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Book Review: The Promise and Peril of Environmental Justice. By Christopher H. Foreman, Jr.

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BOOK REVIEW

The Promise and Peril of Environmental Justice. By Christopher H. Foreman, Jr. Washington, D.C., Brookings Institution Press, 1998. Pp. 160. Hard Cover. \$22.95.

*Reviewed by Alan Ramo**

I. INTRODUCTION

Christopher H. Foreman, Jr.'s *The Promise and Peril of Environmental Justice*¹ asserts several disturbing critiques of the environmental justice movement. Focusing more on the "peril" than the "promise," Foreman's book is in many respects a brief attacking environmental justice activists for everything from the movement's targets to how it engages those targets.

The environmental justice movement grew out of local grassroots opposition to the siting of toxic landfills and other noxious sources of pollution in predominantly communities of color.² Movement leaders like Benjamin Chavis originally focused upon "environmental racism," "[t]he deliberate targeting of people of color communities for toxic waste facilities and the official sanctioning of life-threatening presence of poisons and pollutants in people of color communities."³

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1. CHRISTOPHER H. FOREMAN, JR., *THE PROMISE AND PERIL OF ENVIRONMENTAL JUSTICE* (1998).

2. See Robert D. Bullard, *Environmental Justice: A New Framework for Action*, ENVTL. L. NEWS, Spring 1996, at 16.

3. Michael Fisher, *Environmental Racism Claims Brought Under Title VI of the Civil Rights Act*, 25 ENVTL. L. 285, 289 (1995) (quoting *Environmental Racism: Hearings Before the House Subcomm. on Civil and Constitutional Rights*, 103d Cong. (1993) (testimony of Dr. Benjamin F. Chavis, Jr.)).

Later the movement led by activist-academics, such as Professor Robert Bullard, focused on institutional racism that "intentionally or unintentionally, differentially impacts or disadvantages individuals, groups, or communities based on race or color."⁴ The First National People of Color Environmental Leadership Summit, held in Washington, D.C. in 1991, adopted seventeen "Principles of Environmental Justice" that broadly defined environmental justice to require that environmental policy "be based on mutual respect and justice for all peoples, free from any form of discrimination or bias."⁵

Foreman gives voice to those who are critical of the seminal studies identifying patterns of environmental injustice. He questions the characterization of Love Canal⁶ or Louisiana's "Cancer Alley"⁷ as symbols of the toxic nightmare that

4. Alice L. Brown, *Environmental Justice: New Civil Rights Frontier, Practicing Law Institute*, in ENVIRONMENTAL LAW UPDATE 1993, at 813, 815 (PLI Litig. & Admin. Practice Course Handbook Series No. H4-5162, 1993) (quoting Robert D. Bullard, *Environmental Equity: Examining the Evidence of Environmental Racism*, LAND USE F., Winter 1993, at 6).

5. First National People of Color Environmental Leadership Summit, *Principles of Environmental Justice*, preamble (Oct. 27, 1991). Environmental justice is also defined by the U.S. Environmental Protection Agency ("EPA") as follows:

[T]he concept of focusing attention on the environmental and human health conditions in minority communities and low-income communities in an effort to ensure a quality environment for all citizens, regardless of race, ethnicity, or other socioeconomic factors. It is also concerned with promoting nondiscrimination among low-income and minority communities to ensure access to public information on, and public participation in matters relating to human health and the environment.

U.S. EPA, *Environmental Justice* (visited Apr. 7, 2000) <<http://www.epa.gov/unix0008/water/muni/ej.html>>.

6. Love Canal is the neighborhood near Niagara Falls that was evacuated by federal authorities after the discovery of chemicals leaking into homes and a nearby school from a canal used as a toxic dumpsite by the Hooker Chemical and Plastics Corporation. Occidental Chemical Corporation, which purchased Hooker, eventually paid \$129 million for the relocation and cleanup of the site. The furor over Love Canal eventually led to the adoption of the federal "superfund" program. See James Gerstenzang, *Firm Agrees to Settle Love Canal Suit; Pollution: Occidental Chemical Will Pay 2 Government Agencies for \$129-Million Cost of Cleaning Up Toxic Waste Site Near Niagara Falls*, L.A. TIMES, Dec. 22, 1995, at A43; FOREMAN, *supra* note 1, at 16.

