Environmental Communication: A Journal of Nature and Culture

Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/renc20

Why it Matters How We Frame the Environment
George Lakoff

Available online: 17 Mar 2010

To cite this article: George Lakoff (2010): Why it Matters How We Frame the Environment, Environmental Communication: A Journal of Nature and Culture, 4:1, 70-81
To link to this article: http://dx.doi.org/10.1080/17524030303529749

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.tandfonline.com/page/terms-and-conditions

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.
Why it Matters How We Frame the Environment

George Lakoff

Keywords: Framing; the Real; Messaging; Enlightenment Reason; Hypocognition; Global Warming

Ubiquity

Environmental framing is everywhere in the news. I am writing this on October 11, 2009. Today’s New York Times has two typical and interesting examples. The first is from a Jonathan Safran Foer (2009, p. 74) piece, “Against Meat”:

According to reports by the Food and Agriculture Organization of the U.N., factory farming has made animal agriculture the No. 1 contributor to global warming (it is significantly more destructive than transportation alone), and one of the Top 2 or 3 causes of all of the most serious environmental problems: air and water pollution, deforestation, loss of biodiversity, … Eating factory-farmed animals—which is to say virtually every piece of meat sold in supermarkets and prepared in restaurants—is almost certainly the single worst thing that human do to the environment.

Turning to the op-ed section, one comes across an odd couple, John Kerry and Lindsay Graham (2009, p. WK11), a Massachusetts liberal and a South Carolina conservative, writing to “hopefully” promote the bipartisan climate change legislation they have coauthored:

We are advocating aggressive reductions in our emissions of carbon gases … without hindering global competitiveness or driving more jobs overseas … we must also take advantage of nuclear power, our single largest contributor of
emissions-free power . . . jettison cumbersome regulations that have stalled the construction of nuclear plants . . . encourage serious investment in research to find solutions to our nuclear waste problem . . . for the foreseeable future we will continue to burn fossil fuels . . . The United States should aim to become the Saudi Arabia of clean coal . . . we are committed to seeking compromise on additional onshore and offshore gas exploration . . . Failure to act comes with another cost . . . the administration will use the Environmental Protection Agency to impose new regulations . . . likely to be tougher . . . Industry needs the certainty that comes with Congressional action . . . we will pass on to future generations a strong economy, a clean environment, and an energy-independent nation.

And looking back to the past, we find these quotes from a 2003 language advisory by Frank Luntz (p. 142) to the Bush administration, called Winning the Global Warming Debate: An Overview:

It’s time for us to start talking about “climate change” instead of global warming . . . “Climate change” is less frightening than “global warming” . . . Stringent environmental regulations hit the most vulnerable among us—the elderly, the poor and those on fixed incomes—the hardest . . . Job losses . . . greater costs . . . American corporations and industry can meet any challenge, we produce the majority of the world’s food, . . . yet we produce a fraction of the world’s pollution.

Luntz’ memo was the beginning of the use of “climate change.” The idea was that “climate” had a nice connotation—more swaying palm trees and less flooded out coastal cities. “Change” left out any human cause of the change. Climate just changed. No one to blame.

In the Luntz memo, we see the roots of the conservative discourse used in the Kerry–Graham op-ed: tough Environmental Protection Agency regulations would hurt the vulnerable and create job losses. And the use of language suggests the opposite of the UN report that Foer quotes, that our methods of food production produces only “a fraction of the world’s pollution,” which sounds like “a small, insignificant fraction” with insignificant effects. And, given the conservative perspective that Kerry and Graham take, it is no surprise that they do not mention what Foer says about animal agriculture.

If you are at all sensitive to framing, examples like this jump out at you every day. What are we to make of this flood of examples?

What is “Framing”?

One of the major results in the cognitive and brain sciences is that we think in terms of typically unconscious structures called “frames” (sometimes “schemas”). Frames include semantic roles, relations between roles, and relations to other frames. A hospital frame, for example, includes the roles: Doctor, Nurse, Patient, Visitor, Receptionist, Operating Room, Recovery Room, Scalpel, etc. Among the relations are specifications of what happens in a hospital, e.g., Doctors operate on Patients in Operating Rooms with Scalpels. These structures are physically realized in neural circuits in the brain. All of our knowledge makes use of frames, and every word is defined through the frames it neurally activates. All thinking and talking involves
“framing.” And since frames come in systems, a single word typically activates not only its defining frame, but also much of the system its defining frame is in.

