

design. They should emphasize character and movement. Don't become too concerned with outline. The outline changes with the evolution of the form, which pushes into space and expands at intervals.

The three-dimensional space sketches let you see the form in space and understand the relationships that space creates. They help you become aware of the negative space between the positive forms. The overall character and position of your form in space determines the most important tensional relationship. You can use these sketches to experiment by dramatizing certain overall or comparative proportions and grouping two or more volumes in opposition to other groups.

DEVELOP YOUR BEST THREE-DIMENSIONAL SKETCH.

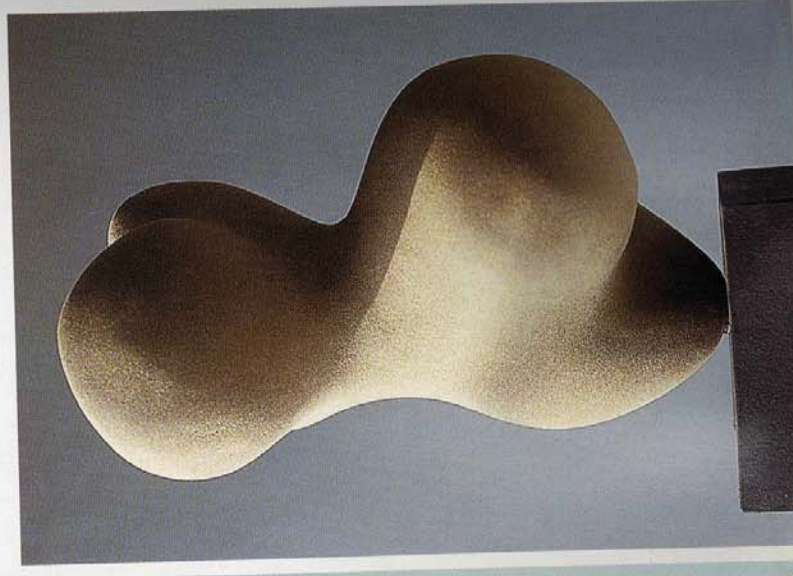
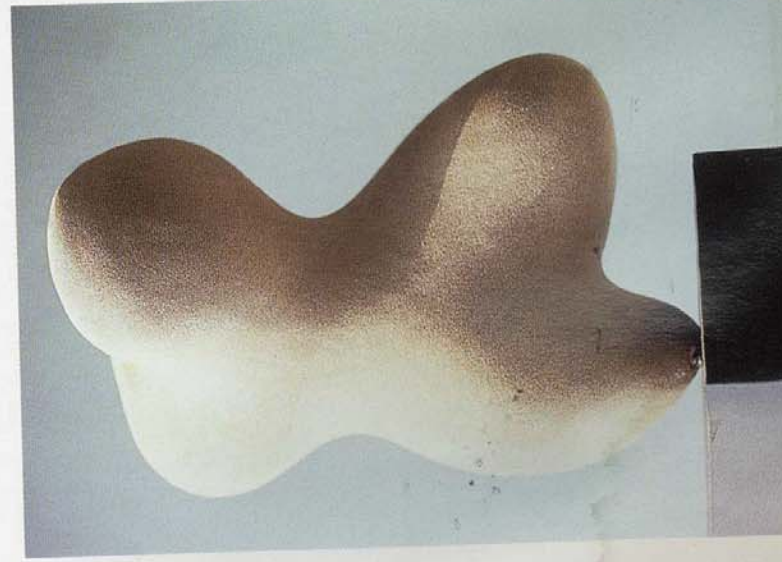
Put your design together quickly and thoughtfully, stopping to look at it from a distance from time to time. Create a mass of two or three volumes using small blocks of clay, grouping forms into abstract shapes. Be aware of the contrast of forms. You should strive to express complementary contrast in proportion and in mass. Each form should improve the other, and the whole should be interesting three-dimensionally.

Establish the dominant-subdominant relationship. Then put subordinate relationships into place. (Remember that the dominant element is the most interesting shape and, nine times out of ten, is in the most prominent position.)

Work with the axes of the big volumes. Gesture, the movement of the axis, should be interesting and strong from every position. It is the core of the design. It keeps all other relationships (between plane, line, and space) in a state of suspension, tension, and balance. Axes should be balanced from every point of view and three-dimensional in concept. You should be able to feel the back of the volume from the front—that is, to feel the movement through the volume.

