

2. Observing; Observing Your Observations; Observations on Observing

What you do when you make sense of the world involves the same acts of mind as those involved when you write: that's what it means to say that the composing process is a continuum. Keeping a journal of observations is one way to see how your mind works; since the active mind is a composer, there's something to be learned by observing it in operation. (*Journal* comes from the French word *jour*, day; a journal is a daily record.) Poets are often addicted to journals, because they know that the composing process is going on all the time and that they need a record of the dialogue between them and the world. Of course, a journal has the practical value of teaching concentration and accounting. A poet I once knew was hired as a research assistant to an anesthesiologist. The job was to observe the appearance, reactions, speech, behavior, etc., of children before and after surgery and she got it not because of A's in biochemistry (she had had no pre-med) but because the doctor guessed correctly that her powers of observation were highly developed.

Writing every day about what you're looking at is the best way I know to discover the interdependence of language and thought. The journalist of observations is in a good position to appreciate this wise formulation of Kant about human understanding: Percepts without concepts are empty; concepts without percepts are blind.

Deliberately observing your observations and interpreting your interpretations sounds like being self-conscious and, in a sense, it is: you are the one who is aware of what is going on and you are also the one responsible for the going on; you are the do-er, the agent. To be deliberately aware of what you're doing is a consciousness of self. But thinking about thinking is not the same kind of operation as thinking about how to serve in a game of tennis or what to do with your lips when you're learning to play an instrument or what to do with your feet when you're learning to dance. In such cases, self-consciousness is what you have to get over. Learning a skill involves immersing yourself in the rhythm of the activity so that you "think" with your whole body; concentrating on what-the-agent-is-doing is therefore a distraction. For the student of composition, however, concentration on what you're doing in making meanings is the best way of learning to write.

Here is the procedure I'm suggesting for keeping a journal of observations. Get yourself a notebook small enough to be easily carried around, but not tiny; a $9\frac{1}{4} \times 6$ spiral is ideal, one bound at the side rather than the top. For about a week, write in it for 10 minutes each day in response to some natural object. This object shouldn't be something you're familiar with (instead of an apple, take a pomegranate or a Seckel pear) and it shouldn't be a rock or a pebble, since they are not *organic*, and one of the points of this looking/seeing is to learn something about *organization*. Address yourself to the object; ask it questions; let it answer back; write down the dialogue. Record your observations and observe your observations. Follow your mind in its course: the composing process rather than a composition is your concern, but if what you're composing seems to have a will of its own, follow its lead; you may be surprised to see where it takes you. At the end of a week or so, see if you can compose a couple of paragraphs setting forth the meanings you have made.

If the observing becomes tedious (and it will) stay with it, regardless; if it becomes intolerable, get yourself another object. I offer my students a choice from several cigar boxes full of bird feathers, crab legs, shells, dried seaweed, seed pods, various

weeds, pine cones, two or three puff balls and oak galls, bits of bark with fungus, etc., but they sometimes prefer their own twigs and bones and parsnips.

☞ To get started, here is an assisted invitation to learn to observe carefully by drawing. This lesson on contour drawing comes from Kimon Nikolaïdes's *The Natural Way to Draw*, which has been called the best "how-to" book ever written about anything.

Materials: Use a 3B (medium soft) drawing pencil with a very fine point (sharpened on sandpaper) and a piece of cream-colored manila wrapping paper about 15 by 20 inches in size. Fasten the paper with large paper clips to a piece of stiff cardboard. Do not use an eraser.

Sit close to the model or object you intend to draw and lean forward in your chair. Focus your eyes on some point, any point will do, along the contour of the model. (The contour approximates what is usually spoken of as the outline or edge.) Place the point of your pencil on the paper. Imagine that your pencil point is touching the model instead of the paper. Without taking your eyes off the model, *wait* until you are *convinced* that the pencil is touching that point on the model upon which your eyes are fastened.

Then move your eye *slowly* along the contour of the model and move the pencil *slowly* along the paper. As you do this, keep the conviction that the pencil point is actually touching the contour. Be guided more by the sense of touch than by sight. *This means that you must draw without looking at the paper*, continuously looking at the model.