Moreover, many frame-circuits have direct connections to the emotional regions of the brain. Emotions are an inescapable part of normal thought. Indeed, you cannot be rational without emotions. Without emotion, you would not know what to want, since like and not-like would be meaningless to you. When there is neither like or not-like, nor any judgment of the emotional reactions of others, you cannot make rational decisions.

Since political ideologies are, of course, characterized by systems of frames, ideological language will activate that ideological system. Since the synapses in neural circuits are made stronger the more they are activated, the repetition of ideological language will strengthen the circuits for that ideology in a hearer’s brain. And since language that is repeated very often becomes “normally used” language, ideological language repeated often enough can become “normal language” but still activate that ideology unconsciously in the brains of citizens—and journalists.

In short, one cannot avoid framing. The only question is, whose frames are being activated—and hence strengthened—in the brains of the public.

There are limited possibilities for changing frames. Introducing new language is not always possible. The new language must make sense in terms of the existing system of frames. It must work emotionally. And it must be introduced in a communication system that allows for sufficient spread over the population, sufficient repetition, and sufficient trust in the messengers.

And, of course, negating a frame just activates the frame, as when Nixon said, “I am not a crook” and everyone thought of him as crook. When President Obama said that he had no intention of a “government takeover,” he was activating the government-takeover frame.

These are some of the properties of “Real Reason,” the way we really reason, which is different from how reason has been understood by many since western Enlightenment.

The Trap of Enlightenment Reason

Most of us were brought up with a commonplace view of how we think that derives from the Enlightenment. Over the past 30 years, the cognitive and brain sciences have shown that this view is false. The old view claimed that reason is conscious, unemotional, logical, abstract, universal, and imagined concepts and language as able to fit the world directly. All of that is false. Real reason is: mostly unconscious (98%); requires emotion; uses the “logic” of frames, metaphors, and narratives; is physical (in brain circuitry); and varies considerably, as frames vary. And since the brain is set up to run a body, ideas and language can’t directly fit the world but rather must go through the body.

This perspective on reason matters to the discussion in this forum about global warming, because many people engaged in environmentalism still have the old, false view of reason and language. Folks trained in public policy, science, economics, and law are often given the old, false view. As a result, they may believe that if you just tell
people the facts, they will reason to the right conclusion. What actually happens is that the facts must make sense in terms of their system of frames, or they will be ignored. The facts, to be communicated, must be framed properly. Furthermore, to understand something complex, a person must have a system of frames in place that can make sense of the facts. In the case of global warming, all too many people do not have such a system of frames in the conceptual systems in their brains. Such frame systems have to be built up over a period of time. This has not been done.

How to Misunderstand “Framing”

Words are defined relative to frames, and hearing a word can activate its frame—and the frames in its system—in the brain of a hearer. Words themselves are not frames. But under the right conditions, words can be chosen to activate desired frames. This is what effective communicators do. In order to communicate a complex fact or a complex truth, one must choose one’s words carefully to activate the right frames so that the truth can be understood. If the hearer has no such frames, then you have to choose your words carefully to build up those frames. That is what I am doing in this essay, for readers who are not familiar with frames, or with the cognitive science behind the study of framing. In order to communicate truths about framing, I have to provide you with a narrative that builds up an appropriate system of frames in your mind.

Have you ever wondered why conservatives can communicate easily in a few words, while liberals take paragraphs? The reason is that conservatives have spent decades, day after day building up frames in people's brains, and building a better communication system to get their ideas out in public. Progressives have not done that. As a result they have a hard time building up the appropriate system of frames from scratch. And if they make the mistake of thinking that words are frames, they will assume that all they need are the right words or slogans.

This mistake lay behind ecoAmerica’s hiring of Western Strategies and Lake Research Partners to help them design and conduct research for their “Climate Truths” report. Now Western and Lake did give them some sage advice to “reframe” global warming on the surface level of word choice and slogans: to talk about values, not just facts and figures; to use simple language, not technical terms; and to appeal to emotions. But in the absence of systems of frames built up over a long period, the words and slogans could probably not do much, though they might be an improvement.

