

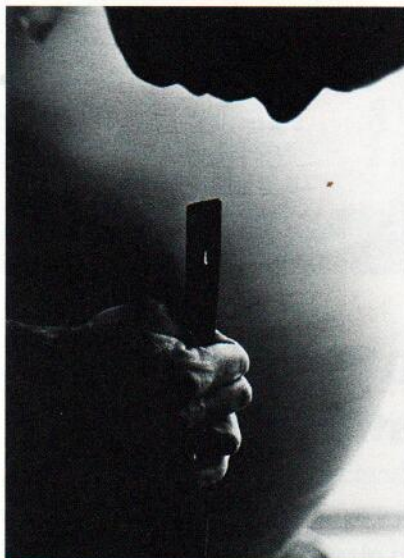
2 Working with Clay

What kind of clay will you work with? Different types of clay (or clay bodies) have unique qualities that make them suitable for different uses. You might use one clay body to make a large sculptural work and another to make fine teacups. Clay is a material that constantly challenges the artist.

As a potter, you must get to know your clay because each clay has a distinct personality. The better you know your clay, the more successful your work. The key factors to learn about are plasticity (how easy or hard a clay is to shape), shrinkage, texture, and moisture.



properties



tools



preparation

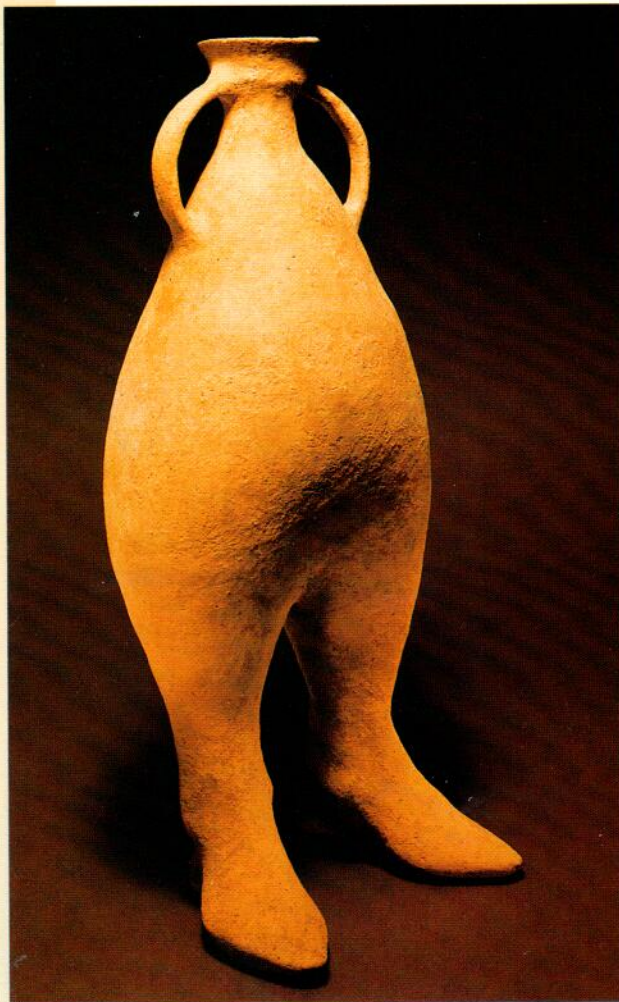


Fig. 2-2. This delightful 3,000-year-old vessel's playful mood gives it a contemporary quality that transcends time.

Northern Iran, *Ceramic Vessel with Two Human-like Feet and Two Handles*, 1000–800 BC.

Collection of the Arthur M. Sackler Foundation, New York.

Clay Properties

Plasticity

Most beginners use highly plastic clay, or one that can easily take different shapes. A good plastic clay for beginners is earthenware, which stands up well to a lot of handling and can be used to form a variety of objects.

Numerous factors can make clay more plastic. For instance, you can mix in some ball clay to make your clay easier to shape. Ball clays are highly plastic. They are not used alone because of their high *shrinkage* rate—instead, they are used as an additive. Algae and bacteria also make clay easier to handle as they grow in aging clay. Some artists store bags of clay that look slimy and old. Experienced potters prize this clay because it is so good to work with.



Fig. 2-3. This work by a ninth-grade student combines organic and geometric forms.

Which part of the sculpture relies most on the plastic quality of clay?

Cannan Good, *Choreographed Temple*.

Raku, slab construction, 15" (38 cm) high. Stivers School for the Arts, Dayton, OH. Photo by Kim Megginson.

Shrinkage

All clays shrink as they dry. Clay can crack when it shrinks if the potter doesn't carefully monitor the drying process. When the dried clay is fired, it will shrink again.

It's frustrating to spend a lot of time creating an artwork only to have it crack. You can minimize the number of pieces you lose if you familiarize yourself with how your clay shrinks, at what rate, and what you can do to affect the process. See page 186 for a test to help you determine how much your clay will shrink.



Fig. 2-4. How did this artist need to plan for clay shrinkage as he developed this tall sculpture?

Bill Stewart, *Frog Foot*, 1999.
Hand-built terracotta with slips and glazes, multiple firings, cone 05, 74 x 23 x 14" (188 x 58 x 35.5 cm). Courtesy of the artist. Photo by Bruce Miller.

Note It Shrinkage is part of experiencing clay. If you make a clay sculpture that includes pieces of different thickness, remember that the thin pieces will shrink more rapidly than the thick ones. Unless you slow down the drying process for the thin pieces, the work may crack or break. Wrapping thin sections in plastic or painting them with wax resist (see page 131) will help to slow the drying process.

Texture

The texture of a clay body can range from coarse to smooth. Much studio clay contains additives that modify it, making it easier to shape or stabilizing it so that it shrinks more uniformly when drying. The quantity and type of additives affect a clay's texture.

Fig. 2-5. How would you describe the texture of these hand-built slab vessels? Imagine how they might look if there was a strong light shining up from under them.

