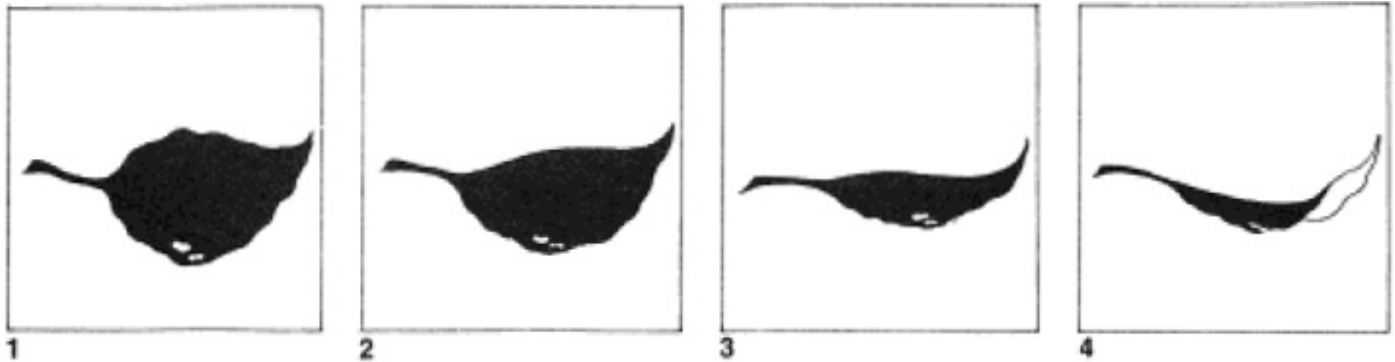


Assignment #03 Visualization of Form Study

Form and Shape

Two-dimensional forms consist of points, lines, and /or planes on a flat surface. The terms shape and form are often used the same but their meanings are not the same. A shape is an area easily defined with an outline. A shape that is given volume and thickness and that can show different views becomes a form. Forms display some depth and volume—characteristics associated with three-dimensional figures, whereas shapes are forms depicted at particular angles, from particular distances. A form can therefore have many shapes.

Form and Shape



Form and Space

Form is positive space that is occupied. Unoccupied space surrounding a form is known as negative space. Positive space is seen as a positive shape (fig. 12). When negative space is surrounded with positive shapes, it becomes a negative shape (fig. 13). Again, positive space is the object, thing or form and it can be any color.



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A flat form shows no thickness, fully faces the viewer and suggests no depth. This is the effect created by pasting a shape cut from thin paper on another piece of paper. When one shape overlaps another, some depth is created (fig. 14). When the same shape is shown curled, folded, or flipped, a form of considerable depth is introduced (figs. 15–17).



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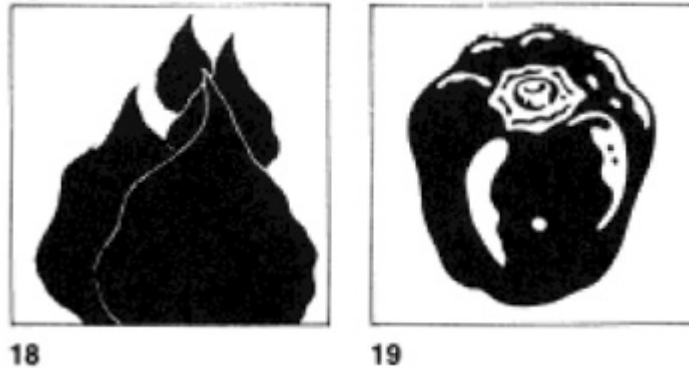


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Form and Space (continued)

The same shape can be displayed at different sizes in the same composition; a sequence of receding forms suggests infinite depth (fig. 18).

A shape that is given thickness or volume transforms a flat, two-dimensional space within the frame of reference into space of appropriate depth (fig. 19). Flat and voluminous forms, shallow and deep spaces, produce different visual illusions, which must be considered when creating two-dimensional designs.



Visualization of Form

As a form takes shape on a two-dimensional surface, it can be depicted in a number of different ways without a change in its size, color, position, or direction. We will be exploring how to create or design a form.

Visualizing a form requires the application of points, lines, and planes that describe its contours, surface characteristics, and other details. Each method of treatment results in a different visual effect, although the general shape of the form remains the same.