Exactly coordinate the pencil with the eye. Your eye may be tempted at first to move faster than your pencil, but do not let it get ahead. Consider only the point that you are working on at the moment with no regard for any other part of the figure.

Often you will find that the contour you are drawing will leave the edge of the figure and turn inside, coming eventually to an apparent end. When this happens, glance down at the paper several times during the course of one study, but do not draw while you are looking at the paper. As in the beginning, place the pencil point on the paper, fix your eyes on the model, and wait until you are convinced that the pencil is touching the model before you draw.

Not all the contours lie along the outer edge of the figure. For example, if you have a front view of the face, you will see the definite contours along the nose and the mouth, which have no apparent connection with the contours at the edge. As far as the time for your study permits, draw these "inside contours" exactly as you draw the outside ones. Draw anything that your pencil can rest on and be guided along. *Develop the absolute conviction that you are touching the model.*

This exercise should be done slowly, searchingly, sensitively. Take your time. Do not be too impatient or too quick. There is no point in finishing any one contour study. In fact, a contour study is not a thing that can be "finished." It is having a particular type of experience, which can continue as long as you have the patience to look. If in the time allowed you get only half way around the figure, it doesn't matter. So much the better! But if you finish long before the time is up, the chances are that you are not approaching the study in the right way. A contour drawing is like climbing a mountain as contrasted with flying over it in an airplane. It is not a quick glance at the mountain from far away, but a slow, painstaking climb over it, step by step.

You might be interested in this comment by another art teacher (Frederic Gore, *Painting: Some Basic Principles*) about the relationship of naming and identifying, drawing and defining.

To put a line round something is to name it and to attempt to enumerate its characteristics. It is a form of definition. Children arrive at the same time at a stage when they draw objects and when they name them. It is difficult for any of us to draw in line something which we cannot name—that is to put a line round something which we cannot separate intellectually from its surroundings. If we draw a nameless thing, we automatically ask what it is while we draw it, and attempt to see a likeness in it to something which we can name. Both to draw things and to name things are attempts to identify and understand objects, situations, conditions and relationships. A particular function of line in drawing is (like naming) to define objects. With a line we first draw nouns. Later we describe relationships: physical situations, the geometry of space, psychological situations, movement. In the traditional European school of drawing (the heritage from Masaccio, through Raphael to Ingres), contour defines

objects and gives them their precise structure and character, while tone (shading) is largely used to state generalities of form—the physical characteristics which all objects share alike—planes and structural relationships, space, lighting conditions. A cube or a cylinder may be given solidity by tone, but it is defined as a cube or a cylinder by line. Whenever we wish to give individuality, precise definition and character to a figure in life drawing or to a head or anything else which we put in a drawing, we find that we must pursue the contour ruthlessly and search out the form by means of outline. The more particular we wish to be the more ruthless we must be. The characteristic shape is in the contour. If in a painting we see a line which is enclosed, we presuppose an object and try to recognize what it is.

Now read some passages from student journals, a couple of meditative essays based on journals, and a feature article for a newspaper written after such journal practice. They are offered not as models but as authentic responses to encourage you in your own observations:

Emily's Walnut Husk

Sept 3 Soft moss-like thread worn crust fruit pit white fluff gulley ridges touchable cracking mold cheeky tip twig anteater insect animal

Sept 4 pointed pursed lips pouting prune spots shadow. Shadow looks like a battery, or blimp, or bottle, or fire extinguisher. Shadow looks like something man-made, technological; difference between shadow and object . . . inorganic/organic . . . dead/alive. Shadow so smooth, not ridged. Feels like velvet. Looks fragile, feels solid although crusty. Temptation to peel it. Sand embedded, almost glued. Nothing comes off on my fingers. What's inside? Skull of an animal. Angry profile.

Sept 5 Sturdy. About to kiss. Makes wooden, knocking sound. Little hairs. Musty smell. A mask, a puppet—seems alive but feels and sounds inanimate.

