



Return to the Pacha Mama

Raqchi, Peru 2011

Terry deBardelaben describes a return to Mother Earth

*Above and below: Erma Rodrigues
constructs the foundation of a vessel
using the donut/coil and slab technique.*



THE UNIVERSAL PATH TOWARD MAINTAINING A cultural and economic system of sustainability is, in large part dependent upon our interconnectedness as peoples to our environment. Clay has been one such material that has helped to underscore the message of social justice and individual and collective action.

Our often marginalised and under-appreciated indigenous brothers and sisters are most likely to be the unspoken keepers of cultural practices, suppliers of commercial utilities and purveyors of pottery traditions. The constancy of these cultural practices brings awareness to the need for a revival of these fundamental skill developed practices and processes of technical acquisition. Expressed gratitude for their contributions of authentic artistic expression and influence on mainstream use of clay has been overlooked and is long overdue.

Global economics, world trade, the quest for energy resources and free market enterprise have made remote locations and communities not previously receptive to outsiders more accessible. These environs were once limited by and dependent upon the transference of generational knowledge to people who exclusively reside within the confines of stringently observed boundaries. Now no longer hidden, these communities have exposed their way of life to make the knowledge obtainable for preservation by people who share common interest and



Left: Rodrigues grinds (using a large stone tool) dry clay into a fine powder before mixing with water. Right: Rodrigues attaches a donut/coil to the slab base to begin construction.

commitment. Accordingly, documentation through the use of audio and video recording devices will inform future generations of methodology and mechanics of art styles and practices that are centuries old. These new media are among the most relevant ways to help prevent the loss of technical wisdom, which is otherwise lost with the blight and struggle encountered by indigenous people in the preservation of their creative expression and identity.

Pedagogical reform requires consideration of a radical departure from academia's undue celebrity of individual notoriety and pedigree. Rather, our interest in creating sustainable art demands a redirection of focus. Fundamental teaching of global techniques worthy of artistic merit are quickly becoming forgotten and might wither into extinction.

Raqchi, Peru elucidates the constant strife that exists between communities those whose survival depends upon the daily use and creation of sustainable resources and those that are hyper dependent upon the interface of those resources with technology. By contrast, over consumption of industrialised, manufactured machine-made utilitarian objects reinforces the globalisation of goods but does little towards the preservation of tradition, culture and micro economic ventures that support and maintain small communities.

Raqchi (Big Vase or Jar) means clay in Quechua – the language of the Inca (Inka) nation, spoken in different dialects throughout South America: Peru, Bolivia, Columbia, Chile and Ecuador. The Raqchi pottery cooperative's adaptation to change offers insightful solutions to universal problems confronting pottery communities everywhere.

HISTORY

In south eastern Peru, the village of Canca (Chanchis), now called Raqchi, was on a well-travelled route along the Inca Road cradled on the slopes of Kinsach'ta Volcano on the right bank of the Vilcanota River. It is between the ancient imperial capital of Cusco and Puno, the home of Lake Titicaca, the highest lake of its size in the world and South America's second largest lake.

Pottery Process

To become acquainted with these techniques in your studio, here are the sequence of steps that the Raqchi potters use:

Create Bulbous Vessel: Materials found in nature are the tools used in a typical Raqchi ceramics studio. Rocks and tree stumps used as tables and work surfaces. River stones, twigs, sticks, plastic products, bags and containers readily found and recycled complement more costly imported supplies, such as oil based paint products, shellac and brushes.

Tools

- Flat Work Surface (Stone)
- Bisque Saucer (purchased): size determines the circumference of the base of the vessel and influences overall size
- Container of Water
- Turn table/or folded newspaper
- Sponge
- Stone
- Needle tool or pointed object
- Clay
- Sieve (small holes punched into metal pie plate)
- Plastic Bag (cut open to enlarge)
- Plastic Bottle (cut into small pieces)
- Oil Base Paint



*Left: Close-up of bisque saucer used to form and support slab base, which is mounted on a turntable. (Evidence of one example of adaptation).
Right: Rodrigues applies natural pigments to a contemporary design of the Pacha Mama.*



The remains of the imposing archaeological complex, consisting of a temple, Plazas and the Inca Baths, are evident today. Terracing and Rampart Walling once the source of *qolqas* (storehouses constructed of volcanic rock) masonry granaries were used to store dried grain, meat and potatoes in case of droughts and natural disasters. Fountain-aqueduct-reservoirs provided clear, cold water for drinking, bathing and crop irrigation. Cerro Auquisa is presumed to be the source of the water, which still flows today; its true source has never been discovered.