Jan Bell, *Palma*
Colorado, 2001.
Stoneware, 15" (38 cm) high. Courtesy of the artist.



Elements of Design

Texture

The texture of a clay body is how it feels to the touch—coarse, medium, or smooth. Texture is also the physical surface structure of the finished clay piece—such as pebbly, ridged, satiny, or grooved—and this surface structure can create diverse effects. When light hits an object, it strongly defines the texture of that object. If an object is in shadow or dim light, the surface texture may be reduced or become imperceptible. When the light is bright, depending upon its position, the texture becomes active or even dominant.



Casas Grandes Revival

Pottery that has been formed by hand, painted with natural pigments, and fired with an organic fuel (like wood or dung) is referred to as **traditional pottery**. Pottery-making traditions handed down through the ages still survive relatively unchanged in some areas of Africa, Asia, Mexico, and South America.

During the first to the late thirteenth century AD, pottery was made in the city of Paquime in northern Mexico's Casas Grandes valley. It became an important commodity on a network of trade routes. The pottery

was remarkable both for its high quality and for its designs.

The original Casas Grandes pottery tradition died out in the fourteenth century when Paquime was destroyed by fire. Over time, new settlements arose in the area—small villages where farming and cattle were more significant than trade and crafts.

Today, hundreds of years after Paquime disappeared, the style of its pottery is once again thriving. An extraordinary example of how a traditional style can live again is seen in

the revival of the Casas Grandes style by contemporary Mexican potters.

This revival began in the late 1970s thanks to Juan Quezada, a lifelong resident of Mata Ortiz in the Casas Grandes valley. As a young boy during the 1950s, Quezada gathered firewood in the mountains near his village. He often found and admired 700-year-old pieces of Casas Grandes pottery. Determined to discover how Paquime's people achieved such perfection in their ceramics, he experimented with clay, natural pigments, and firing techniques for twenty years. Through trial and error, he gradually mastered the ceramic art that had flourished centuries ago. He shared his skill with his family, and, ultimately, with the other people in his community.

Quezada's fascination with the Casas Grandes pottery style eventually transformed not only his life but that of his village. Quezada continues to teach, while his pottery is sought after by museums and collectors worldwide. A second generation of potters has now emerged to continue the legacy.

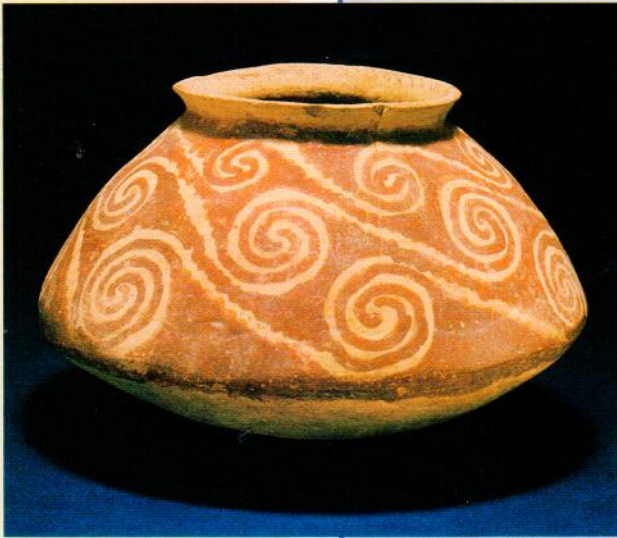


Fig. 2-6. From roughly the first to the late thirteenth century AD, the area that is now northern Mexico and the southwestern U.S. was home to several flourishing cultures: the Casas Grandes, Hohokam, Mogollon, and Anasazi.

Casas Grande, Arizona, *Hohokam Vessel*, 300 AD. Red on buff jar. Courtesy of the Heard Museum, Phoenix, AZ. NA-SW-HN-A4-18.

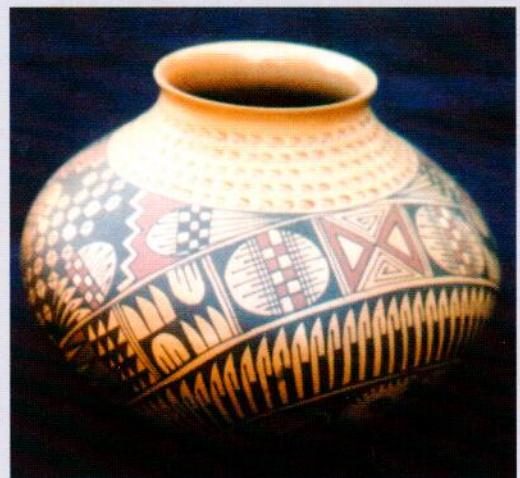


Fig. 2-7. How is the design of this Casas Grande revival pot similar to the traditional pot shown in Fig. 2-6?

Jose Silveira, *Mata Ortiz pot*, 2000. Courtesy of the artist.

Coarse clay contains sand or grog, and is best for large, thick-walled pieces. Medium-coarse clay can be used for hand-built slab work, tiles, and large coiled vessels or figures. A smooth-textured or fine-grained clay is good for throwing pottery, bead making, and other delicate work.

Moisture

It is important to learn how water affects the clay you work with. All clays contain water. You can add water to clay to make it more workable or plastic. Add too much water, however, and the clay loses plasticity—it won't hold any shape at all.

Clay begins to dehydrate, or lose moisture, when it is exposed to air. As you work on a clay project, you will occasionally need to rehydrate, or put water back into the clay, to keep it moist. Mist it with water from a spray bottle or dampen it with a wet sponge. When you're not working, cover the piece with plastic to keep it from overdrying.

Some water remains in the clay no matter how dry it seems. This water is driven out only when the clay is fired. Clay that looks dry but feels cold still contains water and should dry out further before it is fired.

A thick piece of clay can contain trapped moisture. This moisture will turn to steam when the clay is fired and can even cause the piece to explode during the firing process. Artists who build large pieces or pieces with thick walls typically add **grog** (crushed ceramics) or an organic material like sawdust to the clay to make it more porous.

