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# Creating a Fantasy

Follow along as Catherine Mather sculpts & prepares a clay figure for mold making

By Barbara Campbell

cover story



Australian artist Catherine Mather, a 2005 National Institute of American Doll Artists inductee, shares the following techniques for sculpting and preparing a porcelain clay figure for the mold-making process.

She advises doll makers to compile a scrapbook of images from books and magazines, photographs and drawings.

"I find body shapes that convey an emotion consistent with facial expressions," says Catherine. "The right pose is a large part of a finished doll's ability to communicate. A seated doll is the easiest to design because it is stable and does not need an armature for positioning."

This article covers general sculpting technique only. Refer to previous *Doll Crafter* or *Doll Crafter & Costuming* articles for specific sculpting instructions. There are also many books that provide in-depth sculpting and finishing lessons.





Early stage of the full figure in relation to the reality-size reference photo. Use a sturdy base as the work area. Note how the bamboo skewers support the feet and legs against the work stand.



The measured and marked head shows placement of the facial features.

### General comments

To help in proportioning a figure to scale, enlarge reference pictures to the size of the proposed doll. Pin these photos to the work-area wall so they are available for study.

Always work on a sturdy base topped with a turntable. A turntable enables working without the need to move the piece in progress.

Quickly draft out the clay model, using the traditional method of a rectan-



Detach the arms and legs from the body.



Carve the detail of the eyes.

gle for the torso, a ball for the head, and lengths of rolled clay for arms and legs.

At this stage, the clay is quite soft and will take a couple of hours to air dry to leatherhard consistency. Speed the process by surface-drying the clay with a hair dryer.

Because the figure will be slip-cast in mold segments, design the arms, legs and head to be easily separated from the torso. The cast limbs will be fired, painted and securely strung to the fired and painted torso and head with elastic.

At the leatherhard stage, add definition to the limbs and joints, adding and carving, as needed, with a small, sharp knife. Smooth the work with your fingers.



Detach the head and insert a small wooden dowel into the neck.



To attach the head, insert the dowel into the neck. Form neck muscles and tendons over the dowel.

As the figure takes form, use a soft, damp sponge to smooth the torso and round the contours.

To prevent a sculpt-in-progress from becoming dry and brittle, lightly spray as needed with a water atomizer. During time outs, cover all damp clay with lightweight plastic.

### Head

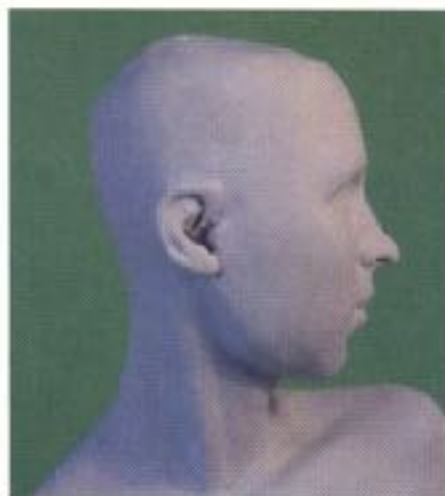
1. Create the head simultaneously with the body. Size and shape the face.

Detach the legs and arms from the torso. Remove the head from the torso with a sharp knife and insert a small wooden dowel in the neck of the head for easier handling.

2. Leave the dowel in the neck. On firm clay, pencil-in centering lines for the face and to position the features.



Mark ear position. Attach a small piece of clay and begin detailing as you carve the ear into the head.



Soften the edges of the ear with a damp brush.



Use a flat paint scraper to refine the joining surfaces.



Form and detail the toes, softening and rounding them with a wet brush.



To replace and secure arms, drill through the arms and torso and insert skewer pins.



Soften fingernail sculpting with a wet brush.

Add clay to the head for the nose, lips and eyelids. Manipulate the added clay into features. Achieve the fine facial details with brushes and small wire tools. Carve and detail the eyes.

3. Replace the head on the body by inserting the dowel downward into the neck of the torso. Add the neck muscles and tendons over the dowel. When it's time to detach the head to make the mold, the drying clay will crack at the neck joining, providing a clean separating point.

4. Mark the ear position with a pencil. Carve into the head, attach a small amount of clay for each ear and model

into ears. Soften with a damp brush.

### Legs

1. Place the legs side by side to evaluate evenness, width and length of thighs, legs, feet, knee bones and ankle joints.

2. Refine the joining surfaces with a flat paint scraper.

3. Drill small holes at matching centers of both cut surfaces in legs and thighs. Drill each hole large enough to insert a short pin of bamboo skewer. Insert the skewers. Push the legs onto the skewers, holding the legs in place.

4. Divide each foot mass to form and detail toes, softening and rounding with a wet brush.

### Arms

1. Arms are the most complex parts of the body. Our model is designed with one hand resting on a knee cap, the other holding the stand. To achieve an accurate fit at this position, the finished arms must align perfectly with the top arm/shoulder point.

Adjust and hold each arm in place to the doll. Refine the joining surfaces with a flat paint scraper.

Drill through the arm end and shoulder extension to accommodate a long pin of bamboo skewer. Insert the skewers and replace the arms.

2. Separate the fingers from each





Access to the waist and buttocks is easier with the arms removed.



The smoothed figure is ready for the arms to be attached.



The bent arm on the completed figure continues to be supported.

hand mass. Carve the fingers and add the knuckles and knuckle details. Shape the palms and the backs of the hands. Soften details with a wet brush. Add and smooth clay for the wrist bones.

3. To compare the arms and hands, carefully detach pins from the torso. Check the width, length and details.

Replace the arms and carve the nail beds as with toes. For elegance, form long feminine nails by extending them with bits of clay.

4. Turn the piece, standing back to view it from all angles. Check for proportion in relation to the reference photo.

For detailing the waist and buttocks, work while the arms are detached. Use a soft brush dipped in water to smooth the area.

To complete the sculpture and prepare for making a mold, carefully smooth the entire clay body, then reattach the arms. >>

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## Materials

- 20-lb. block of porcelain clay
- Soft sponges
- Turntable
- Bowl of water
- Atomizer bottle
- Moistened towels
- Base of suitable height (see photo)
- Small wooden dowel
- Short-blade knife
- Fine wire loop tool
- Craft knife
- Bamboo skewers
- Small ruler
- Lightweight plastic produce bags
- ½ -inch square shader brush
- Small cat's-tongue brush
- Flat paint scraper

