn.





BASIC MATERIALS

The three basic materials used by Quichua potters are clay, paint, and glaze. The procurement, storage, and use of these materials are discussed in this section before dealing in more detail with the construction of individual types of pottery.

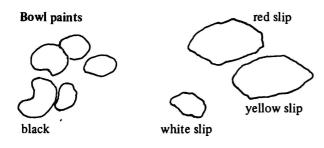
CLAYS. Two types of clay, ranging in color from gray to light rust, are used in the manufacture of Sarayacu pottery. They are gathered and stored separately. The finer clay, light gray in color, is used to make bowls and fiesta pottery, and is called bowl clay mucahua allpa. It is gathered from rivers or streams and has a smooth consistency, with very little extraneous material. The coarser clay, used to make pots, is called pot clay manga allpa. It is gathered from swampy areas

and the banks of larger rivers, and contains small pebbles and other impurities that are picked out of the damp clay during the coiling and scraping processes. Potters who rely on clay deposits found in the main river system report that some finer clay needs to be added to pot clay, but those who have access to deposits from swampy areas do not have to mix the two. A clay sample from a newly found deposit is molded and fired to determine its quality. For storage, the potter wraps the clay in leaves and places it near the house where the dew and rain keep it moist.

When asked what is added as a tempering agent, the potters insisted that bringing it just like that we mold it shinalla apamusha ahuanchi. The fact that they lose very little greenware in the firing process indicates that the natural components of the raw clay already contain a good tempering agent.

PAINTS. Paints and slips are mineral, not vegetable. The Quichua call them earth allpa and obtain them from the Montalvo and Conambo areas, although some shades of red are found in nearby small streams. Some of the colored earth such as the black, is more like rock and is very hard; other types, such as the white, are soft and crumbly.





Slips are made from white earth yurag allpa, yellow earth quillu allpa, and sometimes red earth puca allpa. They are dissolved in water in a discarded drinking bowl and are applied to greenware with a swab of raw cotton or cloth.

Paints are made as needed from black earth yana allpa and red earth puca allpa. There are a variety of rocks called puca allpa that constitute a wide range of browns and reds when fired. Paint is made by rubbing a colored chunk of rock into a concave area of a very large stone that becomes well indented and stained from use. This worn indentation serves well as a palate to hold the water that is added to form a small amount of paint. The applied paint dries quickly, although it is easily smeared until fired.

GLAZES. The Quichua say that the glaze makes pottery waterproof. There are two types: resin of a gum tree shilquillu and white resin of a rubber tree leche caspi.

To obtain shilquillu, the Quichua slash a tree and return one or two months later to cut off the balls of resin that have formed. These are dropped into hot water to clean off impurities napa, after which the resin is wrapped and stored in leaves to keep it clean until needed. Shilquillu is applied to the pottery while it is still hot from firing. The potter rubs the vessel with a chunk of the resin which melts, forming a clear coating on the surface. The Quichua report that if the pottery becomes too cool when applying this glaze, the paint will come off during the application.

The white resin of a rubber tree, leche caspi, is gathered as it drips from fresh slashes on the tree. It is applied to cooled pottery, leaving a matte glaze or milky effect which sometimes obscures the painted design. The vessel is not fired a second time after glazing.



THE STORAGE POT

CONSTRUCTION. To begin molding the large storage pot **tinaja**, the potter flattens a ball of clay between her hands, forming a thick disc which she places on a board in her lap. This disc, about 8-10 cm. in diameter and approximately 8 mm. thick, becomes the base siqui of the pot.

On another board she rolls long coils of clay the thickness of her thumb for the sides of the pot. She guides the coil with her left hand, turning the supporting board as necessary, and uses the fingers of her right hand as an anvil, while with the thumb she presses the clay onto the pot from the inside. Breaking off the coil, she joins the ends together. These joints, where the ends of the coils meet, are alternated so that one does not fall immediately above the other.

After three or four coils are added to the pot, she further adheres them together by a diagonal downward stroke of the forefinger. She then leaves it for a time and goes about her other work.

When the clay is somewhat firm but still moist, she smooths the outside and then the inside with an oval shaped piece of gourd called **huihuishcu**, which she moistens slightly from time to time. The edge of the **huihuishcu** is kept sharp by rubbing it on a rock.