Once the clay is fired, it becomes permanently harder, stronger, and less likely to break. It can never become plastic again.

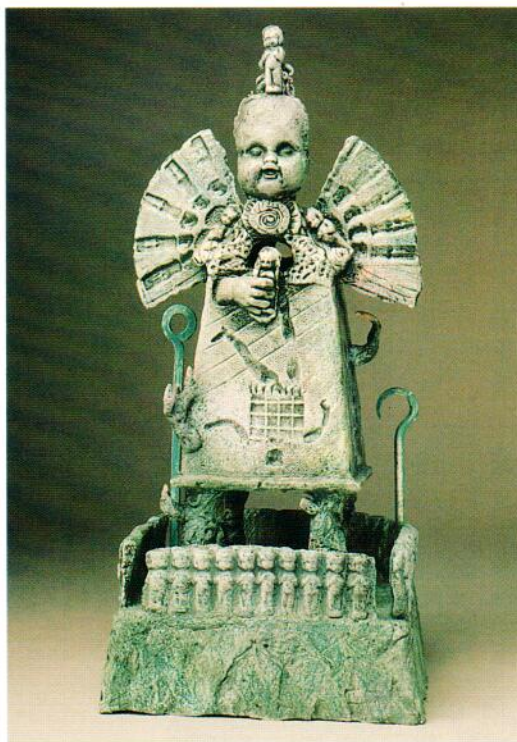


Fig. 2-8. Any piece of clay that is more than 1" thick must be hollowed and pierced to allow hidden moisture to escape. Clay that is more porous enables trapped moisture to exit more easily.

Jane A. Archambeau, *Fall From Grace and the Angel Protects You*.

Earthenware, press-molded with commercial underglaze, pencils, 16 x 10 x 10" (40.6 x 25.4 x 25.4 cm). Courtesy of the artist. Photo by Corey Gray.

Handling Clay

Now that you're aware of the different factors that affect clay, it's time to familiarize yourself with the actual raw material. Developing your sense of touch will make it easier to work with clay. When you handle clay, pay attention to how the clay feels and try to take in as much tactile information as possible.

Flatten a lump of clay on your workspace. Smooth the surface with your fingers. Roughen the surface by digging into it, poking it, or scratching it. Use a damp sponge to smooth the surface again. How does the clay surface react when you add water and pressure?

Try It Cut a lump of clay in half. Roll one piece into a ball. Take the other piece and roll it into a short cylinder (like a short, squat candle). Stand the cylinder up on your workspace. Place the ball on top of the cylinder so that it stays balanced there. Does the shape look symmetrical—do its opposite sides match? Does the weight of the ball affect the cylinder? How far to the side can you move the ball before it falls? If you roughen the surface, will the ball stay in place?



Fig. 2-9. Students wedge clay.
Photo by Ann Perry.

Preparing the Clay

Before you make anything with clay, you'll need to prepare it. Whether your clay is premixed or you add water to a dry mix, the clay should always be *de-aired* before you begin. Air pockets in the clay can throw a wheel-thrown pot off-center or distort the shape of a hand-built slab. The time you spend working the clay at the wedging table can save you a lot of time and frustration later.

Kneading or **wedging** eliminates air bubbles and keeps the internal structure of clay more cohesive and consistent. You can use several methods to achieve this. Find the one that works best or feels most comfortable, and make it your own.

Do your wedging on a canvas-covered board or plaster slab, which absorb any extra moisture. Work on a surface slightly lower than table height. In this way, you can use your upper-body strength as leverage.



Fig. 2-10. Clay recycling.

Note It You can recycle your clay scraps by mixing them with water and pouring the soft mix on a plaster slab. Leave the clay uncovered. The water on the surface will evaporate into the air at the same time moisture is absorbed by the plaster. The clay can then be wedged or kneaded back into a workable consistency.

Safety Note Little bits of clay that end up on the surface of your worktable are harmless. However, when they are brushed onto the floor these crumbs break down into smaller and smaller particles which then scatter into the air you breathe and can cause lung damage.

Practice these simple actions to help limit your exposure to clay dust:

- **Wear protective clothing.** Put on an apron or smock when you begin work and take it off when you leave the studio. When it gets messy and grubby—and it will after a week or two—take a few minutes before the end of class to wash it out in soapy water, rinse, and hang it up to dry.
- **Capture clay dust with water.** Use a wet sponge to clean tables, tools, wheels, and sinks. Clean spills on the floor with a wet mop. Brooms and brushes only make more dust—avoid using them.
- **Don't eat while in the studio.** Ingesting clay dust can be harmful.
- **Wear a respirator or dust mask.** When sanding, scraping, or mixing dry clay, wear a dust mask or respirator.



Fig. 2-11. In order to produce a successful ceramic vessel, artists throughout history have begun their process by thoroughly preparing their clay.

Korea, *Bottle*, 16th century.
Stoneware. Courtesy of Davis Art Slides.

Premixed clay comes in 25-pound bags. Drop the bag on the floor a few times to soften and compress the clay particles before wedging. Choose one of the following techniques and practice it using two pieces of clay, one white and one dark, each about the size of an orange. Use a wire tool to cut the clay into pieces from time to time during the process to check for air pockets, which you can easily see. Slap the pieces together and continue kneading or wedging until clay is uniform in color. You'll be able to hear air bubbles pop as you do this—it sounds like someone chewing gum!

The method you choose is a matter of individual preference—there is no right or wrong choice. Some prefer kneading—the movement is similar to kneading bread dough. Other potters hate to knead and

prefer to wedge. Try both methods to discover your own preference.

How much time does it take to eliminate the air pockets and blend the two colors into one? Plan to use that same amount of time whenever you prepare your clay.