7. "Cancer Alley" is the name given by local residents to an area along the Mississippi River between Baton Rouge and just south of New Orleans where seven oil refineries and between 175 and 350 heavy industrial plants are located, constituting approximately one-quarter of the nation's petrochemical pollution. See Barbara Koeppel, *Cancer Alley, Louisiana*, NATION, Nov. 8, 1999,

the chemical industry is bringing to local communities. Other than making the question of whether environmental harms are distributed inequitably a national issue, and highlighting children's exposure to lead and farmworkers' exposure to pesticides as real problems, it is difficult to find anything that Foreman would contend is salutary in the movement.

II. CRITICIZING ENVIRONMENTAL JUSTICE ACTIVISTS

For those who consider themselves advocates of environmental justice, it would be convenient to dismiss Foreman's book as merely an ideological attack on the environmental justice movement. Foreman indeed gives ammunition to the harshest of environmental justice critics by indulging in a superficial psychological deconstruction of the movement. For example, he claims that "for many activists, environmental justice is mostly about accountability and political power rather than the more technical issue of environmental risks facing communities."⁸ He claims that the movement "effectively speaks to the fear and anger among local communities feeling overwhelmed by forces beyond their control and outraged by what they perceive to be assaults on their collective quality of life."⁹ He accuses the movement of, in effect, pandering to the "collective fear" of "desperate, fearful citizens."¹⁰ According to Foreman, the movement is "hostile" and "suspicious" of risk assessments.¹¹ As for the movement's focus upon hazardous waste sites, Foreman asserts that "[e]vidence and technical analysis relating to risk or health impacts tend to play only a small role in the anxiety and advocacy directed at such facilities."¹²

In Foreman's view, the environmental justice movement has been fueled by "toxic terror" about hazardous waste facilities that pose little risk.¹³ Foreman takes on the seminal toxic event, the migration of toxic chemicals into the basements of homes at Love Canal, and dismisses it as nearly a non-event.

at 16; David Maraniss & Michael Weisskopf, *Jobs and Illness in Petrochemical Corridor; In Louisiana, Pollution is Familiar But Pattern of Disease is New*, WASH. POST, Dec. 22, 1987, at A1; FOREMAN, *supra* note 1, at 75.

8. FOREMAN, *supra* note 1, at 58.

9. *Id.* at 28-29.

10. *Id.* at 39, 40.

11. *Id.* at 20. See generally *infra* Part IV.A-B.

12. FOREMAN, *supra* note 1, at 20.

13. *Id.* at 17.

"Considerable subsequent analysis has suggested that the hysteria at Love Canal was very likely disproportionate to the actual health threat neighborhood residents faced."¹⁴

While those in the environmental justice movement are not above having their motives questioned, Foreman's analysis seems unpersuasive and unduly harsh on this front. The depiction of the motives of hundreds of thousands of people in a movement is hardly supported by taking a few excerpts from statements by certain activists in the field. Relying on these few statements is improper especially when, as Foreman correctly notes, the movement is truly grassroots, without a hierarchy or national leadership.

III. CRITICIZING THE STUDIES IDENTIFYING ENVIRONMENTAL INJUSTICE

While it might be sociologically interesting to determine the validity of these kinds of charges, the question of greater moment is whether the substantive criticisms by environmental justice critics have merit. Similarly, what seems most important in evaluating the environmental justice movement is whether disparate adverse environmental problems exist, whether the movement is addressing the most important of these problems, and whether the movement's strategy is the most effective.

Foreman's discussion of whether disparate environmental problems exist is unfairly weighted against environmental justice. For example, he addresses the seminal United Church of Christ study,¹⁵ which documented a racial pattern in the siting of hazardous wastes sites. He accurately discusses criticisms showing the methodological limits of the study. What he does not highlight in his text, however, are

14. *Id.* at 16.

