6

Getting Around Your Symbol System: Meeting Edges and Contours
We have reviewed your childhood art and the development of the set of symbols that formed your childhood language of drawing. This process paralleled the development of other symbol systems: speech, reading, writing, and arithmetic. Whereas these other symbol systems formed useful foundations for later development of verbal and computational skills, childhood drawing symbols seem to interfere with later stages of art.

Thus, the central problem of teaching realistic drawing to individuals from age ten or so onward is that the left brain seems to insist on using its memorized, stored drawing symbols when they are no longer appropriate to the task. In a sense, the left brain unfortunately continues to “think” it can draw long after the ability to process spatial, relational information has been lateralized, or shifted, to the right brain. When confronted with a drawing task, the left hemisphere comes rushing in with its verbally linked symbols; afterward, ironically, the left brain is all too ready to supply derogatory words of judgment if the drawing looks childlike or naive.

In the last chapter I said that an effective way to “turn off” your dominant left hemisphere, with its verbal, symbolic style of working, and to “turn on” your nondominant right brain, with its spatial relational style, is to present your brain with a task that the left brain either can’t or won’t work at. We have used the Vase-Faces drawings and upside-down drawings to gain access to your R-mode. Now we’ll try another, more drastic strategy that will force a stronger cognitive shift and suppress your L-mode more completely.

The technique is called “pure contour drawing,” and your left hemisphere is probably not going to like it. Introduced by a respected art teacher, Kimon Nicolaides, in his 1941 book, The Natural Way to Draw, the method has been widely used by art teachers. I believe that our new knowledge about how the brain divides its work load provides a conceptual basis for understanding why pure contour drawing is effective as a teaching method. At the time of writing his book, Nicolaides apparently felt that the reason the pure contour method improved students’ drawing was that it caused students to use both senses of sight and touch: Nicolaides recommended that students imagine that they were {\textit{touching}} the form as they drew. It seems more likely now that the method works because the left brain rejects the slow, meticulous,
complex perceptions of spatial, relational information, thus allowing access to R-mode processing. In short, pure contour drawing doesn’t suit the left brain’s style; it suits the style of the right brain — again, just what we want.

Before describing the method, I’ll define some terms.

In drawing, a contour is defined as an edge as you perceive it. As a method, pure contour drawing (which is sometimes termed “blind contour drawing”) entails close, intense observation as you draw the edges of a form without looking at the drawing while it is in progress.

An edge, as the term is used in drawing, is the place where two things meet. In drawing your hand, for example, the places where the air (which in drawing is thought of as background or negative space) meets the surface of your hand, the place where a fingernail meets the surrounding skin, the place where two folds of skin meet to form a wrinkle, and so on, are shared edges. The shared edge (called a contour) can be described — that is, drawn — as a single line, which is called a contour line. (We’ll be working with edges again in the next chapter on negative space.)

This concept of edges is a fundamental concept in art, having to do with unity, perhaps the most important principle in art. Unity is achieved when everything in a composition fits together as a coherent whole, each part contributing to the wholeness of the total image.

AN EXERCISE IN EDGES

To firmly set in your mind the concept of unified shapes and spaces that share edges, do the following exercise in imaging and seeing edges:

1. See in your mind’s eye a disassembled child’s jigsaw puzzle of six or eight painted pieces. The pieces will go together to form a picture of a sailboat on a lake. Imagine that the jigsaw pieces are shaped like the forms: a single white piece is the sail; a red piece, the boat, etc. Imagine the rest of the pieces in your own way — land, dock, clouds, whatever.

2. Now assemble the pieces in your imagination. See that the two edges come together to form a single line (imagine this as a precision-cut puzzle). These shared edges form contour lines. All of the pieces — spaces (sky and water) and shapes (boat, sail, land, etc.) — fit together to form the whole puzzle.

3. Next regard your own hand, one eye closed to flatten the image (closing one eye removes binocular depth perception).
Think of your hand and the air around it as a jigsaw puzzle, the spaces (negative spaces) between the fingers sharing edges with the fingers; the shape of the flesh around each fingernail sharing an edge with the fingernail; two areas of skin sharing an edge to form a wrinkle. The whole image, made up of shapes and spaces, fits together like a jigsaw puzzle.