Principles of Design

Emphasis

Emphasis is the significance, or importance, that you give to something. A potter might decide to emphasize a particular area of the clay form by creating a special design in that area using design elements such as line, texture, color, or shape. Or, the entire form might be elegant in its simplicity, in which case the potter has emphasized the form itself. Find and describe an area of the work shown in Fig. 2-12 where you think the potter used emphasis.



Fig. 2-12. What are the areas of emphasis on this object? Which is dominant? Why?

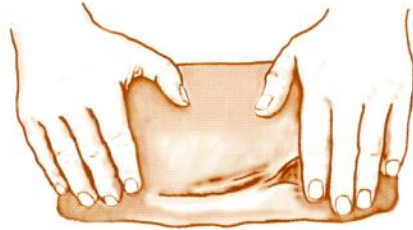
Errienne Flodin, *Untitled*.

Painted terracotta, candle, 3" to 10½" (7.6 to 26.7 cm) high.
Cone 04 electric. Blue Valley High School, Stilwell, KS. Photo by Janet Ryan.

Kneading

This method is best suited to small- or medium-sized pieces of clay. Both hands work together doing the same action side by side.

- Take a lump of clay and form it into a loaf shape, using the palms of both hands.



Form a loaf shape.

- Continue to press down hard with your palms to force the clay into a longer roll. Slam it down onto the work table to make the loaf more compact.



Fig. 2-13. How do the sensory qualities of the appliqué design convey unity, rhythm, and balance on this thrown platter?

Robert Putnam, *Untitled*.

Stoneware, cone 9 reduction, 19" (48.3 cm) diameter.
Courtesy of the artist. Photo by Janet Ryan.

- Cut the loaf in half down the center (you can use a wire cutter or tear it apart with your hands). Look for any air pockets.



Tear or cut in half. Check for air pockets.

- Forcefully slam the two pieces of clay together to make one lump.



Slam back together.

- Pick up the flattened clay and stand it on edge.
- Push the clay down with both hands so that it forms a single lump.



Stand on edge; push down.

- Repeat the process from the beginning about 20–30 times to rid the clay of air pockets.

Wedging

In wedging, the potter's left and right hands work opposite to each other. The left hand turns the clay and the right hand pushes down. Wedging works well with large pieces of clay—an experienced potter can wedge a large amount of clay very quickly. A good wedger at work is something to see. Other people in the studio will stop what they're doing to watch the performance of the rhythmic movement, and the way the clay responds.

The traditional wedging technique is the "Spiral." It requires some upper-body strength and can be hard on your wrists. An alternative wedging technique, the "Ram's Head Spiral," is gentler and generally works better with smaller pieces of clay. Experiment with both and find the one you like best.

Spiral

Begin with a lump of clay. Place one hand against the base of the clay with your thumb pointing up. This will be your lifting and turning hand. Put your other hand on top of the clay lump on the opposite side, palm down. This will be your pressing-down hand.

One hand lifts and turns, the other presses down.



- Lift the clay with your lifting hand, and press it down with the other hand. Use your lifting hand to turn the clay lump a quarter-turn to the right. As you do this, push the clay on the opposite side of the wedge down with your pressing-down hand.
- Get into a turn-and-push rhythm.



Lift, rotate $\frac{1}{4}$, press down onto opposite side.

- Cut the wedge with a wire tool and examine the halves for air pockets.
 - Slam one half down on the table.
 - Slam the other half on top of it.
 - Push the pieces together into a vertical cylinder.
 - Start the process again.
- Repeat several times until you don't see any air pockets.

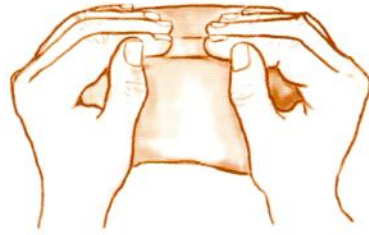
Safety Note As you work with clay, notice that different processes require particular effort and endurance. Physical ergonomics is the science of adjusting the workplace to help reduce the risk of bodily strain and injury. Follow these ergonomic principles when wedging your clay:

- The surface of the wedging table should be at knuckle height when your arms are relaxed at your sides. This way, you use the big muscles in your shoulders to push and pull rather than the small muscles in your arms, wrists, and hands. If the wedging table is too high, stand on a stool or platform.
- Drop your bag of clay on the floor a few times to soften it before you begin to wedge. This helps to compress the clay molecules and shortens the time spent wedging.

The repetitive twisting motion of wedging can be hard on your wrists. When pressing down on the clay with the heel of your hands, release some pressure as you approach the movement's completion. This helps relieve your wrists from the full resistance they would encounter if they continued pushing hard into the table.

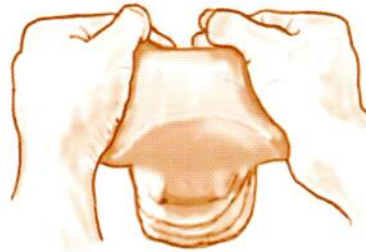
Ram's Head Spiral

- Begin with a lump of clay the size of a large grapefruit and put your hands on each side of it.



Position of hands.

- Grasp the clay with both hands and start turning it toward you, almost as if you were turning two doorknobs (one on either side of the clay lump).



Turn top of clay, pull with fingers.

- Use the weight of your body to push the clay down and away. With your fingers, pull the clay toward you. Use your fingers to make sure the clay doesn't spread outward, but stays compact. Use very slight movements to turn the clay over and inward upon itself. Handling large amounts of clay can trap air.



Push clay away with body weight while turning clay inward.

- When the clay feels like it has a more even consistency, pick it up, shape it into a ball, and start again.
- Repeat several times.

Note It Use light pressure to turn the clay onto itself. This brings trapped air to the surface. Heavy pressure tends to push the air inward and traps it deeper.

Tools: Physical and Verbal

Physical Tools

In the studio you will discover there is a wide array of tools for every possible need. Some people would be lost without their personal toolbox full of equipment. Others are content with a few basics like a rib, wire, a pointed wooden stick and needle tool. You can purchase your tools from an art supply store, fashion them from discarded kitchen utensils, or improvise and make your own. Since a tool merely adds strength, range, and extension to your fingers you will find that certain ones will become your favorites as you continue working with clay.