"The vocabulary was applicable to any design problem. The terms were principles that had to be contended with. It was, in a sense, very rigid—and yet very freeing."

— Gerald Gulotta





Keep in mind that in pure convexity, the eye is drawn around, over, and under. There is no hard-edged outline, no surfaces that meet at an angle. The negative space being resisted by form should flow around the volume. Your eye should be able to trace the way space flows always along the surface of protruding forms. Of course, there will be concavities, but keep them subtle, not deep.

You have three kinds of curves here: the curve of the axis, the curve of the planes going across the axis, and the curve of the configuration. They should all relate. Don't make curves parallel or perpendicular to the axes. It's much more subtle if you keep them on a diagonal.

Hold back the development of the planes that are diagonal to the axis. That is, hold back expansion except in character. Feel the mass first, then work on the planes and lines. Visualize the movement of forms. Be aware of surface tension.

“Things can get so big that the design outstrips the idea. There's a right size for every design—where it expresses the idea adequately and looks its best.”

Do everything by carving. Work slowly or you'll make everything too small. Keep turning your work as you do it. Be careful not to spend so much time refining the shapes that you don't explore relationships.

For the final expression of the convexity problem, we work with a fifty-pound salt block. (Salt blocks are used on farms for livestock. They are about 12" x 12" but not true cubes. The salt block has a slight taper and a hole at one end for standing on a stick in the field.) Creating an organic form that does not retain the shape of the block adds to the challenge, but the material lends something to the experience. It is voluptuous, similar to marble. Unlike plaster, which is too fast, the salt block forces you to work more slowly.

Work the salt block with files and sandpaper. Never chip away at it. The process should be slow and careful. This will give you the opportunity to look very closely and learn to recognize the slightest changes in the form.

You should end up with a form that looks larger than the geometric form you started out with.





