

PROBLEM TWO: CURVILINEAR VOLUMES

“Now you will build on your experience

with rectilinear volumes in a static

composition by taking on a more

complicated challenge. The second

experience involves the organization of

curvilinear volumes in a dynamic

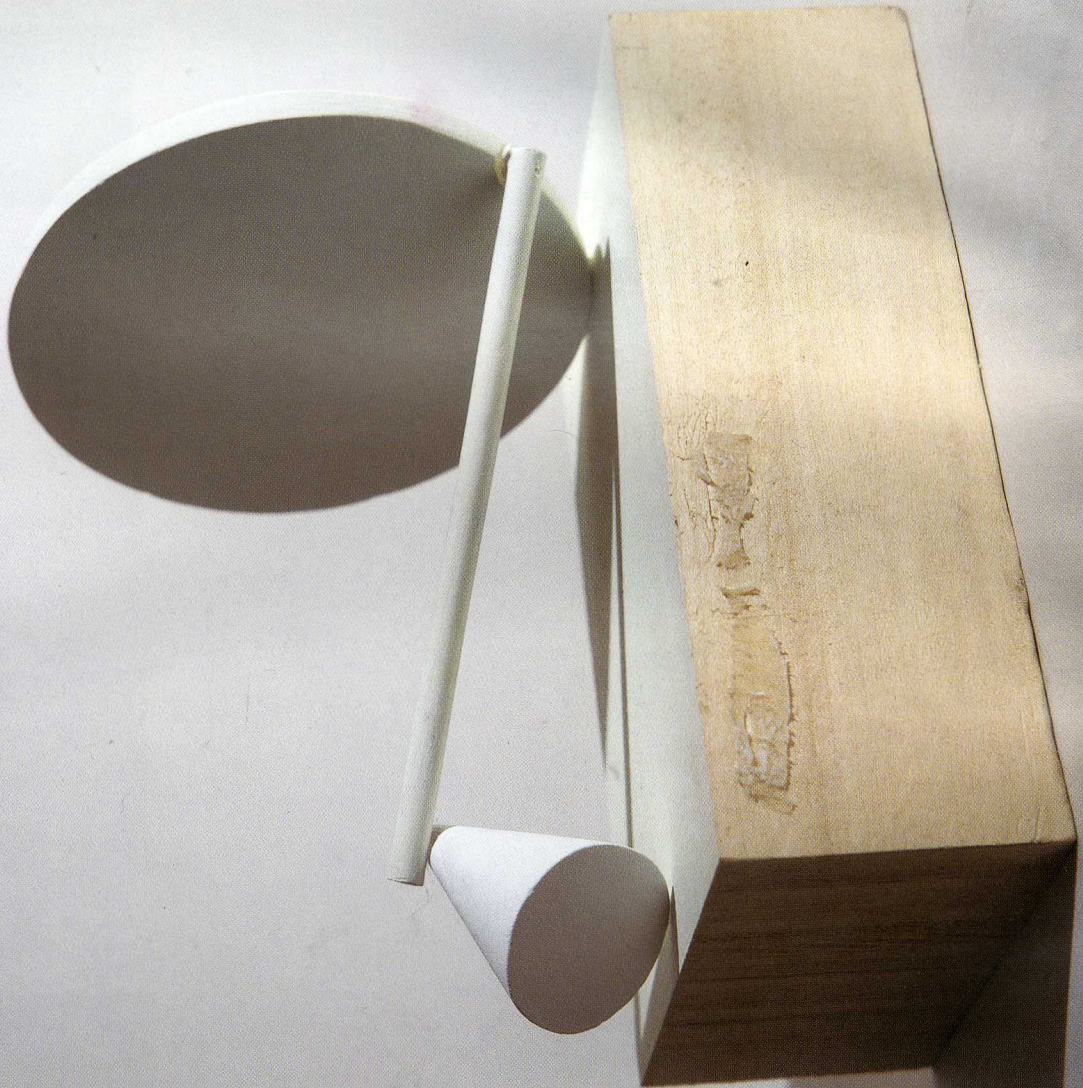
relationship. In addition to mass,

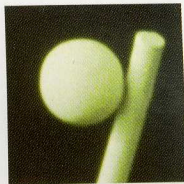
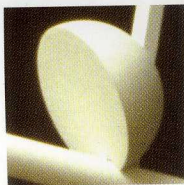
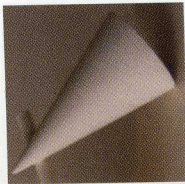
proportion, and character, you will now

deal with the additional challenge of

the diagonal axis. We will work with

curvilinear solids.