Sept 6 Tongue sticking out. Eight spokes, ridges, radiating from tip . . . they go haywire White spots like a disease . . . it

rolled in talcum powder . . . transforming into whiteness? . . . aging. Twig trying to grow out at fat end . . . stopped in the middle of giving birth.

Sept 7 Ridges are like a map. Science fiction, another planet, a world. Falling off the edge, thin end is an enormous cliff. Trails, ocean, hills, inhabitants so tiny. Each speck, each fleck of fuzz lives there—or is a city—a country. Wherever it is placed, it dominates, everything else is background like an aerial photo. Is there a world inside it? It's a capsule, it's going to take off, it's so still, the way a loaded object is charged but immobile. It's alive, vibrating. Still. Solitary. Stuck. Lonely.

Sept 8 It eats through the thin end. Ridges are rolls of fat or bulges showing ingestion. It's old and wrinkled and overfed and sitting there stuffed. Cracks at fat end—bursting and brittle. Soft, velvety/hard, crusty: an aged creature. So old, so delicate, sturdy but soft. Aged, wizened, grandparent, elder. Wise. Senior fruit.

Sept 9 Smooth side. Still has a snout. Piece of thread going across like a mantle, a sash. Draped regally, or like a snake on Medusa. Something refined about it, casually elegant. Mole or Mouse King. Fruit King. About to be propelled forward at a stately regal pace, a slow-motion scurry. White padding on behind so he can sit upright. Little feet underneath? Hold it and it's furry, squeeze it and it's hard like wood. Drop it and it crumbles a bit and makes knocking sound . . . not a furry little creature after all, only when you don't touch it.

Sept 10 The shell has crumbed off in places. Vulnerable. Suddenly capable of disintegrating. Greyer color inside. Insides are peeking out. Fur rubbed, chipped away . . . mange. A wound. Three heights, dimensions now: Tallest ridge, smooth surface, beneath the surface. Valleys. An old planet, devastated. An old creature deteriorating. The snout is still impish. It will keep on moving no matter what. Pursued lips smiling. Indestructible. What's been attacking it? Poor thing.

Sept 11 From head-on, the thread covers his nose—as if he's pushing through some wilderness, on the move and plowing past obstacles, one of which catches on his nose. He's in motion, the snout is angry, determined, the body is getting cut up,

wounded, assaulted along the way, and time goes by and he gets older but he keeps on going, leading with his nose, peering out sharply with the eyes that are dents, that are ridges. White spots on his body like dust, cracking shell from the dry air, wrinkles around the face from fatigue and age and grimacing.

Sept 12 The fat end is tearing off. The creature is being ravaged. I've been careless with the object. It is slowly being destroyed. There is a patch of whiteness inside the end that's breaking. Does the white spotting come from inside? The outside is a sham, the real life is inside, hiding, deceiving me. But to explore it more I'd have to take it totally apart, dissect it, and that would mean ruining it, interfering, destroying it. It is coveting a secret. The shell is just a mask. But the inside that's now exposed is hard to the touch. Indestructible. It won't let me in. Its attitude is still the same, the face determined, aggressive. If the back fell completely off, would it change expression?

Sept 13 I feel so guilty, I put it carelessly in the pouch of my bag day after day, and now it's coming apart. But the thing is looking at me spitefully, nothing will really stop it. The angry profile is really smirking. It's now the end of our time together, and it's acting like it's got one up on me. I'm sick of it. It still looks valiant, like a charger, a little Mouse, Fruit Soldier. Slightly wounded but triumphant.

Bill's Blue Jay Feather

Friday 8 a.m. As I sit down to contemplate my feather—before I ever begin to really look at it, I have several *ideas* about it in my mind. So to dispose of them (somewhat) before I really begin—this is (I believe) a blue jay feather. That is a bird feather, with a thousand immediate connotations for me. For now I will *try* to leave the blue jay behind, however, and begin to simply look at it as an object.

The feather is about 5 inches long, and lies comfortably in my flattened palm. It is not wide; the sense of its size is along the length of the central spine, not across it. The spine itself is fine, lustrous, and very tough. At its white tip it is bare, and translucent, but about half an inch from the tip a gray black stain appears, and gradually replaces the white.

