

gaining access to **YOUR ARTIST'S BRAIN**

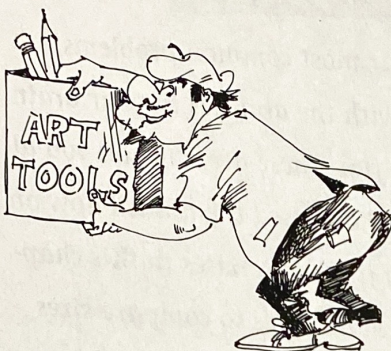
Now that you know the causes of your most common problems, you're ready to become acquainted with the abilities in your brain that make drawing easier and more fun. These are abilities you already possess and use every day! You have used them until now on a subconscious level, hardly aware of it. The exercises in this chapter are designed to apply your natural abilities to compare sizes and angles, and to see positional relationships in the act of drawing. Your hand is the physical extension of your mental operations, and as such, can do only what your brain tells it to do. When your brain shifts from naming items to perceiving visual relationships, it will send the information right to your hand. The hand will then record the information in your drawing.



MONTEREY TANGLE

Graphite on bristol paper
9" x 12" (23cm x 30cm)

The drawing tools you possess



Isn't it Obvious?

You're already in possession of all the tools you need to draw well.

There are four mental abilities that you and I possess and use every day of our lives that facilitate the act of drawing. Every artist has a different name for them and trains them whether they realize it or not:

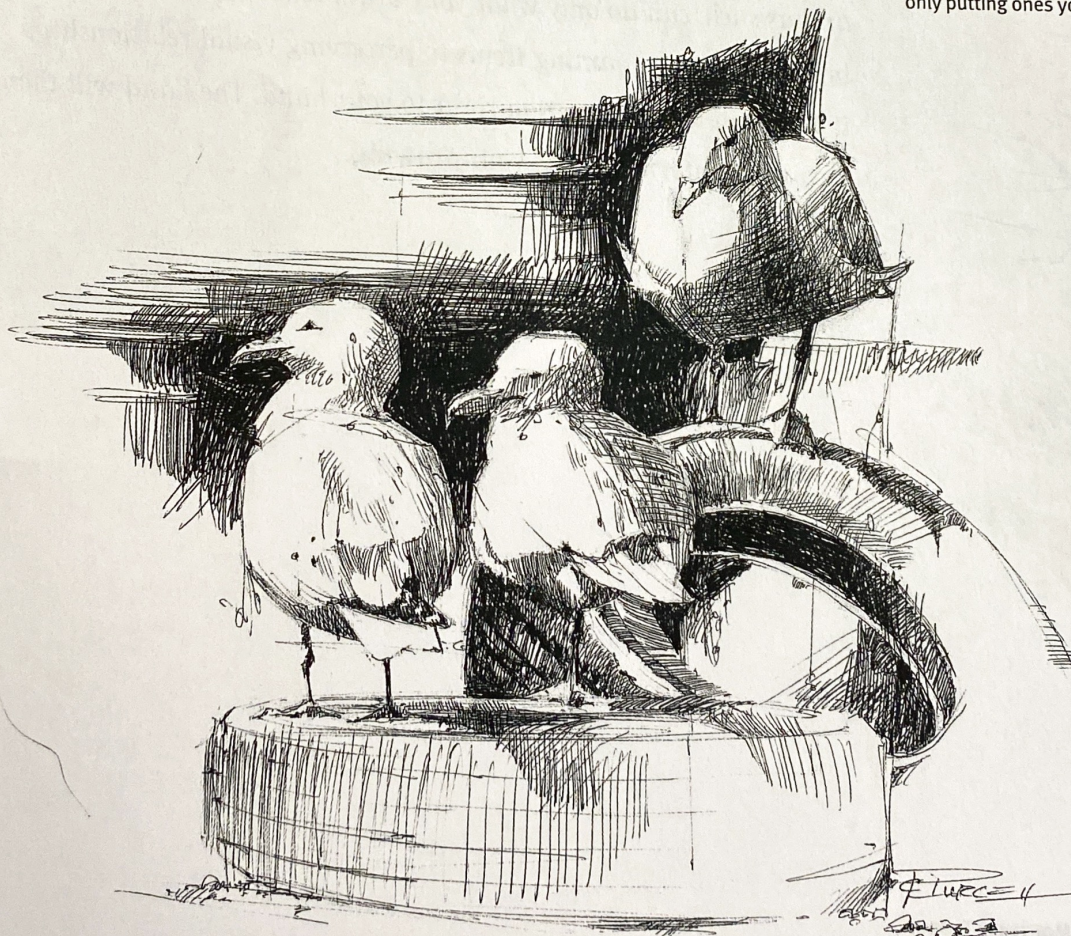
1. The ability to see relationships of angle.
2. The ability to see relationships of size.
3. The ability to see relationships of position in space.
4. The ability to see relationships of value (relative darkness and lightness).

These are not abilities possessed only a few "gifted" people—everybody uses them all the time. If you focus your attention on searching for these relationships, better drawings happen naturally.

The exercises in this chapter will result in your artistic freedom. Like the study of piano, a disciplined approach to learning the scales and chords that form the structure of all music leads to the freedom to play anything. Similarly, seeing in the right way will create good habits and drawing will become easier and more enjoyable.

FROM THE ARTIST'S BRAIN

Remember, you're not gaining new abilities, only putting ones you already possess to use.



WAITING FOR THE FISHING BOATS
Ballpoint pen on bristol paper
6" x 7" (15cm x 18cm)

How you use these tools everyday



1 Your Ability To See Angle Relationships

When you straighten a picture on the wall, you are using your ability to compare angles. You look at the edge and compare it to the closest vertical line you can find: the door frame, a window or another picture. When they are parallel, you are satisfied. Lining up pencils and paper parallel on the desk uses this ability. When you parallel park your car, you are matching the angle of your car to the angle of the curb.

Every day in hundreds of ways, you use this spatial ability to see, compare and project angles in space. In most of these instances, you compare an angle with what you know to be vertical or horizontal, for which you have a built-in sense. This is an artistic ability.



2 Your Ability To See Size Relationships

When you pick up a can of beans and open the cupboard to put it away, you look for a space that is at least the same size as the can. Do you measure the can first? Of course not! You mentally memorize its size and scan the shelf for a similarly sized space. When you decide that a parking space is large enough for your car, you don't have to block traffic while you measure both the space and your car. You can look at a drawing of a head and tell if the ears are too big because you are accustomed to seeing a certain size relationship in people. At a glance, you can look at a group of paintings on a wall and tell which is the largest, which is the smallest and which two are hanging the closest to each other. You perform these kinds of size relationship comparisons every day. Now you will consciously use this as a drawing skill.



3 Your Ability To See Positional Relationships

When you describe something as being at "about eye level," you project an imaginary horizontal line in space equal with your eye. Instead of using actual measurements, we often say things like "the dog comes up to my knees." When we read that the man was "standing just to the left of the door and directly below a carved waterspout," we can mentally position him in space.

Maps are simply two-dimensional representations of where cities and towns are located in relation to each other in real space. On a map, vertical represents north and south, and horizontal represents east and west. An essential part of drawing is "mapping" the location of key points in relation to each other. Vertical and horizontal alignments are something we all understand. They are used constantly in drawing.



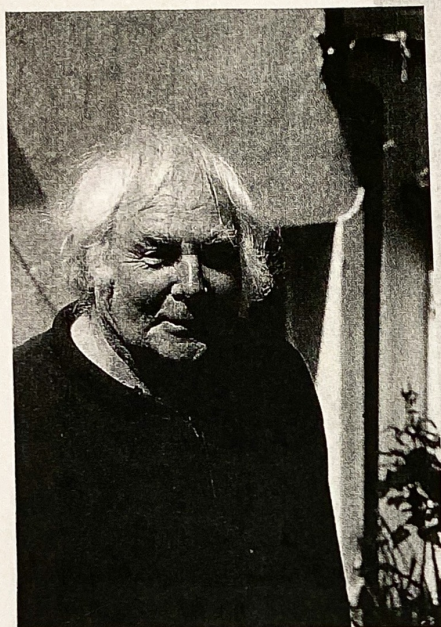
4 Your Ability To See Value Relationships

We are able to distinguish one shape from another because of variations of light and dark. We also understand volume because of the way light falls on an object. As children, we learned that if a shadow on an object ended sharply, there was a sudden change in plane, and if it changed gradually, the form was rounded. Light and shadow are how we read shape and form, but we do so without thinking. In drawing, you will pay close attention to those changes and how they affect your perception. Recording value relationships is a skill that must be developed.

