

All About Movement:
Honoring Rachel Carson With and Without a Pen
By Stella M. Čapek

Presented at the New-CUE
— Nature and Environmental Writers, College and University Educators —
Fifth Environmental Writers' Conference
In Honor of Rachel Carson
Booth Harbor, Maine, 10-13 June 2008

TEXT PREPARED BY THE THOREAU INSTITUTE AT WALDEN WOODS
WITH PERMISSION OF THE AUTHOR
NO PIECE MAY BE REPRODUCED WITHOUT PERMISSION OF THE AUTHOR
©2008

All About Movement:
Honoring Rachel Carson With and Without a Pen
— Stella M. Čapek

In the darkness, we take our places on stage. The lights come up, the music starts, and in spite of my fear, the music is already pulling us along. I reach out my foot, keeping as much contact with the earth as possible, resisting the pointed toe of ballet training. I try to keep my body loose and level, concentrating on remembering the movements, and focusing on a word that our choreographer has given us: on-goingness. “Experience these movements,” she says, as “a total cellular commitment to on-goingness.”

“On-goingness.” That word wasn’t in the dictionary. Our choreographer invented it. But we all knew that it was about more than dance. It connected us to times in our lives when we decided not to give up, to keep moving forward, no matter what happened. It wasn’t hard to call up that feeling, because our bodies knew it. It was as deep as the pulse of life. “Cellular commitment” — that was a more mysterious phrase. It hinted at absolute concentration and determination, a level of experience so deep that we barely knew how to imagine it. We weren’t used to thinking about movement and intention coming from *there*. Paying attention to the tiniest origins of things would be connected, it seemed, with everything else, for better or for worse. Excellent performance advice, and applicable to much more than dance. It invited us to take a dive into the microscopic and to resurface into the immensity of “everything connected,” a place well known to ecologists. It helped explain how a nature lover, environmental sociologist, and occasional dancer with a hefty dose of stagefright — but an even heftier dose of love for Mother Earth — found herself on a stage with other dancers. And it evoked the symbolic presence of someone who embodied the very essence of careful attention and holistic vision: Rachel Carson,

with her total “cellular commitment” to stay on task, writing *Silent Spring* even as her own cells were unleashed in the cancerous dance that would take her life. I should explain how we all came to be sharing a stage.

I happen to love dance. It’s a somewhat inappropriate love, since I’m by no means gifted in that direction. But love is still love, and love gives birth to connection. So when my friend, choreographer Lucy DuBose, invited me to participate in a breast cancer dance project in 2007, I said yes. In the academic world, everything revolves around words. The time I spend there honors my own love of words. But the words also keep us chained to our desks, our laptops, our bad posture, our unsustainable schedules. Writing inhibits the healthy movement of our bodies, whether into the outdoors, or into spaces where the written word isn’t at the center of experience. So the chance to move something other than words was very appealing. And after all, wasn’t dance a kind of calligraphy, a chance to “write on the air” in a different medium? Maybe this thought would only occur to a word-centered person like me, but I liked its passport quality, its invitation to merge the work of pen and of body, its charting of possible new pathways.

Lucy creates nontraditional dance pieces that expand the notion of what dance can be and whom it can include. This one would be a collaboration between three choreographers, a dance class, and community members.¹ It would also raise some money for two organizations--The Witness Project and Esperanza y Vida--that do health outreach to African-American and Latina women. I liked the sound of it right away. And the “hook” wasn’t only my love of dance—it was the chance to connect my environmental sociology research with performance. I’m not a breast cancer survivor, but I know too well the silence wrapped around women’s environmental health issues. I notice how environmental topics are conspicuously absent in public events focused on breast

¹ The three choreographers were Lucy Du Bose, Melanie Hymel, and Ameria Jones.

cancer. It's no accident. After all, Rachel Carson, who faced down an industry-sponsored campaign to discredit her work in the 1960s, was being attacked *again* in 2007, by representatives of the chemical industry — the kinds of people who like to use the buzzword “junk science” on their websites, and who stand to lose a lot of money if we connect the dots between toxic chemicals and health. Of course, they knew she was on to something, and are still working hard to silence it many years after her death. I welcomed the chance to bring the environment back into the picture.