Fig. 2-14. Hand-building tools.



Fig. 2-15. Basic clay-building techniques can produce striking results. These pots, whose forms were inspired by calabash gourds, are typical of those found at the royal court.

Uganda, *Graphite-glazed pots (ensumbi)*, from the Ganda people, 19th cent.

Clay, graphite, tallest is 13½" (34 cm) high. © The British Museum.

Another kind of tool is a sketchbook to try out your ideas on paper before you begin different projects. In addition, you can keep a binder for slides or photographs of your pieces. Note the title, dimensions, and date completed on each one. This record shows how your ideas have developed and how your work has progressed.

Verbal Tools

In addition to basic physical tools, verbal tools will enable you to discuss the clay medium, your own work, and the works of others. Words are powerful—they can help you describe what you're trying to do and give you a common vocabulary to use with other artists. They can also enhance your own ideas and perceptions about ceramic art.

Throughout history people have tried to express their emotional response to an encounter with a thing of beauty. Writing, thinking, and discussion about what is beautiful, tasteful, or pleasing is all part of **aesthetics**, a branch of philosophy that deals with beauty. The word aesthetics

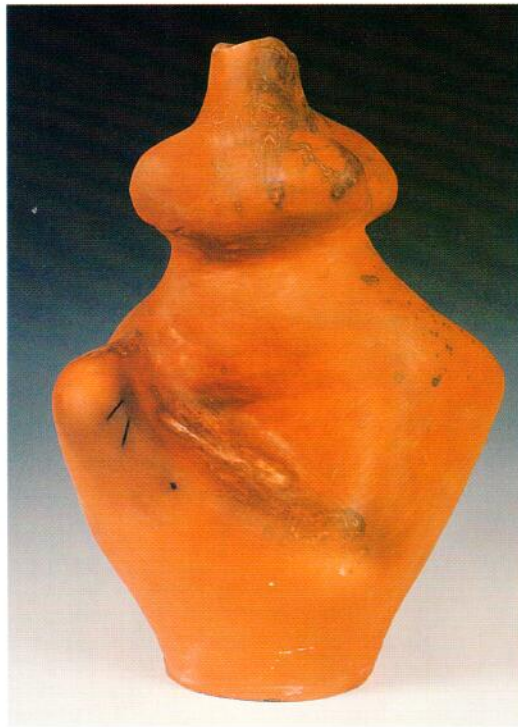


Fig. 2-16. Can you easily find the shoulder, neck, and belly of this vessel?

Kristin Shore, *Bold Woman*, 1998.

Red slip, wood fired, 15" (38 cm) high. Courtesy of the artist.

comes from the Greek *aesthetikos*, or sense perception. The language of aesthetics, therefore, applies to anything that can be perceived by the senses: a painting, a poem, the human form, a landscape, or a ceramic piece.

The word aesthetics can also mean the principles that define a taste or fashion. In the next chapter, for example, you'll read about the aesthetics of Japanese tea bowls. When used in this sense, aesthetics refers to the artistic ideal of a particular culture and art form.

When you describe works of art, the words you use should describe those qualities your senses respond to, or the aesthetic and sensory qualities of the object. As you become aware of these qualities, you can develop a framework to describe the character of ceramic works. Using words in this manner is referred to as criticism.

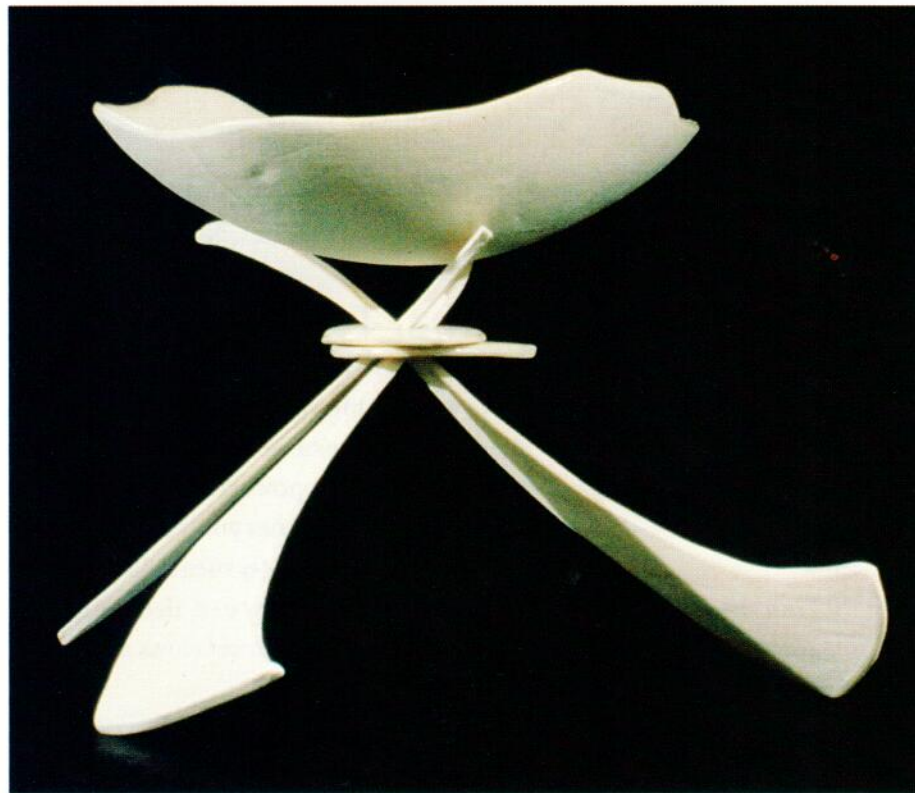


Fig. 2-17. The title of this piece defines its expressive qualities. What sensory and formal qualities add to the feeling of lightness and movement?

Kim Megginson, *Free Flight*, 1993.