FROM THE ARTIST'S BRAIN

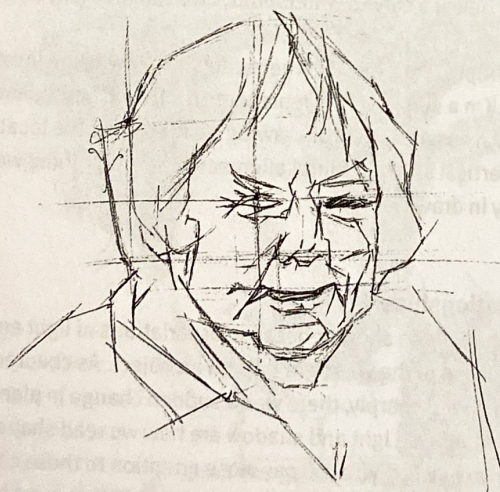
In drawing, three-dimensionality, depth or volume, all have to do with the same thing: the relationship of value.

Achieving a likeness



Reference Photo

This gentleman was nice enough to let me photograph him. People expect artists to be a little weird, so you can get away with asking perfect strangers to do this!



Searching for the Visual Relationships

This sketch is a record of a search for relationships. There are no details; everything has been reduced to angles. Curves have been converted to a series of straight lines so the angles can be seen. Sighting lines help locate points on the head that are horizontally or vertically aligned. This search captures the likeness, but no nameable items have been outlined.

To achieve a likeness in drawing, you must use visual solutions. A likeness is only found in correct visual relationships. The only errors possible are as follows:

1. You have drawn an edge or line at the wrong angle.
2. You have drawn a line too short or too long compared to another.
3. You have drawn something in the wrong place in relation to the things around it.
4. You have made the value of an area too light or too dark in relation to its adjacent values.

There isn't a right way to draw noses, a right way to draw eyes and another way to draw trees. Everything in the visual world can only be drawn as shapes on a two-dimensional sheet of paper. You can draw the angle correctly or not, a shape too large or too small, put the shape in the wrong place or draw too light or dark. That's it!

Everything is made up of shapes, and those shapes have a particular configuration because of the relationship of angles, size, position in space, and value. Build a habit



Finish with the Values

Here the values have been added and the sighting lines have been mostly covered. The values provide the sense of three-dimensionality, or volume. No amount of shading, however, can correct errors of placement, size or angle. Lavish your time on the first stage of the drawing, not on the details.

AN ENGLISH GENTLEMAN

Graphite pencil on bristol paper
5" x 4" (13cm x 10cm)

of searching for these relationships and you can draw anything.

The following is what such a search looks like.

The Strategy of Search

Our strategy in the remainder of this chapter is to focus attention on three relationships—namely of angle, size and position. Put aside common notions of drawing and replace them with this:

*Drawing is a process of searching:
It's a search for the spatial and visual relationships of angle, size and position,*

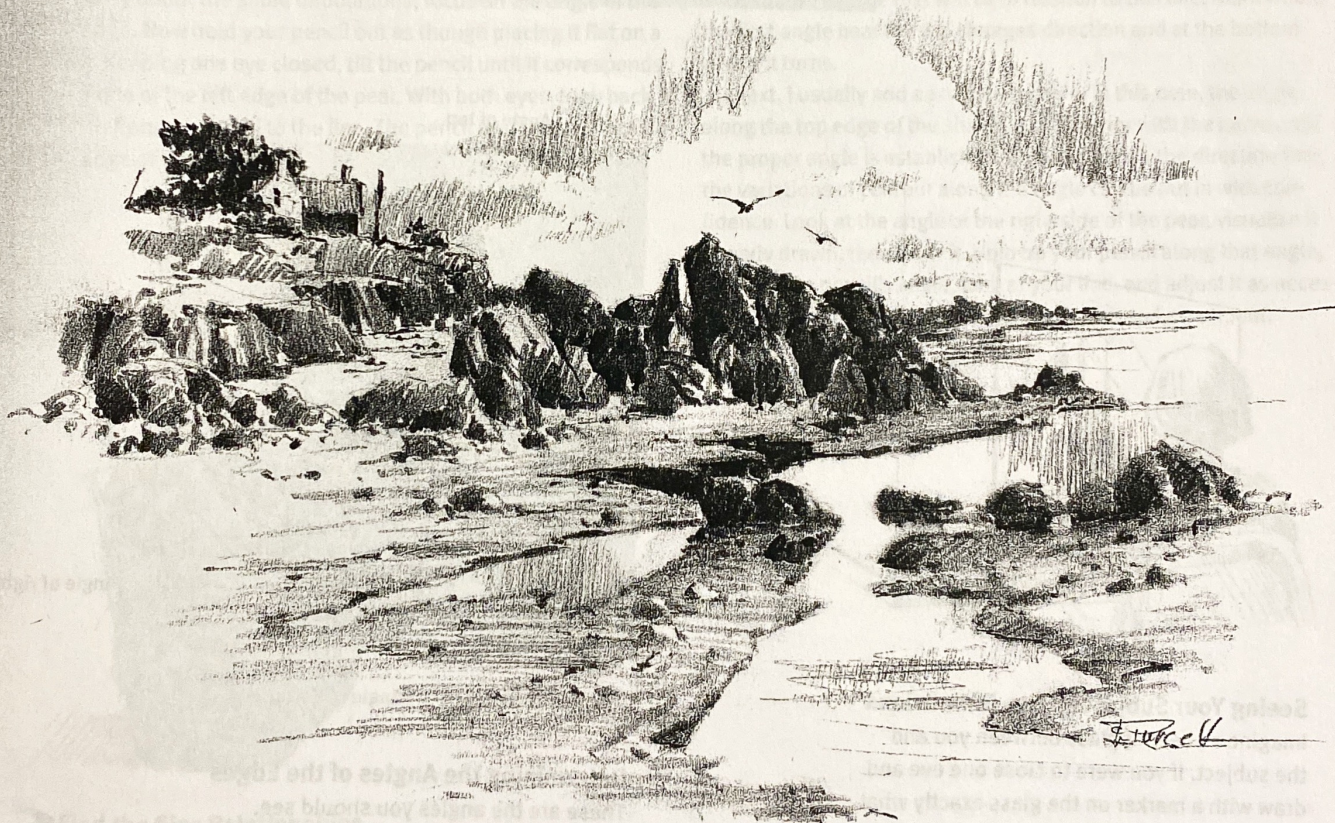
followed by values. My drawing is the record of my search. The more focused my search, the finer the drawing.

Make a sign of the above statement and hang it where you do your drawing. Remind yourself of it daily. If you stay focused on these relationships, your analytical brain will not be able to intrude. You will discover that drawing is easier and more fun.



One Relationship at a Time

Good drawing habits are a matter of noting a relationship, recording it, then moving on. Even the most complex subjects are handled one relationship at a time.



Catch the Spirit

My drawings of the places I visit capture much more of the spirit of the place than the photos I take. I still take my camera along, however, because some things go by too fast.

DORNACH, SCOTLAND

6B graphite pencil on bristol paper

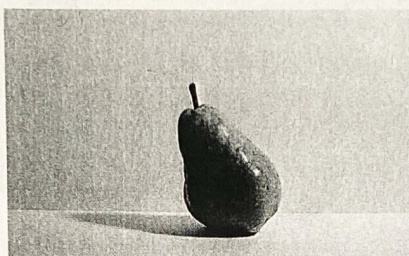
5" x 8" (13cm x 20cm)

Seeing shapes instead of things

Everything in the visual world is made up of irregular shapes that vary in complexity. You don't have to learn to draw shirts, rocks, eyes, etc. You only have to learn to draw shapes. Take comfort in this, for there are millions of different things out there. Anything you draw must be taken just as you see it at that moment, from that vantage point. If

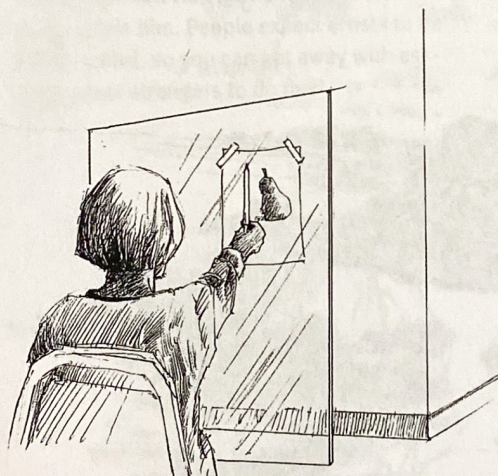
you move over one foot, the shape, the angles, the width in relation to the height and the relative position of points in space will change.

