AKIKO BUSCH

THE ECOLOGY OF UNCERTAINTY

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Akiko Busch, who was a visiting writer at Haystack during our second session, July 14–27, 2009, writes about uncertainty and how it manifests itself in our art making, our lives, and in nature. While she touches on what is increasingly the spirit of our time, it's not a pessimist's view. Not knowing exactly where we are going leaves us in a place of discovery. We are alive and embarking on a journey.

What I particularly appreciate about the journey of words that Akiko Busch takes us on, is that while there may be uncertainty, there is also certainty. She is a writer who moves fluidly between concepts and between the natural world and the one we have made. Because she has mastered her material—language, that is—the reader can follow her investigations and trust her as a guide. We can move back and forth between skill and mystery, with one informing the other. That is, I believe, the place where art is made.

–Stuart Kestenbaum

THE ECOLOGY OF UNCERTAINTY

by Akiko Busch

On a recent visit to my local Barnes and Noble, it was with some curiosity that I found an entire section given to the subject of uncertainty. Behind the new fiction and positioned somewhere between the travel and self-help shelves, I found such titles as *Comfortable with Uncertainty* by the American Buddhist nun, Pema Chodron; *The Flaw of Averages* by Sam Savage, a text on how to address probability management and statistical uncertainties after the Wall Street Collapse; and *The Principles of Uncertainty* by Maira Kalman, an illustrated account of a year in the artist's life. There were several others as well, all artfully stacked on their own table, as though uncertainty is now some separate category of information itself. Uncertainty, the display seemed to suggest, though a significant factor in the practice of religion, business, government, art, and all of life itself perhaps, has nonetheless become so exotic a notion that it now offers itself to us as some arcane field of study that can be examined, contemplated, understood much the way we might try to learn how to cultivate heirloom tomatoes or refer to a manual that offers step-by-step instruction on how to build a birch bark canoe.

And maybe that's the case. We do, after all, live in the information age and work in the knowledge economy, neither of which puts much value on admitting to doubt. The answers to everything we might imagine asking seem but a mouse click away; the phrase "knowledge worker" is used to reference what many of us do; and the value of obscurity often seems to have become, well, obscure. Our *ability* to know a fact—a skill, a technique, the meaning of a word, the name of a place, the date of an event, the title of a book, the whereabouts of a lost friend—often transforms itself to a *need* to know; we live in a time when the unknown can become known nearly instantly and effortlessly. It was thirty years ago that the physicist Richard Feynman, stating his unequivocal appreciation for doubt, wrote, "I think it's much more interesting to live not knowing than to have answers which might be wrong. I don't feel frightened by not knowing things, by being lost in a mysterious universe without any purpose, which is the way it really is, so far as I can tell." Feynman died in 1988, and his attentiveness to uncertainty seems almost quaint today, the relic of another time.

It occurs to me, however, that he would have felt at home on Deer Isle, a coastal landscape that is intimate with uncertainty. Elsewhere, water, air, and land tend to be defined by distinct boundaries, but here they seem to compose a trinity of the unknown. Whether it is in the air that thickens with fog instantaneously, in the indistinct ocean currents that stream with both salt and fresh water, or in the imprecise borders of sand and water that are continuously reshaped by the tides, Deer Isle is a view to the imprecise world.

Identity is fluid here. "Always the edge of the sea remains an elusive and indefinable boundary," wrote Rachel Carson. Is it an island if it is attached to the mainland by a bridge? A young spruce tree manages to disguise itself as an antique with the Spanish

moss draped over its limbs. The mats of sphagnum moss, entire meadows of reindeer lichen with their infinitesimal coppery antlers, warped burls formed by the stress of salt air that transfigures the shape of trees into phantasmagoric gnomes—all of these suggest that the plant life here is irrigated as much by the damp air as well as by the more customary underground route system. The dense layering of species that thrive only in this transitional landscape informed equally by between land and water makes for a place of margins, and suggests that this patch of Maine coast is a festival of the obscure. For all the bedrock of the granite coast, nothing seems to stay the same for very long.

