Afterword

Climate Change and Poetry of the Pacific Northwest

Climate change is the dominant environmental issue today, putting all else in the background. Its acceleration of the extinction of species and potential to inundate island nations and many of the major cities of the world and turn some of the world's agricultural lands into deserts, should give us pause. Bill McKibben gives a brief overview of why we should pay attention:

> So far, we've raised the average temperature of the planet just under 0.8 degrees Celsius, and that has caused far more damage than most scientists expected. (A third of summer sea ice in the Arctic is gone, the oceans are 30 percent more acidic, and since warm air holds more water vapor than cold, the atmosphere over the oceans is a shocking five percent wetter, loading the dice for devastating floods.) Given those impacts, in fact, many scientists have come to think that two degrees is far too lenient a target. "Any number much above one degree involves a gamble," writes Kerry Emanuel of MIT, a leading authority on hurricanes, "and the odds become less and less favorable as the temperature goes up." Thomas Lovejoy, once the World Bank's chief biodiversity adviser, puts it like this: "If we're seeing what we're seeing today at 0.8 degrees Celsius, two degrees is simply too much." NASA scientist James Hansen, the planet's most prominent climatologist, is even blunter: "The target that has been talked about in international negotiations for two degrees of warming is actually a prescription for long-term disaster."

Such consequences if we don't severely cut our greenhouse gas emissions are reported frequently. Yet most industrialized nations are increasing their output of greenhouse gasses, and most people are continuing to drive, fly in airplanes, and use fossil-fuel generated electricity for lights, refrigerators, computers, and our other appliances.

Conserving energy may be a sign of personal virtue, as Dick Cheney once famously said, but it will not mitigate climate change unless it becomes the basis of a comprehensive energy policy unlike any the United States has ever had. Kirkpatrick Sale points out that personal consumption counts for little in the larger scheme of necessary environmental changes: "The whole individualist what-you-can-do-to-save-the-earth guilt trip is a myth. We, as individuals, are not creating the crises, and we can't solve them." The vast majority of all energy consumption—around seventy-five percent, Sale says—is by industry, agriculture, and government, especially the military. And they won't voluntarily stop aggravating the climate change crisis because it would require a complete rethinking and reordering of our economic system.

The only way our economic system is likely to change is through ordinary people demanding it. And there won't be strong enough demand for action unless more people become concerned. In the past twenty-five years we've learned that educating people about the magnitude of the climate change threat is ineffectual—everyone has heard the warnings, yet most people dismiss the issue and continue as always.

How can poets counter indifference and denial, and contribute to the effort to make the public understand the magnitude and complexity of climate change? What role can poetry play in bringing climate change to the forefront of readers' consciousness and convince enough people to demand a total reordering of our economic values? A variety of approaches might incorporate climate change ideas in poetry.

One necessary way to incorporate an awareness of climate change into poetry is to use the terms that name the causes, consequences, and phenomena of climate change. The recent news that Rick Scott, the governor of Florida, banned his state Department of Environmental Protection and other agencies from using the words "climate change," "global warming," "sustainability," and, particularly significant for Florida, "sea-level rise," indicates the power of simply naming the issues. We are not yet in a world of complete Newspeak. We have a powerful and sometimes frightening vocabulary at our disposal.

A second more important way to bring climate change into poetry is to write "poetry of witness" by describing events that are probably related to it. Such poems convey two unequivocal ideas: *These things are happening. They are not normal.* The most accessible of climate change events is manifest in the weather. The adage that "Climate is what you expect, weather is what you get" suggests the distinction between the abstract idea of climate change and the concrete, sensory experience of weather that we can put into poems. Climate is a conceptual pattern discernable over long periods of time. Weather is our reality—immediate and felt and providing images. The contrast between what's usual and the weather we're getting now—earlier springs, fiercer storms, heavier rainfall, dwindling snowpacks, more extreme drought—is apt material for poetry. A poem needn't assert cause-and-effect relationships because no particular weather event can be ascribed to global climate change. But describing major unusual weather events that match the pattern of climate change predictions can suggest that climate change is here and we must act.

For example, Charles Goodrich in "Un-making the Sky" addresses one element of climate change—what we are doing to the atmosphere—by playfully running through creation, until the last line wakes us to the situation we face:

> Our sky's blue
> was an afterthought
> of the flowers and trees
> respiring oxygen into the atmosphere.
>
> That brought improbable insects along
> to shuttle their pollen.
> And once there were bugs to eat
> birds became thinkable.
>
> Everyone who was paying attention
> knew humans would be along soon
> but no one imagined the sky
> would go gray.