Visualization with Lines

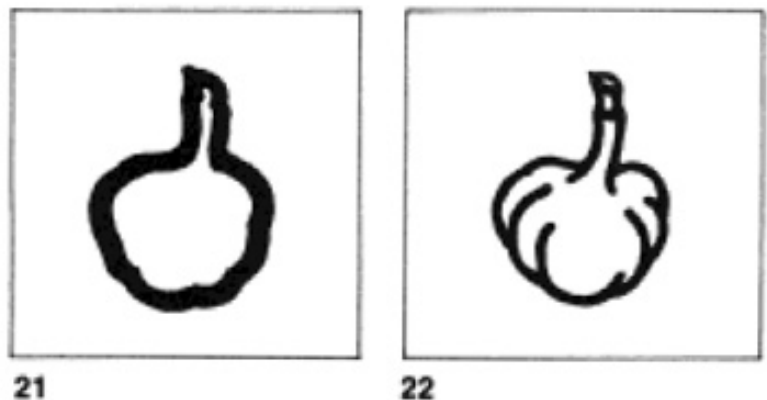
A line is created by moving an appropriate tool across a surface by hand. It is easy to visualize a form constructed with lines. It is somewhat like drawing, except that solid lines of uniform breadth might be used in design creation.

An outline is the most economical expression of basic visual information. If a fine line does not achieve the visual impact desired, a much bolder line could replace it (fig. 21). Note the consistent thickness of the line.

Within the outline, details can be introduced that provide descriptive information and strengthen the connections and divisions of elements, the apparent volume and depth, and the spatial sequence from foreground to background of the form (fig. 22).

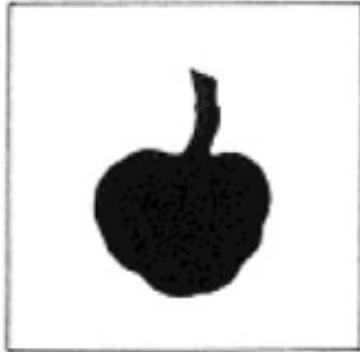


Figure 20

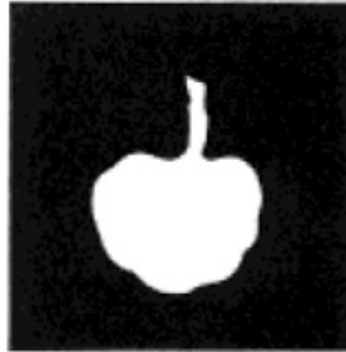


Visualization with Planes

The shape outlined in figure 20 can be painted black to create a continuous flat plane. The result is a silhouette—the simplest expression of a form (fig. 24).



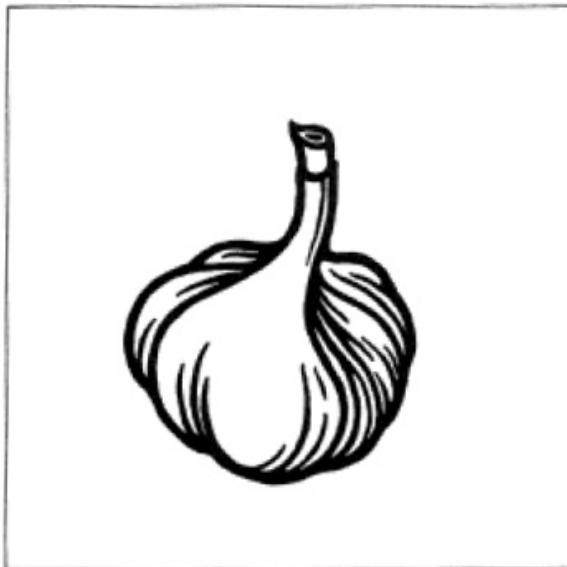
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Black and white areas can be easily reversed; a black shape on a white background becomes a white, or negative, shape on a black background (fig. 25).

A shape that is achieved with one continuous plane is usually void of details. Negative lines (white lines on the solid black plane) can be used to introduce details. Negative lines separate a large plane into smaller planes (fig. 26).



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Visualization with Lines and Planes

Lines are used to create seemingly light shapes, whereas planes create heavy shapes. Lines and planes used together allow light and heavy areas to coexist within a shape; details can be introduced where necessary. This manner of visualization is particularly suitable for adding light and shade to enhance the effect of volume in a form (fig. 27).

Visualization with Points

Repeated points can be arranged to outline a form (fig. 28). Points can also be grouped as a plane to suggest a form (fig. 29). When used to create planes, points produce texture.

Visualization with Texture

Texture can be created with points, short lines, long lines, or any combination of these. Texture can be shown as a regular pattern, or as an irregular pattern, with slight variations in the shape or size of similar elements (figs. 30, 31).