How do you get the angles and size relationships right on all these different shapes? One of the most useful tools for checking these relationships is the one in your hand: your pencil.



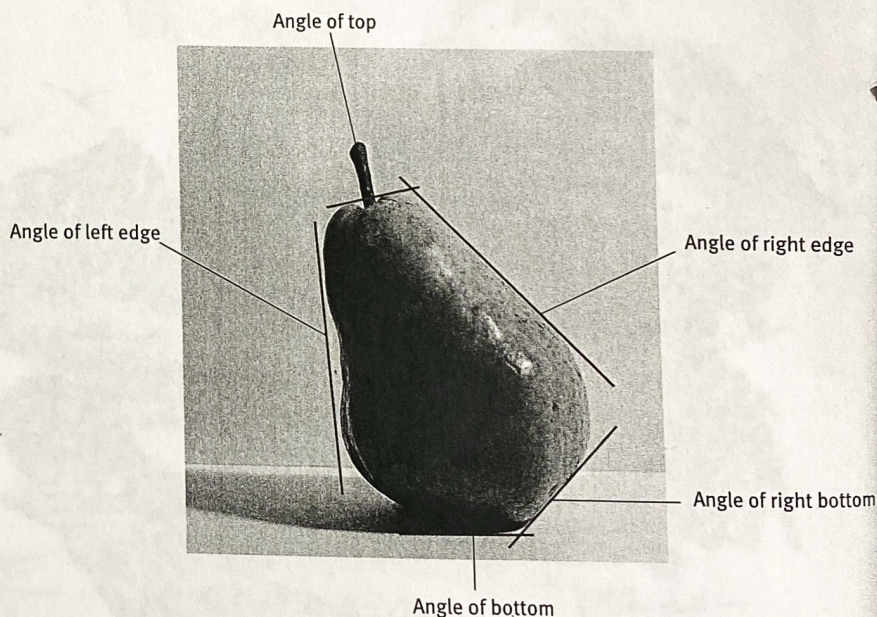
Using Your Pencil to Find Angles

Before you begin to draw this pear, look at it not as fruit, but as a shape. Look at the angles of its edges, the angle of the stem, its height and width and where the stem is in relation to its sides. Use the pencil to check. Prop the book up in front of you.



Seeing Your Subject in Two-Dimensions

Imagine a sheet of glass between you and the subject. If you were to close one eye and draw with a marker on the glass exactly what you see, you would duplicate what you see on your paper—converting three-dimensional material into flat shapes on a flat surface.



Determining the Angles of the Edges

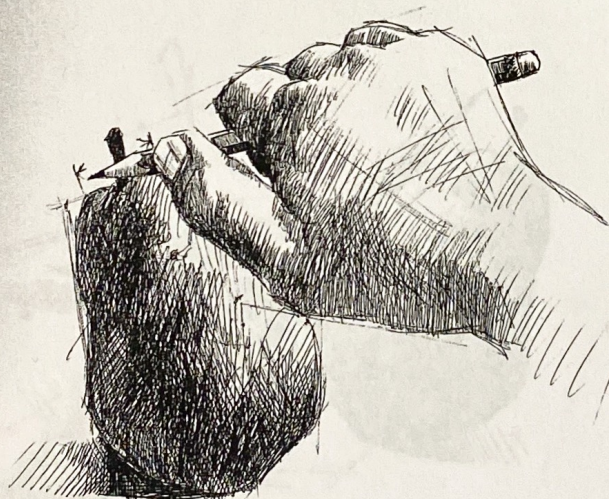
These are the angles you should see.

Using a Pencil to Measure



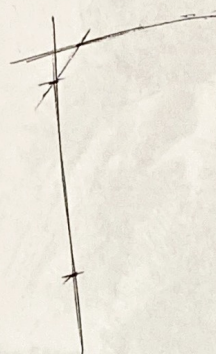
1 Measure the Left Edge

Begin by drawing a line representing the left edge of the pear. Don't worry about the small undulations; focus on the angle of the whole edge. Now hold your pencil out as though placing it flat on a window. Keeping one eye closed, tilt the pencil until it corresponds to the angle of the left edge of the pear. With both eyes, look back and forth from the pencil to the line. The pencil is at the same angle as the edge of the pear.



3 Find the Size Relationships

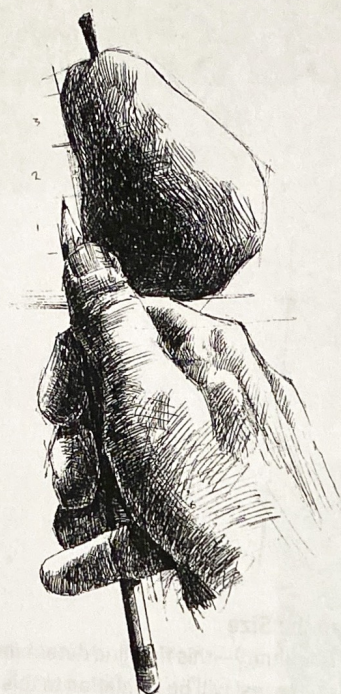
When comparing sizes, it's absolutely necessary to keep your arm extended and locked into place. Any change in the distance between your pencil and your eye will invalidate the comparison. Place the tip of your pencil at the point where the angle of the top edge changes direction and curves down toward the left side. Move your thumb along the shaft of the pencil until it is marking the right end of the angle.



2 Establish the Size

The size is arbitrary—this first line determines the size of everything else; the rest will be in relation to this line. Mark where the first angle near the top changes direction and at the bottom where it turns.

Next, I usually add an adjacent angle; in this case, the angle along the top edge of the shape. Don't bother with the curve until the proper angle is established. If you establish the direction first, the variations of contour along the angle can be put in with confidence. Look at the angle of the right side of the pear, visualize it already drawn, then draw it. Hold up your pencil along that angle, look at your pencil's angle, look at your line, and adjust it as necessary. The most important thing is angle, size and placement.



4 Compare Sizes

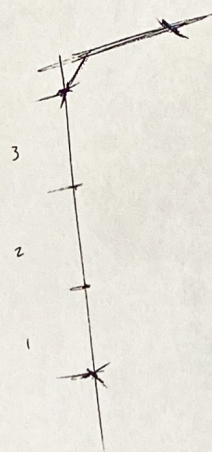
Keep your arm rigid while your thumb marks the length on your pencil, then rotate your hand until the pencil is parallel with the left side and the tip of your thumb is at the bottom of the first edge you drew. See where the tip of your pencil comes to on the pear. Move your hand and pencil up until the tip of your thumb is at that point. Note where the tip of the pencil comes again and move your thumb up to that point. The length you marked off on the pencil with your thumb is one-third of the first edge.

6 Check Sizes and Angles

Use your pencil to see the angle of the right edge of the pear as before. Draw the line, then hold your pencil back up to the subject and repeat the process, looking back and forth from your pencil to your drawn line. When you are satisfied, check its length with the first edge. The first one is a little longer. Make this one a little shorter than your first and go to the angle of the next edge. Compare the widest width with the length of your first edge.

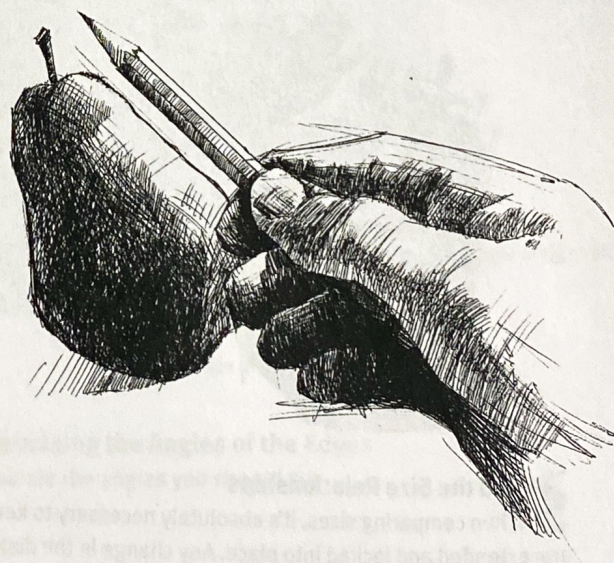
Angle, Edge or Line?