The same mistake has been made by PRAXIS Forum in the instructions I received to write this paper. PRAXIS Forum misframed the issue. Here is an example of questions I was to address:

Some say focusing on language, visual rhetoric, or communication more broadly distracts people from “the real crisis” of global climate change. Do you believe there is any ethical, political, or conceptual risk in a communicative approach to global climate change? Conversely, do you believe there is any ethical, political, or
conceptual risk in ignoring a communicative approach to global climate change? 
(Pezzullo, personal communication, June 23, 2009)

The term “communicative approach” taken as contrasting with the “real crisis” seems to accept a view of “framing” as concerned not with deep truths, but with short-term political persuasion and possibly manipulation. But in reality, environmental frames are the (typically unconscious) conceptual structures that people have in their brain circuitry to understand environmental issues. To understand “the real crises” one needs the right conceptual structures in one’s brain circuitry. Frames are communicated via language and visual imagery. The right language is absolutely necessary for communicating “the real crisis.” However, most people do not have the overall background system of frames needed to understand “the real crisis”; simply providing a few words and slogans can at best help a very little.

But the framing problems are even more profound. Many people have in their brain circuitry the wrong frames for understanding “the real crisis.” That is, they have frames that would either contradict the right frames or lead them to ignore the relevant facts. Those wrong frames don’t go away. You can’t just present the relevant facts and have everyone erase significant circuitry in their brains. Brains don’t work that way. What is needed is a constant effort to build up the background frames needed to understand the crisis, while building up neural circuitry to inhibit the wrong frames. That is anything but a simple, short-term job to be done by a few words or slogans.

Yet, the communications teams for environmental non-governmental organizations, the U.S. Environmental Protection Agency, the think tanks, and U.S. Congress have to have something to say by next week—or tomorrow! They need words and slogans now! And so they see framing as a short-term messaging issue.

If that weren’t bad enough, the problem is even worse. It’s not just a matter of understanding “the real crisis.” We need to understand what to do about it. And choosing the right policies means understanding those policies and how they are supposed to work. This is an incredibly complicated matter, and in many cases the right frames for understanding policy have not even been figured out.

Politics

Then, there is the politics. There are conservative and progressive moral systems (Lakoff, 1996/2002). The conservative moral system includes a number of ideas that work against environmentalism and against dealing with global warming.

- First, there is the idea that man is above nature in a moral hierarchy, that nature is there (put there by God) purely for human use and exploitation. There are other interpretations of the Judeo-Christian Bible (such as the stewardship metaphor promoted by former Vice President Al Gore); however, the resilience of the former inhibits changes in practices and beliefs about global warming.
- Second, there is the Let-the-Market-Decide ideology, in which the market is both natural and moral—it’s the Decider, who rewards market discipline and punishes...
lack of it; there should be no authority higher than that of the market. Hence no regulations, low or no taxes, no workers’ protections or unions, no tort cases. Thus, environmental regulation and government subsidies for sustainable energy, green technology, and green jobs are seen as government interference in the market, and hence immoral. But as the recent world economic collapse has clearly shown, markets require regulation to function effectively and in the public interest. The anti-tax crusade in California has similarly led to the bankruptcy of the state and widespread disasters for the public good.

- Third, conservatives tend to think more in terms of direct rather than systemic causation (Lakoff, 2006, especially Chapter 7). But phenomena like global warming work by systemic, not direct causation.

- Fourth, present-day market fundamentalism assumes that greed is good. It supports the view that market principles should govern our conflicts between environmentalism and economics. One such principle is cost–benefit analysis (CBA). The basic math of CBA uses subtraction: the benefits minus the costs summed over time indefinitely. Now those “benefits” and “costs” are seen in monetary terms, as if all values involving the future of the earth were monetary. CBA is just the wrong paradigm for thinking about global warming, however. For example, as any economist knows, future money is worth less than present money. How much less? The equation has a factor that tells you how much: $e^{(2.781828 \ldots)}$ to the power minus-$d$ times $t$, where $t$ is time and $d$ is the discount rate. Now $e$ to a negative power gets very small very fast. Just how fast depends on the exact discount rate (that is, interest rate), but any reasonable one is a disaster. The equation says that, in a fairly short time, any monetary benefits compared to costs will tend to zero. That says there are no long-term benefits to saving the earth!