The dance project would weave together dance pieces and women's survival stories from the local community. I hoped to come up with some words that could include the environment in the story, and at least a bit of what Rachel Carson knew — some appropriate combination of lived experience, science and art that wasn't too heavy handed. I hoped, too, to take part in one of the dance pieces, and to overcome some of my fear of public performance. The truth is that there aren't many people in this world who can coax me onto a stage. But what I knew about environmental pollution and health made me want to be there. So when the dancers and choreographers gave me the green light, I was thrilled and challenged, both. And Rachel Carson, who practiced the fine art of balance so well, was immediately on my mind — for her science, and in no small measure, for the poignancy of her own death from her carefully concealed illness, breast cancer. As time went by, while the dances and narratives were being created, I realized that she also taught us much about *movement*. But more of that later.

I started noticing environmental issues as a sociologist after I moved to Arkansas to take a teaching job. A friend of mine was working on a news story about 29,000 leaking barrels of dioxin stored at a site near the Jacksonville Air Force Base in central Arkansas. The barrels were abandoned near a residential neighborhood at a facility that once produced Agent Orange for the Vietnam War. The same company later produced herbicides — a military to civilian segue

that Rachel Carson knew well. After a number of companies used the site and the toxic chemicals became a liability, the most recent owner abandoned it and fled under bankruptcy protection, leaving the government to deal with the mess. The temporary solution was to package the corroded barrels in ever larger barrels, but it was only a matter of time before they, too, would leak. It was an absurd solution for a frightening problem.

Seeing the dioxin battle up close was a kind of initiation. I learned about so many things: the politics and secrecy around dioxin nationwide, the harassment of environmentalists who challenged chemical corporations or government agencies, the deeply wounding divisions in communities over the right course of action, the impossibly drawn out legal battles, the high-stakes “tug of war” over scientific assessments, and the silent desperation of people trapped in houses that they couldn’t sell. I was most haunted by those who were sick with mysterious health conditions that neighbors whispered about and kept track of but that doctors and various experts dismissed as unreal. In short, found out too much to ever turn away from environmental issues again. Over the years, I documented quite a few such stories, and I gained respect for the courage of those who spoke out--people like Rachel Carson, who knew it all much earlier, and my contemporaries who followed in her footsteps.

Rachel Carson has been a personal hero of mine for a long time. I’m ashamed to admit, though, that although I knew about her battle to get the truth out about the reckless overuse of DDT and other synthetic chemicals, and although I referred to *Silent Spring* in my environmental sociology classes, I had never read more than small excerpts of her books. And actual words, as we all know, matter. So as part of my preparation for the dance project, I decided to give *Silent Spring* a read, cover to cover. I was lucky enough to be on a sabbatical leave from my college in the fall of 2007, and *Silent Spring* traveled with me to Cape Breton in Nova Scotia, where I read chapter after chapter in a room looking

out on an ocean harbor. Sometimes the intensity of the words and the litany of destruction was too unbearable. I created intermissions, watching the birds arrange themselves on the sandbar according to time, weather, and tide. I walked along the shore, enjoying the sea air and the company of some beautiful rocks. Alone in the house, I read and thought and practiced the simple dance movements on the bare floor. The fall equinox came and went, bringing tides that filled up the harbor like a large bathtub. In the mornings, seagulls sat on the roof of the shed, cormorants arranged themselves like wine bottles on an old piece of pier in the water, and large black crows strutted in the bright green grass just outside the windows. Some days were pure white, a soft wall of fog around the house, and others were full of dazzling light from the sky and the water.

I knew what I wanted to be writing about, up there, and it was those very things. I wanted my words to linger over images like the maroon undercoat of the sea under a brilliant blue sky, or to follow the shape of the wind paths carving up the harbor waters as they turned steely gray under oncoming clouds. I wanted to write about how the house, a simple box with a peaked roof, shed comforting yellow squares of light from its windows onto the grass when I stepped outside at night, and how the full moon created a double shadow, softer and bluer than the one from the light on the road behind the house. I wanted to write about walking to the end of the newly restored wharf at night to listen to the water and see the stars, or the eagle that flew by at eye-level when I opened the front door, or the surprise of cranberries in the “back yard,” the roar of the open ocean, and my never-ending conversation with found objects and rocks on the beach. I wanted to write about good neighbors. And I wanted to write something about my inner life, and my search for balance at age fifty-four. Those things almost wrote themselves.