When asked what the result would be if too many coils were added on without the intermittent drying stages, the



Shaping the base with gourd piece.

Adding coils to the base.



Molding newly added coils.



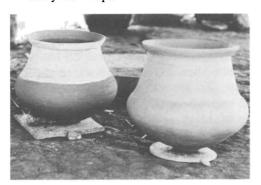
Smoothing the outer surface with gourd piece.



MAKING THE STORAGE POT



Drying the newly constructed pots pot on the left already has white and yellow slips.



Polishing with smooth pebble.



answer was, If we stick it on too wet, it will sag Yapacta iullata llutacpi liu urmanga. When a coil is too wet, the potter holds it by the fire for a moment or uses a fire stick to heat it, drying it slightly before adding it to the pot. The Quichua say that spitting on the hands provides sufficient moisture should the potter's hands become too dry when making a coil.

As the storage pot begins to take shape and the diameter of the belly huicsa increases, plantains are placed around the base for support and balance. The diameter is increased at about a 45° angle up to approximately one-third of the planned height of the pot. Then the sides are brought in, decreasing the diameter. Some potters make the increase and the decrease of the section at a sharp angle, while others make it more gradual and rounded.

When the belly of the pot has become firm, yet still moist, the neck cunga is begun. This section, constituting more than a third of the full height of the pot, rises in a straight profile in contrast to the curved profile of the body section. Tapering in slightly, the neck narrows to the base of the lip where the diameter measures approximately two-thirds that of the widest part of the belly.

After the neck section has become firm, the potter builds the extended lip **shimi** of the pot by adding two coils to the neck at an outward angle. She pinches these onto the outside of the pot rather than from the inside, which is opposite to the procedure used in adding coils

up to that point. After smoothing the clay on the lip with the gourd scraper, she uses a corn husk for even finer smoothing. These modeling tools are moistened from time to time to obliterate any lines left by their use. After the smoothing is completed, the pot is left in position until it is leather-hard. The Quichua say that the molding and drying time for a storage pot takes almost a week.

PAINTING. When the completed storage pot has dried, the potter applies two slips to its surface. She applies two coats of yellow from the base up to the juncture of the belly and the neck, and also to the upper side of the lip. If the yellow is not available, the potter substitutes red earth. She then applies two coats of white slip to the neck. After firing, the solid white neck and the dark red belly present a striking contrast.

A variation of the solid red and white pattern is to add a border design where the colors meet (see color plate). The potter applies the yellow slip up to some point between the full diameter of the belly and the juncture of the belly and neck rather than all the way up to that juncture. She then extends the white slip down to meet the yellow. To form the border area, she paints an encircling red line where the white and yellow meet, and either black or black and red lines at the juncture of the belly and neck. Within this border, the potter paints a design such as those painted on the drinking bowl. In contrast to the drinking bowl, however, the

border design of the storage pot usually contains more than one motif. Sometimes a few animate or inanimate figures are painted on the neck, apparently at random.

After being painted, a pot is set in the sun to dry until, the Quichua say, it becomes very white, a sign that it is completely dry. When it is dry, the potter uses a water-worn pebble to polish it. Until fired, the pot is referred to as raw chahua.

FIRING AND GLAZING. When the storage pot has thoroughly dried, it is placed upside down supported by three damaged pots, its lip resting about 6-8 cms. off the ground. The potter then applies yellow slip to the base of the pot which has previously been inaccessible for painting. She builds a small fire of dried bamboo under the mouth of the inverted pot to gradually heat the interior. When the lip begins to darken and the pot itself is too hot to touch, short pieces of bamboo are stacked around it. Longer pieces are gradually added until the pot itself is covered with bamboo and completely enveloped in flame. The Quichua say that bamboo makes a very fast, hot fire.

When the fire has burned down, the potter removes the pot by using a long pole to roll it onto a slab of bamboo. She slaps the pot with wet leaves to make it shiny. Even before she set up her pot for firing, she had melted some beeswax pungara mixed with chunks of hardened leche caspi resin of a rubber tree for coating the interior of the pot. Hurrying to finish before the pot cools, she rubs the lip and the inside of the neck with a large chunk of beeswax. She then pours the hot premelted tar-like mixture into the pot and moves the pot back and forth to coat the interior. To complete the coating, she uses the chunk of beeswax to spread the mixture up the insides of the belly, thus completing the waterproofing of the pot.

