From Pink to Green

Disease Prevention and the Environmental Breast Cancer Movement

Barbara L. Ley
"We Should Not Have to Be the Bodies of Evidence"

The Precautionary Principle in Policy, Science, and Daily Life

On May 15, 1999, the Massachusetts Precautionary Principle Project (MPPP) embarked on a three-year campaign, launching it at a well-attended meeting. A partnership between environmental health advocacy, scientific, and academic communities, the MPPP was the first activist campaign in the United States directed exclusively at implementing the precautionary principle in environmental health policymaking. The one-day event, held at Framingham College, a small school fifty miles west of Boston, exemplified the growing importance of the precautionary principle to environmental breast cancer activism and the burgeoning environmental health movement more generally.

The precautionary principle is a multifaceted framework for conceptualizing and alleviating environmental health risks. It is most commonly understood as an approach to environmental health policy that encourages regulatory action in the face of uncertainty when some evidence of harm exists. The goal of the MPPP was to develop precautionary-based policies in Massachusetts, with the eventual aim of expanding the campaign nationally. During its first year, the MPPP would work with its participants to define its political agenda and develop strategies for action. Its second-year activities would be educating the public about the coalition’s plan and the precautionary principle in general, as well as promoting public involvement in the campaign. In its third year, coalition participants would work to effect legislative change. The purpose of the kick-off meeting was to bring participants together to begin the first phase of the MPPP and lay the groundwork for the upcoming year’s campaign efforts.

Representatives from an array of environmental health and public health organizations—numbered among them were Health Care Without Harm,
Physicians for Social Responsibility, and the World Wildlife Foundation—attended the meeting, but breast cancer activists and allied scientists from the Greater Boston area played a particularly prominent role. Along with the Clean Water Fund and the Lowell Center for Sustainable Production, the Massachusetts Breast Cancer Coalition co-organized both the meeting and the MPPP campaign. Activists and scientists from the Women’s Community Cancer Project and Silent Spring Institute led workshops and facilitated discussions. Devra Davis gave the event’s keynote speech, which revolved around her widely presented slide show, titled “The Case for the Precautionary Principle: Better Safe Than Sorry.” In her talk, Davis discussed the case of xenestrogens and breast cancer to bolster her argument for the necessity of the precautionary principle. She also outlined ways to implement the principle as part of a broader breast cancer prevention program.

Environmental breast cancer activists’ newfound support for the precautionary principle during the late 1990s went hand in hand with their growing focus on identifying and eliminating suspected environmental causes of breast cancer, especially endocrine disrupters. To be sure, activists responded to the scientific uncertainty surrounding environmental factors by pushing for more and better research that they believed would lead to more definitive answers. At the same time, they came to realize that advocating for increased research without also changing the environmental regulatory system was not enough to protect women’s health. Tens of thousands of chemicals were already on the market, and dozens more are developed every year. Obtaining the scientific data necessary to determine proof of harm based on the standards set by regulatory agencies could take decades, if not longer, especially given that so little is currently known about possible health effects. The limitations of conventional scientific methods, particularly in regard to endocrine disrupters, add to the time line. Not only would the research take a great deal of time to complete; scientists would also need to develop new testing paradigms, research methods, technologies, and risk assessment tools—efforts that could take years to complete in and of themselves.

For these reasons, activists embraced the precautionary principle to challenge the established assumption that proof of harm should be the basis for taking regulatory and other preventative actions. Although activists continue to demand more and better research, they also believe that enough evidence exists to take preventative actions to protect women from suspected environmental causes of breast cancer. As Nancy Evans writes in the fourth edition of State of the Evidence, “The public’s health cannot and should not have to wait for absolute proof that certain chemicals cause breast cancer before moving to reduce the risk of such harm occurring. Too many people will suffer from the disease if we delay action until a ‘scientific standard’ of proof is met. Such a standard requires a 95 percent certainty of cause and effect. While this strict standard is supported by industry when policy changes under consideration would have an impact on profits, less stringent standards are followed in other settings. . . . What may work for science and industry does not serve, in this case, to protect public health.”

Over the past decade, breast cancer activists and their allied scientists have worked to implement the precautionary principle in various ways. Like the bulk of precautionary principle advocacy taking place in the United States and around the world, the efforts by such activists and scientists focus on implementing the principle into environmental health policymaking at the local, state, and federal levels. Just as important, they also approach the principle as an ethic for scientific practice and for everyday life. Understanding how activists have conceptualized and sought to implement the precautionary principle in these multiple ways not only demonstrates the principle’s growing importance to the environmental breast cancer movement, but also highlights the many ways in which the movement contributes to the broader development of the precautionary principle.

A Brief History of the Precautionary Principle
The idea for the MPPP emerged in 1998 in the wake of the “Implementing the Precautionary Principle” conference at the Wingspread Retreat Center in Racine, Wisconsin. Thirty-two scientists and activists from the United States, Canada, and Europe attended this event and developed the first international consensus statement to outline the principle and the reasons why “corporations, government entities, organizations, communities, scientists, and other individuals must adopt a precautionary approach to all human endeavors.”

After learning about the event and its consensus statement, Lee Ketelsen, the New England director of the Clean Water Fund, spoke with conference participant Peter Montague of the Environmental Research Foundation about ways to implement the precautionary principle in Massachusetts. Montague suggested that Ketelsen call Joel Tickner, a fellow conference participant and graduate student at the Lowell Center for Sustainable Production, one of the conference’s co-sponsors. The center’s involvement in the precautionary principle issues made sense. Lowell, a city with more than one hundred thousand residents, was established in 1826 as a textile manufacturing center in the hills where the Merrimack and Concord rivers meet. Considered the cradle of the Industrial Revolution in the United States, Lowell was the largest city in New England.
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during its heyday in the nineteenth century. The city's industrial power declined after the Great Depression, however, and by the 1970s it had lost much of its economic viability and infrastructure. In 1975, the Lowell Technological Institute merged with Lowell State College to become the University of Lowell (in 1991 renamed the University of Massachusetts at Lowell), with the purpose of catalyzing new technology in the area. By the 1990s, the economy had rebounded as a result of new technology and new service industries. The Lowell Center for Sustainable Production was established in 1995 to ensure that technological and industrial development—both within the Merrimack River area and beyond—would foster not only economic growth but also healthy environments and communities.