As the darker color begins strands of the feather itself start to appear—very soft, fine, and random in their formlessness. As the eye moves up the quill, however, the strands quickly become longer and more regular in their flow—and upward sweep turning slightly in upon the quill, and down, near the tip, so that each strand fits lightly under the tip of the next. Looking at the outside of the feather (as it would have been on the bird) the right side sweeps much more emphatically upward than the left, showing barely half the width of the latter. While the color of the right side of the feather changes from its original light grey to a rich blue almost before the strands have organized themselves into a uniform sweep, the left side remains obstinately grey for nearly an inch before the same bright blue begins to appear at the roots of the strands. From here, as the width of the feather expands, the dark grey remains an edging on the feather of a static width, while the blue arrowhead continues to expand as the eye follows the feather toward the tip. Thus, the feather is, basically, a rich blue, with the dark quill a line through this field, and the grey strand tips an edge along the left of the field.

This pattern dominates the feather, with only two exceptions. By far the most obvious is the tip of the feather, where blue and black both end abruptly on a sure white field broken only by the dark quill. The line of change is perpendicular to the quill, so that the strands, as they curve upward, each pass from their original color into white.

Sunday a.m. The second exception is along the narrower blue part of the feather, to the right of the quill. Appearing at the midpoint vertically of the blue field is a short, thick grey hash mark across the blue field perpendicular to the quill—the length of it from quill to the feather's edge, while the width is about half that. This mark is repeated four more times between the first one and the white band—now lighter, now darker, but always similar in shape. The marks appear to be superimposed over the blue field, yet they show the same lustre as the background.

The reverse side of the feather is hardly so interesting as the outside, for, although the pattern and texture of the reverse are repeated, the color is dominantly grey, with only a hint of the brilliant blue. In fact, this hint of blue, apparent only along the edge of the narrow side of the feather, is only

a result of the curl of the strands—the back of each blue strand is actually completely grey.

Monday a.m. The perfect and balanced form so far set down by this description must be qualified by noting the slightly irregular edges of the feather. The edge itself is defined by the successive curling upward of one strand after another, and, as these curlings vary in degree from one strand to the next, slight irregularities in the edge are produced. A smooth, fine edge will suddenly be disrupted and dive inward as several exceptional strands are overcurled and turn back too sharply to blend in the edge pattern. Here, if closely observed, the strands assume their own individual identities, and the larger pattern is broken. But never for long; soon a more standardized strand will reset the dominant pattern, and the edge will be reasserted once again. Thus, the edge continues right up to the white tip. Here, as the strand lengths decline at the very end of the quill, each one's individual existence again becomes manifest—they become too short and bristly to maintain the pattern, becoming distinct branches out of the whole of the feather.

Tuesday p.m. Reading over this last paragraph and looking at the feather, I have just realized that the white tip is transparent—I can see through it as it lies on the page. I am not seeing between the strands, but through them. Looking down the feather again, it is not transparent in the blue/grey zone, until the grey pales considerably near the point of the quill. It must be the pigmentation of the strands which blocks the passage of the light, as it only penetrates where the darker colors are either absent or faint.

This feather is a marvelous thing, but what does it accomplish? Why don't birds have hair, or fur? It is water-resistant, I believe, because of its sheen, its fine texture, its regularity. But couldn't the water penetrate *between* such feathers? It does not strike me as a particularly efficient heat retainer, and although I am sure that it would give increased lift for flight, what is the point of covering the body with such feathers?

Wednesday a.m. Today is the last time I plan to write on my feather. As I look at it, it strikes me as completely familiar, with nothing (?) left to discover. But just say that, and I find something more. The feather is not two-dimensional as I

thought, but actually shows a curve, both along the length and across its width looking down on the feather (i.e., on the outside), the edges curl upward just slightly, creating a gentle trough along the quill. And the quill itself is not straight; if laid on a flat surface it shows a steady arch above the table. In fact, it is this arch which, combined with the color and sweep of the strands, gives the feather its grace.

