

UNRESTORABLE HABITAT
by

Lois Phillips Hudson

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For
LAURA
who loved her planet
June 11, 1955 - June 22, 2000

"... the Xbox, the way that redefines the home environment..." —Bill Gates, *Seattle Post Intelligencer*, 9/24/05

"Microsoft...has put a box in your living room. It entered your house under the humble pretense of a game... Whoever is king of the living room will control the flow of 1s and 0s that very soon will make up the entire fabric of our living culture." —Lev Grossman, *Time*, 5/23/05

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INTRODUCTION

Lois Phillips Hudson was a novelist, essayist, professor at the University of Washington, environmental activist, and mother of two daughters. She was born in 1927 in Jamestown, North Dakota. Because of the Depression, her family was forced to move back and forth between North Dakota and Washington State. In 1937 her family finally settled on a twenty-acre homestead in the rural Sammamish River Valley near the town of Redmond, Washington, population, then, only about 300.

After graduating from the College of Puget Sound in 1949, Lois Phillips left the Sammamish Valley for twenty years. She taught school in Shelton, Washington, completed her M.A. in one year at Cornell, and then lived in Palo Alto, California, and other places. In 1969 she returned to Redmond and the Sammamish River with her two daughters; she began work at the University of Washington, teaching English Literature and Creative Writing. In 1992 she retired from teaching but continued living and writing in Redmond until her death in December 2010.

During her lifetime, Hudson had two books published: *The Bones of Plenty*, a novel about farming in North Dakota during the Great Depression, and a collection of autobiographical stories, *Reapers of the Dust*. She also published essays and articles about many subjects: the environment, childhood sexual abuse, the importance of the imagination for moral vision.

About the Text. Unrestorable Habitat: Microsoft Is My Neighbor Now, was not published during Hudson's lifetime. Hudson left a manuscript that is substantially complete, but not fully finished. The book tells a unified story. It has a clear beginning, coherent development of ideas, and a satisfying conclusion. But it is obvious that Hudson had not done her final editing. There are many parenthetical comments within the text where she reminds herself to recheck sources, to verify facts, and to delete repetitions. We are able to observe Hudson's thought process as she makes suggestions for further revision of her book. Also, there are a few typographical mistakes. However, the text is being published as Hudson last left it, without editorial corrections.

In 2003 Hudson gave a reading of a chapter from this *work in progress* to a meeting of the Redmond (Washington) Historical Society. Before she began the reading she made some remarks about her composition process. [NOTE: There is an internet video of Lois Phillips Hudson reading at the Redmond Historical Society, April 12, 2003. Further documentation comes from the Society's newsletter, *Redmond Recorder*, April 2003, Vol. V, Number 4.] In April 2003 she had written 350 pages of the book and was in the process of cutting and revising. She also mentioned that as she revised and cut, she continued to add to the book. The existing text is 305 pages, and there is also about the same number of pages of her documentation, which are not being published with the manuscript.

From evidence within the text, we can tell that Hudson was working on *Unrestorable* as early as September 2001, for she mentions that she is writing "two weeks" after the attack of 9/11. There are sources cited in the text from the 1990's, so she may have been working on the manuscript earlier, but that is conjecture. The last chapter of *Unrestorable* contains references to articles published in the late summer of 2006, so she continued to work on the book for at least three years following the Redmond Historical Society meeting. Without testimony or documents from the author herself, we cannot be sure of when, or if, Hudson had stopped revising *Unrestorable Habitat* before her death, or if she herself would have considered the manuscript near ready for final editing and publication.

Content and Themes. What is *Unrestorable Habitat* about? At the Redmond Historical Society meeting, before she began reading from the first chapter, Hudson made some remarks about the themes and the structure of the book; according to Hudson, *Unrestorable* was "part memoir and part current events." Here, with professorial reserve, Hudson is leaving much for us to discover on our own. And there is much, much more in *Unrestorable* than memoir and current events. In essence this book is a mix of personal history, moral and political philosophy, environmental criticism, intellectual history, and the psychology of value. Yet for purposes of explanation I'll follow Hudson's lead and begin with her straightforward description of the book as memoir and current affairs.

The memoir part concerns Hudson's life in the Sammamish River Valley and how the valley is transformed over the course of her lifetime, roughly the sixty-five years from 1937 to 2003. She arrives with her parents and two sisters, a dusted out farmer-family from North Dakota. They have to work as migrant pickers in the orchards and fields of the valley for a while. World War II brings economic expansion from the Boeing war factories, where Hudson's father finds work. Then the 1960s brings a floating bridge across Lake Washington and the human and natural life in the valley are transformed from a rural and agricultural to a suburban and industrial-technological form of life. Microsoft comes to Redmond in the 1980s, and the natural life of the Sammamish Valley and human life worldwide are radically transformed. The Valley becomes the center of the world based on computer technology and electrical power.