Even arriving here has been a process of losing my way. The configuration of the peninsula and islands require so many twists and turns that a kind of geographic vertigo has set in; the sun is never quite where I expect it to be. This part of the Atlantic shoreline is called the drowned coast, a reference to a time in its geological history when glacial melt caused the seas to rise, flooding the Gulf of Maine; islands were created and coastal valleys immersed, transformed into bays and lnlets. Still, the phrase can't help but have some association with the sense of dislocation, submersion one sometimes feels in such an indefinite place. Stuart Kestenbaum referred to it himself on the particularly drizzly, foggy night when we arrived at Deer Isle: "When you come to Haystack, the whole world just opens up in front of you. Even if you can't see it, the whole world opens up." Something in me wants to change the syntax. I like to think what he meant to say was "*Because* you can't see it, the whole world opens up."

Haystack requires that we pay close attention to the natural world. And when we do, we see that it thrives on uncertainty. It begins in the air. The dense banks of fog develop where the frigid Labrador Current from the Arctic meets the warmer and more humid Atlantic Gulf Stream out at sea, then drift in to the coast in a thin and barely noticeable mist which might instantaneously become a thick cloud. Within minutes the clarity of a single afternoon gives way to a thin mist, and that to an opaque fog. The path it takes is as indistinct as its composition. The cloud can come from behind or settle in from above; in the same way that clarity can arrive unexpectedly and breathtakingly quickly, uncertainty can blossom instantly right in front of your very eyes or filter in slowly from afar; it can advance from any direction at any speed.

Looking across the bay from this pocket beach, I have no way of telling whether the spit of land to the west is an island or a peninsula or some jagged continuation of this same shore; even if it could be identified, though, that identity would only shift with the tide. Distance is imprecise, perspective elusive in this play with what is close and what is remote. In the same way that time and distance can transform events or memory reconfigure images, the very air here seems capable of altering the proximity of geographic features, reminding me that the shape of what we don't know changes constantly.

A view to the water is a lesson in the protocol of erasure. I consider going for a swim and could choose as my destination the white buoy, the pink rock, the blue spruce, the yellow lobster float. But then, just as there are a wide range of choices, suddenly there are none, and I am reminded that the world is visible only by degrees. A layer of warm air confronts the frigid temperature of the water, and the pink rock suddenly vanishes. A blue spruce dissolves in the sea air, a sailboat seems to fade instantaneously. A row of pines is replaced by a billowing gray cloud. Images fade or are superimposed upon one

another. In film, such transitions are known as cross dissolves and are often used to signal a shift in time or place, in perspective, mood, or atmosphere. But here, too, at the edge of Jericho Bay is proof that one thing can become another in front of your very eyes.

If the particles of moisture in the air are agents of obscurity, the substance of the water is no less elusive. The Labrador Current mingles with the Atlantic Gulf Stream, those with coastal currents, and those with the many currents created by the river systems of Maine as they drain into the ocean, and all of those then finally churning together in a giant, counterclockwise gyre. How these currents run alongside each other or flow over or beneath one another is a matter of their density, salinity, temperature; warm currents are more saline, cold currents are denser; marine water is denser than fresh. But the character of current is rarely fixed, and how the islands lie scattered off the coast further determines its strength and direction, channeling it in one direction, then another, rendering its path volatile, capricious, irregular.

Swimming in these waters is to experience uncertainty not as thought or feeling, but as pure sensation. The morning I venture in, I am between islands, between tides. The surge of disparate currents as they meet is intensified all the more by the pull of the tide, and even in this little patch of the bay there is no predicting which way the water will want to go. Nor is there any telling where it is likely to be still; where it suddenly deepens or where it might remain shallow remains unclear too. I know that the strength of the current is the result of some calculus of tide, rainfall, the topography of the ocean bed, and the direction and strength of the wind, but immersed in it this afternoon, its particulars remain beyond my grasp. There are times, I think, when our need to *not* know something exceeds immeasurably our need to know.