More difficult, sometimes, was returning to *Silent Spring*, sandwiched between the joy of reading novels again, journal and other writing, and hiking

around Cape Breton. I always did return. But I didn't want to read or write about environmental illness and destruction. I wanted to enjoy being a nature lover, and to focus my words there. So I had to face the question—and not for the first time--what does it mean to be a nature lover? Of course, I knew that the right answer was that there was no one right answer. The real question was, what kind of nature lover did *I* want to be? And what had other nature lovers taught me about the answer to that question? Rachel Carson, for example. Now that I was reading her actual words, I knew that the governing metaphors of her work involved subtlety, interconnectedness, humility, and always, a full panoply of facts. It involved seeing what she called the fabric of life. Translating science into accessible public knowledge was her vocation. And what was mine? An environmental sociologist who liked documenting people's stories and writing about intersections of culture and nature, but who felt a secret relief when she could let herself write about the way that a bird looked, or the ocean, or the soft green lungs of a rainforest—her place was less clear. Did I really want to leave behind the sociological knowledge about power and culture and money and struggles over environmental justice? The answer turned out to be no, or at least--not completely. I couldn't turn away from the bigger picture, ecological *and* sociological, poetic and scientific. I remembered hearing an interview with novelist and political writer Arundhati Roy, who talked about her fiction and her political essays being all of one piece, stories that needed to be told. Fiction had an easier birth, flowed more freely and joyfully, but the political critiques were crying out to be written, and were simply art turned in a slightly different direction. I liked that.

And speaking of art, thank goodness for the dance, and the way that it lifted me up off the page and into a creative three-dimensional space with others. Sometimes movement takes up where words leave off. Our dance project was a celebration of movement, and it aimed to set healing in motion. Each piece was

named for a feeling, something that could be expressed from head to toe in bodies moving through space. The range, emotional tone, color, and choreography of each one varied, but all suggested mutual support, interconnectedness, not having to go it alone. How different this was, I thought, from Rachel Carson's own difficult choices. I hoped to make her legacy visible in our project, and to suggest to dancers and audience that the story of breast cancer would be unfinished without including the health of the environment. I wanted to make the statement gently and appropriately, not to impose it in a way that didn't make sense to the women who had the experience. At the same time, how could such an invisible and imperceptible process ever make sense to the woman inside the body? Damage through chemical exposure is, after all, something that a writer recently called "the most intimate form of trespass."²

To help make the invisible visible, what could be more appropriate than Rachel Carson's translations of the science of the microscope into publicly accessible language? In the 1960s, she warned about a "drastic change in the nature of the most serious public health problems." Even more tellingly, she wrote, ". . . there is also an ecology of the world within our bodies. In this unseen world minute causes produce mighty effects; the effect, moreover, is often seemingly unrelated to the cause, appearing in a part of the body remote from the area where the original injury was sustained. . . The lack of sufficiently delicate methods to detect injury before symptoms appear is one of the great unsolved problems in medicine."³ She spoke of the soil as something alive, as alive as the bodies of the dancers. She lamented the barrage of synthetic chemicals that were "hurled against the fabric of life — a fabric on the one hand

² From J. Peter Myers' speech to the United Nations Commission on the Status of Women. Myers is the co-author, with Theo Colborn and Dianne Dumanoski, of *Our Stolen Future: Are We Threatening Our Fertility, Intelligence, and Survival? — A Scientific Detective Story*. Reprinted in the Endometriosis Association Newsletter (24, 5-6, 2004).

³ These quotes appear on pp. 187-189 in Chapter 12 of *Silent Spring*, "The Human Price."

delicate and destructible, on the other miraculously tough and resilient, and capable of striking back in unexpected ways.”⁴ Her language was scientific but always intimate. She knew, too, about the ideology and the power relations that kept us from seeing the complex fabric of life, even though it was all around us. We still have trouble seeing it today.

Somewhere in the process of rehearsing the dance project, I realized that all along, Rachel Carson was teaching us about the importance of movement. She used all of her art and science to uncover the paths of toxic chemicals like DDT, tracing their flow and astonishing persistence as they migrated through ecosystems and into our animal and human bodies. Her gift was to make visible the interconnected fabric of life, mapping how synthetic chemicals actively worked at cellular destruction, engaging in fantastic masquerades and elaborate games of deception that could turn a body’s immune system inside out, send it chasing after the wrong villains, or simply unplug its defenses. And alongside these details about cells, oceans, earthworms, trees, and birds was a love song to the earth and a summons to challenge a destructive pattern. A reader responding to that call would need plenty of good science, yes, but persistent and brave movements of another kind. In a word, on-goingness.

In the end, the exact words that I used in my allotted five minutes—equal to the time given to the other community stories—aren’t so important for the story I’m telling here.⁵ I linked Rachel Carson, birds’ songs, and women’s songs with our dance, and I gave some research facts about chemicals and breast cancer and new links to environmental illnesses. I celebrated the courage of those who refused to be silenced about this. The dancers helped me weave it in organically. I shouldn’t have worried—in the end, it all turned into art, and the sociology was folded right into it. The art wasn’t so much my doing. It happened in the

⁴ Rachel Carson, p. 297, Chapter 17, “The Other Road.”