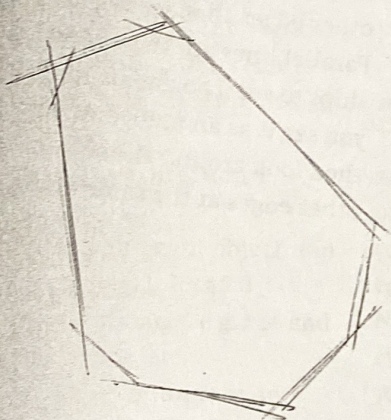
Most of the time in this chapter when I speak about an angle, I will be referring to the angle of an edge on a shape. Your ability to recognize these angle will help you draw every line as it relates vertically or horizontally to the drawing.



5 Correct the Size Relationship

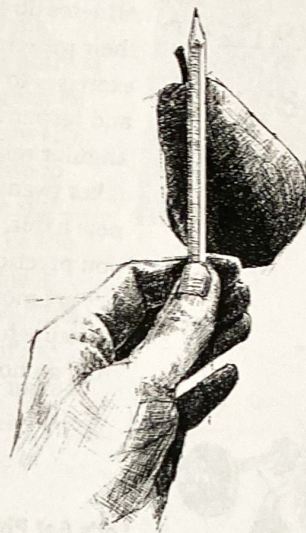
Go to your drawing and divide the first line you drew, the one representing the left side, into thirds. You now know the length of the top angle. No matter how long you made that first line, the second line is one third as long. You are using the pencil to get the same size relationship in your drawing—not an actual measurement, but a comparison.





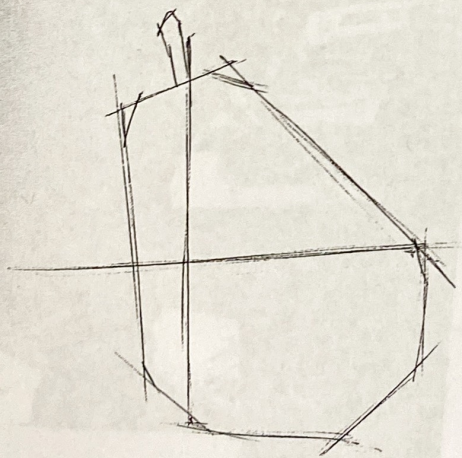
7 Find Positional Relationship

When you complete the shape, your rough drawing contains the essential elements—the proper width to height, the attitude or general tilt of the shape (often called gesture), and the way it sits on the surface. Now let's add the stem.



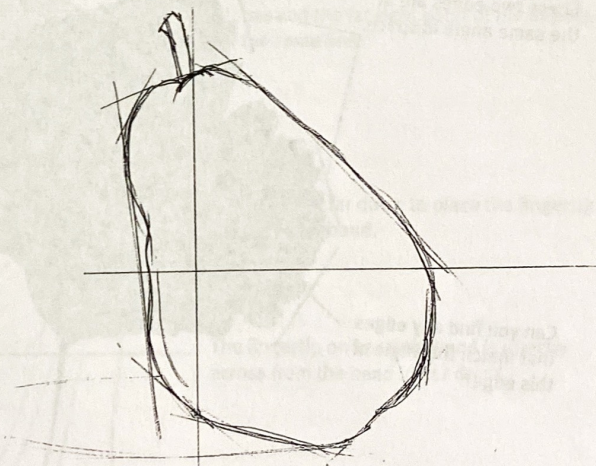
8 Measure the Stem

Hold your pencil in front of you vertically. Move the pencil over slowly until it touches the right side of the stem. Sight along your pencil to see where that line touches the edge of the shape near the bottom. Mark that point and draw a light line vertically up through the shape. You now have the location of the stem and also know that it leans slightly left from vertical. This time you used the pencil as a plumb line to check vertical alignment. You can also hold it horizontally to sight and find horizontal alignments.



9 Add a Sighting Line

Hold your pencil horizontally and bring it up until it's touching the widest point on the right side of the pear. Sight along the pencil and see what's on the left side. The line goes right through the middle of the first edge. Draw that sighting line; it will be helpful in refining the shape.



10 Refine the Shape

Round out the curves where the general angles meet. Can you see how important the angles are? The curves fall into place if the angles are right. Note the more subtle curves and directions of the contour.

The addition of values will eliminate most of your angle lines and sighting lines. Those that remain are evidence of an honest search and, in most cases, only add to the drawing's integrity.

Strengthening your search muscles

Athletes do push-ups to strengthen their muscles. Likewise, you can do exercises to train your mind to see and respond to these spatial and angular relationships. I've heard it takes twenty-one days to create a new habit. So get ready to exercise. If you practice these exercises once every six months, don't expect much to happen. If you practice them for half an hour each day for twenty-one

days, you'll impact your drawing skills forever.

When drawing the edge of a shape, scan the subject quickly for other edges that are the same angle. Parallel lines are the easiest relationships to see. Look at an edge until you see it as an angled line in space, then look around the subject to spot other edges at the same angle.

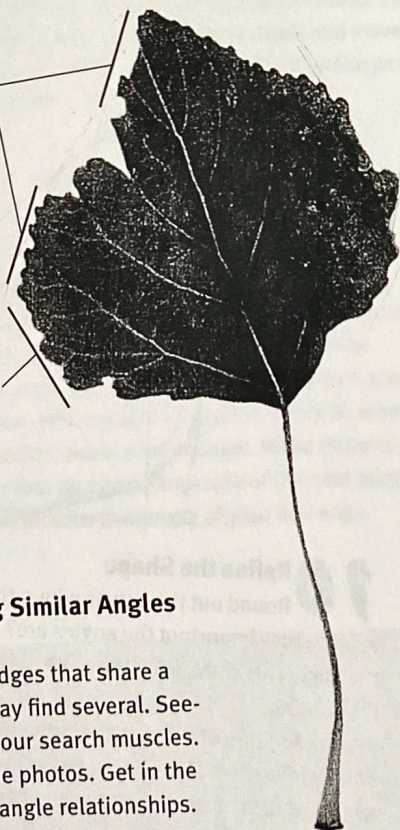


Let's Get Physical

Like an athlete or musician, you'll only get better at your craft with practice and exercise.

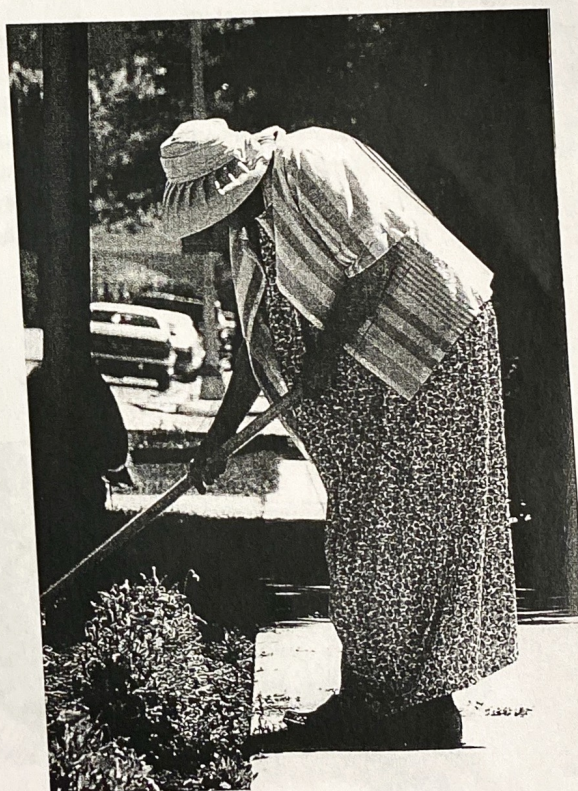
These two edges are at the same angle in space.

Can you find any edges that match the angle of this edge?



Exercise 1: Finding Similar Angles within a Shape.