15. UNITED CHURCH OF CHRIST, COMMISSION FOR RACIAL JUSTICE, TOXIC WASTES AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES (1987). The study, using data on location of hazardous waste sites and demographic data based upon zip codes, found that the percentage of minority residents in communities containing these waste sites was twice as great as the percentage of minority residents in zip codes without such facilities (24% versus 12%), and that the proportion of racial minorities in communities containing two facilities or major landfills was three times greater (38%). See Lena Williams, *Race Bias Found in Location of Toxic Dumps*, N.Y. TIMES, Apr. 16, 1987, at A20.

subsequent studies with better methodology that affirmed the results of the United Church of Christ study. For example, in 1992, Paul Mohai and Bunay Bryant examined and reported on fifteen studies that documented “a class and racial bias” in the distribution of environmental hazards.¹⁶ Further, Foreman discusses the Amherst critique of the United Church of Christ study, which complained of the use of zip codes instead of census data.¹⁷ However, he ignores the rebuttal to the Amherst critique that used an updated analysis employing census data, confirmed the earlier results, and indicated that the problem was actually getting worse.¹⁸ In 1994, Benjamin Goldman reviewed sixty-four studies of environmental disparities, all but one of which found environmental disparities by either race or income.¹⁹

Foreman’s discussion of Love Canal; Times Beach, Missouri;²⁰ and Louisiana’s “Cancer Alley” is disappointingly superficial. The discussion would be more on point if Foreman described the difficulty of proving, through epidemiology,²¹ the health effects from low levels of chemicals in small populations—such as minority populations. He notes that “[a]n array of uncertainties and confounding factors bedevil efforts to

16. Bunay Bryant & Paul Mohai, *Environmental Racism: Reviewing the Evidence, in RACE AND THE INCIDENCE OF ENVIRONMENTAL HAZARDS* 163, 164, 169 (Bunay Bryant & Paul Mohai eds., 1992).

17. See FOREMAN, *supra* note 1, at 25.

18. BENJAMIN A. GOLDMAN ET AL., TOXIC WASTES AND RACE REVISITED: AN UPDATE OF THE 1987 REPORT ON THE RACIAL AND SOCIOECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITE I, at 13–18 (1994).

19. See Bullard, *supra* note 2, at 20 (citing BENJAMIN GOLDMAN, NATIONAL WILDLIFE FEDERATION, NOT JUST PROSPERITY: ACHIEVING SUSTAINABILITY WITH ENVIRONMENTAL JUSTICE (1994)).

20. Times Beach, Missouri is the former community where dioxin-laced oil was used for dust suppression on unpaved roads, eventually leading to the federal government buying out the homes of 2200 residents in 1983 and a massive cleanup under the superfund program. See Laurel Shaper Walters, *The Legacy of an Unnatural Disaster*, CHRISTIAN SCI. MONITOR, Apr. 23, 1997, at 4; FOREMAN, *supra* note 1, at 77.

21. Epidemiology investigates all elements contributing to the occurrence or nonoccurrence of a disease in a population, usually by examining public health data for a given population over many years and comparing the frequency of illness to that which would be expected for a similar demographic population. Using other data, sometimes from health or lifestyle surveys or other sociological data, attempts are made to control factors that may explain the disease, in the hope of developing an analysis of the cause of the disease or at least ruling out other factors that may explain its frequency. See FOREMAN, *supra* note 1, at 69.

discern disease causation, especially where general environmental factors, rather than specific microbes or behaviors, are the suspected culprits."²² Yet a few sentences later, Foreman seems to dismiss criticisms of the Love Canal and Agent Orange studies as merely a result of the "mistrust" by those "predisposed to distrust the results of analysis."²³

High, immediately fatal results from a toxic exposure are fairly easy to document: simply count the bodies near the catastrophic exposure. The more difficult problem, and the source of what Foreman seems to dismiss cavalierly as hysteria, is that low levels of toxic chemicals may produce cancers that only manifest themselves years later in people who have moved or been subject to other exposures that contributed to the immune breakdown that results in a cancer. Pinpointing the source of a cancer cluster, or even discovering a cancer cluster, is a challenge that epidemiological science is only beginning to address. Remember, even when an atomic bomb is dropped on a civilian population, as was done in Hiroshima, experts can disagree significantly over health impacts for those who survived and were exposed to the lowest levels of radiation. More than fifty years later, experts continue to disagree on the significance of cancers resulting from that catastrophe.²⁴