Soon after Ketelsen called Tickner, the latter spoke with Amy Pett, the Massachusetts Breast Cancer Coalition's director at the time, about the same idea. Consequently, the three organizations joined forces, procured funds from various foundations interested in environmental health issues, and spearheaded the MPPP. They consulted with Carolyn Raffensperger, an environmental lawyer from North Dakota and the executive director of the Science and Environmental Health Network (SEHN), for guidance on the coalition's kick-off meeting. Established in 1994 by a group of environmental organizations, SEHN became an independent nonprofit in 1999. It currently functions as a "virtual organization" with six staff and nine board members across the country. Intent on promoting the use of science to protect the environment and human health, the organization has been one of the nation's leading proponents of the precautionary principle. Not only did Raffensperger participate in the Wingspread conference; SEHN was one of its co-sponsors. Moreover, Tickner and Raffensperger co-edited Protecting Public Health and the Environment: Implementing the Precautionary Principle in 1999.

For its inauguration, MPPP packed many activities into the one-day event. Discussion sessions for the entire group of some one hundred participants were interspersed with the keynote speech, remarks by the event's organizers, small-group workshops and planning sessions, and opportunities for informal mingling during breaks. Although participants hashed out a number of issues related to the precautionary principle throughout the day, a common discussion topic was how to define the meaning of the principle for the individuals and organizations involved. Most participants viewed the precautionary principle first and foremost as a commitment to taking preventative actions to protect health in the face of scientific uncertainty when some evidence of harm exists, as opposed to waiting for the proof of harm that the current regulatory system demands. Yet participants also pointed to several other important elements of

the approach. They discussed the need to require proof from manufacturers that their products were safe, as opposed to not harmful, before they put them on the market. Similarly, they emphasized the importance of placing the burden of proof of safety on manufacturers before products were released rather than on consumers after the products were on the market. Further, participants sought to broaden established notions of risk by considering social and cultural factors in addition to economic ones when conducting environmental risk assessment. Finally, they brought up the need to make the environmental regulatory system more democratic through including the perspectives and interests of lay citizens in decision-making processes that traditionally have been dominated by the interests of politicians, policymakers, and industries.

Participants defined the precautionary principle in ways that reflected what they viewed as the necessary steps for environmental health policy change in Massachusetts and beyond. In crafting their ideas for change, they drew on several decades of precautionary principle advocacy, especially efforts that had occurred in Europe. The principle first emerged as Vorsorgeprinzip (the foresight principle) in West Germany in the early 1970s as a policy framework for preventing environmental damage through "forward-thinking" planning. It then entered the international environmental policy arena at the 1984 First International Convention on the Protection of the North Sea, with European governments working to incorporate it into their laws and policies from the mid-1980s into the early 1990s. Although the precautionary principle entered U.S. environmental policy discourses as an explicit concept in the early 1990s, when the U.S. government signed on to the 1992 Rio Declaration on Environmental and Development, it was not until 1998 that scientists, activists, and government researchers from the United States, Canada, and Europe met at the Wingspread Retreat Center in Racine, Wisconsin, to discuss ways to formalize the meaning of the principle and implement it in practice. This meeting, convened by the North Dakota–based Science and Environmental Health Network, ended with the participants' writing and signing on to the Wingspread Statement on the Precautionary Principle.

As public support for the precautionary principle increased in the mid- to late 1990s, proponents pointed to a number of pressing environmental health issues in making the case for its implementation. These included mercury poisoning, arsenic in drinking water, air pollution, problems of children's health, ozone depletion, and global warming. Each of these issues represented serious health problems for which the evidence from the current regulatory perspective was not sufficient enough to warrant more stringent action. Still, the growing scientific and public concerns about the health effects from endocrine disruptors
played a particularly crucial role in fueling precautionary efforts. Many scholars, scientists, policymakers, and activists advocating the precautionary principle discussed the scientific and technical difficulties surrounding the study of endocrine disruptors as a rationale for why the principle was needed. Some of the principle’s proponents even presented the specific case of xenoestrogens and breast cancer to bolster their position.

To understand fully the relationship between the precautionary principle and endocrine disrupter theory it is important to recognize how the influence has gone both ways. Not only have the principle’s proponents used the endocrine disrupter problem to promote the framework; many individuals have also invoked the principle to strengthen their argument for why increased public protection from these toxins is warranted. One of the earliest links between these two issues appeared in Theo Colborn, Diane Dumanoski, and John Peterson Myers’s *Our Stolen Future*. In response to criticism of the theory’s inability to draw definitive links between endocrine disruptors and particular health disorders, the authors pointed to the problem of misapplied and inadequate research methods. They went on to argue that most of this criticism was based on misunderstandings of the theory’s scientific principles:

Just as it is difficult, with current knowledge, to affirm all the human health impacts we raise in this book, it is impossible to dismiss biologically plausible theories that hormone-disrupting chemicals may be a factor eroding human health, undermining intelligence, and reducing reproductive capacity. . . . If one detects worrisome trends in a variety of health problems linked to hormone disruption, the pattern may be far more telling than any single trend. It is a profound mistake to view this issue through the narrow lens of a single illness or physical deficiency or to consider human evidence alone. The power of this book’s argument rests on the cumulative weight of the evidence and the compelling patterns that emerge when it is considered as a whole.

Like their critics, Colborn, Dumanoski, and Myers acknowledged that definitive links between hormone-disrupting chemicals and most human health disorders did not exist. Yet they stressed that the general theory of endocrine disruption is more an interpretive framework than a scientific fact. Consequently, their purpose in writing the book was not, as some critics suggested, to bring this array of evidence together in order to “prove” that endocrine disrupters caused specific health disorders. Instead, they wished to make the case that despite the scientific uncertainty, enough overall evidence already existed to warrant public concern, further scientific inquiry, and increased regulatory action to protect human health from potential harm. Although they did not discuss the precautionary principle per se, they did emphasize the need for “caution” in the concluding paragraphs of the book’s paperback edition: “We raised some daunting questions, knowing at the outset that it is not yet possible to answer all of them. We are pleased that the book and the controversy surrounding it have served to invigorate research. . . . In the meantime, even though the case has not been proven to the satisfaction of all, we urge caution. The possible consequences of widespread hormone disruption are immense and irreversible.” Other scientific writings and efforts since the mid-1990s have likewise invoked precautionary language in their warnings about the possible health risks from endocrine disrupters.