David's Milkweed Pod

Thursday, Sept. 2 I have set the milkweed pod on top of my digital clock and my minutes of observation are very neatly numbered for me. The first thing I notice is the damage incurred to the pod while it got carried around in the pocket of my coat. It has split slightly at the end of its seams, and its fur is slightly matted and worn. Its shape is similar to the shape of a large, fat goldfish. Its color is a nice light brown, the color of a mouse. In rereading that sentence I notice that "nice" is a totally unnecessary word that doesn't tell anybody what color brown the milkweed pod is.

This exercise is going to make me babble, I can see. I can observe my observations, observe myself trying to structure my observations ahead of time so that they will come out in ordered, "literary" paragraphs.

Friday The first thing I observe is that in plugging in my typewriter, I have unplugged my clock. That seemed like an awfully long minute. I tell myself to look at the pod, to center myself around it, so that at least my babble originates its drifting there. I stare at the pod, making associations; thinking about a book I read called the *Psychology of Meditation* that talked about meditating on objects. Then I think about a poem I read that used a pod as a sexual metaphor.

Saturday "Hello pod," my brain says to itself, feeling already a degree of familiarity. I notice faint lines running the length of the pod, like the grooves on smooth bark. Little bumps and nodules interrupt the grooves at random points. Short, white hairs stick out the seams. I realize I haven't really touched it to see what it feels like, and so I reach out and stroke it and it is very soft.

Sunday I think about the milkweed pod in terms of time. Probably no observable changes will happen in the week or so I observe it, but I know it's changing, drying out and transforming. It seems sterile and devoid of purpose, sitting there on my shelf. I get the urge to open the window and throw it out. For awhile the pod seems to be less an inanimate object and more a part of ongoing process. I think about the hundreds of potential milkweed plants contained inside the pod, and then remember when I was a child my father breaking open the stem of a milkweed plant and squeezing the milk onto a wart on his hand. He claimed that it cured warts, but I don't remember if it did or not.

Monday It occurs to me to smell the pod. Nothing very distinct, but then my sense of smell was never very acute. I can be in the same room with a hundred pieces of toast burning and never quiver a nostril. In this particular instance, however, I do not feel too deprived, since what I do smell has the faint odor of the dust bag in a vacuum cleaner. What I have really observed here is the limitations of my observational powers.

I realize also that this journal would probably be different if I was writing it just for my private self. I am aware of the audience, mainly you, Mrs. Berthoff, and try to picture you reading this by the fireside of some Concord home.

Tuesday I set the pod out on the kitchen table so I could type there, and when I came back one of my roommates had picked the pod apart. I was already feeling overwhelmed at the possibilities of what there was to write about, and this made it seem like an infinity made more infinite. All there really is time to do in the 5 or 10 minutes that I look at it is to pull a few sentences down out of the brain static that gets generated. This gets me to thinking about what thought is like before it becomes sentences, which would be very hard to express in sentences. I've been thinking and writing for 5 minutes, and I've hardly said a word about the pod.

Wednesday I think I'll start off with more description. Dark, oval seeds cover a thick body of very light silken material, like cornsilk only more fragile. The seeds are overlapped in a pattern exactly like shingles on a roof. My thoughts spread out in associational chains from this fact. First of all I note that

I would probably not make this comparison if I hadn't worked on roofs. Then I wonder if most people notice the pattern of shingles, and wonder if that comparison would reach the mind's eye of most people. I feel that it is important for a writer to worry about that.

Another chain began with noticing the pattern, and was concerned with function. I realized that I knew the function of the pattern on a roof (to prevent leaks) but that I didn't know the function of the pattern on a seed pod.

Thursday All the seeds are falling off from the silk. I can't figure this out, because it seems to me that the seeds should be firmly attached, each to its own tuft of silk, so that they can float on the wind. The only explanation I can think of is that because the skin has been torn off, the inside is drier than it should be. Or maybe as the seed dries out on the wind it drops to the ground like a parachuter jumping out of an airplane. I doubt it, but the idea sounded good.