Foreman writes off Love Canal and Times Beach, stating that "many analysts now regard the health impacts at issue in each of these episodes to have been considerably exaggerated."²⁵ From this statement, the converse also appears true: many analysts now regard the health impacts to not have been considerably exaggerated. If the converse is true, then Foreman should have stated it. Further, if the converse is not true, why did he use the careful language, "many"? In fact, the reality may be that epidemiology is having a difficult time tracing those exposed, determining the extent of their exposure, and developing a methodology sufficient to pick up and isolate the impacts from this exposure.²⁶

22. FOREMAN, *supra* note 1, at 70.

23. *Id.*

24. See *Radiation Sensitivity; Kids, Elderly May Not Be Well Served By Safety Rules*, CHI. TRIB., Mar. 4, 1998, at 7.

25. FOREMAN, *supra* note 1, at 77.

26. See Anthony Cardinale, *Ex-Love Canal Residents Sought for Health Study*, BUFF. NEWS, Apr. 14, 1999, at 5B; Richard E. Baldwin, *More Study Urged on Love Canal Health Effects*, BUFF. NEWS, Apr. 13, 1999, at 5B.

Foreman cites statistics from Louisiana suggesting that there is no statewide or cancer-alley cancer epidemic and claims there is a scientific consensus to this point. Compare that conclusion with Barbara Koepfel's article²⁷ containing expert criticism of these studies, including their failure to focus in on neighborhood cancer rates on a scale smaller than zip codes, a critique Foreman seems to endorse in challenging the methodology of the United Church of Christ's study.²⁸

IV. FOREMAN'S CHALLENGES TO THE FUTURE OF THE ENVIRONMENTAL JUSTICE MOVEMENT

Foreman's one-sided, or at least, less-than-neutral presentation of environmental justice studies should not, however, obscure some legitimate challenges Foreman poses to the future of the environmental justice movement, which include: (1) the failure to grapple with risk assessment, or the "proximity does not equal health effect" problem; (2) the failure to use risk assessment to compare risks and set priorities; (3) the failure to explore analytically the relationship between environmental hazards and social and economic justice; and (4) the failure to translate a grassroots movement into a nationally influential policy making power.

A. *Failure to Address Risk Assessment*

Risk assessment is a scientifically informed methodology for describing the likelihood of potential health effects or harms from a certain activity or exposure to a source of potential harm, such as a toxic chemical.²⁹ Risk assessment allows analysts to identify health impacts from exposure to a chemical of concern by focusing not merely on geographical proximity, but instead evaluating with rigor the pathway of potential exposures, the intensity of the exposure and the chemical's biological impact on the human body. With considerable force, Foreman makes the case that a blind rejection

27. Koepfel, *supra* note 7.

28. See *supra* text accompanying note 18.

29. See *Use of Risk Analysis and Cost-Benefit Analysis in Setting Environmental Priorities: Hearing Before the Senate Comm. on Energy and Natural Resources*, 103d Cong. 89, 90 (1993) (statement of Thomas C. Jorling, Commissioner, New York Dep't of Env'tl. Conservation), cited in Robert R. Kuehn, *The Environmental Justice Implications of Quantitative Risk Assessment*, 1996 U. ILL. L. REV. 103, 108.

of risk assessment would mean that environmental justice activists and the communities they are trying to protect might be fighting battles about risks that are insignificant.