4. Now direct your eyes at one specific edge anywhere on your hand. Imagine in your mind’s eye that you are drawing that edge as a single, slow, exact line on a piece of paper. As your eyes move slowly along the edge, imagine that you can simultaneously see the line being drawn, as though by some magical recording device.

USING PURE CONTOUR DRAWING TO BYPASS YOUR SYMBOL SYSTEM

In my classes, I demonstrate pure contour drawing, describing how to use the method as I draw — if I can manage to keep talking (an L-mode function) while I'm trying to use my right brain for drawing. Usually, I start out all right but begin trailing off in mid-sentence after five minutes or so. By that time, however, students will have the idea.

Following the demonstration, I show examples of previous students' pure contour drawings.

Before you begin: To best achieve an approximation of the classroom procedure, be sure to read all of the instructions and examine all of the student drawings in the Student Showing before beginning your drawing.

1. Find a place where you can be alone and uninterrupted for at least twenty minutes.
2. Set an alarm clock or timer, if you wish, for twenty minutes just before you start your drawing. (This is to remove the necessity of keeping track of time — an L-mode function.) Or, if you have plenty of time and don’t care about how long you might be drawing, omit the timer.
3. Place a piece of paper on a table and tape it down in any position that seems comfortable. Taping is necessary so that the paper won’t shift about while you are drawing.
4. You are going to draw a picture of your own hand — your left hand if you are right-handed, your right hand if you are left-handed. Arrange yourself so that your drawing hand, hold-
Meeting Edges and Contours

ing the pencil, is ready to draw on the taped-down paper.

5. Face all the way around to the opposite direction, gazing at the hand you will draw. Be sure to rest the hand on some support, because you will be holding the same position for quite a long time. You are going to draw your hand without being able to see what you are drawing (see the position in Figure 6-1). Facing away from your drawing is necessary to achieve the purpose of the method: first, to focus your entire attention on the visual information out there in front; and second, to remove all attention from the drawing, which might trigger off your old symbolic patterns memorized from childhood as the “way to draw hands.” You want to draw only what you see (in spatial R-mode) and not what you know (in symbolic L-mode). Turning all the way around is necessary also because the impulse to look at the drawing is almost overwhelming at first. If you draw in the normal position

Fig. 6-1. The turned-around drawing position for pure contour drawing.
"In oneself lies the whole world and
if you know how to look and learn,
then the door is there and the key is
in your hand. Nobody on earth can
give you either the key or the door to
open, except yourself."
—J. Krishnamurti
You Are the World

and say to yourself, “I just won’t look,” you will very likely find
yourself stealing peeks out of the corner of your eye. This will
reactivate the L-mode and defeat the purpose of the exercise.

6. In the turned-around position, focus your eyes on some
part of your hand and perceive an edge. At the same time, place
the point of your pencil on the paper (at any place well within the
outside borders of the paper).

7. Very slowly, creeping a millimeter at a time, move your
eyes along the edge of your hand, observing every minute variation
and undulation of the edge. As your eyes move, also move your
pencil point at the same slow pace on the paper, recording each
slight change or variation in the edge that you observe with your
eyes. Become convinced in your mind that the information ori-
ginating in the observed object (your hand) is minutely and pre-
cisely perceived by your eyes and is simultaneously recorded by
the pencil, which registers everything you are seeing at the moment of
seeing.

8. Do not turn around to look at the paper. Observing your
hand, draw the edges you see one bit at a time. Your eyes will see
and your pencil will record bit by bit the changing configuration
of the contour. At the same time you will be aware of the rela-
tionship of that contour to the whole configuration of complex
contours that is the whole hand. You may draw outside or inside
contours or move from one to the other and back again. Don’t be
concerned about whether the drawing will look like your hand.
It probably won’t, since you can’t monitor proportions, etc. By
confining your perceptions to small bits at a time, you can learn
to see things exactly as they are, in the artist’s mode of seeing.

9. Match the movement of the pencil exactly with your eye
movement. One or the other may attempt to speed up, but don’t
let that happen. You must record everything at the very instant
that you see each point on the contour. Do not pause in the
drawing, but continue at a slow, even pace. At first you may feel
uneasy or uncomfortable: some students report sudden head-
aches or a sense of panic. I believe this happens when the left
brain senses that pure contour drawing is presenting a serious
challenge to its dominance. It realizes, I think, that if you record
the intricate, complex tangle of edges in your hand at the slow
pace you are drawing, the right brain will have control for a long,
long time. Therefore, the left brain says, in effect, “Stop this
stupid stuff right now! We don’t need to look at things that
closely. I’ve already named everything for you, even some small
things like wrinkles. Now be reasonable and let’s get on with something that’s not so boring — if you don’t, I’ll give you a headache.”