⁵ See the appendix for the actual words.

collaboration. My contribution was small, but the environmental frame took the message to another level. It “clicked” for the dancers and for some who had never thought of the connection. And as if to underline its relevance, on my way to our last performance, I heard on NPR that a new study showed that women and girls who grew up in the 1950s in the “DDT era” had a five times as high likelihood of getting breast cancer.⁶ All the more reason to speak out, to write with our pens, to move with our bodies, to find new ways to fight for our health and the health of the planet.

Away from the constraints of performance, I thought about how everything depends on learning about movement, and seeing connections between different kinds of movement: how energy moves through our ecosystems and through the smaller universes of our bodies, and how energy must move for healing to take place; movement across a stage, as when dancers explore connection and disconnection; movement of previously unspoken words to the lips, or unwritten words to the pen or computer; flows of social support that move private troubles into the realm of social solutions; learning to honor what moves us on the inside; finding out how to move with nature through building design; turning away from things that are dangerous or destructive of

⁶ According to Janet Gray, editor of “State of the Evidence 2008, Executive Summary,” a long-term health study of the effects of exposure to DDT on girls and women found that “Exposure to DDT during childhood and early adolescence was associated with a fivefold increase in risk of developing breast cancer before the age of 50.”

ourselves and our habitat. In fact, to change the world and to support a healthy environment requires a sure grasp of calligraphy and choreography of every sort – how “nature” writes particular patterns into out cells, and how, in our everyday lives, we might repair that fabric in common.

As for me and my battle with stagefright, I made it through the performances, but I can’t say I lost my fear. There was a moment, though, in one of our early work-in-process performances when I had an experience that kept me going. In our dance piece, we had some individual choices, like when to walk toward the audience, or not. I didn’t want to face the audience, but I made myself do it. Just as I turned, I met the eyes of a woman in the audience, one of the survivors. It reminded me that we were dancing about matters of life and death, and that my fears were trivial next to the honor of being part of such a project. The company made me feel humbled and inspired—from the beautiful dancers to Rachel Carson herself, and even the tough lessons of environmental sociology.

Months later, safely off-stage, I cracked open some eggs to poach, organic ones, finally available locally. I almost burned my hands on the steam coming off the boiling water because the eggshells were so unexpectedly thick and resistant. That strength, the opposite of the thinning eggshells that Rachel Carson observed, signaled some hope for a future that can learn from its past—if only we have enough time. Shortly after that, still thinking about all of this, I traveled to Costa Rica to teach. At night, insects walked on my notebook pages and the screen of my laptop, inviting themselves into a room that never quite closed out “nature.” A guide in the cloud forest talked about global warming and the seasons affecting the growth of avocado trees, the favored food of the quetzal. He used the word “choreography” to describe how the plants and the birds moved around in the forest. Of course his choice of words caught my attention. It reminded me that the next step is to take our understanding to a

global level. I believe that Rachel Carson would be right there with us, had she been given the chance, showing us another dynamic thread in the fabric of life, another step in the dance.

APPENDIX

The words that I wrote and read as part of the dance piece:

In my work as a sociologist, I come across a lot of stories. One of stories we don't get to tell enough is the story of the earth and how its health connects with the story of women with breast cancer. In her book Silent Spring, Rachel Carson was the first to write about DDT and the careless overuse of synthetic chemicals. She knew that DDT wasn't only killing songbirds and wildlife, but making its way into the bodies of human beings—something that a recent writer has called “the most intimate form of trespass.” Breast cancer would take her own life, secretly, since she didn't want the public to know.

A bird's song, a woman's song and the song of the Earth are connected. Since Rachel Carson's time, we have studies that show that women with breast cancer often have a higher amount of synthetic chemicals like PCBs in their systems. Although the chemical industry has worked to silence this research, we have good evidence that these chemicals accumulating in our bodies can be linked not only to breast cancer, but to conditions like endometriosis, asthma, birth defects, and learning disabilities in children. Because silence about these things harms us, we have a growing environmental health movement in this country and worldwide. We also have dance projects like this one.

Song is the opposite of silence. Dance is connected to songs--songs of truth, songs of pain, songs of anger, songs of resilience. Dance is a way of singing out into the silence in a universal language. When words fail us, when

we're not allowed to speak, or when the truth just makes us tired, dance is still our common language.

References:

Carson, Rachel. 1962. *Silent Spring*. Boston: Houghton Mifflin.