Nor is there much clarity to this water. At higher latitudes, the sun strikes the earth, or ocean, at a greater diagonal, penetrating the water less deeply—which then forces plant life to converge and concentrate closer to the surface, absorbing more of the light, diminishing visibility and giving the sea it shadowy green color. Open water swimming always demands some degree of surrender; now I wonder—does it make a difference whether you know what you are surrendering to? Or is surrender a matter of degree, and the less you know, the more complete it is? The French poet Gerard de Nerval was known for fastening a blue silk leash to his pet lobster, then taking it for walks through the streets of Paris, answering to curious inquiries that he valued lobsters for being "peaceful, serious creatures who know the secrets of the sea and don't bark." Today, the souvenirs of those secrets are nothing but the colony of translucent moon jellyfish that slip by me. Overhead a great blue heron marks out a random axis across the afternoon sky. Threads of rockweed float past me in that fluid and imprecise grammar of the ocean. I am immersed in the indeterminate world.

Such obscurity, I am certain, answers to that chamber in our brains that exists to archive those volumes of the unknown; there is something in us all that responds to the indefinite world. In 1950 Rachel Carson spoke of scientific endeavors in mapping the ocean, noting that these charts were largely limited to length and breadth. "It is only in thinking of its third dimension that we can still apply the concept of the Sea of Darkness," she wrote. Now, of course, digital mapping has slipped into depths of the sea and is fully capable of measuring its mountains and plains. But a psychic need for the

mysteries of the deep persists. The unseen oceanic world remains a place of mystery in our mythic imagination; it is the geographic feature of the earth that allows us to accept and accommodate the unknown. To believe in this is to believe in the power of imagination.

Certainly it must be what Melville was considering when he wrote this passage in which a young stowaway sailor on the Pequod is thought to have been left behind in the vast ocean:

> The sea had jeeringly kept his finite body up, but drowned the infinite of his soul. Not drowned entirely, though. Rather carried him alive to wondrous depths, where strange shapes of the unwarped primal world glided to and fro his passive eyes; and the miser-merman, Wisdom, revealed his hoarded heaps; and among the joyous, heartless, ever-juvenile eternities, Pip saw the multitudinous, God-omnipresent, coral insects, that out of the firmament of waters heaved colossal orbs. He saw God's foot upon the treadle of the loom."

And there is the matter, too, of the land itself. Even once the fog has lifted, temporarily distinguishing land mass from sky, the contours of that land amend themselves continually. An island is defined as any piece of land totally surrounded by the sea at mean high tide, but it's a definition that easily loses its meaning here. We simply believe what we see—and that is under constant revision. In his book *Islands in Time*, Philip W. Conkling notes there has never been any accurate count of the islands of Maine because

> The number changes too often with storms, history and tides—but mostly with the tides—to make the effort seem worthwhile. If you count the islands at high water, for instance, you end up with a lot that are actually attached to the mainland or to other islands at low tide; if you count them at low water, you count hundreds that disappear ten to twenty feet under at high tide.

Nor is the tide itself really much to count on. Repetition is rarely the exact science we imagine. The mathematics of the tide are imprecise, its rise and fall influenced by the angle of the sea bed, the depth of a channel or width of the bay at its mouth. It's good to be reminded of this—that every time we think we can measure the world, know its shape or how it moves, some new dimension is presented to us to throw our calculations off.

Smaller dramas of the unpredictable play themselves out further inland as well, where the surface of a single granite rock is a place of complex agriculture. Elsewhere it is hard to imagine such stone serving as fertile ground, but here the lichen, each spore a little organic knowledge worker of its own, has managed to inhabit granite. As it attaches, its acid particles eat the surface, creating small cracks and crevices that make way for bits of soil to eventually collect that, in turn, invites other fragments of life: a spongy carpet of peat moss, a tuft of darker Hair-cap, a bed of cloud lichen, a thin mat of Spotted Lungwort, a sumac sapling, a little thicket of wild grass and weed all transform a solid rock into its own improbable garden. Lacy woodland fern has made its bed here as well. You might call it Spinulose Wood Fern. To be even more correct, you might all it *Dryopteris spinulosa*. Things change their names by what you need to know.