- Fifth, aligned with CBA is the Equivalent Value Metaphor. To find out the monetary value of the environment in a particular case, think in terms of the “services” that the environment in this case provides to human beings. Then compute what it would cost private enterprise to provide the equivalent services. That is the value of the “environmental service.” If a developer is willing to pay that amount or more, development should proceed. In cases of development versus conservation, compute the profits from development that would be “lost” to the developer under conservation, and consider that the value of the conservation. That is the money to be paid to the developer if conservation is chosen. In both, the natural environment, which lasts indefinitely, is destroyed and sacrificed to short-term profit.

- Sixth, conservative populism views liberalism negatively, especially through the frame of the Liberal Elite: the tax-and-spend, sushi-eating, latte-drinking, Birkenstock-wearing, do-gooder, know-it-all liberals! This view tends to make conservative populists doubt and reject the science behind reports that establish the existence of and impact of global warming.

Together, these six points lead to much of the moral outrage expressed by conservatives in the face of progressive environmental and global warming legislation.
The Progressive Moral System

The values at the heart of the progressive moral system are empathy, responsibility (personal and social), and the ethic of excellence (make the world better, starting with yourself). Empathy has a physical basis in the mirror neuron system (Lakoff, 2008), which links us physiologically to other beings (e.g., the polar bears) and to things (e.g., redwoods) in the natural world. This leads us to see inherent value in the natural world.

Personal responsibility means taking care of yourself (e.g., maintaining one’s health) and taking care of others (e.g., protecting their health), and functioning in the outdoors is seen not only as a way to do those things, but also as way of developing empathy with beings and things in the natural world. The ethic of excellence calls on us to make the world better (improve the environment) or at least preserve it, starting with ourselves (e.g., conserving energy, recycling, etc.).

The progressive moral system rejects market fundamentalism and sees government as necessary for improving environmental conditions. These contradictory moral systems are at the heart of the political conflict over the environment in America.

Luckily, a large proportion of the public is significantly bi-conceptual, that is, many people have versions of both conservative and progressive value-systems in their brains, but applying to different issues. Many Americans are conservative on some issues and progressive on others. It would be nice if political value systems did not affect environmental issues, but they do. The good news is that it may be possible to activate a realistic view of our situation by using the fact that many swing voters and even many Republicans are partially progressive from the perspective of the value-systems already in place in their brains. What needs to be done is to activate the progressive frames on the environment (and other issues) and inhibit the conservative frames. This can be done via language (framing the truth effectively) and experience (e.g., providing experiences of the natural world).

Unfortunately, conservatives have long been extremely good at the converse—using language repeated all day every day to activate conservative frames and inhibit progressive ones. We are not on a level communicative playing field.

Environmental Hypocognition: the Tragedy of the Absence of Frames

“Hypocognition” is the lack of ideas we need. We are suffering from massive hypocognition in the case of the environment. The reason is that the environment is not just about the environment. It is intimately tied up with other issue areas: economics, energy, food, health, trade, and security. In these overlap areas, our citizens as well as our leaders, policymakers, and journalists simply lack frames that capture the reality of the situation.

Let us begin with the very concept of the “environment.” The Environment Frame sees the environment as separate from, and around, us. Yet, we are not separate from Nature. We are an inseparable part of Nature. Yet we separate self from other, and conceptualize Nature as other. This separation is so deep in our conceptual system
that we cannot simply wipe it from our brains. It is a terribly false frame that will not
go away.

Or take the concept of “environmental action.” What can we, as individuals, do? Use less energy? Replace our light bulbs? Drive less, walk more, ride bikes? Recycle? Eat organic? Eat local? Green our homes? Buy green? All of this is fine and necessary, but the most important thing is missing: political action! To an enormous degree, governmental action outweighs and shapes individual actions. When we think of the environment, we should be thinking of political involvement. But politics is not in the Environment Frame.