Despite growing support for the precautionary principle from the environmental breast cancer and environmental health movements, the approach has been criticized by some scientists, policymakers, and industrialists. Consider Rethinking Risk and the Precautionary Principle, a collection of essays edited by Julian Morris, the director of the Environmental and Technology Programme at the Institute of Economic Affairs in London, as a response to the 1998 Wingspread Statement on the Precautionary Principle. In the introduction, Morris laid out some problems with precautionary thinking, claiming, for example, that the precautionary principle is not well defined and that its lack of concrete protocols leaves it too open for interpretation. He views the principle as antiscience and antitechnology, because obtaining proof of safety is epistemologically impossible and requirements to provide it would halt the development of new science and technology. Along these lines, he believes that the principle’s impossibly high standards of proof of safety contradict the scientific method and society’s emphasis on learning by trial and error. Moreover, the principle may lead to more harm than good, as taking small technological risks often benefits the public at large. Morris goes on to argue that implementing the precautionary principle would be too expensive, as it would require a dramatic expansion of the current regulatory apparatus and of the resources needed to conduct the necessary safety testing. Similarly, he believes that requiring an examination of the full range of safer alternatives to prospective new technologies would prove too costly and would take too long.

Proponents of the precautionary principle counter these charges by emphasizing that its implementation demands more and better science. It will lead to more scientific and technological innovation, as it will require scientists, engineers, and manufacturers to think in creative and novel ways. The precautionary principle will also fuel—rather than hinder—economic growth by reducing the financial costs associated with environmental damage and
public health problems that result from the use of harmful products, technologies, and practices. To be sure, supporters acknowledge the principle’s vagueness when it comes to its lack of concrete protocols. Instead of viewing this characteristic as a weakness, however, they view it as a strength. Given that the precautionary principle is not so much a set of well-defined rules as much as a conceptual framework, a set of general guidelines, and an environmental health ethic, it can be implemented to meet the specific needs of the particular problem at hand.

From this perspective, the principle functions as what sociologists Susan Leigh Star and James Griesemer call a “boundary object.” That is, the precautionary principle’s meaning is stable enough to attract the support of many differently situated individuals and groups. At the same time, its meaning is flexible enough for them to define it in ways that meet their own particular political and public health needs. On the one hand, the precautionary principle’s flexibility plays out across various domains: whereas most proponents tend to construct the principle as an environmental policy ethic, some construct it as an ethic for scientific practice and everyday life. On the other hand, its flexibility is evident in each of these domains, with activists and scientists constructing its policy, scientific, and quotidian dimensions in different ways. The precautionary principle’s multiple meanings within—and across—these domains are apparent in the work that activists and their allied scientists do on suspected environmental causes of breast cancer, especially xenoestrogens.

The Precautionary Principle as a Policy Ethic
As the first U.S. campaign of its kind, the MPPP set the stage for a wave of precautionary principle activism during the subsequent decade. Many environmental health organizations, including those focusing on breast cancer, led this wave of policy advocacy and reform. The Alliance for a Healthy Tomorrow (AHT), for example, began in October 2000 to give the MPPP a more permanent existence. Like the MPPP, the AHT takes a statewide approach to implementing the precautionary principle by seeking to “correct fundamental flaws in government policies that allow harm to our health and environment.” The coalition aims to “create proactive policies to prevent harm before the damage is done, and to choose the safest alternatives.” To these ends, the coalition promotes a number of “proactive” policies that it believes the state government should take to protect the public’s health from environmental dangers. Such policies are based on the core values of the AHT: “choice, progress, and innovation; rigorous science; individual and corporate responsibility; democracy; [and] precautionary action and foresight.”

The Massachusetts Breast Cancer Coalition, the Clean Water Fund, and several other members of MPPP started the coalition, which encompasses a diverse group of “citizens, scientists, health professionals, workers, [and] educators seeking preventative action on toxic hazards.” The Lowell Center for Sustainable Production provides scientific support for the group. Its members number more than 160 organizations and more than nineteen hundred individual activists and citizens; it has a governing board, a labor committee, and a senior advisory council. Breast cancer activists and their allied scientists play prominent roles in the coalition. The Massachusetts Breast Cancer Coalition and the Women’s Community Cancer Project are two of the coalition’s organizational board members. Julia Brody, executive director of the Silent Spring Institute, and Nancy Krieger, associate professor in the Department of Health and Social Behavior at the Harvard School of Public Health, are also members of the coalition’s Senior Advisory Council. Additionally, San Francisco’s Breast Cancer Action is one of ten national organizations that are coalition members.

In working to reduce exposure to toxic chemicals, the AHT strives to eliminate a range of environmental health problems, including breast cancer. The measures sought by the AHT are geared toward both adults and children. In its 2003 campaign, centered around protecting children’s health, the AHT stated: “We need to start by protecting our children. Children are more vulnerable than adults to toxins. Recent research has demonstrated that children—and especially the developing fetus—are uniquely vulnerable to health damage from toxic substances. Children are not little adults. Their organs and physiological processes are still developing. Toxic chemicals can disrupt the development of organs and systems during childhood, causing long-term, irreversible damage. When adults are exposed to some toxins before and during pregnancy, their children can develop lifelong health problems.” By making children’s health a priority, the coalition not only strives to protect the health of one of the most biologically, socially, politically, and economically vulnerable human populations; it also aims to prevent many disease and disorders (such as breast cancer) afflicting adults believed to be caused by childhood exposure to harmful toxins.

Recently, the AHT called on Massachusetts governor Deval Patrick to support the group’s proposed five-pronged approach, intended for the state government to follow, to protect public health and the environment in Massachusetts. The strategies suggested by the AHT included prioritizing “clean economic growth,” purchasing nontoxic products and services, banning toxic substances from consumer products, upholding laws and providing resources for state agencies “dedicated to reducing toxic chemicals,” and
promoting more stringent environmental legislation. The coalition had helped to pass the Mercury Products Bill, which former governor Mitt Romney signed into law on July 28, 2006. One of the most stringent mercury-reduction laws in the country, this bill was framed to “dramatically reduce emissions resulting from the use of mercury-containing products,” especially in municipal waste incinerators. Although this effort does not have particular implications for breast cancer, the coalition’s other legislative efforts do. In 2007, the AHT lobbied the state legislature on behalf of two other proposed bills: the Safer Alternatives Bill and the Safer Cleaning Products Bill. If passed, the former would build on the Massachusetts Toxics Use Reduction Act (TURA) program by helping to create “a comprehensive program to replace toxic chemicals with safer alternatives in consumer products and other businesses.” Similarly, the Safer Cleaning Products Bill “would reduce asthma and other health threats by requiring that only cleaning products approved by the Department of Public Health be used in public schools, hospitals, health care facilities, day care centers and public housing common spaces.”