I have marked two edges that share a similar angle. You may find several. Seeing them develops your search muscles. Practice on magazine photos. Get in the habit of looking for angle relationships. You will eventually spot them immediately.



Exercise 2: Finding Similar Sizes

See how many edges and distances you can find in this figure that are the same length as the angle I have marked. I have indicated one to get you started. There are at least eight more. It's best to scan first, then check to verify. This will train you to see these similarities.

Points of Reference

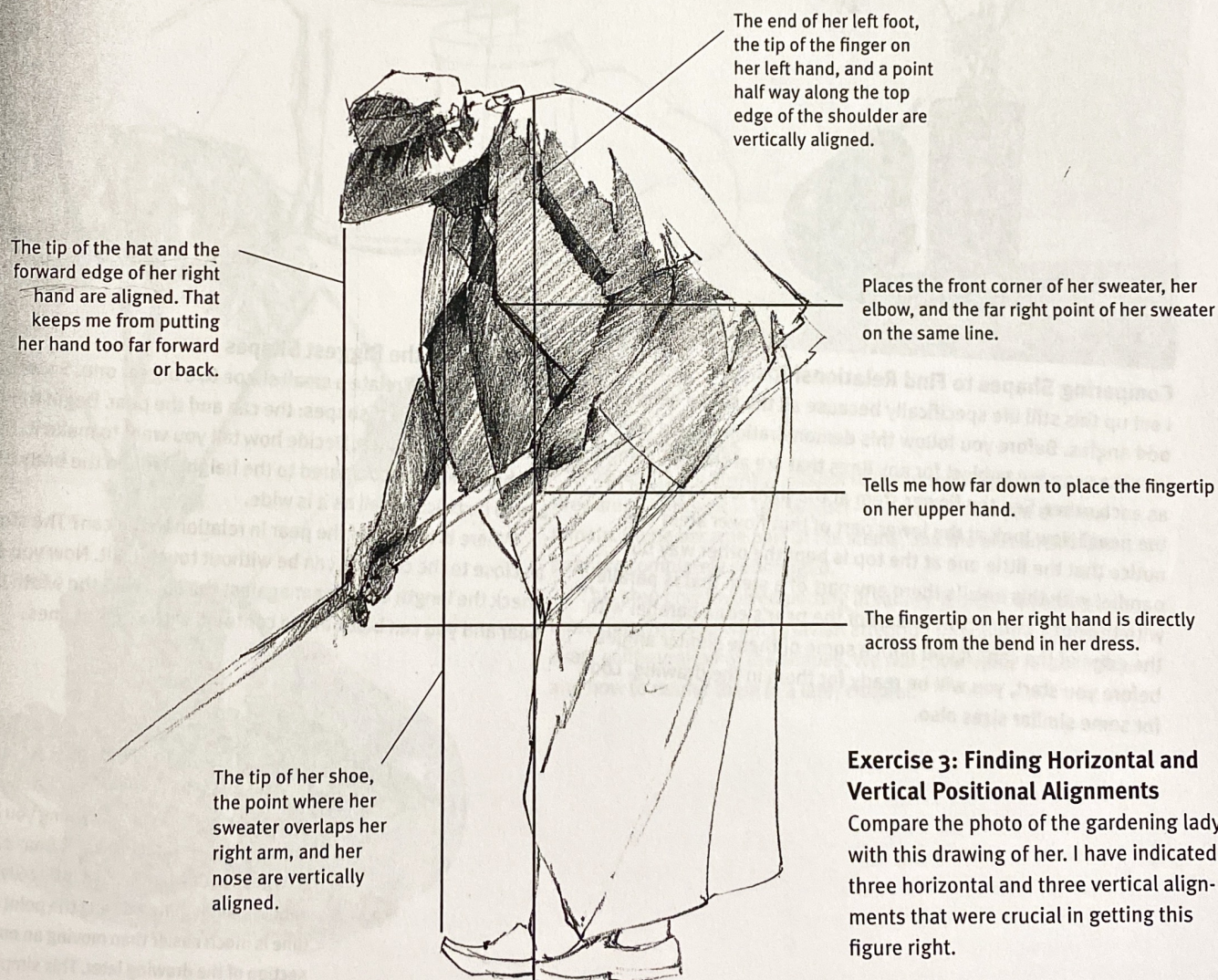
We use points of reference all the time when giving directions. In drawing, the easiest points to locate are in horizontal and vertical relationships. Some artists refer to these as landmarks. They are places where:

1. An edge changes direction
2. Two edges overlap
3. A small but significant object (an eye, for example) is located
4. An object terminates, e.g. the end of a pole or shoe, etc.

When I draw the contours of an object, I bear down a little on the

pencil at those intersections to fix them in my mind and make me pause. Then I see where that point is in relation to other fixed points, especially horizontally and vertically.

The easiest size relationship to see is two things of the same size. The length of one edge may be the same as the width of the subject, or the distance between two points may be equal to the length of an edge. Look at yourself in the mirror. Notice that the space between your eyes is the same width as one of your eyes.



Exercise 3: Finding Horizontal and Vertical Positional Alignments

Compare the photo of the gardening lady with this drawing of her. I have indicated three horizontal and three vertical alignments that were crucial in getting this figure right.

FOUR METHODS OF SEARCH

Method 1

Comparing Shapes to Find Relationships

To get a likeness of any subject, the edges of the shapes must be at the correct angle, the proportions must be right, and everything must be in the right location (positional relationships). Let's look at four of the most common approaches artists

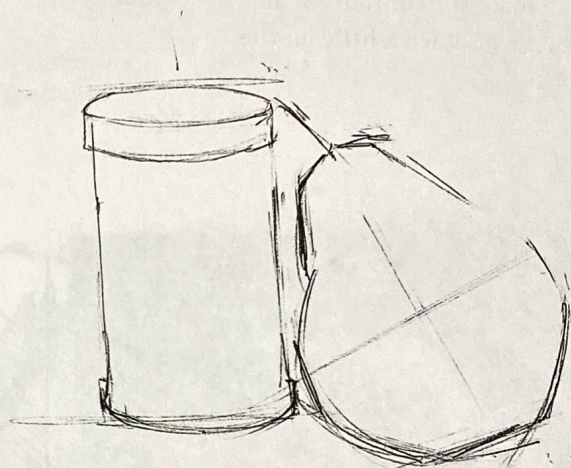
use to apply these rules.

All of the following approaches develop an understanding of the form's inherent structure, eliminate superfluous details and finally use line not as a means of outlining shapes, but to probe and define structural and spatial relationships.



Comparing Shapes to Find Relationships

I set up this still life specifically because all the stems bend at odd angles. Before you follow this demonstration, take a moment to scan the subject for any lines that are at the same angle as each other. See the flower stem at the right and the stem of the pear? Now look at the lower part of that flower stem and notice that the little one at the top is bent the other way but parallel with this one. Is there any part of a stem that is parallel with the edge of the can? Is part of the pear's edge parallel with the edge of the can? If you notice some of these similar angles before you start, you will be ready for them in the drawing. Look for some similar sizes also.



↑ Rough in the Biggest Shapes

It's easier to relate a small shape to a bigger one. So let's start with the two biggest shapes: the can and the pear. Begin the can with two vertical lines. Decide how tall you want to make it, then see how wide it is compared to the height. I found the body of the can to be twice as tall as it is wide.

Where is the top of the pear in relation to the can? The stem is as close to the can as it can be without touching it. Now you can check the length of the pear against the can. Find the width of the pear and you can block in the contours with straight lines.

FROM THE ARTIST'S BRAIN

Every time you draw a line, mark its end point and glance to see if anything you have already drawn is directly across from it, then glance up or down to see if it is directly above or below something. Moving the point at this time is much easier than moving an entire section of the drawing later. This simple check can save many a blunder.

2 Draw Using the Pear's Height and Width

The length of the pear stacked on top of the can (not the lid, just the can) reaches up to a line even with the bottom of the largest flower. The pear at its widest is the same as the length of the largest flower. From the pear, you can get the flower's size and location. As you check positions, put in sighting lines. It will reinforce your good habit.

3 Refine the Edges

Be exact about what happens along their edges. Look at the shapes of the shadows that define the forms. Check the relative widths of the stems and the spaces between them. Add the contours of the pear.