Martha's Bit of Branch

Here's a bit of branch, long since broken from its tree. All the juices have drained from this husk, but if you look closely at the core you can see the channels where they ran. The pith has splintered vertically, not across the stump; that tells you something about the direction of transport. Up and down food and drink were carried, from root to leaf and back again. (How water can be pushed so high, no one quite knows. The laws of hydraulics are broken by the tree, which follows secret laws of its own.) Nothing runs here now and there is no sign of root or leaf. Dried out like this, you might think such a fragment had been fixed and preserved forever—were it not for the sprinkling of fungus along its length, invisibly reducing organic back to inorganic stuff. Life is chewing away at death, reclaiming immortal matter.

There's a paragraph, a bundle of words split off from experience. Could a reader tell which way the currents that fed it ran? To one who knows the history of its composition, it seems impossible that any clues could be found in those splintered ends. See, the process of criticism is already starting to pull it apart. I wait to discover what new shapes will spring from its decomposing.

*Suzanne's Crab Leg **

What am I looking at? What are these particles of shell, lying broken on a sheet of paper? And what are these dried filaments? Are they connective tissue, transparent and fragile, encrusted with sand, no longer able to bear the wrench and pull of the living, moving crab inside? Why is it that the upper part of the crab's leg is shattered, while the claw itself is nearly intact? Does the tubular, curved, tusk-like shape give the claw strength, or is it thicker and more resilient? I wonder—do those evil little teeth on the inner edge of each "jaw" of the claw contribute to its unbreakability? And why, in the drying-out and aging process, does the upper leg lose its resiliency so much more than the claw?

And what is there to see when I focus in close? Is it a process of close focus that reveals the complexities of surface and blurs the perception of forms? Why am I now more conscious of the play of orange toward the tip and cream toward the upper part of the claw? Is the ability to notice a shiny streak along the ridge (how is it I never *noticed* the ridge along the outside of the claw?) a function of concentrating on surface to the exclusion of form?

And now what happens when I move back again? Why am I conscious, now, as I wasn't before, of the arrangement of these forms on the white blue-lined sheet of paper? What roughness of claw teeth, fineness, abrasiveness of speckles of sand, what hungry, cave-like space interior to the claw's joint, bereft of its contiguous parts do I see? What happens to my mind as it moves in and out and over these forms, surfaces, textures, spaces?

What statement can I make that means as much as a query?

What mental process, what level of perception does the question keep pushing me toward, what statement would it close me off from, forcing a false start with each sentence? What happens when I touch these fragments, turn them over, rub my finger over the sand deposited inside, meditate on the salty, watery, sandy, sea-grassy life these forms belonged to when they were whole? What part of the whole is a crab, after all? What does it know of a windy

* Note that the sentences in this essay are all in the form of questions.

afternoon in early summer, of the glassy slick of water on sand that its motions disturb only slightly? Does it feel and sense its structural wholeness, fresh and pungent flesh protected by a hard but resilient outside bone? Doesn't it know it belongs there and not here, dry and fragmented on my paper, in my electric-heated, sun-filled winter bedroom on Waltham Street? Why did it get there in such a broken condition, if not due to the detached curiosity of Ann Berthoff, if not to the indifference and pocketbook-disorder of Suzanne Lynch, if not to the testing and naughtiness of my son's friend Thomas? Did you break it, Ann and Suzanne and Thomas, or was it broken already, when the water level went down and left it drying and dying in last summer's sun?

Rebecca's Water Lily

I began this semester with an assignment to describe a purple lily pod, which I found exciting and liberating. I had this lovely object and the freedom to say anything I liked about it, since in describing it I could describe how it affected me and what it suggested to me. I turned it into an image of the transience of life, the secretiveness of nature, the spring and fall of the individual creature; I made sexual metaphors from its intensity of color, and generalized to my personal sense or experience of fall and the cold. I was amazed at the sense of freedom, of being able to be myself in this new way. The full significance of this first, self-consciously used image was not apparent until much later.

The dried-up lily pod is still with me; sometimes perched on my dictionary, usually on the floor of my room. I remember the day most of its stem, which I had loved for its winding length, broke off, and today I notice that part of the leaf itself has crumbled. It stayed and moved with me through a significant period of time, along with other gathered up images and fascinations. We move along, my images and I, like a tidal wall of water—strong because they carry meaning. I make them change, and mutate; I rearrange them and I suppose they change me. I wouldn't focus on them so if they did not rearrange my thinking too.