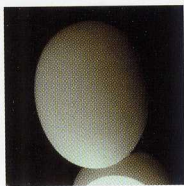
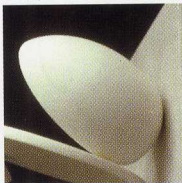




cone

hemisphere

sphere



half ovoid

ovoid plinth

ovoid

Start by making many curvilinear volumes in clay. Make volumes of varying proportions to explore their properties. The jump from rectilinear to curvilinear is a big one because the new shapes are harder to handle. Create a dynamic composition by combining any three curvilinear volumes. Keep the following principles in mind:

Choose forms that are pleasing in and of themselves. Then consider the complementary relations of mass, proportion, and character. (Every body seems to love cones, so I'll tell you something about them that will help your design. A slender cone is easier to see as dominant or more interesting than a fat cone. You can structure slender cones so they don't fall over by cutting a piece from a wire hanger, filing a point, dipping in white primer, and inserting it into the cone.)

Position the axes. This problem is primarily a design of the axes to make your sketch three dimensional and interesting from all directions. Use the diagonal axes to create movement in space. You don't want your composition to look like three forms stuck together. The volumes should be in dynamic relationship. There should be tension—a vibrating relationship—between the axes of the volumes. *Tension* is the point of increased awareness between the axes of volumes, planes, or lines. (It can also relate to color, value, and texture.)

Establish dominant, subdominant, and subordinate relationships. The largest volume doesn't have to be on the bottom. You don't want to build like bricks. The top is more likely to look like the dominant position. Put the most interesting shape in the dominant position. A form has to be doubly dramatic in character if it's going to be on the bottom. Preserve the identity of the individual forms while creating a composition that is larger, more dramatic, and more interesting than any single volume standing alone.

Be sensitive to proportions: inherent, comparative, and overall.

Consider the way elements are joined. The joints are part of the design. It's not usually successful to have one form piercing another unless the one doing the piercing is slender.

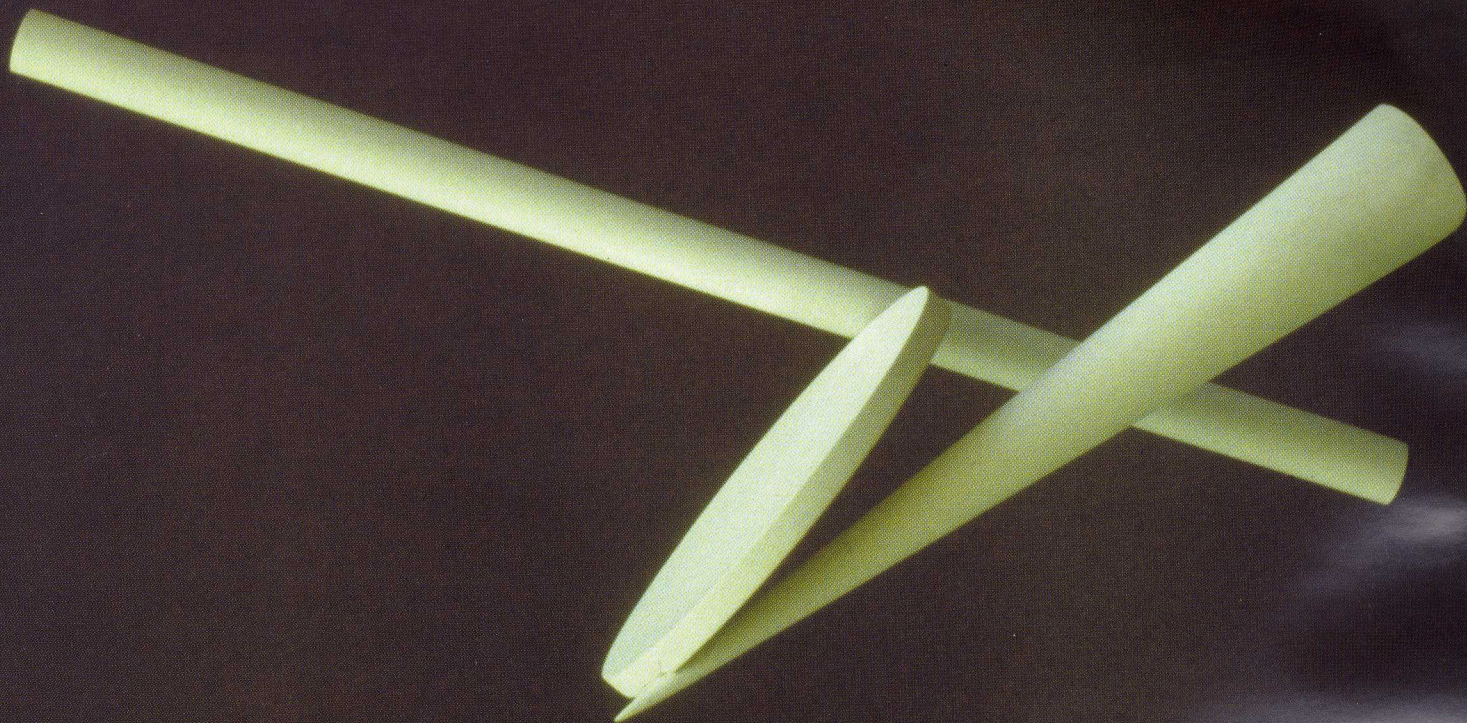
Make a statement about how the composition is to be perceived. Don't give choices. Force the eye to take in all three forms and to move through your design in a specific way.