Foreman is not off base in asserting that there is hostility to risk assessment in the environmental justice movement. For many people in communities who face exposure to chemicals, risk assessment often is perceived as a manipulation of science with inadequate information that is used to achieve the regulatory purpose of approving a project in spite of its apparent risk to public health. Linda King of the Environmental Health Network states the problem well in a passage quoted by Foreman:

If your community is poor, lower middle class, in the south, rural, or minority, you can pretty much expect to have your "cancer cluster" explained away by lifestyle, poor eating habits, alcohol consumption, or smoking. You can also expect the health departments to explain away your research result, telling you that the population surveyed was too small or too large, or that the right kinds of questions were not asked. . . . When it is no longer in your control you can be assured you are not going to be happy with the results and not aware of how those results were arrived at.³⁰

It is wrong to dismiss risk assessment as merely pseudoscience. The results of risk assessment for many chemicals are qualitatively rarely in dispute, even if the actual risk number is subject to controversy.³¹ There are certain chemi-

30. FOREMAN, *supra* note 1, at 114 (quoting Linda King, *Health Studies: Can They Help or Hurt Organizing Efforts?*, INDIGENOUS ENVTL. NETWORK NEWS, Late Summer 1996, at 10).

31. For example, benzene, a carcinogen present in gasoline, was found by the California Comparative Risk Project to pose to an average individual a cancer risk of 2.4×10^{-4} , causing an estimated 100 cancer cases per year. Methylene chloride, a solvent often used by dry cleaners, was found to pose an average individual cancer risk of 5.6×10^{-6} , resulting in an estimated two cancer deaths a year. See CALIFORNIA COMPARATIVE RISK PROJECT, TOWARD THE 21ST CENTURY: PLANNING FOR THE PROTECTION OF CALIFORNIA'S ENVIRONMENT 461-62 (May 1994). While benzene's risk numbers have been subjected to controversy, see *Industrial Union Dept. v. API*, 448 U.S. 607 (1980), and methylene chloride's risk numbers have evolved over the years, compare Proposed Rules, Environmental Protection Agency, *Methylene Chloride: Initiation of Regulatory Investigation*, 50 Fed. Reg. 42037 (1985) (proposed Oct. 17, 1985), with CAL. CODE REGS. tit. 17, § 93000, there is little debate about which is the nastier chemical, and it is no surprise that the EPA has insisted upon regulating benzene under its National Emission Standards for Hazardous Air Pollutants program pursuant to section 112 of the Federal Clean Air Act in 1977.

cals that are particularly dangerous, while others have minimal risks, especially depending upon the route or pathway and intensity of exposure. This information is not useful to either environmental justice activists or the communities they represent. There is also a utilitarian argument that since risk assessment is now well integrated into regulatory decisions, environmental justice activists would do better to master and reform it than ignore it. This argument has been made before³² and Foreman is certainly right in making it again.

However, Foreman ignores those in the movement who have critiqued risk assessment from a strict scientific standpoint and suggested realistic regulatory reforms to more wisely incorporate its results into the regulatory process.³³ One common criticism of risk assessment studies is that the methodology often relies upon studies or assumptions that are based upon an adult white male population. Such studies are irrelevant to the exposed population, which typically consists of minority children and women. Further, risk assessment studies have difficulty integrating multiple sources of chemicals, or the impacts of poor medical care or diet into their frameworks.

Foreman acknowledges the complaint by environmental justice activists that risk assessment fails to analyze cumulative or synergistic impacts,³⁴ but seems to minimize the problem. For minority populations, however, those combination impacts are the key issue in communities with a concentration of toxic sources, such as San Francisco's Bayview-Hunters Point and Chester, Pennsylvania.³⁵

Robert R. Kuehn, former director of the Environmental

32. See Alon Tal, *A Failure to Engage*, ENVTL. F., January/February 1997, at 13-21.

33. The many pitfalls of risk assessment are excellently summarized in an article by Robert R. Kuehn, the former director of Tulane's Environmental Justice Clinic. See Kuehn, *supra* note 29.

34. See FOREMAN, *supra* note 1, at 21.

35. For a description of the Hunters Point hot spot data, see Alan Ramo, *Hunters Point: Energy Development Meets Environmental Justice*, ENVTL. L. NEWS, Spring 1996, at 155; for Chester, see Sheila Foster, *Justice from the Ground Up: Distributive Inequities, Grassroots Resistance, and the Transformative Politics of the Environmental Justice Movement*, 86 CAL. L. REV. 775 (1998).