Porcelain, cone 6, 11" (28 cm) high x 14" (35.5 cm) diameter. Courtesy of the artist.

Discuss It Analogies between the pot and the human form have always existed. Their parts even have common names—foot, belly, shoulder, neck, lip, and so on. When you look at the pot in Fig. 2–16, which part first catches your eye? Do the other sections have similar or contrasting characteristics? Explain how the sections relate. What do you see? Do the parts flow together or are they disjointed? How would the surface feel? Is it smooth or rough?

Steps in Aesthetic Scanning

Use these steps to scan—make a visual inventory of—your impressions of a ceramic work. After identifying the object's external characteristics and seeing how they are organized, you can look for deeper meaning in the work.

1. Note the object's sensory qualities. Sensory qualities refer to the design elements of shape and form, line, color, space, and texture.
 - Shape and Form—As you look at a pot's profile or silhouette, how would you describe it as a two-dimensional shape? Is it geometric (square, rectangle, triangle, oval), organic, or a combination of both? Now look at the pot's three-dimensional form. Is it a cube, a pyramid, a cylinder, or a combination of forms? Is it open, closed, or free-form? Now look at the parts (foot, body, neck). How would you describe their forms? How do they relate to one another?
 - Line—Lines can be described according to their width (thick, thin, tapering), length, and characteristics (sharp, fuzzy, continuous, or broken). Do the lines of the pot suggest movement (circulating, flowing) and direction (curving, horizontal, vertical, diagonal, parallel)? Do they have boundaries or edges?
 - Color—How would you describe the color of the clay body itself (warm, dark,



Fig. 2–18. Name the sensory and formal qualities of this work.

Robert Putnam, *Ewer*.

Stoneware, slab built cone 9 reduction, 13" (33 cm) high.
Courtesy of the artist. Photo by Janet Ryan.

rich, pale)? How would you describe the glaze color? Consider words like *hue*, *value*, *intensity*, *shade*, *transparent*, *opaque*, *monochrome*, and *polychrome*.

- Space—Is the space between the walls of the pot enclosed or open, deep or shallow? Can you locate areas of positive and negative space? (An example of negative space is the empty space enclosed within the handle of a cup.)
- Texture—How would you describe the surface (rough or smooth, ridged, pebbly, or grooved)? If the surface shows relief, is it high, low, or sunken? Are shadows part of the textural surface? Is light reflected or diffused? Does the texture vary in different areas of the work?

2. Note the object's formal qualities. Formal qualities are grouped according to design principles such as balance, unity, proportion and size, movement and rhythm, emphasis, and pattern.

- Balance—Review your list of the pot's sensory qualities. How are they organized to achieve balance? For example, imagine a vertical line through the center of the pot. Are the sides balanced? How do shape, color, line, texture, and other design elements contribute to the balance? Would you describe the piece as symmetrical (left and right sides are mirror images of each other) or asymmetrical



Fig. 2-19. Can you tell how this clay object was made? What clues does this photograph show that would help you determine the work's technical qualities?

Courtney Teschner, *Untitled*.

14 x 10" (35.5 x 25.4 cm). Spruce Creek High School, Port Orange, FL.

(sides appear different)? Now imagine a line through the horizontal center of the piece. How would you describe the balance between the top and bottom?

- Unity—How do the forms of the parts (foot, body, neck, shoulder) contribute to the overall form of the pot? How does the surface decoration of the pot, including texture, color, and shape, work to make the pot seem whole? Are the parts harmonious?

- Proportion and Size—What words would you use to describe the size of the object? Consider words like *length*, *height*, *width*, *volume*, *weight*, *thickness*. Does the work have typical proportions for a functional object (for example, could you easily drink coffee out of a cup like this, by holding its handle), or is it more of a sculptural form (a miniature cup or a giant cup) because of its unusual proportions?

- Movement and Rhythm—Locate and describe any repeated sensory qualities, themes, or designs. Are they repeated in the same way each time or are they varied? Elaborate. Any repeated element contributes to the visual flow and rhythm in each area of the piece. For example, when using lines, a series of cross-hatchings on the body of a pot could slow down visual movement, whereas a horizontal line around the body could increase its speed. Locate any slow or fast areas on the pot. Describe them and explain why you think they are slow or fast. What rhythms do they create?

- Emphasis—Sometimes one area grabs your attention more than another—a design, some textural relief, an area of color, or even a major theme that tells a story. Find and describe dominant area(s) in the example and tell how the artist organized the sensory qualities to achieve that emphasis. Emphasis can also be achieved through the use of simplicity.

- Pattern—Are patterns in this work random or planned? Are they the result of

repeated colors, lines, shapes, or textures? How would you describe the patterns and where they appear? Consider words like *radial*, *grid*, *alternating*, *border* or *band*. What contrasts are formed by the use of pattern?

3. Note the object's expressive qualities. Unlike sensory and formal qualities, which are external observations, expressive qualities require a further step to determine how the external characteristics contribute to an expression or feeling that comes from within the work. Some examples are:

- **Mood**—How can you describe the feeling you get from looking at the clay work? Base your answer on the sensory and formal qualities you discovered. Think about mood words like *happy*, *witty*, *whimsical*, *playful*, *clumsy*, *mysterious*, *reflective*, *austere*, *calm*, *quiet*.

- **Tension**—How do the sensory and formal qualities you've noted give a sense of the clay work's energy? Describe that state. Consider words like *tranquil*, *dynamic*, *powerful*, *lumpish*, *relaxed*, *conflicting*, *stonelike*, *heavy*.

- **Ideals**—Sometimes a work seems to express an ideal. Some words that signify those qualities are *heroic*, *majestic*, *noble*, *humble*, *authoritative*, *regal*.

4. Note the object's technical qualities. Technical qualities relate to how the clay work was created. What materials and techniques did an artist use to make the finished object? These include the clay, forming process, surface treatment, and firing. Understanding these qualities can be challenging at first. As you continue to learn about the many aspects of clay you will find that solving technical puzzles can be a stimulating pursuit.