Like the breast cancer activists in Massachusetts, those in the San Francisco Bay Area work to implement the precautionary principle in environmental health policy. For example, Breast Cancer Action, the Women’s Cancer Resource Center in Oakland, and other members of the Toxic Links Coalition founded the campaign Stop Where It Starts in 2000. They recognized that more research was needed to find more conclusive links between toxic exposures and cancer, especially breast cancer, but they also believed that “there is also enough evidence now to encourage us to decrease the use and production of environmental pollutants in an effort to stop the increased rates of cancer.”

Whereas the AHT focuses on changing statewide policies, Stop Cancer Where It Starts works to pass environmental health resolutions that protect health at the city level. Moreover, the Bay Area campaign focuses not on environmental health issues faced by specific populations but on reducing the incidence of a specific group of diseases—primarily breast cancer and other cancers—among local community members of all ages. Stopping cancer where it starts entails the implementation of prevention strategies at the local sources of environmental contamination to which communities are exposed on a daily basis, often over long periods. By promoting policies to be enacted citywide, activists involved in Stop Cancer Where It Starts strive to eliminate immediate sources of pollution that may pose a greater threat to local residents than more geographically distant contamination sources.

To these same ends, the Toxic Links Coalition worked with the city of Berkeley in October 2000 to pass the “Resolution for the City of Berkeley establishing October as ‘Stop Cancer Where It Starts’ Month.” They chose the month of October, National Breast Cancer Awareness Month, to counter the emphasis on early detection that is so prevalent during that month, by highlighting cancer prevention and emphasizing a precautionary approach toward suspected environmental causes. The resolution read, “WHEREAS, health and environmental policies, as well as industrial and other business practices, should be guided by the Precautionary Principle: When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some of the cause and effect relationships are not established with absolute scientific certainty. In this context, the proponent of an activity or substance, rather than the public, should bear the burden of proof of harmlessness.” Among other things, Berkeley’s resolution called for citywide actions that would reduce the local sources of pollution linked to breast cancer and other cancers. One effort, the Healthy Buildings ordinance, eliminated the use of PVC plastic, formaldehyde, and other toxic materials in new construction. Other proposed actions included replacing the pesticides used on city property and land with safer alternatives; eliminating the use of PVC medical products, particularly in hospitals; requiring city institutions to buy chlorine-free paper items; and educating local businesses, hospitals, schools, organizations, and community members about not only the possible dangers associated with commonly used toxic products but also the availability of less harmful alternatives to these products.

Following the passage of Berkeley’s resolution, Breast Cancer Action, Women’s Cancer Resource Center, and other members of the Toxic Links Coalition helped to pass similar resolutions in the Bay Area cities of San Francisco and Oakland, as well as in nearby Marin County. Breast Cancer Action built on these local successes to promote the campaign nationally. On October 25, 2000, the organization ran a Stop Cancer Where It Starts advertisement in the New York Times. The ad, endorsed by eighteen individuals and organizations with ties to cancer and breast cancer activism, critiqued National Breast Cancer Awareness Month’s emphasis on early detection over disease prevention, as well as encouraged readers to tackle environmental breast cancer issues in their local communities.

Prevention First: A Coalition of Independent Health Organizations is yet another group of environmental breast cancer activists carrying out precautionary policy work. In 2001, eight breast cancer, women’s cancer, women’s health, and consumer advocacy groups from the United States and Canada founded the organization (originally named Putting People First) to promote disease prevention, especially in regards to breast cancer and women’s health more
Breast Cancer

We're already aware. It's time to act.

Reclaim October as
"Stop Cancer Where It Starts Month"

Breast cancer happens every day of
every month to thousands of
women — and some men.

We're aware that nearly 183,000 women will
be diagnosed with invasive breast cancer in
2000; that's one woman every three minutes.
We're aware that another 42,000 women will
be diagnosed with a noninvasive form

and that
approximately 41,000
women will die of breast cancer
this year; that's one death every 12
minutes.

The disease can potentially be prevented by
restricting the exposure of breast tissues to
the air, soil, and water. October has been
colonized by corporate interests as
"National Breast Cancer Awareness Month."
We urge you to reclaim it. Move beyond
awareness. Demand true prevention. Stop
breast cancer before it starts.

Get involved. Follow the lead of San Francisco,
Berkeley, and Oakland, California. These three
cities have declared October "Stop Cancer Where It
Starts Month." Acknowledging the impact of
toxins released into the environment
and working to reduce them.
To find out how to make a difference in your
community, contact Breast Cancer Action.

Figure 4.1: The Stop Cancer Where It Starts campaign's advertisement in the New York Times, October 25, 2000. Courtesy of Breast Cancer Action (San Francisco).

The Precautionary Principle

By the time the coalition officially disbanded in 2007, it consisted of twenty-four nonprofit organizations (and one business) from the United States, Canada, Australia, and Europe. Environmental breast cancer organizations that belonged to the coalition included Breast Cancer Action (San Francisco and Montreal), the Women's Cancer Resource Center in Oakland, the Massachusetts Breast Cancer Coalition, and two Long Island groups: the Babylon Breast Cancer Coalition and the West Islip Breast Cancer Coalition. Unlike the Alliance for a Healthy Tomorrow and Stop Cancer Where It Starts campaigns, Prevention First did not focus on environmental health policy change in a particular geographic region. Rather, the coalition targeted pharmaceutical and biomedical industries, by critiquing the growing trend toward the "medicalization of prevention." That is, it favored "shifting the emphasis in disease prevention away from drugs, medical products, and procedures" and promoted a focus on "true prevention" that eliminates the root causes of diseases, particularly suspected environmental causes. Despite the coalition's dissolution, the organizations affiliated with it continue to work on these issues, on their own and in conjunction with one another.

The precautionary principle structured Prevention First's efforts, especially its central assertion that pharmaceutical companies market so-called prevention pills to bolster their economic profits rather than to protect public health. After all, the use of such pills—many of which the drug companies and the FDA did not adequately judge to be safe before they were marketed to the public—can often cause other health problems. Addressing the precautionary principle in this context, the coalition stated, "The Precautionary Principle is a formal statement of two commonsense ideas about protecting health and the environment. Implementing the principle requires that new drugs and technologies only be introduced into society when we have reasonably good evidence that they are safe, and that those who want to introduce a new drug or technology must first demonstrate that it is safe." The coalition suggested that if companies truly cared about the public's health, they would work to better understand and eliminate the actual causes of disease, especially environmental toxins—rather than develop costly medical interventions as an alternative to "true prevention."