A fertile mountain range offers the residents of Raqchi its most sustainable and natural resource. Large composites of clay shards unearthed reveal that the two story adobe structures used for weaving once occupied by the Aqllas were also used as workshops for the production of ceramic crafts. Regional typography as early as the Qayula-Marcavalle (BC) through the Horizonte Tardío, Chuchito and Tarca is ideal for mining clay deposits for mass production of Salamanca (pouring vessel), Kinsa Qocha, bowls, jars and plates.

Clay objects were once observed as an energy efficient practice; the vessels were made and collectively fired in one central location. With increased demands on individual household chores of farming, care of livestock, food storage and meal preparation, however, it was no longer a viable alternative. Gradually individual household workstations emerged and assumed increased responsibility for the formation of the ceramic object. Ultimately, sight specific studios replaced the necessity of transporting greenware for collective firings that increasingly yielded inefficient results due to the increase in chipped, cracked and damaged ware. Shifting life style challenges continue to inform the transformation of Raqchi ceramic artisans and the way they operate today. Engaging cultural wisdom by listening to the community elders equipped modern day Raqchi residents with the resources that have allowed them to run small businesses within the confines of the cooperative.

There are a number of individual ceramics artists in Raqchi who either work independent from or not exclusively with the cooperative. These artists are thriving as a result of savvy business ventures and the marketability of a unique product. Damian Mamani Collante stands out as a self-employed artist. She has a store: Ceramica Amara, situated directly on the roadside. The building contains studio, kiln and display space. Collante creates large sculptural wheel thrown and handbuilt forms that contain local iconography. Climaco Amaru Rodriguez has a smaller, more modest operation next door to Collante. Both are members of the Guia Oficial de Turismo.

Technique

Secure a saucer (*Platos de alfarero*) to a revolving plate or turn table by placing three small, wet coils to the base/bottom of the saucer equidistant from the centre radius and press to centre of turntable.

Working on a large stone surface, make a clay ball. Leave a small amount of volcanic dust on the stone to prevent sticking.

Rhythmically slap the clay ball with the stone in the right hand while simultaneously rotating the clay with the left hand. The thickness of the base slab is in relative proportion to the overall thickness of the vessel and should not exceed the thickness of any one finger.

Place the slab on a ceramic bisque ware saucer. Wedge the clay ball in hand by slapping together between both hands to compress and remove air. Place the ball in the left hand and with the right hand rotated as to create a doughnut, piercing the centre while rotating clockwise. The left hand compresses the clay in a horizontal position and the right hand formulates the vertical distribution of horizontal compression while both hands work to achieve an even balanced and proportioned coil ring.

During the rotation, the centre opening is gradually stretched to increase the size of the interior opening until the diameter of the doughnut is lightly smaller than the saucer, yet wide enough to fit directly on top of the slab and saucer circumference.

Use a sponge to add water to the outer slab circumference. The doughnut coil ring is then placed on top of the circular slab. Working at six o'clock and rotating the turntable counter clockwise.

ICONOGRAPHY

The iconographic symbols used to adorn the pottery created in Raqchi reflect historic and cultural motifs that reveal a resonance taken from nature directly (the animal representations of the puma, llama and alpaca) or indirectly (the Inca calendar, each month symbolising some aspect of the harvest of vegetables and grains).

Flora and Fauna or *canto* (plant life) are commonly seen depicting individual artistic interpretations of life-sustaining food: maize, wheat and quinoa, which are grown regionally.

The four directions of the wind (north, south, east and west) are often represented by a variety of designs that are geometric in origin. The sun, moon, river, mountain, observed from everyday life, find their way into the surface design and are used as symbols on sugar jars and vases. The application varies; the scale differs; the combinations of design renderings, however, are constant.

The ruins of the Temple of Wiracocha still exist, along with the ritual of *K'intukuy*, which is still practiced. These ruins represent ancient rites and ceremonies giving thanks to the *Pacha Mama* (mother earth) for protection from misfortune or calamity such as drought, low birth rate (livestock, human) illness and injury. Deep-seated spiritual beliefs of the *Pacha Mama* are the source of inspirational artisan depictions. Linear renditions of a female form elegantly dressed in traditional garb adorned with the unmistakable hair braided into long pigtailed is often depicted in some form or variation on the theme.

Two main colour palettes comprise the options used to adorn the surfaces of ceramic ware, neither of which is safe for consumption and both are strictly ornamental. A clear varnish or shellac over the paint or slip-fired finish protects the surface and offers an added layer of aesthetic appeal. Brightly coloured red, turquoise, yellow, white and black are used in combination on the functional whistles and lidded containers. *Amarillo* (yellow), (*siena*) brown, (*blanca*) white, (*negro*) black and (*verde*) green are coloured pigments created from natural material geographically indigenous to the region and used in the creation of utilitarian wide mouth pie plates and other forms.

