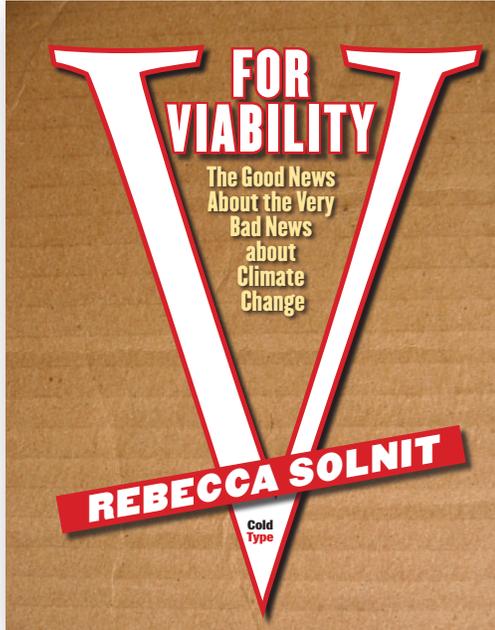


FOR VIABILITY

The Good News
About the Very
Bad News
about
Climate
Change

REBECCA SOLNIT

**Cold
Type**



THE AUTHOR

Rebecca Solnit, author most recently of *A Paradise Built in Hell*, is a good person with solar panels and a bad person with lots of work-related frequent-flyer miles, as well as a regular contributor to www.tomdispatch.com and a great believer in non-electoral politics and direct action in the street.

This essay first appeared at www.tomdispatch.com

© Rebecca Solnitt 2010

ColdType

WRITING WORTH READING FROM AROUND THE WORLD

www.coldtype.net

INTRODUCTION

BY **TOM ENGELHARDT**

This is one complicated planet. We've always known that. And call it what you will – climate change, global warming – it's hard to put all the pieces together. Yes, Western forests are experiencing die-offs “on an extraordinary scale” as a single species of beetle thrives and kills, and warming weather seems to be a culprit. Yes, sea levels could, in this century, rise three to six feet or more – again that warming trend – but not the same three to six feet everywhere.

According to Michael D. Lemonick, “among the most powerful influences on regional sea level is a surprising force: the massive polar ice sheets and their gravitational pull, which will lessen as the ice caps melt and shrink, with profoundly different effects on sea level in various parts of the globe.” (By the way, Miami tops the list of globally endangered major cities, “as measured by the value of property that would be threatened by a three-foot rise.”) And that's just to scratch the surface of the climate-change puzzle at one interesting website, Environment 360, that spends time considering the matter.

Still, for any of us, seeing the whole picture from the puzzle pieces we come across and then imagining our daunting world and what to do with it is one tough task, made no easier by a wash of media and right-wing claptrap about how climate change is just another “gate,” another scandal, another fraud. Denial – the urge to ignore or suppress a reality too painful to deal with – is a tough phenomenon to confront, even when those attacking the reality of climate change proudly call themselves “deniers.” Unfortunately, while denial at the individual or societal level is never a pretty or healthy thing, denial on climate change – even the less active kind where we pretend someone else will deal with the problem in some distant future – is just plain dangerous.

Fortunately, we can call on the irrepressible Rebecca Solnit, an expert on both disasters and hope – and how the two can mix in New York City as in Port-au-Prince. She is, most recently, the author of *A Paradise Built in Hell*, a book about the extraordinary organizing acts of normal people in the face of natural or man-made disasters.

Tom Engelhardt

The Good News About the Very Bad News about Climate Change

REBECCA SOLNIT

These days, I see how optimistic and positive disaster and apocalypse movies were. Remember how, when those giant asteroids or alien space ships headed directly for Earth, everyone rallied and acted as one while our leaders led? We're in a movie like that now, except that there's not a lot of rallying or much leading above the grassroots level.