Justice Clinic at Tulane University, does not advocate eliminating risk assessment.³⁶ Instead, Kuehn proposes burden shifting; more honesty about the assumptions and limits of risk assessment; better participation by community organizations in forming the goals and analysis of risk assessment; and a means for incorporating community data into risk assessment when no other data is available to evaluate impacts on minorities and children.

Further, even Professor Bullard, perhaps the leading writer about environmental justice, does not rule out the use of risk assessment. He would, however, put the burden of proof on those who wish to expose rather than those exposed. Bullard proposes targeted action and resources on health threats. This targeting would be based in part on the use of risk assessment.³⁷ It is a shame Foreman's analysis reduces the issue to an either/or scenario: accept risk assessment as is or ignore it entirely, as purportedly advocated by environmental justice activists.

B. *Comparative Risks and Priority Setting*

Foreman's concern about risk assessment is at its most forceful when he challenges the failure of the movement to set priorities. Foreman's argument is really an acknowledged application of the comparative risk argument, most notably advocated by now-United States Supreme Court Justice Stephen Breyer.³⁸ As discussed by Foreman, Breyer's complaint is that regulatory agencies are not empowered or mandated to develop their priorities according to the comparative risks of potential environmental harms.³⁹ Instead, Breyer advocates an expert agency immune to public hysteria and politics—that, as Foreman puts it, would make as their central resource “the most rigorous possible analyses of risks, costs, benefits, and alternatives.”⁴⁰ Foreman notes that Breyer is

36. Kuehn, *supra* note 29, at 150–71.

37. See Bullard, *supra* note 2, at 16. “The environmental justice framework redresses disproportionate impact through ‘targeted’ action and resources. This strategy would target resources where environmental and health problems are greatest (as determined by some ranking scheme but not limited to risk assessment).” *Id.* at 18.

38. See STEPHEN BREYER, *BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION* (1993).

39. See BREYER, *supra* note 38, at 42–50, discussed in FOREMAN, *supra* note 1, at 110–11.

and alternatives."⁴⁰ Foreman notes that Breyer is concerned that in appeasing popular hysteria to eliminate every harm, society will spend far too much in reducing what Breyer calls the "last little bit" and less on more significant risks that deserve attention.⁴¹

Those advocating comparative risk, such as Breyer, bemoan the irrational nature of the general public's assessment of risk. They note that a lay person's untrained mind will distort risk assessment through a variety of "heuristics" (i.e., rules of thumb). For example, critics worry that lay people will confuse information that is irrelevant but seems to stand for risk (such as proximity being more important than exposure) or become anchored to a belief (such as that hazardous waste sites are always dangerous in spite of repeated information that the risks may be quite low).

Foreman applies this idea to the environmental justice movement. He questions why a movement concerned with pollution threats to the public health of minority populations fails to make tobacco smoke, alcohol, and indoor pollution its top priorities. He certainly makes a plausible case from a comparative risk standpoint that more people die or have health impacts from these behavioral pollution problems than from toxic waste sites, endocrine disrupters, or industrial air pollution.

The arguments about the value of comparative risk appear extensively in legal and environmental literature and have even carried over into both federal and state governmental efforts at comparative risk.⁴² Those criticizing comparative risk to some extent apply the critiques of risk assessment itself—its failure to properly evaluate different populations' susceptibility, its dependence upon questionable assumptions, and its failure to properly integrate the problem of multiple sources.

40. FOREMAN, *supra* note 1, at 111.

41. *See id.* at 110.

42. *See Report of the Environmental Justice Committee, Environmental Justice and Comparative Risk*, in CALIFORNIA COMPARATIVE RISK PROJECT, *supra* note 31, at 461-62; Donald T. Hornstein, *Reclaiming Environmental Law: A Normative Critique of Comparative Risk Analysis*, 92 COLUM. L. REV. 562 (1992).