4 Add the Values

Students are always hesitant to put in sighting lines because they are not present in the subject—yet notice how few of them remain. Some became part of the stems, and the axis lines of the pear are completely submerged.

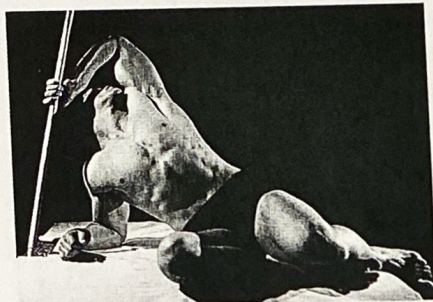
This step only involved putting in values; it didn't involve adding more details. If you want to lavish attention on something, get the exact configuration of the shapes. We will cover value relationships and how to render them in a later chapter.

FOUR METHODS OF SEARCH

Method 2

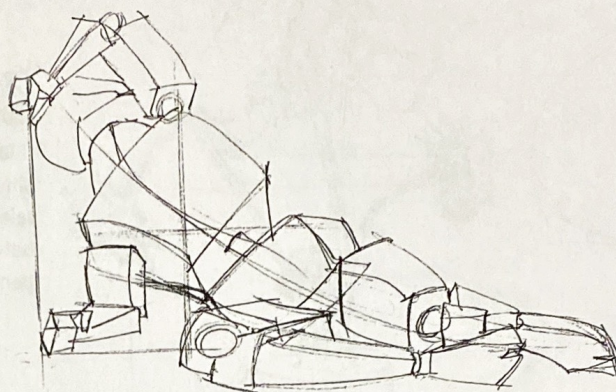
Simplifying, Then Refining Shapes

This has been a standard approach in figure drawing classes for many years. If you have to draw the head as a sphere with attached three-dimensional triangle forms for the nose and jaw, you won't become ensnared by eyelashes and lips. This approach neatly sidesteps the interference of the analytical brain.



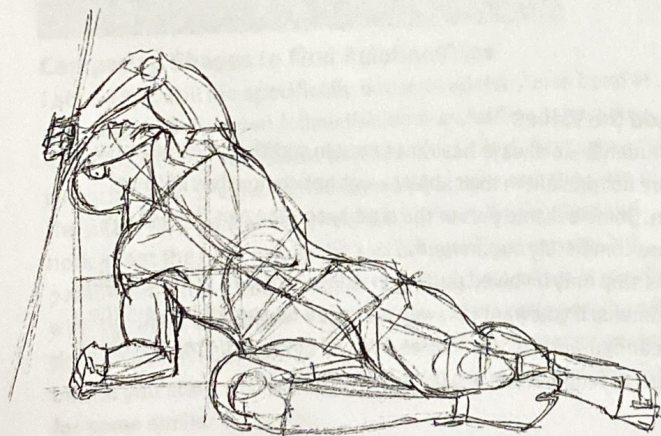
Reference Photo

It's easy to get absorbed in the details and lose the form. I've seen this happen so many times in figure drawing sessions that I believe it to be the norm rather than the exception.



1 Reduce the Figure to Geometric Shapes

Visualize the major portions of the body as geometric shapes that are linked together. By forcing the attention on volume and structure, the details will be ignored. This planar structure is essential if the details on the surface of those planes are to make sense.



2 Define the Contours

Like the first approach, this method moves from a general statement of form toward a more specific description, introducing the surface details at the very end.

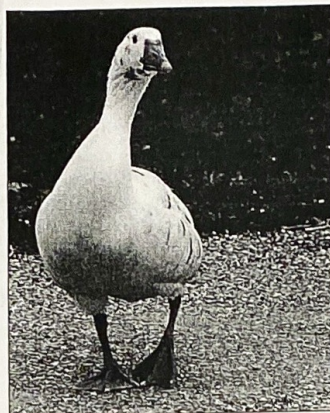


3 Add the Values

Any addition of value, whatever the technique, must be preceded by an understanding of the volume, size relationships, positional relationships and the angles of the forms in space. Anything short of a dedicated search will result in a faulty construction that no amount of shading and surface details will ever resolve.

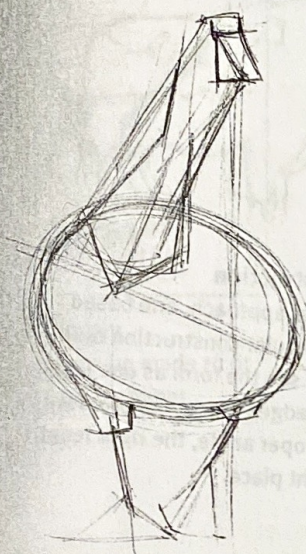
Method 2: Ellipses

Note that in each case, you will still see the plumb lines and horizontal sighting lines that ensure everything is where it should be.



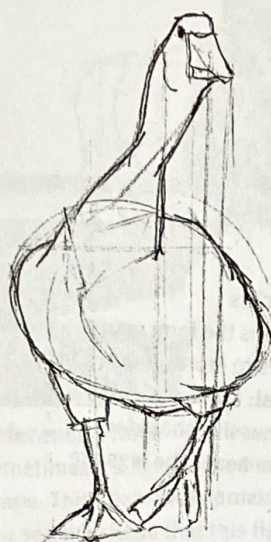
Reference Photo

This goose is an excellent subject to practice converting forms into ellipses and geometric constructions.



1 Draw the Geometric Shapes

Draw the long axis of the ellipse at the proper angle. Next add the angle of the neck, then break it down into a couple of triangular forms, the top one inverted. Notice how the base of the lower triangle extends down into the ellipse. Add the triangular block that forms the beak and drop a plumb line from its tip to see where the feet are in relation to that point. Finally, the legs can be seen as two angled lines with triangular forms at the ends. Pay attention to where the points of the triangles are in relation to each other.



2 Define the Contours

With the structure analyzed, it's time to pay attention to the contours and to place the eye and get the right angles. Isn't it funny that the goose fits so nicely into the shape of one of its eggs?



3 Check Your Angles

Never stop checking the three big relationships. You can see the vestiges of the initial angles, my pentimento lines. I double-checked the angle by looking closely at the plumb line from the tip of the beak. It comes very close to the outer edge of the left foot. I also dropped a plumb line from the eye and confirmed that the foot should be moved to the right. It pays to check rather than assume.

FROM THE ARTIST'S BRAIN

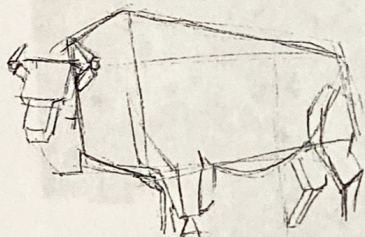
Like all drawing, this method requires you to look for positional relationships by dropping plumb lines from key locations to ensure that things are vertically aligned. Also, check by sighting along horizontal lines from key points like the hand or shoulder. Do not ignore size relationships. If you don't also search these out, you may analyze the structure of the form but have it in the wrong place at the wrong size.

Method 2: Analysis

It doesn't matter whether you analyze the structure as geometric forms or a group of circles. The important thing is that you begin with such an analysis. Any method that shifts your focus from details to relationships is good. You will find yourself gravitating to the method that suits your personality.

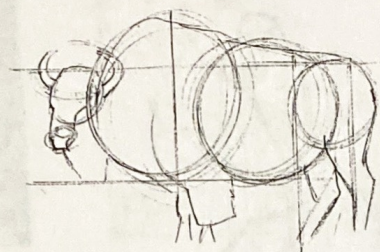


Reference Photo



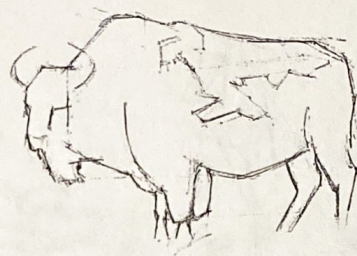
Geometric Blocks

This is an analysis of the form as geometric blocks. It emphasizes the solidity of the forms and the planes.



Overlapping Circles

This approach builds the form upon overlapping circles to represent the major parts of the animal: the hindquarters, the midsection, the massive shoulder and chest area and the head. The legs are added to these basic shapes.



Angular Construction

This is my usual approach, one based on the basic angular construction of the major shape. I see the form as one large shape whose edges are represented with lines at the proper angle, the right length and in the right place.