The movie is called "Climate Change," and you can tell its plot in a number of ways. In one, the alien monsters taking over the planet are called corporations, while the leaders who should be protecting us from their depredations are already subjugated and doing their bidding. Think of Chevron, Exxon, Shell, and the coal companies as gigantic entities that don't need clean water, or food, and don't care much if you do (as you can see from the filthy wreckage in their extraction zones and their spin against the science of our survival).

My recent research into conventional disasters suggests that climate change, de-

**“
if we are to
be saved, I'll
put my money
on the small
characters
mitigating
the crisis and
getting us
through the
rough times
to come**

spite its unconventional scale, is unfolding in ways familiar from the aftermaths of numerous hurricanes and earthquakes: the ruling elites too often “lead” by creating a second wave of destruction, while the rest of us pick up the pieces and do our best to do what's necessary. This is a movie whose crisis is upon us and whose resolution is out of sight, but if we are to be saved, I'll put my money on the small characters mitigating the crisis and getting us through the rough times to come.

Last December, the Copenhagen Climate Summit gave the heads of state supposedly negotiating a future climate-change treaty a clear-cut choice between short-term profits for the few and the long-term survival of practically everyone and everything. As I'm sure you'll recall, they chose the former. You, the summer ice of the Arctic, about half the species on Earth, the shorelines of quite a few places, the glaciers of Glacier National Park, the birds in the trees, the marmots on the mountains, and the long-term future of just about everything were sold out for the sake of the market status quo, not by

V FOR VIABILITY

all the world's nations, but by the most powerful among them.

Not all of the elected leaders failed us. President Evo Morales of Bolivia called a people's summit on climate change which is going on right now, and the most threatened countries did a heroic job of facing up to the world's most powerful ones – tiny Tuvalu, soon to go beneath the waves, told off China, for example. Thanks to their stand and so their insubordination, Bolivia and Ecuador both lost their shot at State Department funding meant for poor countries which need to prepare for future climate-change disasters.

Forbidding Planet

Bill McKibben offers another compelling plot for this horror movie in his new book, *Eaarth: Making a Life on a Tough New Planet*. Its premise is not that something terrible came to Earth – after all we were the ones, over the last 200 years, who sent all those billions of tons of carbon into the atmosphere – but that we ourselves have landed on a strange, dangerous, unfamiliar new planet he calls Eaarth. Think Forbidden Planet without Robby the Robot; think *The Tempest* with neither Ariel nor Prospero.

We no longer live on the kind, comfortable, stable planet we evolved on, he begins:

“For the last ten thousand years that constitute human civilization, we've existed in the sweetest of sweet spots. The temperature has barely budged; globally averaged, it's swung in the narrowest of ranges, between fifty-eight and sixty degrees Fahrenheit. That's warm enough that the ice sheets retreated from the centers of our continents so we could grow grain, but cold enough that mountain glaciers provided drinking and irrigation water to those plains and valleys year round;



Thanks to their stand and so their insubordination, Bolivia and Ecuador both lost their shot at State Department funding meant for poor countries which need to prepare for future climate-change disasters

it was the 'correct' temperature for the marvelous diverse planet that seems right to us. And every aspect of our civilization reflects that particular world.

“We built our great cities next to seas that have remained tame and level, or at altitudes high enough that disease-bearing mosquitoes could not over-winter. We refined the farming that has swelled our numbers to take full advantage of that predictable heat and rainfall; our rice and corn and wheat can't imagine another earth either. Occasionally, in one place or another, there's an abrupt departure from the norm – a hurricane, a drought, a freeze. But our very language reflects their rarity: freak storms, disturbances.”

And then he begins to make the case that this planet, the one we've always lived on, no longer exists.