Here’s a deep truth that is also hard to discuss because there is no established frame for it in public discourse. The economic and ecological meltdowns have the same cause, namely, the unregulated free market with the idea that greed is good and that the natural world is a resource for short-term private enrichment. The result has been deadly: toxic assets and a toxic atmosphere. That is, the joint cause is short-term greed together with the fact that the global economy and ecology are both systems. Global causes are systemic, not local. Global risk is systemic, not local. The localization of causation and risk is what has brought about our twin disasters. We have to think in global, systems terms and we don’t do so naturally. Here hypocognition is tragic. We lack the frames we need.

As Michael Pollan has taught us, food is central to our existence as individuals and the politics of food is central to our existence on the planet. Take Pollan’s distinction between sun-based food and oil-based food. Oil-based food is food that takes petroleum, in the form of fertilizers, pesticides, and transportation. Most of the food Americans now consume is oil-based, and accounts for a massive amount of global warming pollution. Locally grown organic food is sun-based and does not contribute to global warming pollution.

But Pollan had to invent the terms “sun-based” and “oil-based” and the frame for them is not there in the popular mind; nor is the idea of Globalizing Localism. Localism is the idea that food, energy, housing, and many other necessities of life can be made available locally in most of the world, that third-world development depends on it, and that the control of carbon dioxide in our atmosphere may also depend on it. Population control is a necessary part of this idea, and the central factor in population control is women’s education and contraception. Yet there is no single frame out in popular discourse that integrates all these elements into a comprehensible whole.

What we have instead are institutionalized frames that contradict this idea: globalization of trade (neoliberalism); religions that oppress women and keep them ignorant and powerless; genetic engineering and the patenting of genes; maximization of profits via highest yields; the economies of centralized processing; and so on.

This leads to a major point: frames can become reified—made real—in institutions, industries, and cultural practices. Once reified, they don’t disappear until the institutions, industries, and cultural practices disappear. That is a very slow process.
An important frame is in throes of being born: The Regulated Commons—the idea of common, non-transferable ownership of aspects of the natural world, such as the atmosphere, the airwaves, the waterways, the oceans, and so on. Take the case of the atmosphere. Peter Barnes, in *Climate Solutions*, has argued that we do all own the air, and that that ownership should be legalized through a trust. Polluting corporations are dumping garbage in our air and they should start cleaning it up. Those who sell polluting fuels should have to buy pollution permits at auction, with the number of permits capped and reduced two percent a year for 40 years. This will create a market in permits, with their value rising every year. Where does the money go? Not to the government, but to each citizen equally. At birth, you acquire a share; at death, it disappears with you. All the calculations and money transfers would be done by computer. Each month you would get your share transferred to your bank account, with the notation: this is your dividend for owning the air. Part of the moral basis for it is that companies should pay the costs of doing business—including cleaning up.

The Regulated Commons, being regulated, would not be subject to the Tragedy of the Commons, where the commons is destroyed through overuse. Though it would involve common ownership, it would be thoroughly, and equally, capitalist. And its main point would be an idea: common, non-transferable ownership—we all own the air!

Relatedly, there is a crucial movement toward a new economics—an economics of well-being, in which the Gross Domestic Product is replaced by an overall indicator of well-being. This new perspective is directly counter, in many ways, to the narrowly imagined concept of economic growth.

**The Scientists’ View**

I’m a scientist, initially trained as an undergraduate at the Massachusetts Institute of Technology, and late became one of the founders of the field of cognitive science. I was brought up with Enlightenment Reason. Enlightenment Reason still has a hold among physical scientists unfamiliar with the revolution brought by the cognitive and brain sciences. We can see why this matters in the phrase “the real crisis’ of global climate change” in the questions put to the authors in this forum.

The environmental scientists’ view is material—how many parts per million of CO₂ can the earth’s atmosphere tolerate without undue global warming? 350? Or 450? It looks at the chemical reactions in the upper atmosphere that produce warming. It looks at the storage capacity for CO₂ in forests and oceans. It looks at the rate of melting of the glaciers and ice caps and how they correspond to rise of the oceans. It looks at the effects on storms, and on fish, and on birds. That is the domain of the crisis for environmental scientists—and rightfully so. They have our gratitude and support.