To apply the outside glaze, the potter rubs a chunk of shilquillu resin over the exterior of the pot. The heat of the freshly fired pot melts the resin to form a clear coating. The Quichua say that instead of shilquillu, some potters apply fresh leche caspi to a cooled pot to make the neck whiter. If any crack results from the firing process, the potter dabs on the tar-like mixture to mend it.



Applying slip to base of pot.

Pre-heating the inside of green-ware pot using old damaged pots as stilts.



Adding bamboo to the fire.



Slapping the newly fired pot with wet leaves.



FIRING THE STORAGE POT



Coating the inside with melted beeswax mixture.



Mending a crack with dabs of beeswax.



THE COOKING POT

CONSTRUCTION. The cooking pot manga is constructed in the same general manner as the storage pot. The cooking pot is smaller and has a general squatty appearance compared to the more graceful lines of the taller storage pot. The neck of the cooking pot is also shorter, and there is not as much difference between the diameters of the base of the neck and the top of the neck. One variation of the cooking pot has no lip, and the neck of this type is very straight.

A variety of the manga is called sarpa manga. In this type, the potter applies coils of clay onto the exterior rather than from the interior of the belly. She welds the coils by pressing downward in short strokes with her thumb, leaving a corrugated effect on the exterior surface.

When the pot is leather-hard, the potter uses a stick to incise a zigzag pattern of short connecting lines encircling the base of the neck. In contrast to the storage pot, the inside of the cooking pot is polished with a smooth pebble, while the outside surface is left rough. The Quichua say that it takes one day to complete a cooking pot, but the potter allows it to dry two weeks before firing.

FIRING AND GLAZING. In contrast to the technique and the use of bamboo for firing the storage pot, the cooking pot is placed on top of a stack of firewood as high as the pot is tall. More firewood is added to cover the pot entirely. The potter lights a fire at the bottom of the stack which gives the pot time to preheat before the entire stack of firewood is in full blaze. The firing time for the cooking pot is much longer than that for the storage pot. After it is fired, the pot is set aside to cool.

The following day the potter rubs the inside of the pot with nettles chini panga or other types of jungle leaves and places the pot upside down over a smoldering fire. She checks the fire occasionally to knock off any coals beginning to flame and to check the progress of the tarring effect on the interior of the pot. The Quichua explain that the combination of the juices of the leaves and the smoldering seals the pot and prevents it from leaking. Since any mending substance, such as the pungara used in repair of a storage pot, would melt in cooking, a cooking pot cracked in the firing process is discarded. The long drying time and the slow firing technique for the cooking pot apparently keep breakage to a minimum.

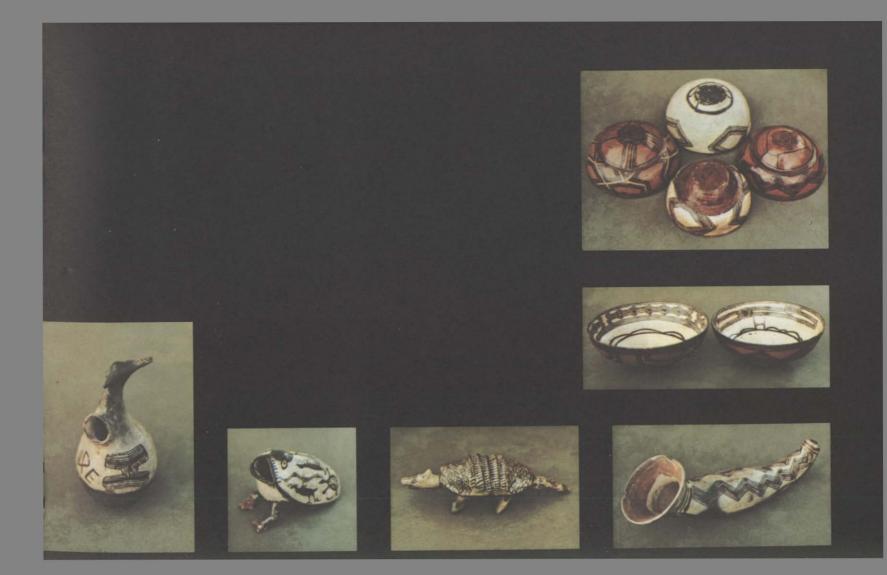


Cooking pot with corrugated surface.