Nobody marshals facts better than McKibben. The first two chapters of *Eaarth* line up the evidence in a devastating way to show that climate change is not (despite the political rhetoric of the past decade) some horrid thing to be visited upon our grandchildren. It's here right now, visiting us. Here's just a sample of our world today:

“A NASA study in December 2008 found that warming [of more than a degree and a half Fahrenheit] was enough to trigger a 45 percent increase in thunder-clouds that can rise five miles above the sea, generating 'super-cells' with torrents of rain and hail. In fact, total global rainfall is now increasing 1.5 percent a decade. Larger storms over land now create more lightning; every degree Celsius brings about 6 percent more lightning, according to the climate scientist Amanda Staudt. In just one day in June 2008, lightning sparked 1,700 different fires across California, burning a million acres and setting a new state record. These blazes burned on the new

earth, not the old one... In August 2009, scientists reported that lightning strikes in the Arctic had increased twenty-fold, igniting some of the first tundra fires ever observed.

“According to the [National Sea Ice Data Center] center’s Mark Serreze, the new data ‘is reinforcing the notion that the Arctic ice is in its death spiral.’”

Then he mentions that a trillion tons of Greenland’s ice melted between 2003 and 2008, a mass ten times the size of Manhattan. Someone recently pointed out that the term moving at a “glacial pace” makes no sense any more, not now that Greenland’s ice sheet is pitted and undercut by rushing torrents of meltwater and the glacial landscape of mountaintops from the Andes to the Rockies is changing with almost blinding speed.

Weird stuff is happening everywhere: since McKibben’s book went to press, numerous news sources reported that a two-mile-long island in the Bay of Bengal, long fought over by Bangladesh and India, is no longer a bone of contention. The rising waters have erased it.

McKibben doesn’t say a lot about himself in the book, except for some New England anecdotes to which the Massachusetts-raised Vermonter was a witness. Too bad, since he himself could star in the movie you should be watching, the one about the low-key writer-guy who, upon realizing that his excellent writing on climate change isn’t waking us up enough, takes to dashing around the planet to do the job as an activist.

Mr. Smith Goes to Copenhagen. (People eager to suggest that flying is carbon-intensive should check themselves; the world is not going to be saved by individual acts of virtue, only by collective acts of change of a kind that would lead to China and the U.S.A. radically revising their en-



Weird stuff is happening everywhere: since McKibben’s book went to press, numerous news sources reported that a two-mile-long island in the Bay of Bengal, long fought over by Bangladesh and India, is no longer a bone of contention. The rising waters have erased it

ergy policies.) In recent years he seems to have become one of the figures I’ve run across occasionally in my own activism: someone so filled up with purpose they’ve become a conduit for change, and a lot of the personal – like ease and comfort – get washed aside for the sake of the mission. He’s achieved remarkable things. Notably with 350.org.

350 Degrees of Inseparability

A word about that number, 350. For a long time, McKibben relates, the premise, or pretense, was that the parts per million of atmospheric carbon we needed to worry about was 550, double the historic concentration. As it turns out, it was also a random figure, easy to calculate, not too alarming. We weren’t anywhere near there yet, which is why we could frame global warming as some terrible thing that was going to happen way down the road – the grandchildren theory of climate change.

Then the scientists got more data and so more precision about where peril lay: in December of 2007, NASA climatologist James Hansen announced at the American Geophysical Union that 350 was about the upper limit at which life on Earth as we know and like it was likely to continue.

We’re now at about 390. We don’t get to go up dozens of more degrees before the peril strikes. We need to go down now, dramatically. Imagine that change of numbers as like shifting from worrying about whether the butter on your toast was going to clog your arteries way down the road to worrying about whether you’d just swallowed a dose of really creepy industrial sludge and should start puking. The crisis was, in fact, in the past, and the future was upon us.

”The day Jim Hansen announced that number was the day I knew we’d never

V FOR VIABILITY

again inhabit the planet I'd been born on, or anything close to it," McKibben writes in *Eaarth*. So he co-founded a grassroots organization, 350.org, with a posse of younger activists he'd met through a climate-change campaign in Vermont.