- **Clay**—What type of clay body (earthenware, stoneware, porcelain) is the object made from?



Fig. 2-20. How would you describe the expressive qualities of this work?

Ann Perry, *Alicante*.

Porcelain with cone 04 patina. Courtesy of the artist.

- **Process**—How was the object formed? Explain the method of construction (slab, pinch, coil, thrown, combination).
- **Decoration**—What decorative technique was used on the clay work's surface? Use words like *incise*, *carve*, *paint*, *wax resist*, *burnish*, *inlay*. Comment on the use of color (*slip*, *stain*, *underglaze*). Identify the type of glaze treatment (*crystalline*, *luster*, *enamel*, *multiple application*).
- **Firing**—Describe and comment on how the piece was fired (*reduction*, *oxidation*, *raku*, *primitive*, *wood*, *salt*).

Try It Look at the piece shown in Fig. 2-20. Identify the sensory qualities. Write as many comments as you can (at least two) for each design element. As you outline the object's sensory qualities, notice how they are organized. Their organization will be the basis for how you discover its formal qualities.

For Your Sketchbook

Use your sketchbook as a place to record your impressions about the work of other artists. List the artist's name, date and title of work, and media and firing technique. Then write your observations, using the steps of aesthetic scanning as a guide.

Studio Experience

Build a Paperclay Structure

Paperclay—a specially-prepared mixture of paper, clay, and water—is very strong and versatile, and has low shrinkage. You will build a structure with paperclay that shows a particular architectural style. Your construction can be based on a historical style or an imagined future style. Plan to use at least two geometric forms in your piece.

The first cities of the world—Harappa (Indus Valley, 2500 BC) and Sumer (Mesopotamia, 2400 BC)—were made of fired clay bricks. Architecture has been an essential part

of every culture's development.

Buildings echo the cultural style and social, economic, ritual, and

mythic character of the time in which they were created.

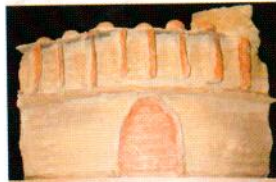


Fig. 2-21. This building was made from dry paperclay slabs.

Jules Xavier, *Untitled*.
Paperclay, stains, slip, 1 1/2" (31.7 cm) high. Photo by Maureen Mackey.

Before You Begin

- Look at architectural styles from the past as well as contemporary buildings designed by Antonio Gaudi, Frank Lloyd Wright, R. Buckminster Fuller, or Paolo Soleri. What types of structures appeal to your aesthetic sense? What geometric forms can you see in the different examples? Can you tell the purpose of a building by looking at its structure? If you came from a different time in history or cultural background would you be able to identify the building's purpose?

- Mix paperclay using dry or recycled clay, shredded paper, and water. Spread into slabs.

- Consider the design of your structure. Will it display an architectural style from a certain time period or will you invent a future style? Will it be a shelter—a place you'd want to live in—or will it serve some other function? Will it be short, wide, tall, narrow? Will it demonstrate symmetry (balance) or asymmetry (imbalance)?

- Make sketches of your ideas. Select one and expand it. Will your structure appear bold and strong, or fragile and delicate? What geometric forms will you incorporate? Will the surface be smooth or textured?

You will need:

- slabs of paperclay
- paperclay slip
- hand-building tools—fettling knife, needle tool, sponge
- ware board to set your piece on
- round mold (optional)

Create It

- 1 Cut shapes for your piece out of paperclay slabs. Pyramids and cubes will need a front, back, and sides. You can make cylinders from rolled rectangles. Make a base for your building.
- 2 Make dome shapes by draping a slab into (or over) a round mold. For a sphere, slip and join two dome shapes of the same size.
- 3 For added texture, layer on paperclay slip at any time (damp or dry). Smear it on with a brush, your fingers, or a rib tool.
- 4 Seal seams with paperclay slip.
- 5 Poke a hole in any hollow or enclosed section to allow gases to escape during firing.



Fig. 2-22. Spreading the just-mixed paperclay evenly on a hard, smooth surface.

6 When your structure is dry it can be bisque fired. Fire slowly until smoking stops (500–900°F), then continue at the normal rate to cone 05.

Safety Note Make sure the kiln area is well ventilated. Smoke and fumes will emerge as the paper burns away.

7 Once your piece has been bisqued you can proceed with surface decoration and glaze application. See Chapter 5 for ideas. Plan your glaze firing for the clay type (earthenware, stoneware, or porcelain) you used in your paperclay mixture.

Check It Does your structure show a particular architectural style? Were you able to incorporate at least two geometric forms? How did you balance your piece? Does your form appear bold or delicate? Explain how you were able to achieve this look. Describe what you learned from this exercise.

Fig. 2–23. Summer Ahearn makes geometric forms as the basis for her structure.



Fig. 2–24. Can you see where the artist used a cube, a pyramid, cylinders, and spheres in this structure? What architectural style inspired her? Summer Ahearn, *Untitled*.

Paperclay, stains, slip, cone 04. Photo by Misty Ahearn.

Sketchbook Connection

What other ways can you include architectural themes in a sculptural piece? Keep a record of interesting architectural models in your sketchbook. Use them as a starting place for sketching new ideas. Refer to them for inspiration before you begin new work.