PROBLEM THREE: CONCAVITY

“The sculptural exercise that emphasizes

concavity explores a relationship that is

seldom understood. A talented and intuitive

designer may well arrive at sensitive,

positive volumes, but unless the important

relationship of the negative volumes, or

concavities, to the positive forms is

explored, his visual solution is only half

controlled. In the convexity exercise, you

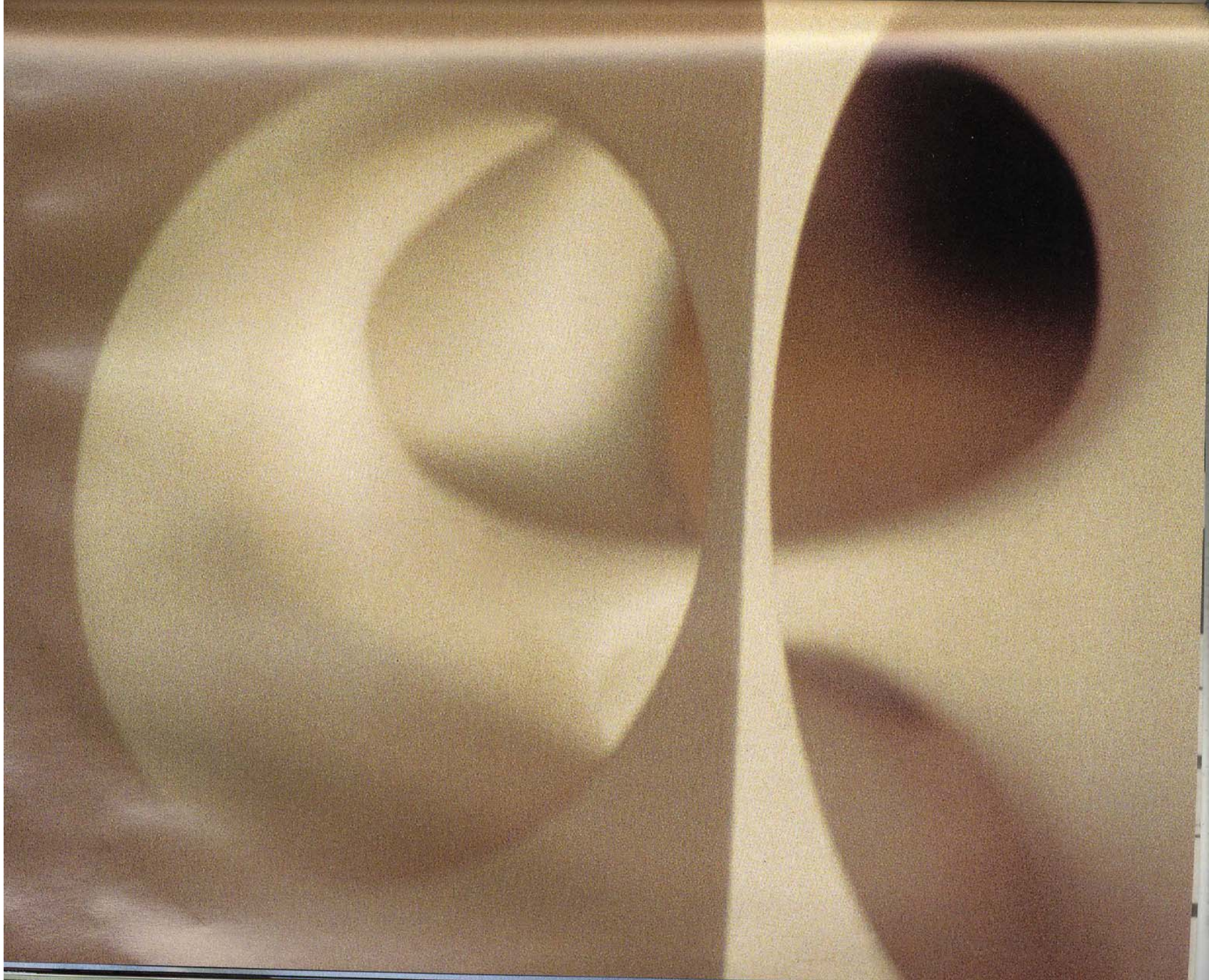
were already learning about concavity—

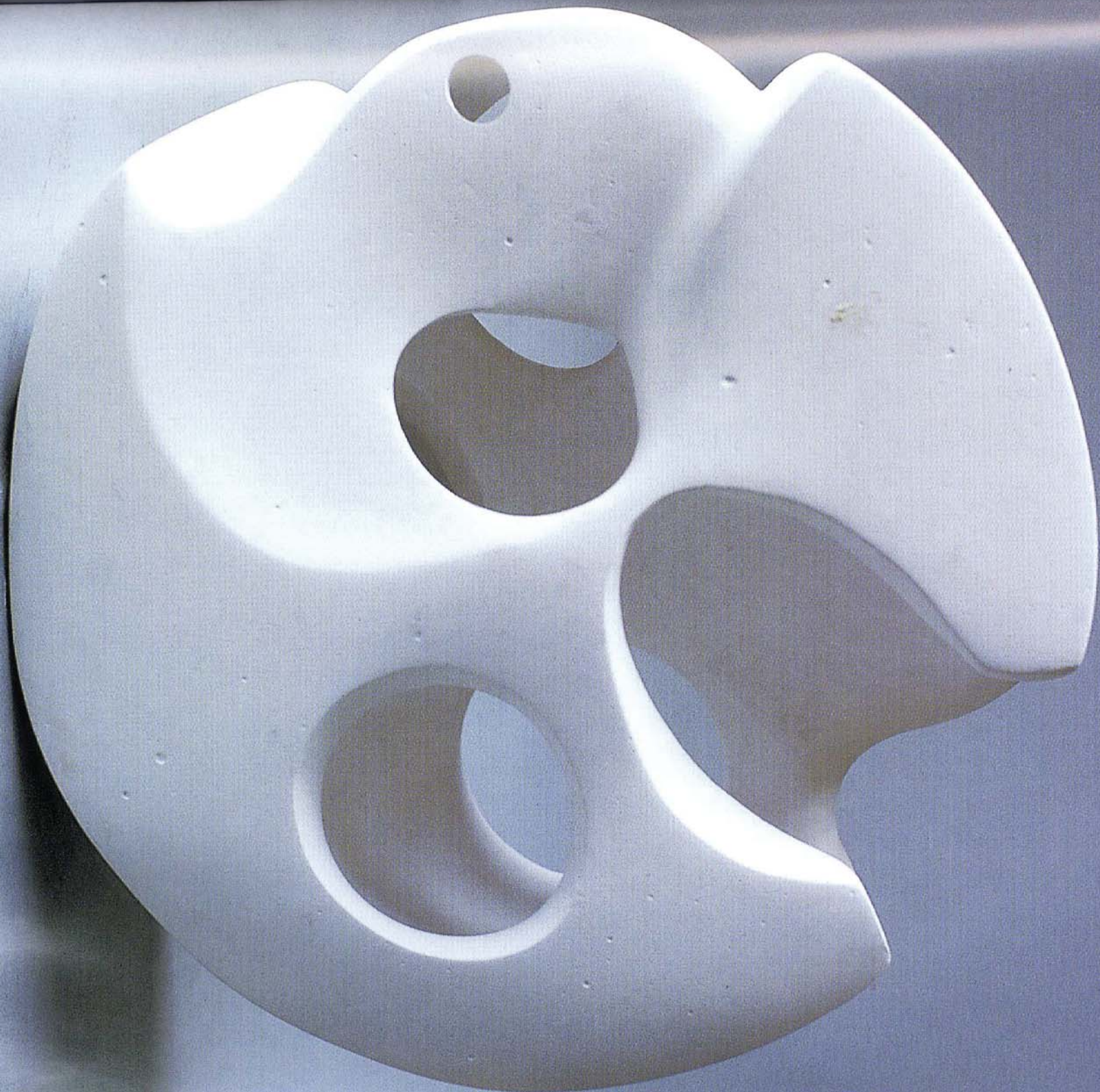
about how negative volume affects form.