Ignore this complaining. Simply persist. As you continue to draw, the protests from the left will fade out and your mind will become quiet. You will find yourself becoming fascinated with the wondrous complexity of the thing you are seeing, and you will feel that you could go deeper and deeper into the complexity. Allow this to happen. You have nothing to fear or be uneasy about. Your drawing will be a beautiful record of your deep perception. We are not concerned about whether the drawing looks like a hand. We want the record of your perceptions.

*After you finish:* Think back now on how you felt at the beginning of the pure contour drawing compared to how you felt later, when you were deeply into the drawing. What did that later state feel like? Did you lose awareness of time passing? Like Max Ernst, did you become enamored of what you saw? When you return to the alternative state, will you recognize it?

For most students, pure contour drawing produces the deepest shift, the farthest journey into the R-mode subjective state, of any of the exercises. Cut off from the drawing — from visual input that would allow naming, symbolizing, categorizing — and forced to focus on what it considers too much information, the left mode is turned down and the right mode takes over the job. The slowness of the drawing seems to push the left mode deeper and deeper into neutral, or “off.” Pure contour drawing is so effective at producing this strong shift that many artists routinely begin drawing with at least a short session of the method, in order to start the process of turning off the L-mode.

If perhaps you did not achieve a strong shift to R-mode in this first drawing, be patient with yourself. Some individuals’ left hemispheres are very determined, or perhaps very fearful, of giving up control to the right. You must reassure the left. Talk to it. Tell it that you are not going to abandon it, that you just want to try something out.

Gradually, you’ll find that the left will “allow” the shift. Make sure, however, that you don’t permit your verbal left brain to ridicule your pure contour drawing, saying critical things and spoiling the gain you have made. That’s not what we were after at this point. Soon, however, we’ll be putting everything together, and your drawing will be better than ever before.

*Krishnamurti:* “So where does silence begin? Does it begin when thought ends? Have you ever tried to end thought?”

*Questioner:* “How do you do it?”

*Krishnamurti:* “I don’t know, but have you ever tried it? First of all, who is the entity who is trying to stop thought?”

*Questioner:* “The thinker.”

*Krishnamurti:* “It’s another thought, isn’t it? Thought is trying to stop itself, so there is a battle between the thinker and the thought…. Thought says, ‘I must stop thinking because then I shall experience a marvelous state.’…. One thought is trying to suppress another thought, so there is conflict. When I see this as a fact, see it totally, understand it completely, have an insight into it… then the mind is quiet. This comes about naturally and easily when the mind is quiet to watch, to look, to see.”

— J. Krishnamurti

*You Are the World*

“Blind swimmer, I have made myself see. I have seen. And I was surprised and enamored of what I saw, wishing to identify myself with it….”

— Max Ernst
In *The Doors of Perception*, Aldous Huxley described the effects of mescaline on his perception of ordinary things—in this instance, the folds of his gray flannel trousers. He saw the folds as “living hieroglyphs that stand in some peculiarly expressive way for the unfathomable mystery of pure being.... The folds of my gray flannel trousers were charged with ‘is-ness.’”

Huxley continued: “What the rest of us see only under the influence of mescaline, the artist is congenitally equipped to see all the time.”

**STUDENT SHOWING:**
**A Record of an Alternative State**

Following is a Student Showing of some pure contour drawings. What strange and marvelous markings are these! Never mind that some of the drawings don’t resemble greatly the overall configuration of a hand—that’s to be expected. We will attend to the overall configuration in the next exercise, “modified contour drawing.”

In pure contour drawing, it is the quality of the marks and their character that we care about. The marks, these living hieroglyphs, are records of perceptions. To be found nowhere in the drawings are the thin, glib, stereotypic marks of casual, rapid L-mode symbolic processing. Instead, we see rich, deep, intuitive marks made in response to the thing-as-it-is, the thing as it exists out there, marks that delineate the is-ness of the object.