Accordingly, I can remember when, in the 1970s, I first heard that earth’s temperature might rise a degree or two. In seconds, my reaction was “Omigod!” I had studied enough thermodynamics to know how huge an amount of heat that was.
I had read enough about meteorology to realize the effects on storms, enough about species to understand how vulnerable they (and we) are to subtle changes in climate, and so on. I had enough of the scientists’ frames in my brain to draw those conclusions instantly. And like other scientists, I believed at the time that if we all just got the scientific word out, the world leaders would see the threat and do the right thing. This has been the Al Gore strategy: if enough people see An Inconvenient Truth and are exposed to those facts, the world should change.

To some extent it has. To some extent cognitive frame changes have led to material changes. Electric cars are being developed. Companies—even including Walmart—have found ways to make more money by becoming greener. Food consciousness is increasing, with farmers’ markets sprouting up and an organic garden on the White House lawn. But it is not enough. Not nearly enough.

It turns out that the results of the fundamental material science of the environment are not sufficient to change enough brains. For that we need some understanding of the cognitive and brain sciences. We need it to be effective countering the powerful conservative forms of resistance.

Messaging

I wish I could tell you that just getting a few of the words and slogans better by next week would change the world environmentally and win the culture wars. But what I have been saying for years is that it is harder than that. There are many things that have to be done at once on the message front.

First, progressives need a much better communications system. In addition to serious framing research institutes, such a system needs training facilities, a system of spokespeople in every electoral district, and bookers to get them booked in the media.

Second, there needs to be cognitive policy in addition to material policy. That means planning the frames that are needed in the long run, as well as those needed to battle the right on issues of the day. The effectiveness of short-term frames depends on the prior effectiveness of long-term frames.

Third, framing institutes are about much more than language. They are about the kinds of things discussed in this paper. What framing gaps are there and how do we fill them. How can the right frames get institutionalized? How can an understanding of framing guide policy?

Fourth, there are everyday helpful hints:

- Talk at the level of values, and frame issues in terms of moral values. Distinguish values from policies. Always go on offense, never defense. Never accept the right’s frames—don’t negate them, or repeat them, or structure your arguments to counter them. That just activates their frames in the brain and helps them.
- Provide a structured understanding of what you are saying. Don’t give laundry lists. Tell stories that exemplify your values and rouse emotions. Don’t just give numbers and material facts without framing them so their overall significance can
be understood. Instead find general themes or narratives that incorporate the points you need to make.


The ecoAmerica Report got some of these helpful hints right, and at least deserves credit for that. But, as Mark Mellman (2009) pointed out in his critique, the report also violated some of the basic principles of short-term messaging. The main problem with the ecoAmerica Report was that it did not address either the deep or long-term issues. It was written as if short-term messaging would win the day, even in the absence of prior effective long-term messaging and a serious communications system.

Framing for an Environmental Movement

Successful social movements require the coherence provided by coherent framing. Think of the union movement, the anti-war (or peace) movement, the civil rights movement, or the feminist movement. The basic ideas are simple and straightforward. Unions: Because companies have much more power over individual workers in matters of pay, benefits, and working conditions, workers need to join together in unions to equalize that power. Civil rights: African-Americans have been denied a wide range of civil rights and should have them. Feminism: Women have been relegated to inferior positions in society and deserve equality in those areas. The same should be true of environmentalism. Environmentalism: The natural world is being destroyed and it is a moral imperative to preserve and reconstitute as much of it as possible as soon as possible.

Of course, in each case, complexities have arisen, along with powerful reactions. The details are enormously complex in each, as they are in environmentalism. But what has made social movements effective is a simple basic framing.

The social movement approach is idealistic of necessity. Idealism mobilizes. And it throws a light on, and presents a counterweight to, moral compromise. The media reports mainly on political compromise, as exemplified by the Kerry–Graham quote we started with. Without a clearly framed social movement, the moral compromise behind the political compromise can be hidden.

Truth must be framed effectively to be seen at all. That is why an understanding of framing matters.

Note


References