That small team proved something important: that we could respond to what's happening on our planet with a speed nearly commensurate with the growing danger. The group's numerical name, with its crystal-clear target, worked in every imaginable language on *Eaarth* as words would not have.

A year after Hansen's announcement, McKibben sent me an e-mail:

"What we need is a rallying cry, an idea around which to coalesce. That's why we're running 350.org, and why we'll do a huge global day of action on Oct. 24. We need a measuring stick against which to critique Copenhagen, and 350 ppm CO₂ is the best one we're going to get. It implies dramatic and urgent and apple-cart-upsetting action, but it comes at it from a position of strength, not defensiveness. Our hope is that a huge worldwide outpouring on Oct. 24 will set a bar to make any action in Copenhagen powerful."

It worked.

It Happened One Day

At this point, let Climate Change, the movie, zoom out from following our protagonist to pan the amazing October 24th visual spectacle of groups of all sizes around the world pushing the number 350 – spelling it out (and into our consciousness) with their bodies for overhead photographs, holding signs in tribal villages, schoolyards, and urban plazas, everywhere from Madagascar to Slovakia. In one poignant case, a lone girl in Babylon, Iraq, who – you might think – had enough to worry about already, held up her hand-



The list of 350 endorsers begins at "A" with Afghanistan, which on this issue at least proved a much saner country than the U.S., and on through a long list of most of the poor nations, island-nations, and African nations, to Vietnam, Yemen, and Zambia

drawn 350 sign for a photographer who somehow managed to send the picture in to the organization. (I did my own little bit for the day, getting a few writers – Diane DiPrima, Ariel Dorfman, Barry Lopez – to contribute 350-word pieces they'd written to spur on the participants.)

There were more than 5,000 actions in 181 countries, which is to say, in most parts of the world. I've asked some groups and it's clear that quite a lot of people now know what the number 350 means. So did a lot of politicians and policy-makers by the time Copenhagen came around. The action mattered. Things changed.

That day of actions added a key tool to a previously faltering dialogue: suddenly, ordinary people, organizers, and elected officials had a concrete goal to reach for and a point of entry into the complex science of climate change. By the time the Copenhagen conference rolled around, 112 of the participating countries had endorsed that 350 ppm goal, the majority of nations at the conference – if, alas, the poorer and less influential ones.

Still, this took place a mere two years after Hansen first proposed the number as a measure of our global health, an astonishing adaptation to new ideas. The list of 350 endorsers begins at "A" with Afghanistan, which on this issue at least proved a much saner country than the U.S., and on through a long list of most of the poor nations, island-nations, and African nations, to Vietnam, Yemen, and Zambia.

The list offers a new way of sorting out the world in which the United States finds itself on the wrong side of history, but also of science, nature, and survival. Of course, this country is always a mix: the nation of Jim Crow was also the nation of the Montgomery bus boycott and Freedom Summer, and the nation of the greatest climate emissions per capita is also the nation of

Hansen, McKibben, and a host of innovative activists offering practical solutions to the problems climate change poses.

V for Viable

The early part of *Eaarth* offers the grim news about the way one species, ours, remade our world – so radically that it has become a turbulent, surprisingly inhospitable new planet. And here’s the bad news: no matter what we do, it will continue to get worse, at least for a while, though how much worse depends on whether we act.

Fortunately, the second half of McKibben’s book offers a kind of redemption and a lot to do, and so gives the book the shape of a “V,” if not for victory, then for viability: you tumble into the pit of bad news, then clamber up the narrative of possibility – of what our responses should look like, could look like, must look like. This is where this particular book diverges from the mountains of recent publications on the facts around climate change: if the first half is a science jeremiad, the second half is a very practical handbook.