Although Prevention First challenged the marketing of prevention pills in general, it directed much of its efforts toward tamoxifen (Novaldex) and raloxifene (Evista). Both drugs, selective estrogen receptor molecules, reduce the risk of estrogen-receptor positive breast cancers by acting as anti-estrogens. In the late 1970s, the FDA approved tamoxifen for the prevention of recurrences of breast cancer in women. In 1992, the National Cancer Institute (NCI) established
The five-year Breast Cancer Prevention Trial to examine whether the drug could prevent breast cancer in healthy women (premenopausal and postmenopausal) over the age of thirty-five at increased risk for developing the disease.\(^6\) By 1998, the study had determined that tamoxifen reduced such risk by 49 percent; it also, however, significantly increased the risk of blood clots, endometrial cancer, uterine sarcomas, strokes, and cataracts, especially in women over the age of fifty. Notwithstanding these serious side effects—and despite criticism from many breast cancer and women's health activist groups—the FDA approved the drug for use in healthy women that year. A follow-up study in 2005, however, led researchers to advise that healthy women over the age of sixty should not take the drug because it harms such women more than it helps them.\(^36\)

Also in 2005, the NCI established the Study of Tamoxifen and Raloxifene study to compare the use of raloxifene to that of tamoxifen in healthy postmenopausal women at increased risk for breast cancer. The FDA had approved raloxifene in 1997 for the prevention of osteoporosis in postmenopausal women. Two years later, the agency approved it for the treatment of osteoporosis. That same year, investigators for the Multiple Outcomes of Raloxifene Evaluation study found that postmenopausal women taking the drug for osteoporosis also had fewer invasive breast cancers than participants who took a placebo. In a 2004 follow-up project, the Continuing Outcomes Relevant to Evista, NCI confirmed these findings. Furthermore, the Raloxifene Use for the Heart trial found that raloxifene decreased the incidence of invasive breast cancer in postmenopausal women at increased risk for coronary problems. Building on these earlier findings, the STAR study assessed the safety and efficacy of raloxifene in postmenopausal women at increased risk for breast cancer. Researchers concluded in 2006 that raloxifene prevented invasive breast cancer just as well as tamoxifen. Unlike tamoxifen, however, raloxifene did not decrease the incidence of noninvasive breast cancers. Although the study also found that those taking raloxifene had 36 percent fewer uterine cancers and 29 percent fewer blood clots than those taking tamoxifen, women taking both drugs had the same increased risk for developing strokes. In 2007, the FDA approved raloxifene for postmenopausal women at risk for invasive breast cancer.\(^37\)

As forms of chemoprevention for healthy women at risk for breast cancer, both drugs received much hype within the medical community and the media. Prevention First, however, was not impressed, not only because of the drugs’ serious side effects but also because of the ways in which they treat “a risk factor as though it were a disease.”\(^38\) “True prevention isn’t a shell game,” the National Women’s Health Network, one of the coalition’s founding members, stated. “Instead of women lifting up the shell and finding a prize (less breast cancer), they’re just as likely to raise a shell and reveal a stroke, blood clot, or other kind of cancer.”\(^39\) Along this line, Prevention First additionally targeted the direct-to-consumer (DTC) ads for chemoprevention drugs. In December 2001, the FDA sent a regulatory letter to tamoxifen’s maker, AstraZeneca, stating that the company had violated the agency’s DTC advertisement requirements by “making misleading efficacy claims, minimizing health risks, and failing to comply with postmarketing reporting requirements.”\(^40\) Prevention First pressured the FDA to make sure that AstraZeneca responded to the agency’s charges by improving its ads. The coalition further encouraged other breast cancer groups, women’s health groups, and concerned citizens to take action by sending their own letters to the FDA about the tamoxifen ads, challenging the misleading claims made by DTC ads more generally, and working toward “public policy that puts people’s health before corporate profit.”\(^41\)

The Precautionary Principle as a Scientific Ethic

At the Massachusetts Precautionary Principle Project’s second annual coalition meeting in December 2000, participants formed subcommittees, each of which focused on a particular set of precautionary principle issues. One committee addressed the relationship between the precautionary principle and science. The discussions that took place among its members over the subsequent months led its chair, Joel Tickner of Lowell’s Center for Sustainable Production, to organize the three-day “International Summit on Science and the Precautionary Principle” at the University of Massachusetts at Lowell. Eighty-five scientists, scholars, and activists from seventeen countries participated in the September 2001 event.

At the conference, participants developed a consensus statement outlining their understanding of the precautionary principle; the reasons why it should structure environmental health policy; and most important, its relevance to scientific practice. On the one hand, the statement outlined the role that science should play within a precautionary policy framework. For instance, it discussed the need to base policy decisions on evidence of harm rather than proof of harm. It asserted the importance of deeming a product safe, as opposed to harmful, before putting it on the market. It also emphasized that the burden of proof should fall on manufacturers and not consumers. On the other hand, the statement highlighted the significance of precautionary thinking for scientific practice. That is, it critiqued the ways in which “normative” science reflected and reinforced the established model of environmental health policymaking that they sought to revamp: “We believe that there are ways in which the
current methods of scientific inquiry may ... retard precautionary action. Unfortunately, limitations in scientific tools and in the ability to quantify causal relationships are often misinterpreted by government decision-makers, scientists, and proponents of hazardous activities as evidence of safety. However, not knowing whether an action is harmful is not the same thing as knowing that it is safe.” To these ends, the consensus statement outlined conceptual and practical strategies for conducting research from a precautionary perspective. Among other things, the statement asserted that practicing science from such a perspective demands new research agendas—particularly an increased focus on primary prevention—and new modes of analysis for assessing the relationship between toxic exposures and health. It described how this science requires not only improved and innovative scientific methods and tools but also a greater integration of quantitative and qualitative research. Scientists also need to go beyond established paradigms in order to develop safer and more cost-effective alternatives to harmful products and technologies currently on the market.42