The Sammamish River Valley was for Lois Hudson what Walden Pond was for Thoreau, what the Lake District was Wordsworth, what the farm at Port Royal, Kentucky, is for Wendell Berry. It is both her home land and it is the womb of her imagination. Day after day, year after year, she rode her bicycles, first along the county gravel roads of her youth, then along the asphalt pathways of the Kings County Park and Trail System. As she rides, she observes the natural order and its cycles; she observes the human habitation of this world and how it changes the natural order; she sees rivers where salmon were once plentiful now dammed for power generation and straightened for flood control. Parking lots cover wetlands. Golf courses and soccer parks replace farm fields. Suburban housing developments overrun apple and cherry orchards. Her rural habitat of small farms, salmon streams, forests, and the human community closely tied to the natural world are transformed into the suburban technological-capitol of the world, the headquarters of Microsoft, Hudson's new "neighbor."

The radical transformation of her local habitat prompts Hudson to investigate the connection between the natural world and the human imagination. She links the destruction of natural habitat with the destruction of the human imagination. Microsoft is Hudson's exemplar for a world civilization based on technology, high levels of energy consumption, concentration of wealth, and environmental and human transformation. During the course of Hudson's lifetime along the Sammamish River, the human has been divorced from the natural world and wedded to the electronic web. Microsoft's X-Box is the symbol of this transformation. We no longer live in the natural world; we waste away in front of a screen for longer and longer periods of each day. In a vicious circle, the destruction of the human imagination through our misuse of electronic technology and our abandonment of a more traditional and more natural way of life makes the further destruction of both the natural and human world inevitable. For Hudson, violence is interconnected.

Hudson investigates many other subjects within the course of *Unrestorable*. She has a wonderfully creative intellect that develops connections in surprising ways. One section concerns chickens and her childhood chore of cleaning the coop every Saturday morning, a nuclear waste

dump in Hanford, Washington, Chaucer's rooster Chanticleer, the evolution of the English language, teaching college students, Veblen's theory of the leisure class, Dante, Shakespeare, bib overalls sold by Abercrombie and Fitch in Redmond, the egg market in fifteenth-century London, and antibiotics used in agriculture. All lucidly connected and tied together with a most succinct summary thesis: "I reflect that chicken shit comes in many shapes and textures."

In another section Hudson explores the connections between democracy and slavery, in both the political thought of Aristotle and Thomas Jefferson, and in fifth-century Athens and the early United States. It is a damning examination of American history, and I will quote a passage about Jefferson and Sally Hemmings, his slave and forced concubine:

"As a real farm girl, I know the difference between exploring the metaphysics of freedom in the drawing room and sweating out your guts in the plantation rows. To this farm girl, the hero is not the one who lives in a mansion, freed from all soul-ravaging and joint-wrecking manual and menial labor, educated, traveling the world, enjoying the adulation of your fellow citizens, healthy to what we still consider a ripe old age--83. To me the hero is the one who survives being kidnapped, raped, whipped, tortured, orphaned, mutilated, half-starved, humiliated, forbidden to learn to read, doing some of the hardest work known to humankind all day, every day--and still sings."

Conclusion. Hudson's eloquence is the eloquence of the empirical, the factual. Her analysis is not abstract and airily theoretical, but always rooted in the soil of the real, the historical, the everyday. She reminds us of how important it is to be intellectually and morally grounded on the particular, the existential, and the local. Yet her intellect is encyclopedic; the power of her imagination is what Coleridge called "emplastic." She brings together the gritty details of farm work in the 1930s with a discussion about Aristotle's *Categories*. She sees how computer software is connected to the destruction of salmon streams. She connects the wisdom of the First People's First-Salmon celebrations with the Venerable Bede and his *Ecclesiastical History of the English People*.

It is a great loss that Lois Phillips Hudson did not live to complete the final revisions of *Unrestorable Habitat*. It is a great blessing that she accomplished so very, very much.

John Henry
Hastings, Minnesota. January 2014

EDITOR'S NOTE

When I first came across this manuscript, I was, as doubtless others are, intrigued by the title. I immediately sat down to start reading it, almost breathlessly wondering if it would be some fascinating expose of the mega company that is so much a part of our daily lives.

It is not.

It is, instead, the observations of a woman greatly in tune with life, about the changes she perceives. The manuscript gives voice to things that we have all given some consideration to – or ought to - if not so eloquently stated as the author is able to do. Perhaps the reading of it will push us to more seriously consider what she believes –and there is some evidence for - and to act on it, even if only in some small measure.