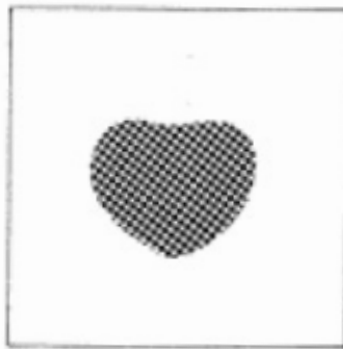
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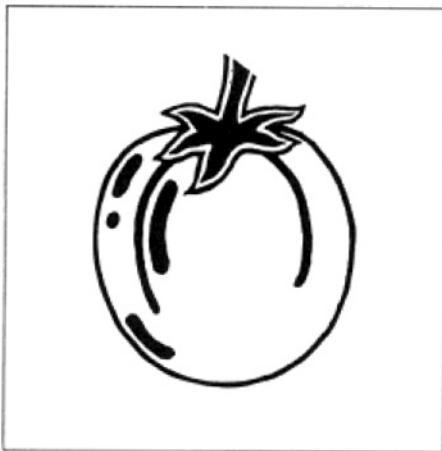
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Texture generally adds visual variations to planes and surface characteristics to forms. Texture can also be applied in light-dark modulations to establish volume (fig. 32).



32

Types of Forms



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Forms can be broadly classified according to their particular contents. A form that contains a recognizable subject communicates with the viewers in more than purely visual terms. This is called a representational form. When a form does not contain a recognizable subject, it is considered nonrepresentational or abstract.

Representational Forms

A representational form can be rendered with photographic realism or with some degree of abstraction—as long as it is not so abstract as to make the subject unrecognizable (fig. 33). If the subject cannot be identified, the form is nonrepresentational.

Sometimes the subject of a representational form is fantastic. The form, however, will present a transformed reality, the fantastic subject conveys a kind of reality to the viewer (fig. 34).

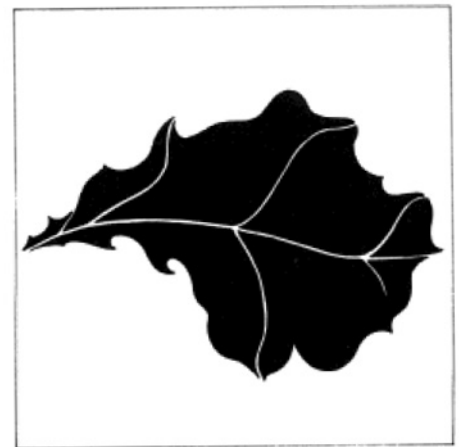


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Natural Forms

Representational forms can be further classified according to subject matter. If the subject is something found in nature, the form can be described as a natural form (fig. 35). Natural forms include living organisms and inanimate objects that exist on the earth's surface, in oceans or in the sky.

Other types of forms are **Man-made, Verbal, and Abstract.**



35



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Types of Shapes

The same form, whether representational or abstract, can be expressed in different shapes. This does not mean that it must be seen from different views, angles, and distances, or that it must be moved or transformed; the different approaches possible in visual creation produce different results.

One approach is to draw the shape freehand in a somewhat *calligraphic* manner. Another approach is to create an *organic* shape by reducing a shape to all smooth curves. A third approach is to use only straight lines, circles, or arcs to establish a *geometric* shape.

Calligraphic Shapes

The movement of the hand, the drawing tool, the medium, and the drawing surface are apparent in a calligraphic shape. The tool is generally a pen, pencil, or brush, whose particular characteristics are apparent in the finished form (fig. 39).

Organic Shapes

An organic shape displays convexities and concavities with softly flowing curves. It also includes points of contact between curves (fig. 40).

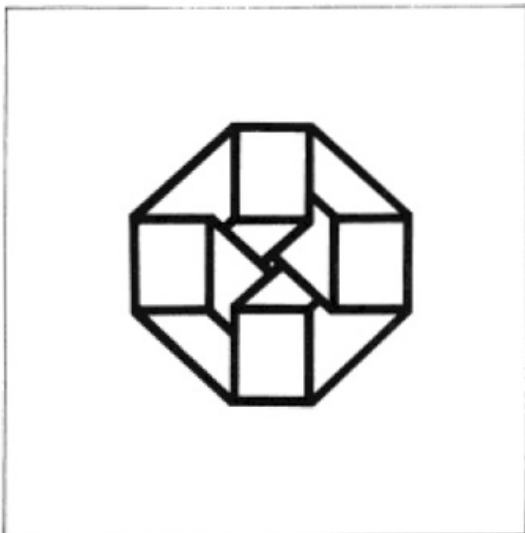
When visualizing a form as an organic shape, all pen lines and brush strokes should be controlled to minimize traces of hand movements, and the recognizable effects of particular tools.

Geometric Shapes

A geometric shape relies on mechanical means of construction. Straight lines have to be drawn with rulers, circles and arcs with compasses. Sharpness and precision must prevail. All traces of hand movements or tools should be eliminated as much as possible (fig. 41).