Cooking pot with lip.







Shaping the basic cone.



Flattening the base.



Shaping the inside.



Drying the base with a firestick.

Drying the base of the bowl formed from a cone of coils such as the one to the right.



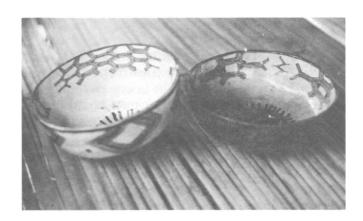
Adding coils to build up the sides.



Molding the added coils together.



MAKING THE DRINKING BOWL



Finishing the surface using a gourd piece.



Smoothing the rim with a cornhusk.

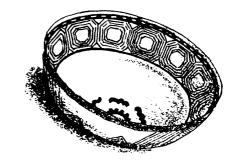


THE DRINKING BOWL

CONSTRUCTION. While it takes a day to construct a cooking pot and a week to construct a storage pot, a potter is able to mold several bowls in one day. She works on them alternately, each one on a separate board in her lap, for all stages of construction.

To form the base of the drinking bowl mucahua, the potter begins by spiraling a coil or by depressing a small ball of clay to shape into a cone. With another coil, she builds up three additional tiers, extending the diameter of the cone. Holding the cone upside down and using the gourd piece huihuishcu, she smooths the outside with diagonal strokes and later the inside with horizontal strokes. She pats the point of the cone with the gourd piece to flatten it, forming the base. Turning the flattened cone over and resting it in the palm of her hand, she further shapes the inside, using the rounded end of the gourd piece. At the same time, she works the upper section of the cone to spread it out, forming a saucer-like shape called opened-up pascarishca. The edge of this opened-up section is pinched off to even its circumference. A short drying time is allowed before adding other coils. Meanwhile, the potter starts a new bowl or resumes work on one begun previously.

If the potter is ready to work again on a bowl which is not sufficiently dried, she may take a firestick and hold it near the bowl to dry it slightly before applying more coils. If the bowl is still soft, she may place small balls of clay under the





opened-up section as supports. She then adds three or four coils to build the sides, called ribs cushtillus. Again, the bowl is put aside until the clay has set. Then she smooths the outside surface jahua with the gourd piece using an upward diagonal motion and the inside surface ucu with a horizontal motion. The potter gives special attention to working the coil at the juncture of the sides and the base. She evens the rim, called lip or mouth shimi, by biting off the rough edges. In the leather-hard stage, using a small piece of corn husk, she does the final smoothing of the completed bowl. The bowl is set aside for one or two days to dry thoroughly before the first slip is applied.

PAINTING. The same basic painting techniques are used by all potters, even though each one has her own distinctive style of decorative designs. The symbolism used in decorative designs is discussed by Norman E. Whitten, Jr., Sacha Runa, Ethnicity and Adaptation of Ecuadorian Jungle Quichua (Urbana: University of Illinois Press, 1975.)

The potter begins painting the drinking bowl by applying two coats of slip: white to the interior, and either white or yellow to the exterior. The Quichua say that the paints of the design will not adhere unless these base coats are used.

The potter does not sketch a preliminary design before beginning to paint. She first starts with the interior of the bowl and may begin by defining a wide border area, painting one encircling black line just below the rim and another line parallel to it lower in the bowl. Using slow and precise strokes



with a tiny brush made from her own hair, she paints a combination of single black lines to form what becomes the predominant geometric shape of her design. She then adds black lines parallel on either or both sides of those that form the original basic shape. These lines create the motif which she repeats again and again until she has filled the entire border area. The motif may be accented by parallel red strokes or small solid black or red areas. The potter may repeat the motif just as it is or vary it either in density or size, but each repetition is complete in itself.