It is not unusual to begin something—a book, a painting, a pot, a walk, a recipe, a relationship, a marriage, any enterprise of the mind or heart—in a state of uncertainty. But I wonder now if some like uncertainty isn't also a good place to end up. Possibly, it could even be the objective. I take this idea to metalsmith Gary Griffin, whose work runs to hammered steel cattails, dogwood branches and leaves; the surface of a table manages to rest on blades of grass or stalks of wheat; which is to say, he is someone who has some familiarity with managing the fugitive elements of life. Metalwork, I think, must be an area in which there is only room for decisiveness, but he is attuned entirely to the rewards of uncertainty. "It suggests problem-solving, imagination, curiosity, as if one were on a path, a directional towards a journey," he tells me. "Uncertainty is not comparable to being lost. It is most comparable to exploration. An explorer knows where he or she has been, and has a destination in mind, will sample routes, considering options and opportunities as they present themselves. Evaluation is always present."

Griffin knows how uncertainty can be riddled with expectation and suggests that there are shades of distinction between uncertainty and ignorance. "There is a difference between saying you are uncertain about something and saying you don't know," he says. "If you are uncertain about something, then you still have some idea about the choice of direction you can take. You have some idea about the opportunities that are open to you. Saying you don't know is working without that sense of possibility. It is more absolute. Uncertainty opens things up. Uncertainty is more of an opportunity to reflect upon things, to process them.

"I'll say 'I don't know' as an answer to something. But if I say I'm uncertain, I'm weighing things, things are starting to come to mind. As in hiking, in choosing the correct trail; you have to make a choice. And then you have to ask, 'what is certainty'? That is more closed. Uncertainty is an area of probing, curiosity, imagination. It's a useful term in art making, or in any kind of decision making. Uncertainty is workable. It is a fruitful place for artistic production. Even ending up there. Just as the term "unlikely." If something is unlikely, it could still be true. it could still lead to something. Being unsure about something is like leaving a lit house; you leave it behind you. Your eyes have to get used to the dark, which they do, so you don't look behind you. And then you make your way. I love the idea of leaving certainty behind."

"It is beyond human understanding," we sometimes say of matters so diverse as acts of war, natural catastrophe, or ordinary human behavior. *The Cloud of Unknowing*, a fourteenth-century tract of unknown authorship, puts forth the practice of spiritual faith as a matter of contemplation of a transcendent god that is beyond human understanding. Contemplation is a manner of accepting mystery.

> However much spiritual understanding a person may have in knowing about all created spiritual beings, still by the work of his understanding, he can never gain knowledge of an uncreated spiritual being—which is God alone. By the failure of understanding he can do so, because the one thing in which it fails is nothing but God alone. It was for this reason that St. Denis said, "The godliest knowledge of God is that which is known through ignorance.

Uncertainty is so wide a condition its shades range from hesitation and ambiguity to doubt and disbelief and incredulity, the difference between them as changeable and as imperceptible as the changing fog that comes in off the ocean. It has its own aggregates; it can accommodate dread, as it did, for example, in John Wesley Powell's 1869 exploratory passage down the canyons of the Colorado River where fears of the unknown in the uncharted river exceeded by far those fears that had been identified and named. Living in perpetual suspense of what lay beyond the next bend in the river was more exhausting to the spirit than the actual challenges of roiling water, submerged rock, animal hunger. "Uncertainty sucked out their strength and resolve more surely than any other hazard, even if, in the end, nothing happened," biographer Edward Dolnick writes. "To travel in dread is worse than to face even the grimmest reality."

But uncertainty can just as easily be infused with hope, expectation, and probability; it is about being receptive; it contains its own archives of anticipation. It brings us to a state of possibility. Ceramists confront this every day. "You learn not to be surprised," says my friend Polly Myhrum, a potter in New Hamburg, New York. "Clay can warp in the bisque kiln, or crack. You don't always know why. Or think of the spout of a teapot. It's narrower at the top than the bottom. So you let it dry, you put it in the kiln. Clay relaxes at high temperatures. If it has been twisted, it can untwist. I fire four or five kilns a week, and watching what happens gives me a real humility. You just have to be able to open the kiln and say, "Look at that!"