The poem uses words related to cognitive activities that we should engage in more while considering the subject matter, such as "afterthought," "thinkable" "paying attention," and "imagined."

Jenny Root's poem "Money to Burn" published in our spring 2009 issue describes an activity predicted to become more and more common as droughts increase and rainfall patterns change—fighting forest fires. Another poem in the same issue, Daniel Marlin's "Someone Should Tell You," describes an oil spill on San Francisco Bay while addressing flocks of birds migrating south, warning them not to trust their millennia-old memories or genes that have led them to the bay, because the waters

> will trap you
> in a web of grease and poison,
> weight the hollow bones of your wings,
> bleach your strength away,
> leave you gasping.

Humans used to kill the birds with "weirs and arrows," presumably to sustain human life, but now, the speaker explains to the flocks, "Now, killing the earth, we murder ourselves." When an appeal to ethics fails, and people do not lose sleep over species daily going extinct, it is time to appeal to self-interest, and point out that we humans are pushing ourselves toward extinction. None of these poems scold or chastise anyone for bringing about these situations. They simply point us toward the occurrences, and let the reader make the connections.

One of the big questions of climate change is how fast species can adapt to changed environments or move to environments in which they can survive. Already many species of fish and other sealife in both the northern and southern hemispheres are moving away from the equator and toward the poles. Trees have a harder time moving, though they do move, often by dispersing seeds which land on slightly more favorable ground. Elizabeth Kolbert in *The Sixth Extinction* describes one researcher who has been plotting the progression of trees on mountain sides in Peru. In what he calls "the Birnam Wood scenario," trees have been moving upslope to where the temperatures that they're accustomed to now are. He has found that global warming

is driving the trees uphill at an average of eight feet a year, though one species was moving at the rate of one hundred feet a year, while others were hardly moving at all. Bill Siverly's "Mortality" in this issue plays with this idea of trees needing to move either to higher elevations or toward the poles:

> Bare winter alders hover like ghosts in dim twilight.
> They cannot move north as fast as those who drive cars.
> All over the globe we are driving climate into free fall.

The coastal Pacific Northwest has its share of ongoing climate tragedies that might be put into poems—sea-star wasting disease is wiping out thousands of starfish, eel grass is dying, salmon is increasingly diseased (partly due to disease-ridden salmon farming operations and partly due to the warmer water being friendlier to pathogens), shells of pteropods (sea snails such as the sea butterfly) are degrading, and sea urchins are increasingly diseased.

A third approach to bringing climate change into a poem is to explore our psychological responses to the new world we're living in—*Eaarth,* McKibben calls it, because the earth is not longer exactly what we're living on. Perhaps the most pervasive psychological response to the undeniable facts of climate change is denial of their significance, or cause, or consequences. We see it in the governor of Florida's ban on the words enabling climate change discussions. What prompted the ban? A belief that if we don't talk about it, it will go away? Worry that knowledge of sea-level rises and more violent storms might scare away tourists and investors along the vulnerable coasts? A wish to avoid panic?

In her book *This Changes Everything: Capitalism vs. the Climate,* Naomi Klein analyzes the assumptions and values of those who deny climate change. She comes to the conclusion that the predicted consequences of climate change so contradict the world view that humans can dominate nature that those with a great stake in our centralized industrial economy built on remarkable engineering feats cannot believe that climate change can't be made to go away with the right technologies employed on ever more massive scales. Humans invent explanations

to account for unpleasant facts that don't fit into our concept of reality, as Thomas Kuhn shows in his discussion of historic paradigm shifts in *The Structure of Scientific Revolutions.* Furthermore, when our economic security is threated as well as our intellectual concept of reality, we hold on more tightly to our beliefs. We are all susceptible.