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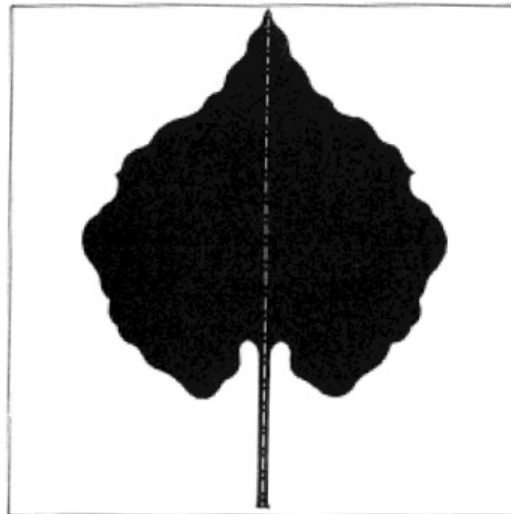
Symmetrical Expression

Symmetry can be introduced in an organic shape. To achieve strict symmetry, a mirror image can be created of components on either side of an invisible axis (fig. 211). The axis, however, can become a C- or S-shaped curve, and the components can be appropriately adjusted for a symmetrical expression (fig. 212).

Further manipulations of the resultant shape can also be introduced (fig. 213). Components can vary slightly without destroying the symmetry of the structure (fig. 214).



212



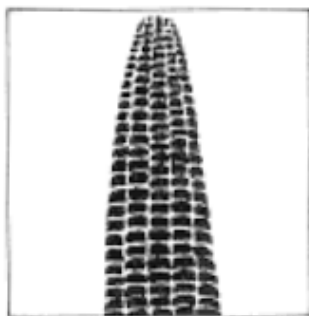
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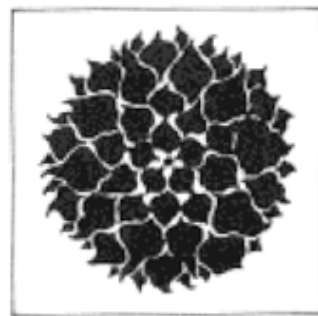
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Observing Natural Forms

Natural forms are diverse, but possess the same basic structural characteristics determined by natural laws governing their growth. It is helpful to observe and identify the environmental forces that affect the shape of natural forms. The shapes of the components of natural forms and how they work together structurally should then be examined.

Affinity and Unity

Elements within a particular natural form—cells, sections, or layers that make up a surface—usually display *affinity* (figs. 271, 272). These elements are not strict repetitions, but vary individually or progressively to conform to an overall shape and structure. There might be several types of elements, with affinity among elements of the different types. Affinity establishes *unity*. Unity is also established by fitting elements tightly together (fig. 273). Transitions create a smooth flow between elements (fig. 274).

Designing a Singular Form

To create a singular form, the chosen subject is first studied from different viewpoints with drawings and sketches. One drawing (fig. 279) is then selected and used as the basis for design development. Consideration is given to aspects of aesthetics as well as communication. The singular form can be visualized as one solid plane (fig. 280), planes displaying details (fig. 281), lines (fig. 283), the combinations of lines and planes (figs. 282, 284, 285), or a textured shape (fig. 286).

Design a Singular Form

Find a natural object and create a singular form design. The best would be to use a three-dimensional object that will allow you to explore all angles fully. You may use a photo and/or several photos for reference only.

Step 1 - choose an object found in nature

Step 2 - explore fully with thumbnail or larger sketches. Create at least 15.

Step 3 - Choose one of your sketches that you find compelling and draw it again larger. Explore that shape at least 5 more times.

Step 4 - Draw a visualization of your shape using black and white within a minimum size of a 3" square in these styles:

- a) outline
- b) outline with spatial sequence and volume
- c) with planes (pos/neg)
- d) Lines and Planes
- e) points
- f) texture

Step 5 - Present a final designed form, rendered on illustration board and presented to class.

Materials

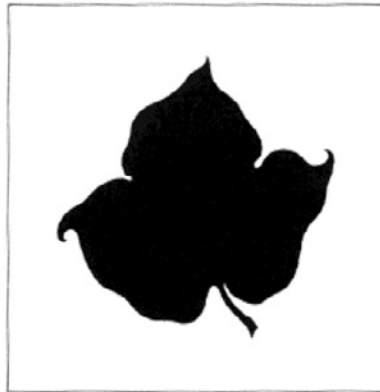
- Natural object and multiple photos
- Pad of tracing paper
- Soft pencil (2B, or so)
- Sketch book
- Enough illustration board to create 8, 3-inch ink drawings
- Faber Castell PITT pens, Alvin Penstix or India ink pen in black

Due Dates

- 02 February • Step 1 and Step 2
- 07 Feb. • Step 3
- 09 Feb. • Step 4
- 14 Feb. • Step 5 Final presentation



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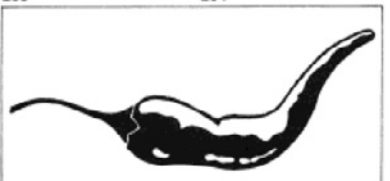
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