Be aware of the volume of air within which your design exists. Try to activate the negative volume around and between your positive forms.

Create a balance of directional forces from every position if possible. The composition shouldn't look flat from any vantage point. No one view should look more than twenty percent more interesting than another view. The two largest forms in your design should accomplish more than two-thirds of the balance. The balance of directional forces is the sum total of the forces of movement within a composition. One

these exercises are
unning the scales.
you have to be able
to strike the notes
efore you can play
the music."

— James Fulton



adds it up subconsciously. Either it feels right or it doesn't. A sensitivity for balance can be acquired over time. It develops with practice and experience.

Think of dependent and independent visual balance. Each form in your composition should be responsive to every other form. Strive to create a total experience in which all of the elements work together.

Dependent balance describes a situation in which the axis of a volume, plane, or line needs the axis (axes) of other volumes, planes, or lines for physical structure or to feel structural to the eye. It also applies to a group movement in which three or four forms are dependent on one another for balance, and to one group movement in relation to another (that is, when the gesture of one group needs the gesture of an opposing group to achieve balance).

Independent balance refers to the condition in which a line or volume in a static composition is independently related to the vertical or the horizontal axis. Curved lines or volumes in composition are independently balanced when each appears to be in the best possible position for itself regardless of whether or not it is physically supported by other curves or straight lines.

Precarious balance describes the situation in which one gets the feeling of balance but ever so slightly—as when a dancer is suspended for a moment in space or on toe. It is as though, for a split second in time, the gesture is holding its breath. The very thrust of the gesture seems to support itself for the moment.

Work on developing a sense of visual structure. Think of the position(s) in which a form, standing alone, is comfortable. For example, does a given cylindrical volume look more or less comfortable in a resting position (horizontal or vertical) or at a forty-five degree angle? How far over can it lean and still appear comfortable? The total composition should look structural. It should appear to be self-supporting. It should look like a physical structure as well as a design structure.

It's all design organization. All the directions regarding proportion in the first problem apply here. In addition, here we have three kinds of tension. First, tension between the axes of the volumes. They have to be very sensitive to each other. Second, tension between the surfaces of the planes. They must be aware of each other. (Actually, tension is just an increased awareness.) And third, tension between the accents of the curves (that is, the areas of greatest expansion). You must try to find the most interesting tensions you can because that will change the positions—and for the better.

Always ask yourself, "Is this an interesting design idea? Does it make a design statement?" The process of doing these problems is like reflexology—like pressing a spot on the foot. The way you know you're pushing the right spot is that it hurts.

"She taught us a visual three-dimensional language, and the intrinsic organization and structure of her teaching was akin to the teaching of a written language. There were rules like the rules governing the structure of a sentence. The structure isn't in or out of fashion—it just is."

— Robert Anders

