

HWC 201 – UNIT 2 – THE ENVIRONMENT –

Outline for Lecture 8– The Brownlash: A Betrayal of Science & Reason

While it assumes a variety of forms, the brownlash appears most clearly as an outpouring of seemingly authoritative opinions in books, articles, and media appearances that greatly distort what is or isn't known by environmental scientists. —Paul and Anne Ehrlich

Denial, however, must be distinguished from honest disagreement about matters of fact, logic, data, and evidence that is a normal part of the ongoing struggle to establish scientific truth. It is, rather, the willful dismissal or distortion of fact, logic, and data in the service of ideology and self-interest. —David Orr & David Ehrenfeld

...the vast majority of brownlash pronouncements are based in either faulty science or the misinterpretations of good science... although convincing to some lay readers, are replete with gross scientific errors and severely twisted interpretation. — Paul and Anne Ehrlich

There appears to be a concerted and systematic effort by some individuals to undermine and discredit the scientific process that has led many scientists working on understanding climate to conclude that there is a very real possibility that humans are modifying Earth's climate on a global scale. Rather than carrying out a legitimate scientific debate through the peer-reviewed literature, they are waging in the public media a vocal campaign against scientific results with which they disagree. — Susan Avery et al.

With strong and appealing messages, they [the Brownlashers] have successfully sown seeds of doubt among journalists, policy makers, and the public at large about the reality of such phenomena as overpopulation, global climate change, ozone depletion, and the losses of biodiversity. — Paul and Anne Ehrlich

I. Definition and Introduction to the Brownlash

A. Brownlash (purposeful distortion of scientific information about the environment in the service of ideology and self-interest); disinformation; manipulation of public opinion; public relations strategies vs. normal way science is done

- origin of the term – Paul & Anne Ehrlich—*Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future*
- a body of anti-science – a twisting of the findings of empirical science – to bolster a predetermined worldview and to support a political agenda
- a distortion of scientific information to create disinformation, uncertainty, doubt, and confusion over scientific findings about the environment
- the current scheme whereby industry-paid pitchmen promote highly questionable, discredited – or sometimes non-existent – studies to try to minimize the seriousness of environmental problems
- it is a backlash against the increase in public concern about the environment and against the "green" findings of the scientific community
- also known as “green backlash,” “greenwash,” “contrarian lobby,” or “anti-environmental” movement
- it includes such assertions as: the ozone hole is a hoax, that concern about global warming is unwarranted, that there is no extinction crisis, that chemicals consumers are exposed to have been tested and found safe, that population growth is not a problem.
- represents a disparate group including corporate lobbies, politicians, ideologists, propagandists and researchers
- a type of **pseudoscience** (purport to use the methods and findings of science, but do not)

B. Why is there a brownlash? Leaders of some corporations and many people in positions of economic and political power see environmental laws and regulations as threats to their wealth and power, and they oppose them.

“In a world where a new environmental or health regulation can cost an industry millions of dollars worth of profits the stakes are high and corporations have employed almost every imaginable technique of persuasion that money can buy including the latest PR techniques and information technologies available for raising money, building coalitions, manipulating public opinion, lobbying politicians and attacking environmentalists.”-- Sharon Beder

II. Critical to distinguish brownlash from honest scientific disagreement

- very different from honest scientific disagreement; critically important to distinguish
- environmental scientists can be wrong, and they appreciate being corrected—this is how science advances. However, this is different from the brownlash

III. Need to understand how scientific process works

- Scientific research is based on evidence—*whether you like the results or not, you have to accept the evidence* (In contrast, the brownlash, like other pseudoscience, is based on a preconceived notion and a selective choosing of evidence)
- Peer-review process; what is peer review?; why is it important? does this guarantee correctness, lack of bias? Where is something published?

The brownlash uses distortions of truth and disregard for scientific methodology, and has gained credibility despite these inadequacies. The movement, which publishes on op-ed pages of major newspapers instead of peer-reviewed academic journals, uses techniques such as writing press releases in the form of scientific journals. They take advantage of a scientifically illiterate population. —paraphrased from Paul Ehrlich

The IPCC (Intergovernmental Panel on Climate Change) report went through extensive external peer review.

C. Scientific consensus vs. minority viewpoints— what should we base policy on?

“Science does not advance by consensus, but by formulating hypotheses, testing them, and either rejecting them based on the empirical data or by accepting them...However, ..., science policy should be based on consensus”—Jeff Harvey 2002

IV. Methods of the Brownlash (a few of the many)

- Precursor**—the tobacco industry example was a precursor to modern corporate PR campaigns—a coordinated, industry-wide strategy designed actively to mislead and confuse the public about the true dangers associated with smoking cigarettes.
 - “Scientific prostitutes”