A style unique to some potters is the repetition of the motif with size variations, alternately large and small, at spaced intervals that are connected to each other only by thin black lines near the rim. Certain potters leave very little white exposed within the border area, thereby creating a very dense motif. Still other potters repeat the basic motif fewer times, giving a lighter effect. The border area itself may be





highlighted by a black line around the rim and by additional parallel lines of black, or sometimes red, above and below the border. There are also variations without any encircling black lines to define the border area.

Some potters leave the bottom of the bowl interior unpainted, Others paint it solid black or red; still others accent it with single or paired lines, or with dots. In one example, a small letter "a" was painted in the center of the base. These all have a dabbed-on appearance in contrast to the intricate line patterns on the rest of the bowl.

When asked about the meaning of the border designs, the Quichua answered, From our thinking we paint ñucanchi yuyaimanda pintajanchi, or, We paint only what we think in our hearts ñucanchi shunguhuan yuyarishállami pintajanchi. When we asked Pepita Hualinga, however, she not only identified many designs, but on paper she drew sixteen motifs, each within a boundary of parallel lines. She then

Using a rock as a palette for the bowl paint.



Painting the inside border.

PAINTING THE DRINKING BOWL

Painting the black lines parallel to the basic design on the outside of the bowl.



Inside border design patterns

as drawn by Pepita Hualinga Boa design amaran huasha

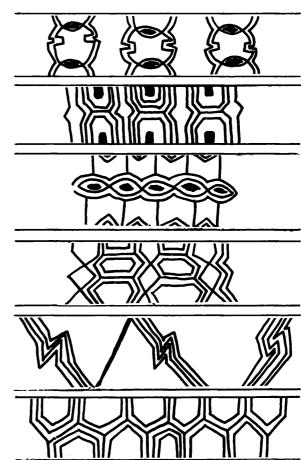
Crab design apangura huasha

Snake design huaisa palu huasha

Turtle shell design tsahuata cara

Fish design pescado muru

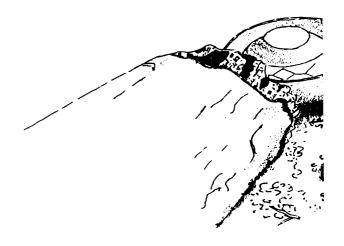
Water turtle design charapa cara

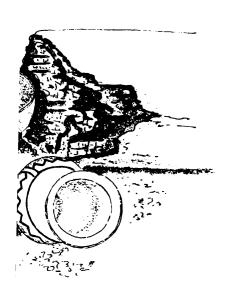


explained what each represented (see page 21), or identified the others as meaningless drawings yanga pintana man. Her drawings of some of these meaningless designs are pictured on the cover of this publication. Although there are trends toward certain patterns by a particular potter, each piece is unique; no two pots, bowls, nor paintings are exactly alike.

On the exterior of the bowl, red earth is used to paint wide lines to form the basic or dominant design pattern called mother mama. Occasionally a potter uses black paint, another red (which fires a dark brown), or even white for the mama. On both sides of the mama, the potter paints a series of thin parallel black lines, creating a visual echo of the basic design (see color plate). Sometimes the junctions of these thin black lines are overshot. The motif formed by this combination is then repeated in a continuous series around the bowl, often with variations in size for the purpose of making each repetition of the motif complete in itself or conform to the basic pattern. The potter usually paints the exterior base of the bowl solid red or black. Near the rim, and sometimes around the base, she paints encircling lines of red or black, or a combination of the two. The rim is edged in black.

FIRING AND GLAZING. The potter constructs a portable kiln for firing the drinking bowl by knocking out the base of an old broken pot or soup bowl. She places this portable kiln over the hot coals of the three logs of her cooking fire and





puts the bowl into it upside down over the hole. When the bowl is heated and the color darkens, she covers it entirely with dry powdery dirt and ashes taken from near the cooking fire. She then builds a fire underneath the kiln with regular firewood. Somewhat later, the kiln turns white with heat, and although it loses the whiteness when more firewood is added, it again turns white when the heat becomes intense. The bowl is considered baked cusashca when firewood has been added three times (over a period of approximately an hour), but the potter also checks by looking underneath to see if the bowl has turned white.