The Finished Product

This is the final stage of adding the values. Most of the sighting lines have disappeared, but slight vestiges of the angle lines and a couple of sighting lines remain as evidence of the search.

FROM THE ARTIST'S BRAIN

Keep asking yourself the important questions. (And I don't mean "Why am I doing this?") Questions like, "How close is the angle of this object to vertical?" "Are any of the subject's dimensions the same?" "Where is this in relation to that?" Everything is a relationship of size, position or angle. If something looks wrong, the problem and solution lies in one of these relationships.

Method 3



See it Simply

Anything can be made to fit into a simpler shape!

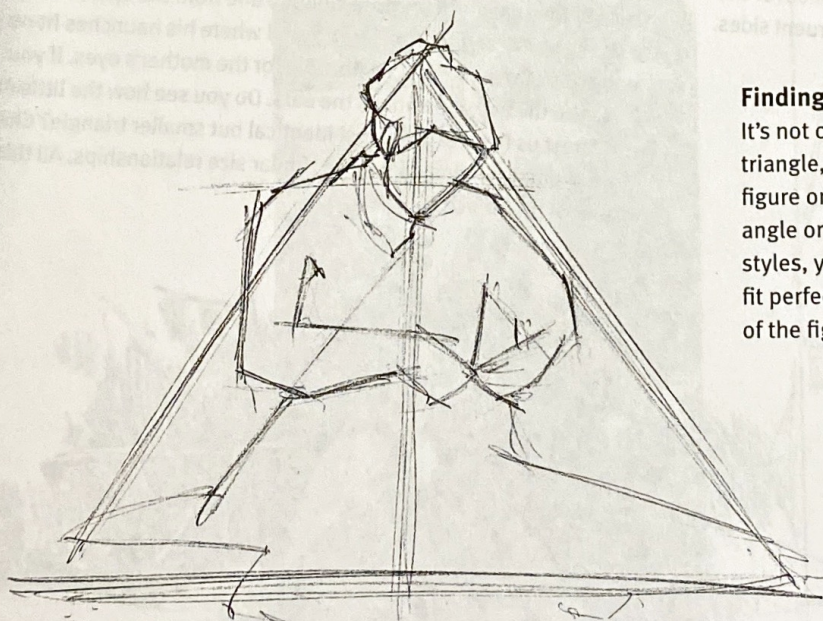
Fitting the Subject into One Shape

All of these methods simplify the subject matter and organize it into manageable parcels. Think of it as similar to creating an outline for a written article. The outline does not present any of the supporting details, but it organizes the main ideas to best support the thesis. Like an outline, these methods organize the task of drawing and present a framework on which to hang the supporting details.



Reference Photo

Sometimes a single figure fits nicely into an easily defined shape. This shape then provides a framework for the whole. Can you see the shape that this figure fits into?

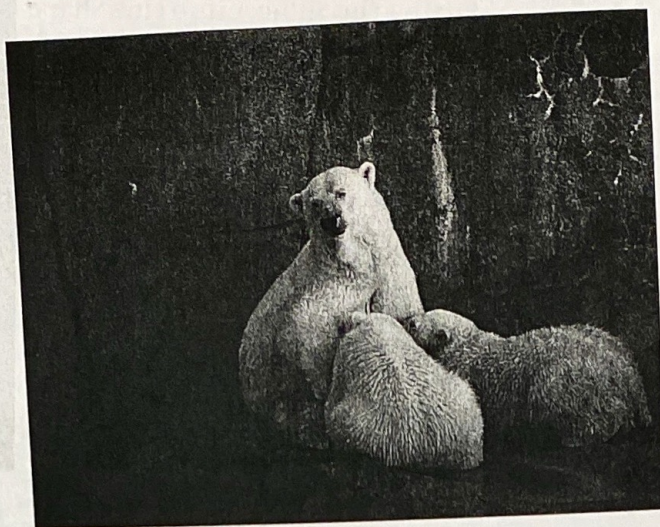


Finding the Shape

It's not often that a figure fits so nicely into an equilateral triangle, as this one does. But be aware, often a complex figure or group of figures fits perfectly into a rectangle, triangle or square. If you are looking at lips, jewelry or hair styles, you will not see these shapes. If some parts don't fit perfectly at this stage, don't worry. At least the majority of the figure is organized for you.

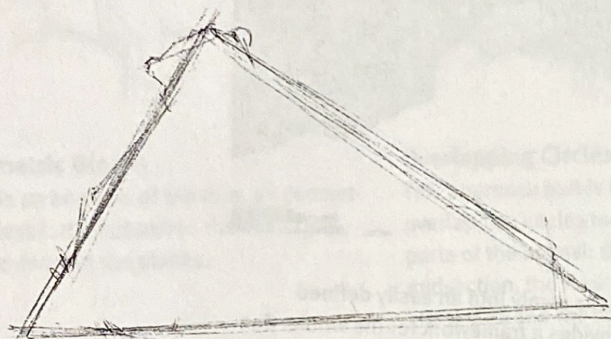
Method 3: Subject as a Triangle

In typical Renaissance tradition this trio formed into a stable triangle shape. We can use that shape to begin our search for important relationships. Raphael would have loved this!



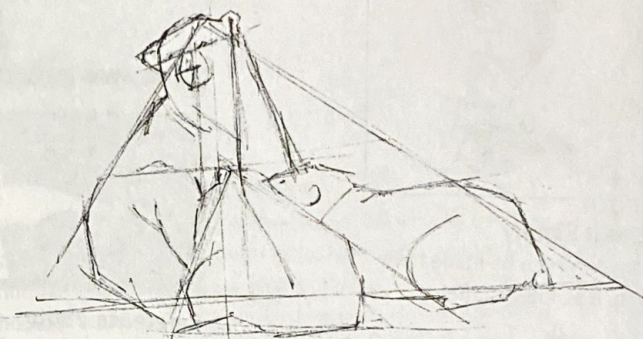
Reference Photo

I was fortunate to be at the zoo one day when a proud polar bear mother was striking a classic madonna and child pose. Except this Madonna had twins.



1 Record the Shape

Record the triangle shape that encompasses most of the grouping. This is a scalene triangle, it has no congruent sides.



2 Fit the Figures into the Shapes

Note where each of the figures extends beyond the boundaries of the triangle. If we drop a plumb line from the apex, it passes the cub's ear and touches the ground where his haunches fit over the rock. Draw the angle of the line for the mother's eyes. If you extend the line, it positions the ears. Do you see how the little cub nearest us fits into an almost identical but smaller triangle? Check for similarly angled edges and similar size relationships. All this is part of the search.

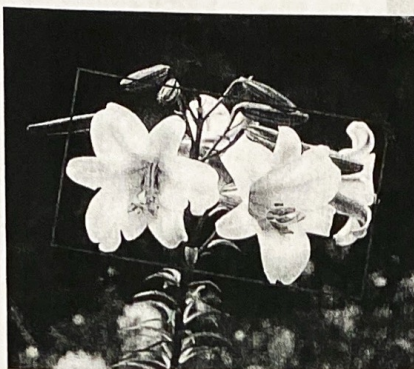
3 Add the Values

When you are satisfied that the shapes and angle of the edges are right, and the sizes are correct in relationship to each other, then you can begin adding the values. If any of the above is wrong and you add darker values, it's a lot of work to erase. I promise we will get to values later. Just hang on for now.



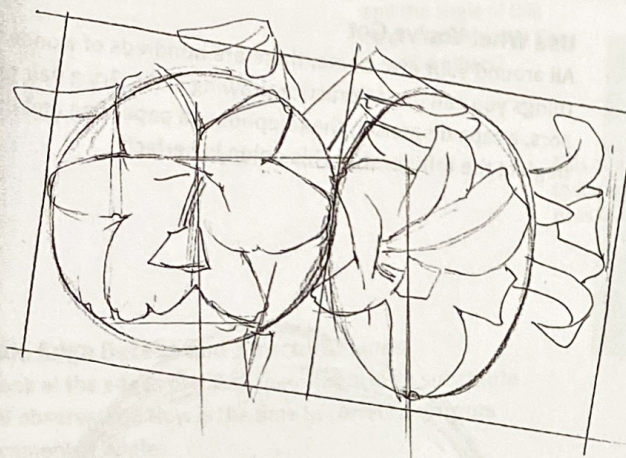
Reference Photo

If you try to draw these lilies petal by petal you will probably get frustrated. I would! Let's simplify the process into more bite-sized steps. See how neatly these blooms fit into a rectangle? Determine its height to width ratio. Hint: the length is one and two thirds times the height. Tilt the right side downward.