Poetry is uniquely suited to explore the recesses of the psyche, and seldom has the need been so great to understand why we are behaving as unresponsively as we are. The speaker in Pepper Trail's "Killing Barred Owls" expresses in both action and word the futile attempt to deny that the world is changing. The speaker addresses the owl:

> I squeeze the trigger, and you explode
> Like a burst pillow, and it takes a long time
> For all the feathers to settle, my ears to stop ringing
> The space you filled now empty, available
> If there was only a Spotted Owl to fill it
>
> This is the way we want it
> We want it like it was before
> Before we did everything that we did
> So now this is our plan, to do this, I guess
> Forever

That is increasingly our wish: "We want it like it was before." And as things stand now, we will continue our ineffectual efforts, even though it's obvious they're too insignificant to stop the changes already set in motion.

Profound discouragement about the future and depression is another typical response to understanding the most accepted ramifications of climate change. College students studying climate change in environmental classes often adopt a pessimistic view of the future when it becomes apparent to them that catastrophes on a scale we've never seen before are likely ahead. Indeed, it's distressing to read nature poetry of the past, filled as it is with tortured souls taking comfort and strength in the permanence of the natural world, with its predictable cycle of seasons, and every species migrating or blooming or

courting when it should to continue the cycle of life. That permanence is less and less available to take comfort in when the snows or rains don't arrive, as snowpacks worldwide decrease and areas of severe drought increase, or when snows or rains arrive in such record amounts that cities the size of Boston must shut down under many feet of snow, or towns like Oso, Washington, are buried by earth that can't hold any more rainwater. Poetry has traditionally provided comfort in time of need. How can it provide comfort for us in the face of the discouraging facts of climate change? One way to explore this psychological response is to put the world we now have into a more expansive context as it changes. In "Taghum Bridge," appearing in the fall 2009 *Windfall*, Tom Wayman implies the end of our automotive ways when he presents his joy at the way things have been:

> Another road poem,
> you complain? But there were only two or
> three generations when the highway
> was cheap enough we could step into a car
> any morning and drive
> across the world. Why shouldn't I celebrate
> an ecstatic stream of air
> that poured in from an open window
> to laugh around the cabin
> as just-greening fields raced backwards
> along the shoulders?

Wayman recognizes our car culture's implication in climate change by listing the woes—again, tellingly, all in past tense:

> Of course the pavement
> sealed off the earth, our exhausts
> smoked as they climbed the long grades, carburetors
> and pistons pumped oil from the ground. Tens of thousands
> of us
> were crushed each year inside metal
> twisted from too sudden a stop.

It's a bittersweet farewell to a product that symbolizes the mistakes our industrial culture has made.

Charles Goodrich's "The Terravores" also provides a long view of the way we're living now, with a similar, more humorous celebration of CO_2-producing machinery:

> I'm going to miss them,
> those lumbering yellow road graders,
> bulldozers, and belly scrapers
> grazing at the edge of town.
>
> When the gas is gone, I'll miss
> watching the little boys
> point and squeal with excitement
> as the big machines unerringly
> peel the face from another wheat field.
>
> Most of all, I'll miss
> their awful placidity
> at night, bedded down
> in the moonshade of scorched oaks
> like perfect beasts.

Such humor in the animation of the machinery makes contemplating the likelihood of their disappearance more tolerable. And the impulse to compare machines to animals perhaps suggests that what we humans really want and need are animals, not machines.

A last psychological response that deserves mentioning as one to explore in the context of global climate change is perhaps the most appropriate one: confusion. When the rug is pulled out from under us, when our world view no longer explains reality, when the landscape and its creatures are so transformed (or extinct) that we no longer feel as though we're living in the world we were born into, confusion is likely. Charles Goodrich again, in "Touched":

> He complains that his shoulder blades ache
> if there aren't any geese by the river
> where the geese should be.

All summer he roams
the leftover woods, his hands
achy and cramped. He claims
that clawing huckleberries into his mouth
loosens the pain of the absence of bear.

The poem continues, as the "touched" one encounters a garden without butterflies or a songbird, and a snowmelt river without Chinook. We would hope that the disappearance of species would engender anger and political action to stop the causes, not this "touched" state. But what is the general population's reaction to the daily decline and extinction of species? Indifference. This poem presents a model of a more engaged-in-reality psychological response. One implication of the poem is that if we were more in tune with the natural world, we would see that what we're doing is crazy, and crazy-making.