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Georgette Zaleski

Cami Berg

**Student Showing: Pure Contour Drawing**
Blind swimmers have seen! And seeing, they have drawn.

I believe that these drawings are visual records of the R-mode state of consciousness. As a friend of mine, writer Judi Marks, remarked on viewing a pure contour drawing for the first time, "No one in their left mind would do a drawing like that!"

Begin now to draw, using the Pure Contour Drawing method. Continue to draw until the timer goes off. While you may of course stop whenever you feel like it, try to draw for about 30 minutes without stopping and without looking at your drawing. If you make a significant shift to R-mode, you may draw on and on for even an hour or so.

**MODIFIED CONTOUR DRAWING**

Now that you have learned how to gain access to the right half of your brain — how to open doors of perception and to enter the slightly altered subjective state of right-hemisphere processing

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Beth Glick

Judy Leventhal

Student Showing: Pure Contour Drawing
Supplementary Exercises

6a. Following precisely the directions for pure contour drawing, observe and draw a complex flower such as an iris, a chrysanthemum, a rose, a geranium. Draw for thirty minutes.
6b. Again following the directions for pure contour drawing, draw a natural inanimate object such as a shell, a rock, or a piece of driftwood. Again, choose a complex object. Draw for thirty minutes.
6c. Crumple a piece of paper and draw it, using pure contour drawing. If possible, take a full hour to do this drawing.

— you are beginning to see in the way artists see, and you are almost ready to draw a realistic image using the next method, "modified contour drawing."

But before we go into that, do exercises 6a, b, and c. Do not skip these drawings. They are necessary for you to fully experience the cognitive shift so that the R-mode state becomes familiar and pleasurable. After that, the transition to modified contour drawing will be easier to make.

Modified contour drawing is exactly like pure contour drawing, except that you allow yourself to glance at the drawing at intervals for the sole purpose of noting relationships of sizes, lengths, and angles. You will be able to glance briefly at your drawing to monitor line direction, proportion, etc., and at the same time to use the slow, intense observation that causes the cognitive shift to R-mode.

Before you begin: Read all of the directions.

1. Arrange for at least a half-hour of uninterrupted time.
2. Sit comfortably at a table, this time in the usual position, shown in Figure 6-2. Again, tape your paper to the table so that it won't slip around. You are going to draw your own hand again. Arrange your hand in a complex position — fingers entwined, clenched, crossed, whatever. A complicated position is better for our purposes than a flat, open, simple position because the right hemisphere seems to prefer complexity.
3. Be sure not to move either the position of your hand, once you've started the drawing, or your head — that is, don't tilt your head to see part of your hand that may be hidden from view. Take a single position and stay there. We want one view only, not a multiple view that would distort your drawing.
4. Gaze at your hand in preparation to draw. This will start the cognitive shift to R-mode processing. Image a vertical line and a horizontal line next to your hand. Observe the relationship of a single angle to either vertical or horizontal. Now look at your paper and image the angle as though it were drawn on the paper. Find a space, perhaps between the fingers. Gaze at that space until you see the edge of the space where it meets the edge of the finger. Try to feel your mind making the cognitive shift to R-mode.
5. Fasten your eyes at any point on a contour. Check the angle in relation to vertical or horizontal. As your eyes move slowly along the contour, your pencil draws the contour on the paper at the same slow...
Fig. 6-2. The position for modified contour drawing is the usual drawing position.

speed. Move from contour to adjacent contour. Do not draw a complete outline and then try to draw the interior forms. It's much easier to move from form to adjacent form. As in pure contour drawing, your pencil will record all of the edges, noting every slight change of direction and undulation of each contour. This is a wordless process. Do not talk to yourself. Do not name the parts as you draw. You are working with visual information only; words do not help. It's not necessary to try to figure anything out logically, because all of the visual information is right there in front of your eyes. Concentrate on what you see, wordlessly sensing to yourself how long one part is in relation to another; how wide one part is in relation to the one you have just drawn; how steep one angle is compared to another; and where one contour appears to emerge from one you have just drawn.

6. Glance at your paper only to locate a point or to check on a relationship. About ninety percent of your drawing time should be spent with your eyes focused on the hand you are drawing, just as in the pure contour method.
Professor Elliot Elgart of the University of California at Los Angeles Art Department told me in conversation that he has often observed beginning drawing students, presented for the first time with a reclining model, tilt their heads far to one side while drawing the model. Why? To see the model in the position they are used to, which is standing up!