Rubric: Studio Assessment

4	3	2	1
Idea Communication • Specific culture or function (real or imaginary) • Match between intentions and realization			
Structural form/surface attention clearly relate to specific function, yield strong cultural clues. Some supplementary information may be needed. Convincing, meaningful	Structural form/surface attention indicate specific function, yield sufficient cultural clues. Some supplementary information may be needed. Believable, satisfactory	Specific function and/or culture vague, much supplementary information needed. OR some mismatch between intentions and final form. Some gaps, vague	Specific function and/or culture very obscure even with explanation. OR broad mismatch between intentions and final form. Large gaps, obscure
Design Choices • At least two geometric forms • Symmetry/Asymmetry • Texture/other decorative elements			
At least two readily identifiable geometric forms present, symmetry choice adds striking effect. Specific texture(s) and/or other elements add unity and interest. Engaging, integrated	At least two noticeable geometric forms present, symmetry or asymmetry used to good effect. Specific texture(s) and/or other elements add unity and interest. All aspects considered	1 of these: Structural design utilizes only one geometric form; symmetry or asymmetry detracts significantly from overall effect; weak use of texture or other design elements. Needs additions or edits	2–3 of the factors listed in level 2. Monotonous, unfinished
Media Use • Paperclay use • Structural craftsmanship • Glaze application			
No apparent mistakes in paperclay use and construction of clay form. Very successful glaze application. Polished finish	Few apparent mistakes in paperclay use and construction of clay form. Successful glaze application. Competent finish	Some noticeable mistakes in media use. Glaze application may yield an uneven finish. More care indicated	Many noticeable, significant mistakes in media use. Rudimentary difficulties
Work Process • Research • Sketches • Reflection/Evaluation			
Thorough documentation; goes above and beyond assignment expectations. Thoughtful, thorough, independent	Complete documentation; meets assignment expectations. Meets expectations	Documentation is somewhat haphazard or incomplete. Incomplete, hit and miss	Documentation is minimal or very disorganized. Very incomplete

Web Links

Visit the New York State College of Ceramics at Alfred University to learn about the school and its associated ceramics museum, the Schein-Joseph International Museum of Ceramic Art. <http://nyscc.alfred.edu>

What is an Artist-in-Residence Program all about? Find out about the program associated with the Roswell Museum and Art Center at <http://www.rair.org>

Career Profile: Eddie Dominguez

Eddie Dominguez believes strongly in building communities. He has worked with racially diverse populations from all age groups. Dominguez is also an assistant professor at the University of Nebraska, Lincoln. A native of New Mexico, he studied at the Cleveland Institute of Art followed by graduate work at New York State College of Ceramics at Alfred University. He has received many grants and two National Endowment for the Arts awards. In 2002 he was selected as an artist-in-residence at the Roswell Museum and Art Center in Roswell, New Mexico.

How did you become involved with ceramics?

Eddie: At first I thought of painting as the most popular art form. Then I discovered clay, and it opened up a whole new world for me. I like the "community" of it. It's a wonderful medium.

Describe some of your community work.

Eddie: I enjoy doing public artwork, especially when I can involve the community in the process. One of my earliest



Photo: Larry Gawel.

projects was designing a stage set for a dance company comprised of dancers with disabilities. Another artwork was a large-scale wind chime for an elementary school in Albuquerque, New Mexico, in which I worked with more than 500 students. One of my largest public artworks is a 25-by-55-foot wall mosaic on the exterior of the Martin Luther King apartment complex in Tucson, Arizona. Called *A Show of Hands*, the project involved more than 800 elementary school students, artists, senior center residents, and college students.

What positive outcomes of your community projects have you noticed?

Eddie: I particularly notice the strong sense of ownership that the community feels for the finished work. Such pride of ownership is certainly the result of the direct, intense community involvement.

Please share your advice for a young artist.

Eddie: Art may be something you were born to do, but it can also be something you can learn to do. Education is so valuable, and there are all types of art programs. Just follow your instincts and practice, because that is evidence to everyone around you that you are serious about what you do.

Fig. 2-25. This ceramic dinnerware set for twelve was inspired by a floral bouquet the artist received when his son Anton was born. Eddie Dominguez, *Anton's Flowers*, 1997. Collection of the Renwick Gallery of the National Museum of American Art at the Smithsonian Institution, Washington, DC. Courtesy of the artist. Photo by Herbert Lotz.



Key Terms

pinch
coil
extruder
slab
mold



Fig. 3-1. The artist who created this vessel learned hand-building techniques that were passed down through generations of potters in Nigeria.

Magdalene Anyango N. Odundo, *Reduced Mixed-Color Symmetrical Piece*, 1990.

Ceramic, 13 $\frac{3}{4}$ " (34.9 cm) high. Museum purchase, 91-4-2. Photograph by Frank Khoury. National Museum of African Art.

Chapter Review

Recall List the four properties that you must learn about any type of clay you work with.

Understand Explain why potters generally use additives such as grog when building large ceramic pieces.

Analyze Select one ceramic artwork from this chapter. Write a description of the work based on its sensory, formal, expressive, and technical qualities. Describe as many qualities as possible. Be prepared to discuss your analysis with the class.

Synthesize Compare paperclay to regular clay, based on the four basic properties of clay.

Evaluate Which technique of clay preparation—kneading or wedging—did you have most success with? Why?



Fig. 2–26. This paperclay sculpture features a powerful man-animal figure in a familiar pose. What do the tiger stripes and stance suggest?

Christopher Maxwell, *Untitled*, 2000.
Paperclay, paint, $8\frac{1}{4} \times 6\frac{1}{4} \times 8\frac{1}{4}$ " (21 x 16 x 21 cm). Applecross Senior High School, Ardross, Perth, Western Australia. Photo by Graham Hay.



Fig. 2–27. Helen Kwok displays her paperclay mask. What technique would you use to finish this piece?

Helen Kwok, *The Face of Reflections*, 2001.
Paperclay, $7\frac{3}{4} \times 7 \times 2\frac{3}{4}$ " (20 x 18 x 7 cm). Applecross Senior High School, Ardross, Perth, Western Australia. Photo by Graham Hay.

Writing about Art

Often when looking at a work of art we think about or discuss whether or not we like it. Select a clay piece from this book (or another source) that you dislike. Write a short, clear statement indicating why you do not like it. Then write a persuasive statement arguing why it is a good work of art.

For Your Portfolio

Photograph your paperclay structure. Document with title, date, and size. Write a statement about the construction of your work—tell what inspired you to build this piece. Explain who would use this building and what its function it might be.