My friend Patrick Reinsborough of the Smart Meme Project likes to talk about the “battle of the story, rather than the story of the battle,” of the need for activists to pay attention to narratives, because at least half of any battle turns out to be over just what the story is, and who gets to tell it. If we’re going to get anything done about climate change we’re going to have to change the story; not the scientific story about parts per million of carbon, and black soot, and methane in the atmosphere, which we need to find ways to broadcast over the white noise of corporate-funded climate denial, but the story of what we might want to do about it.

Right now, the story that everyone tends to tell, no matter what their politi-



Okay, it requires renunciation – but of things a lot of us would love to give up, including the whole alienated mode in which both power and production are centralized in remote and politically inaccessible sites – from food produced overseas to decisions made in furtive board meetings of multinational corporations

cal positions on climate change, is about renunciation: we’ll have to give up cars, big houses, air travel, all our toys and pleasures. It’s a story where we get poorer. No one but saints and ascetics likes giving things up. What’s exhilarating about *Eaarth* is that McKibben has a surprisingly different tale to tell. His version of the solution would make most of us richer – even if not in the ways we are presently accustomed to counting as wealth.

His vision is kind of delicious, at least if you like participatory democracy, local power, community, real security, and good food. Okay, it requires renunciation – but of things a lot of us would love to give up, including the whole alienated mode in which both power and production are centralized in remote and politically inaccessible sites – from food produced overseas to decisions made in furtive board meetings of multinational corporations. These things are awful for a lot of reasons, but the salient one is that they’re part of the carbon-intensive conventional economy. So they have to go.

Eaarth is actually an exceedingly polite, understated cry for revolution, but one that makes it clear how differently we need to do a whole lot of basic things. If it’s all about how you tell the story, then McKibben tells one that hasn’t, until now, been associated with climate change, one in which life, in ways that really matter, gets better. And it’s a winner, maybe even a game-changer.

Cheap Is the New Expensive

Another writer, David Kirby, was on my local radio station, KALW, the other day talking about his book, *Animal Factory*, and making the case that cheap meat is actually very expensive – if you count the impact on human health and the environment. Swine flu, which killed tens of thou-

V FOR VIABILITY

sands, sickened millions around the globe, and cost us a lot in terms of vaccines and treatments, likely evolved on one of the giant animal concentration units that pass for farms nowadays, and so host antibiotic-resistant bacteria, as well as concentrations of pollution from animal waste that harm hundreds of thousands or millions directly. “Should the multibillion [dollar] cost of swine flu be factored into the cost of every pork chop sold?” he asks, and adds, “And if so, what would that come out to, per pound?”

In the same way, the American way of life – often portrayed as a pinnacle of affluence – is in many ways deeply impoverished. We’re not poor in material goods, from new houses to hamburgers, though their quality is often dubious, and the wealthiest country the world has ever seen produces surprising amounts of hunger, poverty, and homelessness through the misdistribution of that wealth.

Even for the affluent, everyday American lifem is often remarkably impoverished, if measured in terms of free time, social connectedness, political engagement, meaningful work, or other things harder to calibrate than the horsepower of your engine or the square feet of your McMansion. And this way of living produces the carbon that is replacing the planet we evolved on with McKibben’s *Eaarth* – about as high a price as we could pay, short of extinction.

Cheap oil requires our insanely expensive military whose annual budget amounts to nearly as much as the rest of the world’s militaries put together, a crazy foreign policy, and in the past decade, a lot of death in the Middle East. It also pushes along the destruction of nearly everything via climate-change, a cost so terrible that the word “unaffordable” doesn’t begin to describe it. “Unimaginable” might, except



Even for the affluent, everyday American lifem is often remarkably impoverished, if measured in terms of free time, social connectedness, political engagement, meaningful work, or other things harder to calibrate than the horsepower of your engine or the square feet of your McMansion

that the point of all the data and data projections is to imagine it clearly enough so that we react to it.