7. When you come to the f-i-n-g-e-r-n-a-i-l-s (we are not naming things, remember), draw the shapes around the nails, not the nails themselves. This way you will avoid any dredged-up symbols from childhood. The left brain has no names for the shapes around fingernails. In fact, if you have trouble with any part, shift to the next adjacent shape or to the space that shares the contour you need.

8. Finally, remember that everything you need to know about your hand in order to do your drawing — all of the required perceptual information you need — is right there in front of your eyes. Your job is simply to set down the perceptions just as you see them in marks that are records of perceptions. You don’t need to think in order to do this. Since you need only sense and observe and record what you see, the drawing will seem easy and you will feel confident and relaxed and engaged, fascinated with how the parts all fit together like a perfectly fitted jigsaw puzzle.

Begin now to draw. Within a few minutes you will have shifted to the alternative state of R-mode, but you needn’t think about that. You have consciously set the conditions for the shift to occur, and it will soon occur without any effort on your part. Modified contour drawing, like the other exercises, is a task that the left brain will turn down, opening access to the right-hemisphere mode.

After you finish: Review in your mind the drawing strategies you used, what the R-mode state of consciousness felt like, how you slipped into that state by consciously setting up conditions to facilitate the shift.

This first drawing may reveal some misperceptions of proportion or of relative angles. Exercises in the next chapters will help correct problems with proportions.

Drawing at this stage is rather like learning to drive a car. You first learned the separate operations — acceleration, braking, signaling; watching cars ahead, behind, at the sides. In driving that first time, you had to put everything together, coordinating separate skills into an integrated whole. The first time was harder than the second, the second harder than the third. Soon the skills and strategies were integrated.

And so it is with drawing. Drawing is a holistic skill, requiring the coordination of a number of strategies. In a short time, these strategies will become as automatic as braking, accelerating, and signaling have become for you when driving.
To give yourself more practice and to build confidence, carefully do exercises 6d to 6g on page 95. Before you start each drawing, set up the conditions that will facilitate the cognitive shift to the R-mode state of consciousness. Especially important: make sure you have a block of uninterrupted time. Later, you may be able to accomplish the shift in spite of interruptions, but most artists seek solitude for drawing.

STUDENT SHOWING: Modified Contour Drawing

In the following student drawings, the hands seem to have been drawn by individuals who were experienced at drawing. The hands are three-dimensional, believable, authentic. They seem to be made of flesh, muscles, skin, and bones. Even very subtle qualities are described, such as the pressure of one finger on another, the tension of certain muscles, or the precise texture of the skin.

THE NEXT STEP: TRICKING THE L-MODE WITH EMPTY SPACE

So far, we have located some gaps in the abilities of the left hemisphere: it has problems with mirror images (as in the Vase-Faces drawing); it can't deal with upside-down perceptual information (as in the upside-down Stravinsky drawing); it refuses to process slow, complex perceptions (as in the pure and modified contour drawings). We used those disabilities to give your right hemisphere a chance to process visual information without interference from the domineering left brain.

The next chapter is designed to reestablish your grasp of the unity of spaces and forms in composition, which you had as a child. The emphasis of that chapter is on negative space.
Annette Ramirez

Pat Marovich

Student Showing: Modified Contour Drawing
Supplementary Exercises

Before you begin: Spend five or ten minutes doing a pure contour drawing of any complex object to prepare for the cognitive shift to R-mode.

6d. Do a second modified contour drawing of a pinecone. See Figure 6-3 for an example of a student’s drawing.

6e. Do a modified contour drawing of an ordinary brown paper bag, in any condition or position you wish. See Figure 6-4.

6f. Do a modified contour drawing of an ordinary household object — an eggbeater, a corkscrew, an iron, a can opener. Remember that the right hemisphere seems to prefer complexity. See Figure 6-5.

6g. Do a modified contour drawing of your own foot, with or without shoe. (If you include your knee as you look down at your foot, note how wide it is relative to the width of your foot.) See Figure 6-6.

After you finish: Regard your drawings done in L-mode. Take note of the areas where the drawing indicates that you were most “locked on” to the image before your eyes. This will be reflected in the exactness of your perceptions. Try to recall your brain state at that point in your drawing.