I knew that I wanted to publish the manuscript, but wasn't sure if it were best left in its "not quite finished" form; if I ought to dare to let it stand as is, purely in Lois Phillips Hudson's voice. The alternative would be to risk editing it, and perhaps lose something of Hudson's passion.

You may find some typographical, or perhaps grammatical errors...places that may seem repetitive. You will read the notes she left for herself, to double check, or to follow up on something. I urge you to really see them, and to realize that she was trying to craft something lasting from pieces that are ever changing – but not to focus on them such that they draw you away from the points she is making.

In the end, what you have before you is Lois Phillips Hudson, and her unadulterated take on the world she spent her life in.

Cynthia L. Anthony
"Editor"

Special Acknowledgment

This work would never have come to light if not for Lucy Hudson and Mary Snow; it would not have been published without their intense desire to continue to build and support the legacy of Lois Phillips Hudson, their mother and partner. Thank you for trusting me with something so precious—your loved one and her life's work.

WHEN I WAS IN THE SIXTH GRADE, in 1938, Redmond School (twelve grades, 250 students) [CHECK WITH RED. HIST. SOC.] began showing Friday-afternoon movies. (Johnny Weismuller's Tarzan was our favorite.) They were a treat for kids too poor to go to the Gateway in Kirkland, but you did have to cough up that nickel, so I usually had to stay in my classroom, along with three or four others of the poorest of the poor. For some reason, there were rarely any other girls—just the most forlorn boys and me. We sat at our desks, the boys in bib overalls, home-barbered bowl-haircuts, I in made-over blouse and skirt, working page after page of multiplication and long-division problems. (How to encourage kids to love math.) We couldn't just *read*, because how would we prove to the teacher, herding the rest of the class in the auditorium, that we had been too busy to get into mischief? Framed in school-window light, the thirty empty desk-tops made the empty room even emptier, flashing our failure in life. I see now that this was one of my early lessons in the intricacies of capitalism: For want of about 20 cents, there was all this wretchedness for us and all this extra work for our teacher, who had to make up the problems for our little lost tribe and then check all our arithmetic. (Each of us had to have different problems; otherwise, without supervision we would probably commit illegal collaboration. Computers to help her out in such a rudimentary chore were a half-century in the future.) Imagine imagining, in 1938, that one day in my valley I would live two-and-a-half miles from the "campus" of the richest man in the world.

ONE

I SHALL NOT BE TAKEN. I SHALL TRAVEL AS FAR AS THE RIVER EXTENDS, BUT I SHALL NOT BE TAKEN.

From our house in the hills of our "stump farm" above the Sammamish Valley we looked down on bottom lands looped with the willows and cottonwoods fringing a little river. The river wandered as it pleased, without so much as a single boulder for an obstacle--what you might call a calm spontaneity. Seemingly aimless as the river, but with none of its spontaneity, the world in 1938 was becalmed in bottomless night. Our family—my father, mother, younger sister and I—went without things few Americans would imagine going without today. We didn't go hungry: Our 20 acres fed us well, but when the school started showing movies on Fridays (mostly Johnny Weissmuller-Tarzan), you still had to ante up a nickel. I had to stay in my sixth-grade classroom, along with two or three of the worst boys, because I never had a nickel.

We lived two miles north of the village where we bought flour and sugar and precious little else. That village nobody had ever heard of was Redmond. Today we're "the world headquarters" of the richest human on our planet. As the jazz lyric puts it, "Bill Gates is my neighbor now."

Gigantic spawning salmon heave into the air above the Sammamish River, a stone's throw from the Redmond City Hall. The pair is made of stainless-steel heads, tails, and fins which grow from rusting chain-link bodies reddening, like their living counterparts, in the oxidation of doom. The title of the sculpture, "The Last Test," evokes classic images of salmon heroically leaping mountain torrents and rainbow-mist waterfalls, but it may be more ironically appropriate right here on the nearly stagnant river, for the fish homing up the Sammamish now might find that the crucial test for *them* is simply struggling through algae-clogged, herbicided, pesticided, too-warm water in a nearly dry stream bed.

In 1964 the Army Corps of Engineers made the crooked straight, bulldozed miles of willow-shaded meanders and ditched the river into a deep canal. Cows in the pastures that are now Paul Allen's golf course ambled to the river's edge anywhere for a drink of clean water. What once were river banks are now steep dikes brandishing eight-foot-high tangles of inch-thick blackberry canes studded with half-inch thorns—real Sleeping-Beauty thickets. I accidentally rode over a dead twig on the Sammamish River Trail and a thorn pierced a new bike tire and its supposedly puncture-proof innertube. The river still connects Lake Sammamish to Lake Washington, but its length has been cut in half, and you could drag your canoe along its bristling banks for miles without finding a path to get the boat into the water.