Before removing the kiln from the fire logs, the potter takes some of the ashes from around the fire and places them on the ground nearby. With two machetes she removes the kiln from the fire. Using one machete to hold the fired bowl in place, and the other as a lever to tip the kiln, she turns the kiln upside down to dump out the ashes on top of the first pile, and sets the bowl on the hot ashes. Quickly she sets the inverted kiln nearby and again with the machetes places the bowl on the kiln right side up over the hole.

Beginning at the rim and working rapidly while the bowl is still hot, the potter glazes it by rubbing both the interior and exterior with a chunk of resin. Some potters divide the glazing process by applying gum tree resin to the exterior while the bowl is still hot, and rubber tree resin to the interior after it has cooled.



Pre-heating the greenware bowl placed upside down over hole in base of old cooking pot as a kiln.

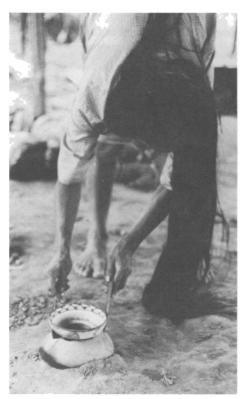
FIRING THE DRINKING BOWL

Firing the bowl covered with ashes.



Removing hot bowl from kiln onto pile of ashes.





Placing hot bowl on top of kiln to cool slowly.



THE SOUP BOWL

CONSTRUCTION. The construction of the soup bowl callana is the same as that of the drinking bowl. One style of soup bowl has a curved profile rather than the straight ribs cushtillus of the drinking bowl. This soup bowl does not have the opened-up pascarishca section; instead, the sides curve directly out from the base up to the rim where a small extended lip is incised with short straight lines. Some soup bowls have a foot chaqui added.

Because of the blackening of the finishing technique, no slip or paint is applied to the soup bowl.

FIRING AND GLAZING. The firing procedure for the soup bowl is much the same as that for firing the cooking pot. The bowl is placed upside down on top of dried firewood, which is then ignited. The bowl is left until all the firewood has burned. The following day, the bowl is rubbed with leaves and finished with the smoldering technique used for the cooking pot.

Soup bowls: fired and unfired.





Soup bowl with foot.

FIESTA POTTERY

CONSTRUCTION. The two basic types of fiesta pottery puru are miniature vessels and figurines. Whereas the shapes of pots and bowls have apparently undergone very little change through the years, much variation occurs in fiesta pottery. It is here that the potter seems free to express her own creative imagination in producing a variety of shapes as she interprets such objects as the adze, trumpet, toucan, foot, seed pod, snake, frog, armadillo, snail, fish, alligator, goblet, and anteater.

The potter employs the same technique for making these miniatures as for the other vessles. The form of a face is added in relief to some of the miniature storage pots, while hollow appendages which function as spouts are added to others.

To produce the figurines, the potter begins by forming the clay into a cone. She flattens the point and then folds the edges over, joining them together. Sometimes she joins the two edges by adding a piece of clay between them. She then gradually molds the clay into a basic hollow shape in the form of the object she wishes to represent. Appendages are added separately. The potter uses small coils to reinforce the edges of openings left, or especially made, for adding appendages, and works them down with the gourd piece to form a smooth juncture. She then forms appendages by coiling or shaping them from small hunks of clay. A hole, such as an eye or mouth, is made (apparently as an air escape) in figurines which would otherwise be completely closed.



Rolling coils to add to the basic cone shape.



Cutting into the 'body' to add leg appendages.



Reinforcing the joint of an appendage.



Adding the tail appendage to an armadillo.



MAKING THE FIESTA POTTERY



Alligator painted and fired.



All fiesta pottery is smoothed with the gourd scraper and the corn husk. The potter applies yellow slip on the lower part and white slip on the upper part of all pieces.

PAINTING. Fiesta pottery is painted with the same basic technique as that used in painting the drinking bowl. The potter uses the same design patterns on the miniature drinking bowl as its larger counterpart. On the figurines, she paints a geometric design similar in style to that applied to the exterior of drinking bowls, but conforming to the shape of the figurine.