More than one hundred scientists, activists, and scholars signed on to the consensus statement. Three—Ana Soto, Carlos Sonnenschein, and Ruthann Rudel—were breast cancer researchers who had participated in the summit. Four other breast cancer scientists and activists—Devra Davis, Nancy Krieger of Harvard University, Joan Reinhart Reiss of the Breast Cancer Fund, and Mary Lomont Till of the Women’s Community Cancer Project—signed the consensus statement at a later date. The fact that these first four scientists endorsed the statement is worth noting, as most of their breast cancer research has both focused on xenoestrogens and been influenced by a commitment to the precautionary principle.43

The precautionary principle influences the ways in which breast cancer scientists conceptualize and assess evidence, as exemplified by the slide show that Davis presented at public venues across the country. When making the case for a precautionary approach to breast cancer prevention, Davis did not provide proof that xenoestrogens caused breast cancer in women. Such proof did not and still does not exist. Instead, she discussed evidence that demonstrated the plausibility of the xenoestrogen theory. Some of the evidence, laid out in the slide show, came from experimental research, including studies demonstrating how DDT and other pesticides disrupted normal breast cell communication and how DDT stimulates breast cancer cell growth.44 Other evidence came from epidemiological studies showing correlations between increased risk of breast cancer and exposure to DDT, as well as between heightened cancer risk in Scandinavian women and their consumption of contaminated fish.45 Davis highlighted ecological research from Long Island demonstrating that post-menopausal women living near two or more chemical plants had twice the risk of developing breast cancer compared with women who lived in areas with no such facilities.46

In taking this precautionary approach, however, Davis not only rethought what constitutes enough evidence; she also rethought what constitutes relevant evidence. In addition to describing evidence linking xenoestrogens to breast cancer, she highlighted evidence linking xenoestrogens to reproductive health problems in human males. Specifically, she explained studies demonstrating the declining rates of birth for baby boys in the United States, Canada, Denmark, Norway, and other industrialized countries.47 She pointed to research showing increased rates of undescended testicles and hypospadias in baby boys, as well as increased rates of testicular cancer in men, in various parts of the world.48 In some of her presentations, Davis also described a 1999 Japanese documentary that examined possible environmental causes, especially exposure to PCBs, for the steady decrease in testicular weight among Japanese men over the past decade. “Now, let me add some recent findings from Tokyo that I am trying to get translated into English,” she stated at the Massachusetts Precautionary Principle Project’s kick-off event. “The Tokyo medical examiner has conducted studies of the autopsies of Japanese men killed in accidents from 1970 to 1998. Over the years the men’s bodies became taller and heavier. Researchers measured their height, their weight, the weight of their brain, the weight of their liver, and the weight of their testes. And in proportion to the weight increases of their other organs and total body mass, their testes did not continue to grow after 1980. I think this is pretty important. I don’t know why Japanese men have smaller testicles, and I think it may be of interest to more than just Japanese women. But I think it is pretty important that we find out.”449

Finally, Davis’s presentation included slides linking xenoestrogens to health problems affecting wildlife, evidence that she called “sentinel indicators.” She highlighted studies suggesting that endocrine disrupters caused limb malformations and abnormal sex concentrations in frogs in New Hampshire, as well as deformed frogs and declining frog populations in the Midwest.49 She summarized research that drew connections between the dichofol, DDT, and other pesticides that polluted Lake Apopka, Florida, and the altered sex ratios and deformed penises in the alligator population that lived there.50 She also discussed evidence demonstrating that exposure to high levels of synthetic estrogens caused sex reversal in snapping turtles.51

By rethinking what counts as relevant evidence in regard to the theory that xenoestrogens cause breast cancer, Davis created a new “ecology of risk”—a
term that I use to describe the particular ways in which individuals, institutions, and communities conceptualize the relationship between breast cancer risk and the natural or built environment. Conventional ecological understandings of risk consider the unique set of risk factors associated with a particular disease such as breast cancer. By rethinking the notion of relevant evidence, however, Davis constructed an ecology of risk based not so much on the problem of breast cancer per se but on that of breast cancer as it relates to the broader set of risks associated with endocrine disruptors. In particular, Davis based her ecology of risk on a global framework that linked breast cancer on Long Island to human and wildlife disorders found in other parts of the United States, as well as in Japan, Scandinavia, and Canada. Indeed, much of Davis's precautionary approach to breast cancer prevention reflected her perspective that endocrine disruptors are a global problem that needs a global solution. By presenting a slide on how PCBs and other endocrine-disrupting chemicals are found in the fat of polar bears living in the Arctic Circle—a region with little human presence, much less an industrial one—she argued that increased federal regulations, though important, cannot in themselves protect against the transport of these chemicals into the United States or to more remote areas such as the Arctic Circle by way of rain, ocean currents, and wind. Instead, global solutions are also needed to solve this growing environmental health problem.

Other breast cancer activists who construct their own ecologies of risk take a more local approach. In the early 1990s, Lorraine Pace and other concerned women suspected that the inordinately high increase in rates of breast cancer in their Long Island neighborhoods were caused by environmental factors, particularly xenoestrogens. In part, their suspicion arose from their mapping studies indicating that the highest rates of breast cancer in the neighborhoods occurred among women living on cul-de-sacs where "dead-end water mains" contained high amounts of sewage runoff. Yet their suspicion also resulted from their concerns that xenoestrogens caused other health problems in local human and non-human populations. For instance, some activists speculated that the declining clam population in the nearby bay resulted from cadmium contamination. In Rachel's Daughters, Pace explained that local companies had been dumping cadmium into the bay since 1932 and that some residents, herself included, used cadmium as a fungicide for their lawns, which bordered the bay. She went on to observe that cadmium is known to harm shellfish populations and cause mammary tumors in rats. "When I first moved here," Pace stated, "you could practically walk from clam boat to clam boat. That's how many clam boats there were. Now you're lucky if you see one clam boat. Something is killing the clams. Something is killing the fish. So maybe the same thing that is in their fat cells is in our fat cells." Not surprisingly, cadmium made the list of one hundred suspected endocrine disruptors that Long Island activists wanted the EPA to examine as part of the Long Island Breast Cancer Study Project.