Mixing Dry Clay: A large 18 metre by nine metre curvilinear slab stone is used (using a rocking cradle motion) to grind and crush a three-to-one ratio of dry clay to volcanic rock. After grinding, clay is placed into a colander for sifting and shaking to assure that only the finest particles of ground clay remain. Set clay aside.

Repeat process for red volcanic stone, which is ground into a fine powder with a flat stone. Set aside a small batch of volcanic powder.

Place clay on a large plastic surface and create an opening in the centre. Then add water in small portions to eventually comprise the total. Mix thoroughly with hands and then both feet. Once mixed into a malleable consistency ready to use, the clay is stored in plastic for protection from the air.

When the clay is ready for formation, the red volcano dust is eventually used to prevent the clay from sticking to the work surface or flat stone. (See Technique notes in sidebars.)

KILN

The kiln measures approximately two feet in diameter and stands four feet high, two feet of which extends below ground level. The kilns'

Technique (Continued)

Place both hands in the middle of the form. Remove thumbs to the exterior of the vessel where they remain. Keep fingers in the vessel's interior. Emphasis is on the placement of the index fingers and their relationships with the thumbs. Establish rhythmic movement of both thumbs and index fingers in unison.

Join together the coil ring and slab base by overlapping the coil with excess from the slab base by pinching the slab on to the coil. Use thumbs to fold (in upward motion) the remaining slab base on the coil's periphery. Press to attach to the coil. Squeeze/pinch together while gradually rolling the index fingers downward (to attach the coil to the interior base) while the thumbs are rotated upwards to attach the slab to the coil.

Once combined, maintain an even wall thickness of coil and slab combination by establishing an equal distance between each portion of the compressed clay. This action joins the two clay constructions together.

Move turntable counter clockwise. Repeat in small one-inch increments until entire circumference of the vessel is joined together.

Slightly dampen the interior walls with a sponge. Rotate the vessel clockwise to smooth the interior wall with a damp sponge, working at nine (if right handed) or three o'clock (if left handed)

Use the rounded edge of a flat stone to secure and attach interior walls. Applying counterpoint pressure (hands on the exterior and the rock pressing both the wall and base of the vessel) simultaneously merges the wall and base together.

Use a sponge to remove excess water at the base of the pot. Use a needle tool to trim uneven mouth edges.

Repeat coil construction process to add length, defining and adjusting the coil diameter: larger to expand, smaller to reduce. Use a plastic bag swatch (1 x 1 in. rectangular shaped) to smooth and shape the vessel lip. After the form is leather hard, scrape excess and uneven clay from the exterior with a saw blade, removing any evidence of the shape of a flat plate upon which the pot was created. Then immerse the vessel in water. With plastic (a white plastic container cut into 1 x 1 in. squares) burnish the exterior. Before storing, immerse the vessel in water and wrap with plastic.

Let dry in the open air for at least 24 hours before firing at 80°C for four hours.



Above: Rodrigues uses her pick ax to mine clay directly from the mountain just a short five-minute walk from her home.

Below: Rodrigues trims uneven clay from the mouth of a vessel to establish an even height before she continues the construction process.



underground cavity serves as the receptacle opening through which sawdust and wood fuel are feed. The middle of the kiln, approximately one foot off of the ground is constructed with a permanent mesh wire screen, which delineates the fuel compartment and whose ceiling functions as a base for loaded green ware. Loaded by size: largest pieces at the base and smaller pieces at the top. The lowest chamber (where the fuel is fed) and the middle section (where the ceramics are housed) assure the proper function of a successful up draft kiln.

It is estimated that 80,000 pieces of ceramics are fired every year. Traditionally the firing process takes place at sun down during nine months of relatively dry weather. Due to wet soggy damp conditions (January, December and February) drying and firing clay during the rainy season prohibit ceramics production.

FIRING

Eight-foot eucalyptus trees with a diameter of 12 inches are used to feed the fire. Constant ratios of sawdust and wood were fed into the mouth of the kiln, approximately every 15 minutes. An enormous amount of sawdust from local lumber was brought in with 60 pounds taking a total of four hours to burn at 1200°F, cone 020. The kiln top stays open during firing to assure the oxidation process and remains open until the kiln is unloaded after cooling overnight. The assortment



Rodrigues squints as she constructs to ensure accurate execution of her community's aesthetic.

of vases, shallow plates and lidded containers are dunked in cold tap water the following day, removed and set in the sun to dry.

HOMAGE

The Andean people have a saying in Quechua which, when loosely translated, means, "We live by the Law of Reciprocity", everyone cares for the next.

Global learning, sustainability and culture are: synonymous, intricately entwined and invariably lead to profound transformation. ~ Terry deBardelaben

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