A couple of years ago, the Corps, King County, and the City of Redmond began "restoring salmon habitat." They posted signs describing the new mission of the trucks and bulldozers as they scraped the banks and river bed and dumped boulders, logs, and dead trees to re-create meander-like eddies in which spawning fish might rest. Now, some of the Corps' signs have been removed and some have rusted and fallen into the blackberries—"Himalayas." Their name tells the story: a fierce exotic that quickly and ineradicably takes over disturbed earth in the Pacific Northwest. To our credit, Redmond is genuinely trying; at this late date we've managed to restore a bit of a curve between the NE 85th and NE 90th Street bridges, and Public Works Department heroes like Peter Holte, Habitat Stewardship

Coordinator, plant native species and, rather than pollute the river with herbicides, doggedly dig out blackberries, root by root—and someone does cut back the briars that never stop twining around The City of Redmond sign, which undauntedly declares "The River Returns."

Sixty years ago, my friend Juneau and I spent our fourteenth summer working on the Aries Brothers' truck farm on the valley bottom. During our lunch breaks from thinning and weeding, crawling along endless rows of carrots, lettuce, cabbage, cucumbers, we would sneak across the fields to the nearest meander, strip in a willow-grove dressing-room, slide our hot bare feet through the cool grass, squish balms of mud between our toes, and skinny-dip in water cold enough to get us through the endless afternoon.

In those days I would gaze out our kitchen-dining-living-room window overlooking the valley and dream of being rich enough to buy a little wood boat and row the whole length of the river, to feel the mystery of the ways it chose its digressions across the plain, to find out, like any other curious river animal, what was around the next bend, to watch the clouds floating through the willow boughs, to look up at the five hills of our farm and all the other hills that made our valley, and to glimpse beyond them the white and purple peaks of the Cascades and the great gleaming cone of Mount Rainier.

Kenneth Grahame just about said it all in *The Wind in the Willows*: "The river chattered a babbling procession of the best stories in the world, sent from the heart of the earth to be told at last to the insatiable sea. 'So—this—is—a—River!' exclaimed Mole. '*The River*,' corrected the Water Rat." Coming to a backwater, they sculled "into what seemed at first sight like a little land-locked lake. Green turf sloped down to either edge, brown snaky tree-roots gleamed below the surface of the quiet water"—such perfect habitat for a tiny kingdom that "Mole could only hold up both fore-paws and gasp, 'O my! O my! O my!'" Then "with his ear to the reed-stems he caught, at intervals, something of what the wind went whispering so constantly among them."

Many years after I dreamed my rowboat dream, I was rich enough to buy a fifteen-foot Grumman aluminum canoe. My daughter, Lucy, and I put the boat in at the northern end of Lake Sammamish, the river's source, and paddled the fourteen miles to the river's mouth on Lake Washington. We were too late, of course. We voyaged through none of the elfin provinces I had set my heart on exploring; if, indeed, those provinces had ever existed, the river was now sunk so deep in the Corps' ditch that we saw nothing but the same bristling dikes and the same blank slit of sky.

Now I ride my bike along the Sammamish River Trail every afternoon, and the more "RESTORATION" signs I see, the more I fear that, like jaunty explorers floating down an unmapped river, we are about to plunge over a brink we won't see in time. When an unimaginably deep and distant tectonic plate rams itself under another plate, the sea swells over the concussion and, for an instant, pulls the breakers away from some roaring shore. As the tsunami sweeps toward them at six hundred miles an hour, people on the suddenly silent beach look out over miles of sea-bottom that no one has ever seen before. In that silent moment they might imagine that the Universe is granting them "a New Frontier."

We often pretend we have no inkling that a species is on the brink of extinction till—surprise, surprise—it crashes. I am not convinced that any "salmon restoration" efforts on the Sammamish will ultimately survive even the changing politics of its series of managers, let alone what we have already done to our other streams and wetlands. Chinook and coho fry, for example, must spend their first year of life in saltwater estuaries before heading out to sea, but ninety percent of Washington's coastal estuaries now generate factories, warehouses, docks,

and subdivisions. [Sierra CASCADE, Dec. 2001, Vol. 14, # 5] My microcosm, the Sammamish, was thirty-four miles long before the industrious Corps lowered it seven feet and obliterated nearly 20 miles of its meanders. To the Corps the Sammamish isn't even a river any more; it is a "conveyance" or a "facility." [Peter Holte, Redmond Habitat Stewardship Coordinator.]