It broke my heart (or would have, had I let it—I knew the experience was not over) when the stem of the leaf broke off since that was precisely what I'd liked. I broke it; it was

no accident, though one likes to think that these things just happen, life goes on, etc. But in addition to the calendars I keep, my journals, and all the photos I take—all pictures of time marked as it moves—I still have the pod, and I'm awfully glad I didn't throw it away when I got so anxious about my own abilities. All those times it mocked me (actually it more resembles a hungry, wretched cat now than anything that could mock), all those times it reminded me of my inability to work; how it tried to remain on the floor with the dust but I in some perverse mood always returned it to my desk—how hard it was to learn to live with chaos. The symbol of what was exciting at first has come full circle and makes me glad I still have it, battered as it is. It holds my meaning—I found my way through a section of time, and understanding.

Robin's Fish Trip

Why didn't somebody tell me? Why didn't you tell me? During the 7 years I've lived in Boston, I've been dragged to concerts, coerced into buying various record albums, and had my sanity questioned for not seeing certain films. But in all that time, no one has ever insisted that I visit the New England Aquarium. If I hadn't been sent there on a writing assignment, I might have missed out forever on the most involving museum in this area.

The Aquarium is such an exciting visual experience that I was talking to myself in wonder before I got off the first floor. You must go and see for yourself. The Aquarium opens at 9 A.M. It's important to arrive early before the endless busloads of schoolchildren disrupt the silent and intimate setting created by the very low lighting. The Aquarium uses the concept of theatre and entertainment in its interior layout. In the semidarkness, as in a theatre, one's sense of both privacy and involvement are heightened and a very personal experience is possible. Tanks of varying sizes are mounted into the walls and lighted from behind. Like small stages they present a particular view of aquatic conditions or explain the complex relationships of sea plants and animals to one another and to us. In each tank there is at least one creature whose brilliant colors or fantastic shape stand out wonderfully, luring us through the half-light to the next tank.

The Aquarium manages to present an enormous amount of information and a great variety of exhibits in a simple direct manner. I learned about underwater sounds (the ocean, it turns out, is a pretty noisy place), and got some static from an electric fish when I pushed the button in front of its tank. I was warned against poisonous stingrays, man-eating sharks, and the dangerous shellfish-out-of-season! Printed information is mounted in colored letters, along with photographs, on plexiglass and then illuminated from behind. Some exhibits have recorded information which plays when you press a button. All the tanks are placed on opposite ends of each floor. The side walls are either left in shadow or have pictures of whales and sharks painted in large, outline form.

The real first floor is actually a wide, shallow pool in which penguins and sharks live in apparent harmony. Around this pool runs a slightly elevated walkway, and from its center rises the three-story, cylindrical glass tank. Another walkway spirals right around the sides of this enormous tank until it reaches the top floor where you can look down into the water and realize just how broad the tank is. Going up this ascending walkway is just like walking through Harvard Square on any warm Sunday afternoon. I just couldn't believe what I saw. Giant sea-turtles with shells like batiked leather, the world's fattest fish, sharks with quick, subtle movements, and hundreds of fish of every size, including a deflated blowfish and one poor creature with a healed-over bite taken right out of its back. Every hour a diver goes to the bottom and feeds the turtles and smaller fish, while the sharks turn terrifying arcs through his rising air bubbles. This feeding procedure became a strange water ballet, which set off for me a chain of associations on our relation to the sea and our place with these creatures in the evolutionary chain.

All these musings were lost when I got back down to the first floor exit and came upon the sea otters. These little animals have the same effect on order as the Marx Brothers, tearing about their area and bathing pool in a total frenzy. The glass boundary was the only reason I was able to keep from picking one up and taking it home. The otters actually seem to wave as they swim on their backs and perform series of difficult underwater somersaults, squeaking all the while. If their appeal isn't enough to encourage you to visit the

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Aquarium, go anyway! I promise that you will find yourself wondering, as I did, why no one ever told you about the New England Aquarium.