Method 3: Subject as a Rectangle

Remember, these methods are organizational tools. Use them as a framework for your drawings and get a feel for the shapes. Eventually, you won't even notice the details at first.



Filling the Rectangle

Now divide the rectangle in half and notice that the left bloom fits into a circle that takes up the first half of the rectangle. The second bloom fits into an ellipse, with the third bloom filling in the remainder of the rectangle's length.



Make 'Em Fit

Visualize this lady fitting into a shape. What does it look like?



Identifying the Shape

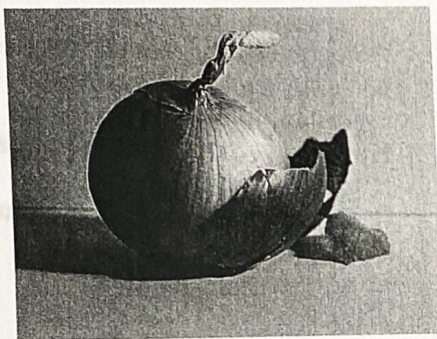
See how well she fits into a rectangle that is just a little over three times as high as it is wide?

A word of caution

One caution I would give in using the first three approaches: Don't look for a magic formula that results in a great drawing every time. You can't memorize a set of relationships because these variables change. You can't memorize, period. Every time we move a fraction of an inch, the relationships of all objects to one another changes.

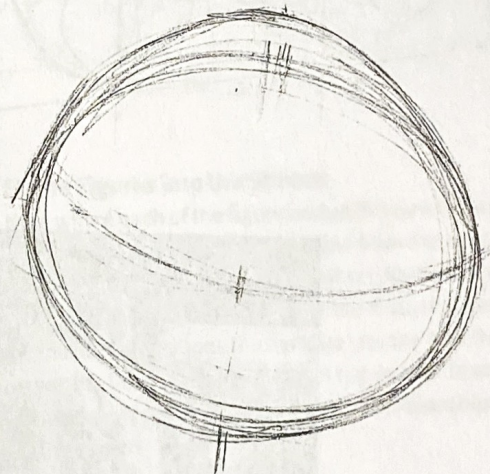
Some subjects present a general overall shape that make it easier to

see the whole. In that case, Method 3 is an ideal way to begin. Other subjects may be more easily mastered by seeing their geometric construction as in Method 2. Some subjects have no overall shape, so you'll need to compare one shape with the others as in Method 1. Become familiar with all the methods in case the need arises, which it will.



Use What You've Got

All around your own home, there are hundreds of wonderful things you can use to practice drawing skills. Try a pair of scissors, a tape dispenser, the telephone, a paper bag and don't neglect the refrigerator. This onion is perfect!



Why All These Steps?

After years of drawing, I asked myself, "If I can draw a shape generally, then adjust it until it is correct, why can't I just draw it right the first time and skip the general stage?" I tried and it worked.

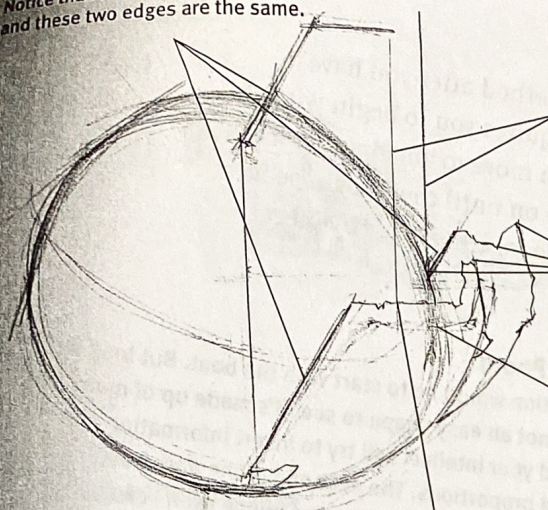
My wife gave me a wonderful Christmas present a couple of years ago. It was the book *Alla Prima* by the great oil painter Richard Schmid. He had come to the same conclusion. He writes, "If I could see the colors and shapes of a subject well enough to correct them, then I could also get them right the first time, and thus eliminate the almost-right stage! All I had to do was be very picky about how I looked at my subject, and what went on my canvas."

However, this accuracy from the get-go requires discipline—assume nothing about the subject.

1 Get the General Shape

This subject has a circular shape that will help us if we get it correct. But before you draw the circle, determine if it's a full circle, more elliptical, straight or tilted. Then draw it, but not with a dark line pressed deeply into the paper. Hold the pencil lightly, and with a full arm movement, lightly block in the shape. I go around a number of times until it evolves into the shape I want. This circle is about as wide as it is tall, and its axis is tilted to the right. It is more like an ellipse with a little added to the top.

Notice that the angle of the stem and these two edges are the same.



Vertical sighting lines help get the placement of the end of the stem and the other shapes right.

If you can get these four points right, you will have placed quite a few shapes correctly.

This shape's top edge was actually the onion's midpoint, so I moved it up.

The top angle of the stem and the angle of this edge are the same. Can you find others?

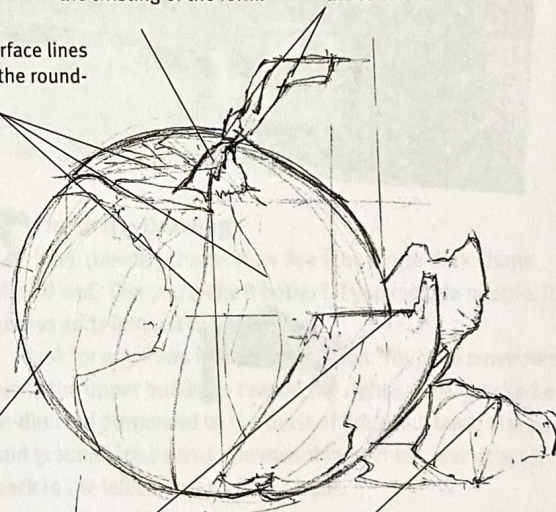
2 Refine and Add Other Shapes

Use your sighting lines to place the shapes and the angles of the stem.

Draw the shape of the shadows on the stem to explain the twisting of the form.

These lines also explain the contoured curve of the form.

This onion has surface lines that also explain the roundness of the form.



Lightly indicate the shape of this core shadow.

These notches in the edge of the peeling help depict the brittle skin.

If we continued the angle of this edge, where would it strike another point or edge?

3 Add Edge Details and Structural Lines

Look at the edges of the shapes. There is no substitute for real observation. Now is the time to correct any errors of placement or angle.

4 Place the Values

Even with the values added, the shapes are what really matter. How dark is one shape in relation to another? What is the actual shape of the shadow? Does it end abruptly or gradually? Think shape!



FOUR METHODS OF SEARCH

Method 4

Drawing Adjacent Shapes

You may want to try this last method after you have mastered drawing shapes. It requires you to begin with one shape correctly drawn then move to an adjacent shape, draw it correctly, and so on until the last shape is drawn. It's like putting a puzzle together piece-by-piece.



Reference Photo

The temptation would be to start with the boat. But look again—the boat is not an easy shape to see. It's made up of many little shapes, and your intellect will try to insert information about lengths and proportions. The near end of the dark building at the top is a better place to start. That's a shape even I can handle.



1 Get One Shape Down Right

Visualize the completed drawing on your paper. Place the all-important first shape somewhere near the top. Draw the right edge of the shape the size you want it. This is the easiest line in the drawing because you get to decide how long it will be, and the angle is vertical. Measure on the photograph and you will see that three more of those lengths will take you to the bottom of the boat.

Check the length of the edge of the roof. If you don't count the part that sticks beyond the edge of the wall, it's the same length as the first line. The width of the shape is a little more than twice the length of the edge.

2 Proceed to the Adjacent Shapes

Take each shape and relate its size and position to the first shape. If you check, you will usually find that a size repeats. The height of the gray building minus its white cap is the same length as the first line drawn and the roof angle, as is the length of the roof ridge and the height of the right edge.

When you put your pencil point on the paper, pause to see if you are in the right place. You wouldn't swing a hammer and then check to see where the nail is.