B. Specific Tactics:

- Lobbying against environmental laws and regulations
- Coalition of phony front groups (often called “Wise Use” movement) and think tanks to cause confusion and speak against environmental reforms and question scientific claims. Anti-environmental front groups (with green-sounding names) include “Environmental Conservation Organization”, “National Wilderness Institute”, “National Wetland Coalition”, “Global Climate Coalition”, “Greening Earth Society”, “Information Council on the Environment”, “American Counsel on Science and Health”
- Misinformation, disinformation; influence public opinion (PR firms defending undesirable practices or countering attempts to expose those practices; manipulating media)
- Exaggeration and smear tactics: Ron Arnold (one of leaders of Wise Use movement): “Facts don’t really matter. In politics, perception is reality.”; portray environmentalists as extremists; exaggerate financial impact (“sky is falling”)
- Either don’t collect data, or keep them secret (exert pressure to prevent studies) -e.g., DFW metroplex
- Intimidate, threaten, etc. (e.g., punish whistle-blowers, lawsuits, violence)
- Fox guarding the henhouse appointments (influence by those being regulated)
- Exploit the built-in limitations of science and public ignorance about science (no 100% proof)

V. How to protect yourself from being manipulated?

- Follow the money**— who benefits financially?
- Follow the motives**— who benefits politically or in other ways and who do they owe?
- What is the **consensus viewpoint** of the majority of scientists? Small-minority or contrarian viewpoints should not be ignored, but they don’t deserve equal weight as consensus views; can be misleading or purposefully manipulated (scientists can be “bought”)
- Be skeptical**—**assess the scientific integrity of the material** (peer reviewed?; where published?)
- Assess the scientific integrity & funding of the scientists** (e.g., Fred Singer, consultant for a number of major oil companies— ARCO, Exxon, Shell, Sun Oil, Unocal)

Specific Examples of the Brownlash

1) Brownlash says ozone hole is a hoax

"Similarly, if there were in fact to be some reduction in the ozone layer, the appropriate response, to avoid the additional cases of skin cancer that would allegedly occur from exposure, to more intense sunlight, would be to be sure that there were more sunglasses, hats, and sun-tan lotion available" –George Reisman

Rush Limbaugh calls concern about the ozone layer: "*balderdash. Poppycock.*" *The only people who worry about it are "environmental wackos," "dunderheaded alarmists and prophets of doom."*

Diggs assessment: Given our current knowledge, the consensus of almost all atmospheric scientists, and the progress that has been made since the control of CFCs, the Brownlash position seems obviously wrong.

2) Brownlash says concern about global warming is unwarranted

"*It's getting colder in Greenland. Isn't the earth supposed to be warming?*" Greg Easterbrook

The Ehrlichs say that Easterbrook, like many pundits, confuses the difference between global warming and regional climates and between climates and weather in general. Global warming refers to what may be happening to the average temperature of the Earth, they say, not the temperature of any particular area on its surface. It is quite possible for the average temperature of the earth to rise and for Greenland to cool simultaneously.

Diggs assessment: The evidence documents that the world is warming and the consensus opinion of the world's leading climatologists and atmospheric physicists is that humans are contributing to this change. However, global climate is extremely complex, there are natural climate cycles, and many uncertainties. Nonetheless, because of what is at stake, we should, at minimum, implement "no regrets" strategies (things that help us in other ways) that give us an environmental insurance policy.

3) Brownlash says there is no extinction crisis.

"*[I]f one takes the admittedly very rough guesses at the numbers of species being made extinct and of the numbers that exist hazarded by the rightly eminent biologist Edward O. Wilson, less than 1% of species would become extinct in 30 years*" – Wilfred Beckerman, English Economist, 1995

Diggs assessment: This is a distortion/misunderstanding of Wilson's work. Already well more than 1% of non-microbial species have become extinct (probably 10%). All one has to do to witness this first-hand is to go to the vast areas where rainforests (and the species they contain) have been wiped out. I have witnessed this myself.

4) Brownlash says that the chemicals consumers are exposed to have been tested & found safe.

"*Dioxin is vastly overrated as a dangerous chemical.*" *Exposure to dioxin 'is now considered by some experts to be now more risky than spending a week sunbathing'*" –Keith Schneider, 1991

Diggs assessment: Most chemicals in use today have simply not been adequately tested for their impacts on human health, either individually, or more importantly, synergistically. Dioxin, a by-product of a number of industrial processes, is particularly dangerous. Extremely tiny amounts can cause serious human health problems.

5) Brownlash says that population growth is not a problem.

"*We now have in our hands—in our libraries, really—the technology to feed, clothe, and supply energy to an ever-growing population for the next 7 billion years.*" –Julian Simon, 1994

Diggs assessment: This is an absurd statement given the food and freshwater issues facing the world today, to say nothing of the environmental degradation we are currently facing.

A "**front group**" is an organization set up to hide the true interests of its creator. For example, a group of casino owners that did not want legalized gambling in an adjacent states might create a group that claimed to oppose gambling on moral grounds, when they actually opposed gambling in adjacent states because they thought it would hurt business. Front groups use the well known tendency of people to put more faith in information that appears to come from a source that apparently has no direct interest in an issue. A related strategy is the "**third party technique**" in which a supposedly independent expert is actually paid indirectly by an interested party. Also popular are "**astroturf groups**" that appear to have been formed as citizen groups but have actually been formed by vested interests, and the "**think tanks**" which appear to be scholarly institutes but are often heavily funded by special interests.. —Jim Norton (<http://www.info-pollution.com/frontgroups.htm> 2004).