The precautionary principle shapes the structure of research projects and the types of research questions that breast cancer scientists ask. For example, it influences the research practices of toxicologist Ruthann Rudel and her colleagues at the Silent Spring Institute. Rudel joined Silent Spring when it first opened after having spent numerous years at an environmental consulting firm. She made the switch because she wanted to work on a more "proactive" environmental health research agenda. The institute was a good fit for her, because the science done at Silent Spring is policy driven, meaning that its scientists seek to conduct research that "helps to increase the imperative to act," according to Rudel. Much of the science revolves around exposure assessment, especially the development of exposure assessment methods. Exploratory research is conducted to identify new avenues of scientific inquiry, as opposed to more "doable" research—that is, testing of narrow hypotheses in well-developed research areas that can be easily answered. Silent Spring's research, while innovative in many respects, tends not to land big grants from mainstream research organizations, industries, or government agencies that prefer to support studies with well-defined and testable hypotheses. Rudel points to Silent Spring's multidisciplinary research approach (which includes toxicological, epidemiological, and ecological research) and its collaborative relationship with activists and Cape Cod residents as evidence of the institute's precautionary approach to environmental breast cancer science. Democracy and collaboration are central to the precautionary principle, as they provide an alternative to the top-down model of scientific knowledge production.

The Precautionary Principle as an Ethic for Everyday Living

Five months after the Massachusetts Precautionary Principle Project's kick-off meeting in October 1999, the Massachusetts Breast Cancer Coalition (MBCC) organized its own one-day conference, "At the Heart of Primary Prevention: Breast Cancer and the Precautionary Principle." The purpose was to discuss the principle as it specifically pertained to the issue of environmental links to breast cancer. After making her introductory remarks, MBCC director Deborah Forter introduced the conference's keynote speaker: Mary O'Brien, an Oregon-based scientist, breast cancer survivor, and environmental health activist.

In her talk, "Racing towards the Starting Line: The Radical Nature of Precaution," O'Brien discussed the importance of taking a precautionary
From Pink to Green

perspective in efforts to prevent breast cancer. Much of her speech centered on the need to implement the precautionary principle in environmental health policy-making. Yet she also maintained that envisioning the principle solely as a regulatory framework is not enough; the precautionary principle must also become a framework for everyday life. That is, it must guide the ways in which we inhabit our natural and built environments so that we live our lives in ecologically sustainable and health-promoting ways. In particular, she encouraged people and communities to practice simple living. The social movement that revolved around simple living encourages individuals and communities to reduce their dependence on stressful lifestyles and jobs; unnecessary material goods; fuel-based transportation; environmentally harmful practices, products, and technologies; and food that is overly processed, pesticide ridden, and packaged.58

Several days later, O'Brien expanded on these themes in a workshop on "alternatives assessment" at the Lowell Center for Sustainable Production. Unlike conventional risk assessment, which focuses on the economic costs and benefits of particular technology and policy decisions, alternatives assessment also considers social, cultural, personal, spiritual, and other less tangible costs and benefits. Most important, it emphasizes the need for citizens, industrialists, activists, and policymakers to develop safer alternatives and creative strategies for addressing environmental health problems.59 Along this line, much of the workshop was spent on everyday efforts that communities could take to reduce their environmental risks. O'Brien advised that widespread acceptance of such efforts will require shifts in not only personal but also social and cultural values. That is, they require what anthropologist Linda Layne calls a "cultural fix."60 O'Brien explained, for example, that individuals will begin to rely on bicycles instead of cars for their primary mode of transportation only when cultural perceptions about time, class status, and physical activity change. In addition, communities will need to build more bike trails and design more bike-friendly roads. People will need to live closer to where they work, shop, and play. For their part, city planners and officials will need to construct their communities with these simple living principles in mind.

Like O'Brien's approach, the final section of Davis' slide show—"Precautionary Approaches to Risk Reduction and Prevention"—presented the precautionary principle as an everyday ethic. In addition to encouraging schools and workplaces to offer healthier food choices to their students and employees, she encouraged individuals to "exercise more, eat better, and reduce their reliance on hazardous products linked to breast cancer. Further, she spoke about the need to eradicate the socioeconomic barriers that make it difficult for many people to incorporate healthy living strategies into their lives in the first place. In contrast to O'Brien, Davis incorporated an explicitly spiritual dimension into her precautionary ethic that drew from her strong Jewish faith. After advocating prayer and meditation as facets of a broader plan of breast cancer risk reduction, she ended her slide show with four inspirational quotes to encourage people to join others in working to prevent breast cancer. The last of these quotes comes from the Talmud: "It is not for us to complete the task, but we must begin it."

Sharon Koshar also views the precautionary principle in spiritual terms. Koshar served as MBCC's precautionary principle coordinator from 1999 to 2003 and continues educating people about the principle in the social change class that she teaches at Springfield College.61 In her presentation at MBCC's October 1999 conference, Koshar described her reliance on spiritual ideals in explaining to local residents why they should strive to incorporate the principle into their daily lives. Unlike Davis, Koshar drew not from Judaism but from Deepak Chopra's Ayurvedic approach to holistic health.62 In this belief system, one's physical, emotional, and spiritual health are intertwined. To be healthy in one of these ways requires health in all of them: one's body cannot be well, for instance, if one is chronically anxious and stressed. Moreover, Ayurvedic perspectives into her precautionary principle activism.

Koshar situated these three facets of individual health within the broader context of environmental health. One must inhabit a healthy environment to live a healthy physical, emotional, and spiritual life—and vice versa.

In 1999, Karen Miller, founder of the Huntington Breast Cancer Action Coalition established the Prevention Is the Cure (PITC) campaign. This initiative promotes the precautionary principle in dealing with the environmental health concerns facing Long Island and beyond. In partnership with other breast cancer and environmental advocacy groups, the campaign espouses everyday living strategies that individuals can use to lower their environmental health risks. For example, PITC, along with Neighborhood Network, developed a chart of twenty-five "Precautionary Alternatives" to "toxic triggers" that are known to cause or are suspected of causing various cancers, endocrine disorders, respiratory problems, Alzheimer's, and other health problems. Such precautionary measures include relying on organic pest control to minimize exposure to pesticides, using glass and stainless steel containers instead of plastic ones, and choosing paint with low levels of volatile organic chemicals (suspected of triggering asthma and reproductive effects).63 PITC organizes the annual Prevention Is the Cure Week, comprising a series of educational
workshops and local events across Long Island that has been held since 2002. In 2008, such events—most of which are free or encourage a voluntary donation—includes classes on safe cosmetics, environmental factors associated with breast cancer and other diseases (and steps to reduce one’s risk), nontoxic home care, organic gardening techniques, and the national and international history of the precautionary principle. Running these events are various local breast cancer groups, such as the Huntington Breast Cancer Coalition, the Babylon Breast Cancer Coalition, the Great Neck Breast Cancer Coalition, the Islip Breast Cancer Coalition, and the Brentwood/Bayshore Breast Cancer Coalition.64