A solid color, either dark red or black, or a simple repeated design, is painted on the lip of the miniature storage pot, and a wide red line and thin black lines circling the pot define the base of the neck. In contrast to the large storage pot, the solid red painting of the base of the miniature does not extend proportionately as high up on the body, but the miniature does appear to have design patterns similar to those seen on the full-sized pot. Such designs may take the form of plants, geometrical designs, or geometrically shaped animals. Miniatures having appendages, heads, or faces in relief are painted so as to accent such features.

FIRING AND GLAZING. The potter lays greenware near the fire to preheat, turning it occasionally to assure its being heated on all sides. She then covers it with small sticks of firewood and bamboo for firing. It is glazed with gum tree resin when still hot. Miniature bowls are glazed on both sides, but other fiesta pottery is glazed on the exterior only.





Quiver with incised designs.

The geometric design patterns are so prominent and bold that one might expect to find them expressed elsewhere within the culture. Although body painting was observed, it did not resemble the complex patterns found on pottery. The men reported, however, that they do paint designs on their faces similar to that of the inner border of the drinking bowl. We observed other such patterns on several dart holders where the motif was similar to examples drawn by Pepita Hualinga (see cover and page 21). Instead of painting them, however, the Quichua carve the design into the surface of the bamboo and rub charcoal into the incisions to form blackened patterns. The owner of one of the dart holders explained that two of the designs were the same as those customarily painted on drinking bowls, while the third design was the same as that painted on the storage pot. A few of the older men carve the inner design of the drinking bowl onto a chambira palm nut which is used as a container for dry red face paint bought from the Livaro.

The survival of the beautiful Sarayacu pottery as seen today will be strongly influenced by the availability of commercial substitutes, also by migrations of the Sarayacu Quichua to areas where it is no longer the custom to make such pottery and where the clays and paints to which they are accustomed are not readily available.

APPENDIX I

BOWL AND POT SIZES

Samples of bowls and pots were measured for comparative purposes. The measurements (in centimeters) are presented in Tables I and II. Blank positions in the tables represent measurements which were inadvertantly left untaken in the process of data collecting or which were inaccessible (as in the case of storage pot #1 which was in use and set into the ground, thus preventing our obtaining a measurement).

TABLE I: BOWL SIZES

	CIRCUMFERENCE				DIAME	TER	HEIGHT		
	Rim	Ribs	Juncture of Ribs & Base	Base	Mouth	Base	Foot	Ribs	Total
DRINI	KING BOW	/LS:							_
1.	66.1	61.3	35.5	15.3	21.2	5.0		4.7	7.3
2.	60.3	54.2	36.3	18.2	19.2	5.8		4.3	7.5
3.	60.0	59.2	29.8	14.3	19.1	4.3		4.8	7.3
4.	57.5	51.7	23.5	16.0	18.9	5.1		5.1	7.6
5.	54.4	48.2	21.0	17.9	17.2	5.6		5.9	7.6
6.	53.9	50.7	27.7	16.0	17.1	4.7		3.8	6.9
7.	53.3	49.3	34.0	17.9	16.8	5.5		4.0	5.9
SOUP	BOWLS:								
8.	70.0		41.5	22.0	22.5	5.0	7.0	3.8	11.5
9.	63.8	62.0	39.5	19.3	20.2	6.0		4.3	7.2
10.	61.9	59.7		21.2	19.8	4.1	2.5	4.6	8.7
11.	58.7	55.2		17.9	18.8	5.7		4.8	7.7
12.	56.0	54.8	35.1	18.0	17.3	5.5		5.3	8.0

TABLE II: POT SIZES

	CIRCUMFERENCE				DIAMETER		WIDTH	HEIGHT	
	Belly	Base of Neck	Top of Neck	Lip	Mouth	Base	Lip	Neck	Entire Pot
STORA	AGE POTS:								
1.	227.5	157.0	122.0	131.0	41.5		3.5	20.6	
2.	221.5	176.0		116.5	42.0	9.3	3.5	19.5	54.0
3.	215.0	158.5		126.0	40.5	8.8	3.0	22.5	58.5
4.	211.0	179.0	117.5	133.5	42.5	9.0	3.5	23.0	61.0
5.	210.0	171.5	127.0	142.0	45.5	10.0	2.7	19.0	54.0
6.	201.0	161.0	111.0	123.0	38.5	8.0	3.0	17.5	49.0
7.	174.0	146.0		115.0	36.0	9.5	3.0	21.5	47.0
8.	172.2	143.0	113.0	127.0	40.0	9.5	3.0	20.5	51.0
9.	139.2	106.5	86.8	98.0	30.7	9.8	3.2	15.4	41.5
10.	134.1	103.5	79.2	92.1	92.2	11.6	2.8	13.6	36.3
11.	114.0	93.9	69.9	84.6	26.8	8.6	3.4	13.0	34.1
12.	105.0	92.5	58.5	67.5	21.5	7.8	2.8	9.7	22.5