How do you turn an asphalt parking lot back into a wetland, a ditch back into a river? University of Washington geology professor David R. Montgomery says in *King of Fish*, "Salmon returns to Pacific Northwest rivers are just 6 to 7 percent of historic levels." [p. 230] We can only try to imagine this river so thick with wild salmon that before Luke McRedmond homesteaded among two-hundred-foot cedars in the Squak Valley, this little settlement was called Salmonberg.

"'The Pacific Northwest is any place salmon can get to.' By that definition the region has been shrinking for 150 years," says Jim Lichatowich in *Salmon Without Rivers*. One last run of kokanee struggles back to Lake Sammamish, and as the "living symbols of the Northwest" go extinct, replicas proliferate. On Bear Creek Drive a spotlighted sculpture marks the entrance to the "Center" that brought Redmond into the mall world; it's a very thin fish made of many steel rings suspended in the centers of three consecutive large rings. No explanatory title helps me out on this one. What I seem to be seeing is a starving salmon lost in a culvert.

The mall is built—where else?—on what were wetlands along the river. With a couple dozen other die-hards, for years I yawned through City Council meetings in a stifling small room in order to speak my piece against the New-York-based mall-building corporation's plans for the soggy defunct Redmond public golf course. The old golf course adjoined our King County Parks system's "prime jewel," Marymoor Park at the northern end of the lake, and it constituted a natural addition to the park. With each exhaustive Council deliberation on each application to add on to a garage or enclose a shed, I would see the briefcase full of student papers bulging bigger—bigger than the hassock on which I had dumped it before deserting my young-teen daughters, then bigger than the coffee table, then bigger than the La-Z-Boy Lounger. All of us protesters had full-time jobs, but when the Council's agenda finally got to the issue we were all there for, we had to confront the New York lawyers whose *only* job, year-in, year-out, was wearing down hinterland yokels. ("Globalization" is not new to us folks Out West.) As I drove home to the long night with my briefcase—kids already in bed—I seethed in Old-West helpless rage and dreamed of Old-West vengeance, of tarring-and-feathering and riding-out-of-town-on-rails.

BEAR CREEK WOULD ALMOST QUALIFY AS A RIVER on the Arabian Peninsula or in Southern California. It is the biggest tributary of the Sammamish, and, with its own feeder creeks, a spawning stream for chinook, coho, sockeye, steelhead, and cutthroat trout. When my sister and her husband, a great-grandson of the Bothells for whom the river town was named, were raising their boys on the creek, a couple miles upstream from Redmond, they sometimes hooked a four-foot-long chinook in their backyard. Their five acres were condemned in 1991 for a park and King County moved them to Issaquah and burned their house. The park never materialized. Instead, where the house built by one of the Bothells had stood for a hundred years, there is a Jehovah's Witness Kingdom Hall and a hundred—car paved parking lot a few feet from the stream. In the pasture across the creek, not far from the "Restoration of Habitat" signs, there is one of those much more common signs:

PROPOSED LAND-USE ACTION

Bear Creek's last miles flow around the trashy rears of shopping strips and malls—cement-block walls, loading docks, and dumpsters. A couple thousand feet of it have been "relocated" between a mini-mall and the SR-520 overpass of "East Lake Sammamish Parkway." How grand! When my grandmother lived in a disintegrating cabin on five acres overlooking the lake, The Parkway was just the gravel road to her place. A sign says this block of pavement is "Creekside Crossing." Under the words on the sign are three wavy lines symbolizing water. This must be one of the country's more poetically named Blockbuster Video sites. Across the Parkway is Bear Creek Village. Our Eastside Qwest phone book lists 24 Bear Creeks in the business section, including two churches, a chiropractor, Bear Creek Consulting, Bear Creek Data, Inc., and a Bear Creek electrolysis hair remover. The Federal Regional Fish and Wildlife Department has set up a coho-spawning study along the pavement runoffs. Meanwhile, in the Redmond mall, home of several outdoor-gear stores, the "Eddie Bauer" strain of the Ford SUV Explorer flourishes in the parking lot of Recreational Equipment, Inc., wilderness-lovers.

I have always wondered how many Bear Creeks there are in the United States, and how many still flow in their original beds, let alone still feed a salmon to a bear. Our Redmond Bear Creek could, of course, have suffered an even worse fate than being squeezed into alleyways. It could have been squeezed into a pipe and buried. Then some unlikely day, Progress might momentarily defer to "preservation," and the creek might be "daylighted" through a trench jackhammered in the pavement over the pipe. We would call this "restoration." In the vocabulary of the cement-pourers and asphalt-pavers, the new verb "daylight" joins that alltime favorite—"enhance."