Besides naming the terms of climate change, or describing its effects as it's happening, or exploring our psychological response to it, poetry could also showcase the actions which people are taking to deal with climate change. Because there is a great deal of "upwelling" off the Pacific Northwest coast that is bringing up highly acidic water from deep in the ocean, water which absorbed our carbon dioxide perhaps a hundred years ago, the waters of Willapa Bay, just north of the Columbia River estuary, have become too acidic most of the time for new oyster larvae to survive. One oyster company, Goose Point Oysters, has built a facility in Hawai'i, which doesn't have such upwellings, to start oysters growing before bringing them back to the waters of Willapa Bay to grow to adulthood. Portland, among other Northwest cities, has been building rain gardens, swales, and stormwater planters along roadsides to handle the heavier and heavier rainfall. Many companies have been preparing for the more severe weather and flooding anticipated as the effects of climate change intensify. Such actions might be starting points for poems that bring climate change issues into the open.

Another kind of action is calling out the guilty parties, naming names, and pointing fingers at those who have encouraged the policies that continue to worsen the drivers of climate change. Charles

Goodrich's "The Uber-Rich Step Up" demonstrates an ironic way to go about writing such poetry:

> Mayor Bloomberg has vowed
> to take shorter showers. The Koch brothers
> are lowering the thermostat two degrees
> in every one of their mansions. Rupert Murdoch
> has ordered a fleet of Priuses
> for his domestic staff.

The poem then describes the Walton family, Goldman Sachs, and British Petroleum making such equally laughable efforts in response to climate change, and concludes by inviting listeners to do their part:

> Citizens,
> we invite you to sit back
> and watch it all happen on television.

Surprise! That's already the general non-response, making no effort at all.

A final way that poetry might bring the issue of climate change into greater prominence is by exploring our potential futures. Fiction writers have tended toward dystopian futures, such as Cormac McCarthy portrays in *The Road*. But other novelists have imagined more friendly, communal, and satisfying futures, such as James Howard Kunstler's *World Made by Hand* novels. Part of the appeal of Klein's *This Changes Everything* is the book's optimism that social good may come from our addressing the causes of climate change and preparing for its effects. Once immersed in the literature of climate change, with its increasingly grim reports and predictions, it becomes apparent that hope is one of the most important qualities that we must nurture. Scott Russell Sanders, an English professor at Indiana University (and married to a scientist, a biochemist), tells how he deals with many young people in their late teens and early twenties, his children as well as his students, who are being influenced by the dark view of the future presented by their professors:

> "One of the penalties of an ecological education," Aldo Leopold remarks, "is that one lives alone in a world of wounds." The

young people who put their disturbing questions to me have had an ecological education, and a political one as well. They know we are in trouble. Everywhere they look they see ruined landscapes and ravaged communities and broken people. So they are asking me if I believe we have the resources for healing the wounds, for mending the breaks. They are asking me if I live in hope.

Sanders explains that "Not easily, not without battling despair, I do live in hope." And his exploration of where that hope comes from generated the essays of his collection *Hunting for Hope: A Father's Journeys.* One useful approach for poetry to take in presenting models of hope is portraying how we, and our parents, and our grandparents have dealt with hard times and learned to live well with limited or damaged resources. Robert Morgan, "the poet of Appalachia," in such books as *Red Owl,* Wendell Berry in such books as *Farming: A Handbook,* and Paul Hunter, in such books as *Ripening,* all present poems of successfully dealing with difficult environments. In his book *Ascendance,* Olympic Peninsula poet Tim McNulty provides an example we might imitate:

MY FATHER SPEAKING

In those years, the oughts and early teens,
it was woods from Mt. Pleasant Street clear
to West Peak. Eight of us kids then—
Fran wasn't born yet—and I'll be honest,
we were often hungry. We'd find food
where we could.

In fall when the chestnuts were ripe
we'd comb McCarty's woods for them.
We smaller kids would get a boost up
to the lower limbs, but
the big boys would find stout logs
and give the trees a whack. Oh brother,
would those chestnuts come showering down.

We'd fill gunnysacks, all we could carry,
and haul them back to Ma
who'd roast them in the cookstove.
The house would fill with their flavor,
the nicest, sweetest nuts you ever ate.

In 1917 the blight took them all.
They never came back.
When you were kids I'd bring home
bags of European chestnuts, remember?
But nothing, nothing compared to those wild nuts
from the woods.

To tell the truth,
I don't know what we'd have done without them.

We at *Windfall* welcome poems that might use these or other ways to reflect some element of climate change in the Pacific Northwest.

—Bill Siverly and Michael McDowell

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