McKibben’s vision of a world in which we might survive and even lead decent lives features decentralized food and energy production. Farewell, mega-corporations! (though, unlike me, he’s pretty polite about their influence on our society and the environment). His suggested mode of doing things – a vision of an alternative to capitalism as we know it – could be flexible, adapted to the peculiarities of regions, and low-carbon or carbon-neutral, unlike the systems on which we now rely. It would also require people to become more involved in local economies, ecologies, and policies, which is the scale at which viable adaptation seems likely to work best. (This is ground he covered in his 2007 book *Deep Economy*.)

His is, in fact, a vision of the good life that a host of flourishing institutions like farmers’ markets and community-assisted agriculture, organic farming, and small-scale farms are already embracing. In many ways, the solutions to our crisis are under development all around us, if only we’d care to notice.

They are here in our world in bits and pieces, as well as in parts of the so-called underdeveloped world that someday may turn out to be the sustainably developed world. They need, however, to be implemented on a grand scale – not by scaling them up, because their smallness is their beauty and efficiency, but by multiplying them until they become the norm. If they require losing what we have, they promise to recover what we’ve lost.

(Not So) Titanic

McKibben ends his book by marshaling a host of statistics and stories about just how this kind of agriculture works, now,

around the world, and ways, in the future, alternative energies could be similarly innovative and effective. So, of course, could a commitment to energy efficiency. The first changes we could make, starting tomorrow, undoubtedly involve reengineering everything from buildings to transit in the name of energy efficiency.

I live in a state that decided to implement such efficiency measures after the oil crisis of the 1970s. As a result, the average Californian now uses about half as much energy as the average American, not out of saintliness, but out of sophistication. We need to reduce our energy consumption by a huge percentage, but McKibben points out we could achieve the first 20% of the necessary reduction through efficiency alone, which is a painless step. I can testify that it doesn't feel like renouncing anything to live in better-built structures with better-designed machines.

To survive, McKibben suggests, we'll also need a lot of flexible, responsive institutions that aren't too big to fail or too big to adapt to the coming climate chaos. Describing a little inner-city savings and loan in Los Angeles, he writes:

"There's nothing that Broadway Federal could do to trigger a recession, and that's the other advantage of smallness: mistakes are mistakes, not crises, until they're interconnected into a massive system. Many small things breed a kind of stability; a few big things endanger it — better the Fortune 500,000 than the Fortune 500 (unless you want to be an eight-figure CEO)."

A lot of people don't even want to take in the reality of climate change, let alone do anything about it, because it seems so overwhelming. *Eaarth's* most signifi-



If we were imagining climate change as a movie, our ship of state would still ram the iceberg, but this time the passengers would have debarked ahead of time

cant strength lies in the way it breaks our potential response to climate change's enormity down into actions and possible changes that not only seem viable and graspable, but alluring. One of the most interesting phenomena of the Bush era was the way addressing climate change here in the United States devolved to the level of states, regions, and cities — the U.S. Council of Mayors got behind doing something for the environment (and us) at a time when the federal government was intent only on making the world safe for oil barons. It was in this same period that the state of California set emissions standards for vehicles that the Obama administration has now adapted.

But that administration isn't doing nearly what's required either. Last year, speaking of the economy, Barack Obama said: "Look back four years from now, I think, hopefully, people will judge [our] body of work and say, 'This is a big ocean liner, it's not a speedboat. It doesn't turn around immediately.'"

It's an unfortunate thing to say, since the most familiar image of ocean liners in popular culture involves a calamitous meeting with an iceberg 98 years ago. If we were imagining climate change as a movie, our ship of state would still ram the iceberg, but this time the passengers would have debarked ahead of time.

If the ship of state can't turn in time to avert catastrophe, it's time to jump ship and put ourselves into small, mobile lifeboats, canoes, outriggers, and kayaks. The age of the giants is over; the future belongs to the small fry. If we want to have a future, that is. It's really your choice because, whether you know it or not, whether you like it or not, you're also starring in this movie.

WRITING WORTH READING FROM AROUND THE WORLD

ColdType

www.coldtype.net