It was hard not to see symbolically the end of hope when two of the most indefatigable Redmond fighters against enhancing gave up after 25 years of mostly losing battles. Seeking the undeveloped landscapes of their Western youth, Dr. Paul Beeson, a nationally eminent internist, and Barbara Beeson returned from Out East just in time, as it turned out, to watch their valley begin its transformation to High-Tech-Land. As I read the farewell that left many of us feeling sad for the world, I could hear years of Barbara's phone calls reminding me of a meeting, a petition that must be circulated. Last winter, aged 83 and 93, they moved Back East. Barbara told the *Redmond Reporter*: "I guess you end up feeling a little sad for the world and sad for your children because I can remember and Paul can remember growing up surrounded by wilderness and with clean water and clean air." I hope her conclusion was not true: "You can't expect someone who was born on cement to care much if a tree falls down." [2/14/02] Will people know only that they are always *hungry*?

Twenty years ago, S. Dillon Ripley, curator of the Smithsonian, predicted to a *New Yorker* reporter that by the end of the Twentieth Century ninety percent of Americans would never have seen a snake outside of captivity, and he asked how an heir robbed of his inheritance before he was born would ever know that he had been robbed. About once a year I see a small garter snake sunning itself on the trail—never anywhere else—and I wonder if Ripley's number should have been ninety-nine percent.

THE SAMMAMISH has been dubbed "Little Silicon Valley." In Big Silicon Valley the San Jose city streets are named "Peach" and "Plum," but peaches and plums have long gone extinct there, and I fear that all that is necessary to complete the replication of the San Jose

Valley in the Sammamish are a couple more real-estate agents on the King County Council who never will meet a variance they don't love. After all, only 25 years ago, nobody could have imagined that what I knew as farms and forest would be replaced by dozens of buildings housing thousands of workers launching millions of little disks to fly forth and operate 98% of the world's computers. Or that Redmond, population about 300 when I was growing up (not enough of us in the whole Sammamish Valley to fill one 747), would be the miraculous birthplace of the Millennium's entrepreneurial legend. Or that this little valley nobody has ever heard of would be the home base of the richest man in the world.

A pervasive, though seldom recognized, contemporary illusion is that cyberspace *is* the Universe—an infinity of *virtual* space. In the real world, of course, the production of cyberspace machinery, like any other mundane matter-based industry, gobbles a great deal of *real* finite space. For twenty years Microsoft has been radiating north, south, east, and west from its original "main campus." I drive by this campus several times a week, and for the last ten years, I've never seen fewer than five cranes dangling cement blocks, beams, bales of sheet rock, and slabs of green glass—components of an architectural style I have come to think of as "Y2K-Parking-Garage."

Of Microsoft's world-wide 6,714,744 square feet of office space in 60 countries, most are in "the always expanding main campus"—5,319,632 square feet in 47 buildings—unimaginably, to me, just two-and-a-half miles up 148th Avenue NE from the modest house I bought in 1970 for a \$400-down payment, every cent I had. On the Bothell "campus" a few miles north of me on drained Sammamish wetlands, robot arms shrink-wrap the CD-ROMS in their snappy cases, and the company has just built another new "campus" in Issaquah, at the south-eastern end of Lake Sammamish. Microsoft acquires "office parks" and other real estate under various company names; no one knows just how much of my valley is owned by Paul Allen and Bill Gates.

Along with the thousands of workers in other local high-tech enterprises here, the 50,000 [check] Redmond "Microsofties" stare into screens in thousands of cubicles stacked up the hillsides behind the green glass. Most of them, I reflect as I ride past condo parks, industrial parks, business parks, office parks, and research parks, are laboring to make one or another part of me obsolete.

I think of how for the last half-century we "enshrined" the "elegantly simple" Watson and Crick theory of DNA-determined heredity. [*Scientific American*, 12/03, p. 108, "The Unseen Genome: Beyond DNA," W. Wyatt Gibbs] Now we know that humans have many fewer genes than Crick's elegant theory requires. "There is no clear correspondence between the complexity of a species and the number of genes in its genome. 'Fruit flies have fewer coding genes than roundworms, and rice plants have more than humans,' notes John S. Mattick, director of the Institute for Molecular Bioscience at the University of Queensland in Brisbane, Australia... [*Scientific American*, 11/2003, p. 49] There is no longer any doubt that a new theory is needed to replace the central dogma that has been the foundation of molecular genetics and biotechnology since the 1950s." [*op. cit.* p. 48]