She has learned to love her mistakes, cataloguing them with all their imperfections on a separate shelf in her studio: two cups that toppled onto each other in the kiln are now welded together in perpetuity; a small three-inch vase that collapsed on to a plate with the image of a woman on it—the vase now protrudes from the center of the woman's forehead. "Who could have come up with that," she asks. "The kiln heats to 2,400 degrees. I can't even imagine what happens at that temperature. In pottery, you can only control things up to a point. And this is why I love teaching kids. Kids can take real pleasure in this process. 'Oh, look at that,' they say. Adults want to know why things didn't come out the way they had planned, the cup just right or the glaze perfect."

Her reception towards surprise echoes Griffin's suggestion that uncertainty is an ally of discovery; and that making something is always a pursuit of the unknown. And each of them also evokes the words of Winston Churchill some half century earlier: "Without a measureless and perpetual uncertainty, the drama of human life would be destroyed." But it is not just the drama of human life, but of human work—the glazed pot, the steel gate, the glass bowl could not take their form without some nod to the unknown. Craft, the engagement with material process, by nature recognizes uncertainty for the capable partner that it is. Craft is about the transformation of substance; it is about the possibility of one thing becoming another and about accepting ambiguity. And if uncertainty is a liability in the age of information, in the world of craft, it is a material reality, an opportunity, a chance.

All too often we associate uncertainty with risk, but there is a world of difference between them. While loss may be implicit in risk, uncertainty is simply a state of limited knowledge. It comes with being human to know that uncertainty attends not simply the stock market and weather, but what we do, what we say, when we say it, what

we think, how we feel. It's the kinetic energy in the air before a thunderstorm, the sky full and crackling, the atmosphere infused with expectancy. "Nature hates calculators; her methods are saltatory and impulsive." Emerson wrote in his essay "Experience," reminding us continually of the value of those forces that are random, volatile, erratic. "Man lives by pulses; our organic movements are such; and the chemical and ethereal agents are undulatory and alternate; the mind goes antagonizing on, and never prospers but by fits. We thrive by casualties." And certainly such casualties are familiar to people who make things, who traffic in clay, wood, thread, paper, metal, glass.

Human curiosity is unshakable. But I wonder if our ability to answer to this curiosity almost instantly has caused is to lose something. It is possible, after all, to be ambushed by meaning. My children learned this when they were young. They grew up surrounded by information—every shoe had a logo, every t-shirt a message, every baseball cap some icon of expression. It's no surprise they grew up saying, "Too much information." And for a child to say too much information seems as though there has been some betrayal in the delivery of knowledge.

There is an argument to be made for doubt, for hesitation, for some practice of inquisition that cannot be answered instantaneously. Graciousness to the unknown is a keystone to Buddhist practice; implicit in the acceptance of the unknown is the ability to inhabit the present moment. Or being present for openness. In her meditation on the subject, Pema Chodron writes, "We can bring ourselves back to the spiritual path countless times every day simply by exercising our willingness to rest in the uncertainty of the present moment—over and over again." Which is also a way of saying that uncertainty doesn't belong to any particular precinct; it doesn't inhabit any established place in our lives, any single book, week, relationship, meal, trip, time, experience, thought, feeling. Rather, it is everywhere, like the fog, like the moss, like the current. Maira Kalman's book about uncertainty has an index. The list of entries for the letter O, in its entirety, reads: obituaries, old, *The Old Man and the Sea*, old people, Omaha Beach, one thing leads to another, operas, ottoman. Uncertainty is undiscriminating and random.

This small stretch of Maine coast reminds me of how it is entirely possible to be at home with all those things that remain uncertain. If literature, spiritual doctrine, human experience, the illustrated account of one year in a woman's life are not enough to convince us of its value, then we might be persuaded by the chemical and ethereal agents of the coastline itself, the sand and the rock, the ocean currents, or the composition of the air. This is a place where the natural world, in its very condition of growth and change and forward momentum, seems to thrive on uncertainty. And possibly, I think, uncertainty *can* be practiced in the same way that patience can. If we can recognize it as a minor force in the day to day—the weather, the traffic, the random encounters, the unexpected call, all the unknown minutiae that factor into our lives every day—maybe we can find a way to accommodate it as a larger governing force in our lives. The uncertainty, for example, about why certain partnerships last and others don't, or how a teenage child can emerge from the maelstrom, or when the tumor will shrink. Or the certainty of death that is matched by all the grand uncertainties of when it will come, how, and what may follow.