CIRCUMFERENCE				DIAMETER		WIDTH	HEIGHT		
	Belly	Base of Neck	Top of Neck	Lip	Mouth	Base	Lip	Neck	Entire Pot
соокі	NG POTS:								
13.	146.0	••••	105.0			9.0	3.0	19.5	42.0
14.	87.4	65.9	59.9	71.8	22.4	5.8	4.4	3.4	21.8
15.	79.3	70.4	62.1	71.6	22.6	6.5	3.2	5.8	20.3
16.	67.7	57.5	50.6	59.3	18.8	6.1	3.0	3.2	15.6

APPENDIX 2

WORD LIST

POTTERY/VESSELS:

Storage pot — tinaja
Cooking pot — manga, yanuna manga
Cooking pot with rough
exterior — sarpa manga
Drinking bowl — mucahua
Soup bowl — callana
Fiesta pottery — puru

POTTERY MAKING ACTIVITIES:

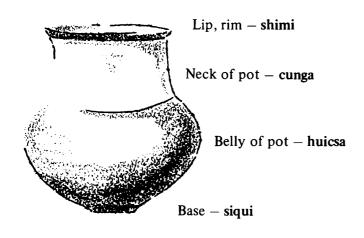
Make pottery — ahuana
Roll a coil — cauchuna
Add coils — Ilutana
Smoothe with gourd — aspina
Smoothe with cornhusk — pichana
Moisten with spittle — tiucana
Pattern with thumb — tiusina
Dry greenware — chaquichina
Apply slip — armachina
Rub with pebble — amulana
Dissolve paints — yunuchina
To paint — pintana
To bake — cusana
To glaze — churana

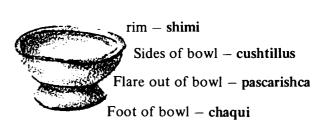
MATERIALS:

Clay – allpa Pot clay - manga allpa Bowl clay — mucahua allpa Gourd piece - huihuishcu Cornhusk – sara panga Pebble - rumi White slip - ruyag allpa Yellow slip — quillu allpa Red paint - puca allpa Dark red paint used as basic design on exterior of bowl - mama Black paint - yana allpa Paint brush — huillma Firewood – vanda Bamboo – huamac Resin - huiqui Gum tree resin - shilquillu Rubber tree resin – leche caspi Nettles - chini panga Beeswax tar — pungara

MISCELLANEOUS:

Coil – huasca
Greenware – chahua
Fired pottery – cusashca
Discarded pottery – jichushca
Impurities in resin – napa
Manioc mash – chicha
Outer side – jahua
Inner side – ucu





SIL MUSEUM OF ANTHROPOLOGY PUBLICATIONS

- 1 SARAYACU QUICHUA POTTERY by Patricia Kelley and Carolyn Orr (available also in Spanish as SERAMICA QUICHUA DE SARAYACU), 1976.
- 2 A LOOK AT LATIN AMERICAN LIFESTYLES by Marvin K. Mayers, 1976.
- 3 COGNITIVE STUDIES OF SOUTHERN MESOAMERICA edited by Helen Neuenswander and Dean E. Arnold (available also in Spanish as ESTUDIOS COGNOSCITIVOS DEL SUR DE MESOAMERICA), 1977.
- 4 THE DRAMA OF LIFE: GUAMBIANO LIFE CYCLE CUSTOMS by Judith Branks and Juan Bautista Sánchez, 1977.
- 5 THE MUSIC OF THE USARUFAS by Vida Chenoweth, 1977.