However, certain criticisms of comparative risk have even more force in the area of environmental justice, where lack of data about toxic impacts on minority populations is a particular problem. The use of certain "irrational" heuristic devices may in fact be quite prudent in many situations. For instance, such devices may be appropriate where there are concentrations of sources of low levels of toxic chemicals that individually can cause significant illness, unacceptable rates of cancer, or other severe illnesses with no answer to their cause; uncertainties about cumulative or synergistic health impacts from chemicals; and initial underestimations regarding the risks of unfamiliar sources, such as radiation or toxic chemicals. Donald T. Hornstein, in his Columbia Law Review article criticizing comparative risk, asserts that these same heuristic devices may in fact lead to better decisions than those made by experts.⁴³ For example, the apparent "hysterical" reaction to the Three-Mile-Island accident led to an intense reevaluation of risk analysis that may have substantially improved accident prevention strategies for the nuclear industry and other hazardous materials operations. That reaction was in fact a rational response to a risk assessment process that was somewhat speculative.

Similar analysis may be made about other "irrational" heuristic devices. In a situation where risks are poorly understood, the "certain" data about proximity may be the best form of protection. Being anchored in a belief that an environmental risk is harmful may be fully appropriate when the data is uncertain and significant adverse health effects are occurring in a community. Such a conservative assumption when dealing with unknown environmental risks may be the most prudent approach to comparative risk.

The knowledge of toxic risks is insufficient to simply rely upon available data, as Foreman seems to suggest. For example, while thirty percent of breast cancers are associated with known risk factors such as genetics, risk factors accounting for the other seventy percent of breast cancers are unknown.⁴⁴ Is it not a logical and appropriate regulatory policy to reduce or eliminate exposure to carcinogens whenever feasible when the cause of most of the cancers of a fairly

43. See Hornstein, *supra* note 42, at 613.

44. See Ramo *supra* note 35, at 156.

common cancer in women is unknown? While Foreman acknowledges the logic of the argument that it is better to be preventive and reduce unnecessary exposure to toxics that may cause cancer,⁴⁵ he does not seem to take that argument to heart in his book.

Indeed, one of the strengths of the environmental justice movement has been its emphasis upon pollution prevention. Comparative risk, by emphasizing risk ranking and cost-benefit analysis, too easily falls into the trap of seeking solutions that incrementally reduce the greatest risks at the lowest cost. Environmental justice advocates, in response to communities threatened from a seemingly overwhelming number of toxic sources, have searched for a more dramatic solution, leading to an affirmation of pollution prevention strategies that eliminate pollution at low cost or even a profit.⁴⁶ This kind of approach holds great promise, yet is not credited by Foreman.

Despite the shortcomings of his arguments, Foreman's challenge to implement priority setting should not be easily dismissed by the environmental justice movement. The question remains: how should that priority setting be done, if not exclusively on "objective science"?⁴⁷ The environmental justice movement implicitly sets priorities that have not included alcohol, tobacco, or other behavioral public health issues.

There may be good reason for the priorities that have arisen from the grassroots movement. For example, there are already significant resources focused on alcohol and tobacco. Thus, the movement may legitimately choose to focus upon those issues left behind by the traditional environmental movement and the regulators. The movement's resources are scarce, and activist energy is limited. However, Foreman is right to at least pose the question to what extent the movement's priorities are based upon scientific and medical merit.

45. See FOREMAN, *supra* note 1, at 21.

46. CALIFORNIA COMPARATIVE RISK PROJECT, *supra* note 31, at 241.

47. Bullard, *supra* note 2, at 5.

C. *Challenging the Relationship Between Environmental Hazards and Social and Economic Justice*

Foreman's arguments about risk assessment dovetail with his section on social and economic justice. Looking beyond his contention that activists may care less about public health than political power, Foreman is really challenging whether environmental activism is taking on social and economic injustice in the most effective manner. That is, assuming it is important to attack the roots of social and economic justice, do environmental justice activists do so in the most effective manner?

Foreman discusses various environmental programs intended to address social and economic problems—such as brownfields and environmental training—suggesting that those programs provide environmental justice activists an opportunity to make an important difference. He suggests that these programs are more critical for economic and social justice than the grassroots organizing conducted by environmental justice activists. However, if environmental justice activists are correct that the roots of environmental disparity are in social and economic injustice, then perhaps it is not incorrect for them to focus, as Foreman claims they do, on achieving political power.