Now, the focus will be on concavity.”

“The impression you got
from her teaching was
that she analyzed what
was wrong. Actually, she
saw that something was
or wasn't beautiful—and
then figured out why.”

— *William Fogler*





Think about natural elements and the slow erosion caused by wind and water. Make some clay sketches in which concavity establishes the character of the design. Design the surface of the concavity to contrast with the convexity.

“Good art or design rarely looks like it was done quickly. The artist or designer keeps working until all the parts of a painting, sculpture, or product relate to each other. That’s what makes art last—regardless of its time. We respect it for its completion and its consistency.”

Choose your most successful sketch and develop it. Use several blocks of clay and combine them. Decide whether you want a predominantly vertical or horizontal composition. Create shapes in which the character is interesting and the inherent and comparative proportions are pleasing.

Establish dominant, subdominant, and subordinate relationships. The first big spatial relationship should express the whole design. It should express the character and proportions of the volumes, the rhythmic movement of the volumes, and the variety and contrast of curved and straight lines.

Work on contrast. If things are different, they must complement each other. It’s much harder to make things that are complementary than to make things that are the same. The complementary relationship must be understood from the very begin-





ning. If you're having trouble, just hang in there. Take one shape away, and see if it looks better without it.

Be aware of the axes. Not only do positive forms have axes, but concavities have axes as well. When the shape of a concavity is strong, it becomes a thing. It's almost like a positive form.

Do not trap the negative space. It should go around and come out and go someplace else. The space should flow, pushing against the volume in an eroding process, like a river through a canyon. Try to indicate how you'd go through it with the eye.

After you've gotten the volumes and the axes right, you can begin to play with one plane against another plane. Then you can play with all the other lines. See how the outside lines relate to the inside lines.

Execute your final design using a salt block or plaster block as your medium.

Plaster is OK here. You can afford to work more quickly on the concavity exercise because you can gouge and hollow the material. If you work in salt, use files and sandpaper as you did in the convexity problem.

Although you're taking away material here, don't let your form contract like a prune becoming a raisin. You want to increase the presence of the form through its expansive characteristics. Once again, you want to end up with a form that looks larger than the geometric form you started out with.

to help you see the internal movement of your piece.”

— *Pamela Waters*

“She was interested in Martha

Graham's idea of dynamic

tension across space: two

figures doing something not

at all the same but holding

together. Like Graham in

dance, Chanel in costume,

and Calder in sculpture, she

didn't see it as figures but as

pure abstraction.”