We say things, we make things, we do things. And so much of what we say and make

and do demands knowledge—an intimacy with material, the acquisition of skills, the ten thousand hours of doing a single thing until you know every shape a word, a cup, a blade, a chair can take, an understanding of texture and shape and tendency, knowing what will happen to things when you touch them and when you don't, what happens when you leave it rough or polish it until it shines, understanding the passage of time and the difference between a minute and an hour and a week and a year and what all of those will do to a length of wood or a piece of paper or the sound of a sentence. Knowledge, practice, repetition, familiarity, how to bend or shape an iron rod, a clay slab, a paragraph—our lives and work depend on this.

And yet. "What's in your head—throw it away / What's in your hand—give it up / Whatever happens—don't turn away from it," admonished Abu Said Abil-Khair, a tenth-century Persian spiritual master. Griffin puts it a little differently: "I have begun to think about confidence as having a direct relationship to uncertainty as related to craft. As one develops in their craft, the confidence inspired by past success buttresses one's move into uncertainty."

Maybe in the end what we know is based on some elusive rhythm of clarity and obscurity; maybe human intelligence depends on some choreography of the sure and unsure. Maybe what you know can converge with what you imagine.

The unknown outcome is a gift. A spruce sapling grows out of a granite rock. What looks to be a cluster of hemlock trees becomes a white cloud. What I thought of as a stretch of sand is now water. There is no telling where the current is running. I know there is a manner of trusting doubt, and sometimes I like to think of uncertainty as an surprisingly dependable companion, in much the same way Nerval strolled the streets of Paris with his marine pet. Here, though, it is enough to listen to the sound of the lobster boats going out in the early morning or to watch the fog drifting in. One need not be equipped with blue silk leashes nor visit foreign cities to recognize uncertainty as a steady and reliable ally.

REFERENCES

Berrill, Michael and Deborah Berrill. *A Sierra Club Naturalist's Guide to the North Atlantic Coast, Cape Cod, and Newfoundland.* New York: Random House, 1982.

Carson, Rachel. *The Edge of the Sea*. Boston: Houghton Mifflin, 1955.

Carson, Rachel. *The Sea Around Us*. New York: Oxford University Press, 1951.

Chodron, Pema. *Comfortable with Uncertainty.* Boston: Shambhala, 2002.

Conkling, Philip W. *Islands in Time: A Natural and Cultural History of the Islands of the Gulf of Maine*. Camden, Maine: Down East Books, 1999.

Emerson, Ralph Waldo. "Experience," from *The Portable Emerson*. New York: Penguin, 1946.

Kalman, Maira. *The Principles of Uncertainty*. New York: Penguin, 2007.

Melville, Herman. *Moby Dick*. New York: Random House, 1950.

Spearing, A. C., translator. *The Cloud of Unknowing and Other Works*. Penguin, 2001.

Akiko Busch writes about design, culture, and the natural world. She is the author of *Geography of Home: Writings on Where We Live* and *The Uncommon Life of Common Objects: Essays on Design and the Everyday*. Her most recent book of essays, *Nine Ways to Cross a River*, a collection of essays about swimming across American rivers, was published in 2007 by Bloomsbury/USA. A contributing editor at *Metropolis* magazine for twenty years, her essays have appeared in numerous national magazines and exhibition catalogues. She has taught at the University of Hartford and Bennington College and has appeared on public radio in the U.S. and Canada. Currently, she a regular contributor to *American Craft* magazine and teaches at the School of Visual Arts in New York City. She lives in the Hudson Valley with her husband and two sons.

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Haystack Mountain School of Crafts
P. O. Box 518
Deer Isle, ME 04627-3503
www.haystack-mtn.org