Not so long ago, many experts believed that the human egg was no more than a passive pasture for the sperm, which cavorted about in it doing all the creative work. Now we know that not only do all of our billions of cells get half of their information from the egg, but also that, plus a lot of other "marks," most of them contain thousands of maternal mitochondria. [CHECK: Did Watson and Crick even know about mitochondria,?] As a medievalist, the mother of two daughters, and the daughter of a father who frequently assured me that the brightest woman could

never be as bright as your average man, I enjoy contemplating all those mitochondria cavorting about in the cells of both females and males. My petty-minded vindication aside, living in a silicon valley reminds me every day that what is *fact* today will very probably not be fact tomorrow. Only the blink of an eye ago, Andrew Marvell heard time's winged chariot hurrying near, and now I hear in the "clean industries" along my river the relentless microchips quietly working to replace my brain cells.

Yet "even codfish are conscious" in a way that the most advanced "thinking device" *never* can be, so mathematician-physicist Roger Penrose maintains, distinguishing between "real brains and model brains" in *The Emperor's New Mind*. [p. 383] The codfish's consciousness evolved in and responds to *physical place*. If the consciousness of "lower" animals requires this grounding for their ultimate survival, I wonder if our progress in the use of symbols could trap the consciousness of our own species in a deadend habitat of imagination fed almost entirely on symbols. And today, even most of our symbols actually exist only as instantly erasable "high-tech footprints." We no longer paint them on cave walls, possibly to be discovered by spelunkers thirty thousand years from now. This evanescence of symbols may itself be symbolic, foreshadowing a future in which we search for "new blood" to revitalize attenuated species only to find ourselves stuck with no alternatives to distorted, damaged, or oversimplified copies of copies. I think of all the "stolen harvests," to quote Vandana Shiva's book title, all the varieties of food stolen from valley bottomlands in my environs—besides my little Sammamish, the Snohomish, the Skykomish, the Skokomish, the Snoqualmie, the Tolt, the Skagit, the Puyallup, the Green. Shiva warns that the global dominance of a handful of seed companies, especially Monsanto, has drastically reduced the diversity in human-grown crops, while habitat destruction has extinguished plant-cousins that might have provided genes to aid us in our escalating wars with insects, disease, and weeds, not to mention our never-ending quest for the perfect tomato.

ABOUT THE TIME THE FIRST NATION in our valley would have been celebrating the return of the First Salmon, my family would be performing the last of our year's harvest rituals. All summer and fall, as crop after crop ripened, my father, the High Priest, would pick the best-formed, the biggest and tastiest. He cleaned the pulp from the fat white seeds of the tenderest squash and the stickiness from the svelte black seeds of the sweetest watermelon. (Now our factory "farms" produce seedless watermelons, sparing consumers the effort of spitting out seeds; in exchange we give up only diversity and flavor.) He spread the seeds to dry on a towel-covered cookie sheet propped on the kitchen windowsill. When I was barely tall enough to look out the window at the blowing fields darkening the sky all the way to New York City, long before I was nine and our family became four more specks in the migrations of drought-destitute farmers to the coast and the cities—even then I understood how precious those seeds must be, because they mattered so much to my father. "Waiting for the harvest and the time of reaping, we shall come rejoicing, bringing in the sheaves. Sowing in the morning, sowing in the noontide and the dewy eve," sang the congregations of the little Community Methodist Churches in Cleveland, North Dakota, and Redmond, Washington. During our time in one of those congregations I made the connection of sheaves with seeds. I wonder how many Americans who eat bread have ever seen a sheaf; the number must be even much smaller than the number who have seen a wild garter snake. We called the John Deere Reaper a "binder" because below the rotating bars slashing the sky like a horizontal Dutch windmill the toothed blade cutting off the wheat stalks delivered them to a huge spool of bristly twine that bound them in sheaves. (Millet's "The Gleaners" was one of the favorite Old Masters copies hung in

homes and institutions; the 1857 painting depicts the poorest of the poor women allowed to gather the wheat stalks that fell out of the sheaves.) We called the monster steam-powered threshing machine a "separator" because it separated the wheat grains from the chaff and straw.

Long ago, combines replaced reapers and threshing machines, and a modern American farmer is hardly more likely to have seen a sheaf than is a city person. When I was six I carried jugs of water to the migrant threshing crew that worked their way north across the Great Plains every harvest season. In the August heat shimmering above the new stubble I would run barefoot through rows of sheaves.