D. *How Effective Is the Grassroots Movement?*

The final question becomes whether the movement is organized to achieve the necessary political power. Foreman acknowledges that the grassroots movement has made environmental justice a matter of national "environmental policy discourse."⁴⁸ However, he questions whether a grassroots movement can really make the kind of fundamental change advocated by environmental justice activists. Foreman contends that such change requires impacting national policy. He notes that the Environmental Protection Agency's ("EPA") institutional response to the environmental justice question is the formation of the National Environmental Justice Advisory Council, an organization that has an "absence of authority and highly restricted institutional capacity."⁴⁹ He questions whether the Clinton administration's environmental

48. See FOREMAN, *supra* note 1, at 122.

49. *Id.* at 49.

justice policy involves more than a "general yearning to listen hard and do good."⁵⁰ Indeed, the John Lewis-sponsored Environmental Justice Act⁵¹ (cosponsored by then-Senator Al Gore) is still locked in congressional committees.

Foreman notes that in the four years after President Clinton's executive order on environmental justice called for federal agencies to ensure that all programs or activities receiving federal financial assistance do not discriminate in violation of Title VI of the Civil Rights Act,⁵² no administrative complaint under Title VI had been sustained or even decided on the merits (although there are dozens pending).⁵³ Indeed, since the executive order, the EPA has only ruled on one complaint on the merits, denying the complaint because, according to the EPA, there was insufficient evidence that federal health standards were being violated, and other potential disparate impacts were not proven.⁵⁴ Congress has even been more hostile, prohibiting the EPA's implementation of its "Interim Guidance for Investigating Title VI Administrative Complaints Challenging Permits," released by the EPA in February 1998.⁵⁵

Nevertheless, Foreman to some extent underestimates the movement's influence. Federal agencies have adopted environmental justice policies and those policies have some influence on the myriad decisions made by these agencies on a day-to-day basis.⁵⁶ Further, states like California have incor-

50. *Id.* at 63.

51. H.R. Res. 1510, 106th Cong. (1999).

52. Exec. Order No. 12,898, 59 Fed. Reg. 7629 (1994).

53. See FOREMAN, *supra* note 1, at 123.

54. See Letter from Ann E. Goode, Director, EPA's Office of Civil Rights to St. Francis Prayer Center and Michigan Department of Environmental Quality (Oct 30, 1998) (available at <<http://www.epa.gov/reg50opa/steelcvt.htm>>). The letter concerns the dismissal of EPA File No. 5R-98-R5, the "Select Steel Complaint," a Title VI complaint against the Michigan Department of Environmental Quality. See *id.*

55. See Veterans Affairs and HUD Appropriations Act, Pub. L. No. 105-276, tit. III, 112 Stat. 2461, 2496 (1998).

56. See U.S. ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF FEDERAL ACTIVITIES, FINAL GUIDANCE FOR INCORPORATING ENVIRONMENTAL JUSTICE CONCERNS IN EPA'S NEPA COMPLIANCE ANALYSES (Apr. 1998); COUNCIL ON ENVIRONMENTAL QUALITY, OFFICE OF THE PRESIDENT, ENVIRONMENTAL JUSTICE: GUIDANCE UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT (Dec. 10, 1997); *In re Louisiana Energy Services*, 47 N.R.C. 77 (1998) (remanding nuclear power plant licensing decision because of disparate impacts).

porated environmental justice principles into state law.⁵⁷ Major companies and their trade associations have also adopted or are considering environmental justice policies.⁵⁸

V. CONCLUSION

Foreman is not mistaken that the movement has a way to go before it can be considered as influential as the major traditional environmental organizations. Foreman's arguments, in a positive sense, serve as a plea for the movement to solidify its achievements by building a more formative national agenda and political presence. To do so requires the movement to ground itself in science, where it is useful and available; to hone its agenda to better communicate and focus its program; and to mobilize politically through institutions capable of influencing national policy. These recommendations are valuable suggestions to the movement.

57. See 1999 Cal. Legis. Serv. 690 (West).

58. See California Council for Environmental and Economic Balance, *CCEEB General Info* (visited Apr. 2, 2000) <http://www.cceeb.org/indices/general_info.html>.