TODAY, MY DEPARTMENT OF AGRICULTURE has supported research and issued a patent on "technology which genetically alters seed so that the plants that grow from it are sterile." "Terminator Seeds Threaten an End to Farming," by Hope Shand and Pat Mooney in *Earth Island*, flipped me into a time warp, myself at four smelling the dust sifting around the window sash, pondering those cookie-sheet fields of tiny universes. Now, no more distant from my father than the generation of his own children, "the 12,000- year-old practice in which farm families save their best seed from one year's harvest for the next season's planting may be coming to an end."

A French paleontologist imagined one of his distant ancestors at a modern banquet and concluded that if we dressed the Cro-Magnon of 30,000 years ago in a tuxedo, he would not look any different from all the other men at the table. Our *dinner*, though, besides costing us more work-time than his did, would also be far less diverse than his—the fish, the shellfish, the roasts and steaks, the berries and leaves and kernels and roots. In their book, *Shattering: Food, Politics, and the Loss of Genetic Diversity*, Mooney and Cary Fowler contrast the Native Americans' use of perhaps as many as 5,000 wild plants with the relatively few foods in our supermarkets. They conclude that "perhaps the biggest single environmental catastrophe in human history is unfolding in the garden." [Arizona, 1990, p. ix] The title of another of Shiva's books names the human parallel to this loss of plant diversity: *Monocultures of the Mind*. Or, as Todd Oppenheimer puts it in *The Flickering Mind*, "the end of imagination." As I pedal along the river I knew before it was ditched, I think of computer-genius Clifford Stoll's definition of cyberspace. In *Silicon Snake Oil*, he says, "cyberspace is no place."

Yet "no place" has "put Redmond on the map," migrated a village beyond the real hills of its valley into a pixel horizon. To my ear, the "Redmond" of the evening newscasters' "Redmond-Washington-based-Microsoft" sounds as abstract as any other dot in the cyberspace universe of Microsoftland. Microsoft, of course, is only one of our valley's high-tech industries. Fifty percent of our local electrical power goes to server "farms." Internet specialties spin web upon web, biotech laboratories proliferate like bacteria, and, adjoining the Microsoft campus, technical advisors in Nintendo's American Headquarters cubicles work through Mario's dilemmas with Super Mario players around the globe. So a more accurate name for my environs would be "High-Tech-Land."

Around the northern Pacific Rim, from the Sacramento tribes of California to the Chukchi tribes of Kamchatka, to the Ainu tribes of Japan, the orbits of humans and salmon have intersected for thousands of years. I duck head-high blackberry runners that have uncoiled from the dike thickets since yesterday and think of how the salmon hordes once rested in the meanders of the river as it wandered through the willows. "Sammamish" in Lutschotseed means "People of the Meander." I imagine the Sammamish, along with a hundred generations of other Pacific peoples on scores of other coastal rivers, greeting the

First Salmon coming home.

In his *Ecclesiastical History of the English People* the Venerable Bede described the conversion of Edwin in 627 A. D. The King and his advisors listened thoughtfully to Bishop Paulinus's description of a human life in eternity. As they discussed officially adopting a new religion which answered all the questions their own did not, one of Edwin's aldermen offered what was apparently the decisive argument—an image of stoic Anglo-Saxon yearning that haunts us across thirteen hundred years:

"It seems to me, thou King, that this present life of man on earth, compared to the unknown time, is as if, as you sit at supper amid your aldermen and thanes in wintertide, and the fire is lit and the hall warmed while outside it *rine*, and *sniwe*, and *styrme*, in comes a sparrow and swiftly flies through the house, in one door and immediately out the other. Lo, in that time that he be inside, he is not touched by the winter's storm, but there is only the least space of one eye's glance, and he straightaway comes from winter to winter again. Likewise man's life appears to be this short a space. What went before or what follows after we cannot know." [my translation]

In contrast to this linear flight of the sparrow into a moment of light, the cosmic story of the Pacific Coast peoples was circular: the egg hatching far up in the gravel creek beds, and the fingerling swimming down to the sea tail-first, like a human glancing behind himself so he will know how the trail will look on his return trip, finally coming back to die giving birth. But "I shall not be taken. I shall leave my scales on nets and they will turn into salmon, but I myself shall not be taken. I myself shall go by and not be killed." [KROEBER HANDBOOK. p. 68/ Erikson, p. 282] Thus the hunter's double, his prey, must be immortal. And forests, land, water—all must be, in the favorite adjective of pioneer colonizers, "inexhaustible." Cycling my daily orbit along a trail that only *seems* linear on a spherical planet, I think of that closing of the circle, and of how all those human generations never failed to dance and sing their thanks for the salmon generations' return. In commemoration of their gratitude, I have borrowed my chapter titles from the First People's First-Salmon celebrations.