Viewing the precautionary principle as an ethic for daily life requires activists to direct their efforts toward not only scientists and policymakers but also the general public. Activists grapple with how best to communicate the meaning and importance of the principle to members of the public. During her presentation at the 1999 MBCC conference, Kosar warned that activists should describe the principle in language that most people can understand. She acknowledged that many activists, scientists, and policymakers feel comfortable using the term precautionary principle as it pertains to their political, scientific, and regulatory efforts. Many laypeople, however, find the term cold and overly technical, she explained, especially when it is used in campaigns aimed at educating them about the relevance of the principle to their daily lives. After her talk, audience members discussed these rhetorical concerns in relation to their own precautionary principle activism. They brainstormed alternative ways to describe the concept to the general public. In addition to suggesting such familiar phrases such as “Look before you leap,” the audience members discussed the politics of describing the precautionary principle as a form of “common sense,” a “gut feeling,” and an innate “intuition” that all people shared regarding how to maintain a healthy self, community, and environment.

After the MBCC conference, one local group handed out a flier with “HEALTH FIRST!” printed across the top in bright red. The flier highlighted a way in which activists described the precautionary principle in less technical terms. Pictured below the phrase were nine men, women, and children of different ethnicities standing in front of the earth and smiling. Below them, the fact sheet stated in red and blue letters: "USE THE PRECAUTIONARY PRINCIPLE: For people, businesses, and governments—the first thing to consider when using a substance, creating a product or permitting a practice is: Is it healthful? Or harmful? Today there are over 80,000 chemicals in use. Many of them have polluted our earth, water and air, causing widespread contamination of plants, fish, wildlife and people. We need to take better care of our health and that of all living things. HEALTH FIRST: Let's do our part! Grassroots at Work for a Healthy World.

Figure 4.2 A flier from “At the Heart of Primary Prevention: Breast Cancer and the Precautionary Principle,” a conference organized by the Massachusetts Breast Cancer Coalition in October 1999. Courtesy of Lise Beane. 
"Better Safe Than Sorry" promotes health over harm by appealing to what Davis and others call "common sense." Davis likes the phrase because it is one that people of all ages and backgrounds have heard throughout their lives in relation to many real-life situations, from rechecking whether the coffee pot is turned off to not driving one's car too fast in a snowstorm even if driving slower will make one late for an important event. "In many aspects of our lives, we promote the idea that it's better to be safe than sorry," Davis once explained to me, "So why should the values guiding how we protect public health from environmental dangers be any different?" Long Island's Prevention Is the Cure takes this view, as well: "The science has spoken!" the organization asserts on its Web site. "Harmful environmental toxins are causing disease. Instead of waiting for definitive 'proof' of the toxicity of millions of chemicals and products, we advocate a precautionary health model—one that says it is 'better to be safe than sorry.'" 65

Davis also likes "Better Safe Than Sorry" because it helps people to understand the importance of erring on the side of caution even when the risk of harm—especially death—is unproven. "We should not have to become the bodies of evidence," declared Davis at many of her public presentations. She borrowed this phrase from Bay Area breast cancer survivor and activist Nancy Evans.66 Both Davis and Evans use it bring attention to the deaths of women with breast cancer that have occurred when harmful products were deemed "safe" for industry use and public consumption following inadequate safety testing. In addition, they rely on the phrase to highlight how women's breast cancer—ridden bodies have become the evidence of harm within a regulatory system that places the burden of proof on consumers rather than on the manufacturers of toxic products.

Activists' efforts to implement the precautionary principle within the domains of science, policy, and daily life demonstrate its growing relevance to the environmental breast cancer problem, and the principle's flexibility indicates that it will continue to be a useful framework in the future. In the years to come, activists and their allied scientists will identify new chemicals and other toxic substances of concern. They will focus on new geographic, workplace, and other physical sites of exposure. They will better understand not only the toxicological properties of particular chemicals but also the biological, genetic, behavioral, and structural factors that make particular individuals susceptible to environmental health risks. They will develop new research methods and fine-tune older ones. In addition, the changing technoscientific landscape of environmental breast cancer activism will intersect in new ways with the shifting terrain of other health movements. In response to these emerging types of knowledge, issue priorities, technoscientific practices, and kinship opportunities, activists will rethink what strategies count as precautionary and how best to implement them.

Implementing precautionary policies and practices, however, requires more than just the support and compliance of scientists, other activists, industrialists, and policymakers. It also needs support from the public. Activists rely on the public to embrace their objectives and participate in their campaigns as a way to validate their efforts and put pressure on key officials and decision makers. They depend on the money, time, and other resources provided by citizens in carrying out political and public health work. Incorporating precautionary strategies into the daily lives of individuals and communities demands public involvement, as well. Given that breast cancer primarily afflicts women, activists devote much of their outreach efforts to them, often by constructing environmental breast cancer as a women's health issue. Still, the ways in which they construct it as such vary and are subject to debate.
The Cultural Politics of Sisterhood

In September 1999, the Breast Cancer Fund announced that it would be part of a new coalition, with Susan G. Komen for the Cure and the National Organization for Women (NOW), which would campaign for increased federal research on environmental causes of breast cancer. One of the coalition’s first efforts was a two-page letter to President Bill Clinton, copied to presidential candidates Governor George W. Bush of Texas; U.S. senator Bill Bradley of New Jersey; and Vice President Al Gore. Written on Breast Cancer Fund letterhead, the letter called on the president to remedy the nation’s failure to address possible environmental causes of the disease and, by extension, breast cancer prevention. The Breast Cancer Fund’s decision to send the letter to President Clinton in late October, in the final week of National Breast Cancer Awareness Month, served to sharpen an already existing critique of the dominant breast cancer paradigm. Unlike other activist groups that criticized National Breast Cancer Awareness Month, however, the Breast Cancer Fund did not frame the letter’s environmental health demands in relation to critiques of the cancer industry. Instead, the organization conceptualized its environmental health demands and the coalition’s broader campaign goals through the lens of the population most affected by breast cancer and by the environmental factors linked the disease: women. In doing so, it took a feminist perspective, situating its demands for more environmental health research within the broader context of women’s health politics and activism.

Women’s health is arguably one of the most common disease categories in which breast cancer activists situate the breast cancer problem. Thus, it is not surprising that the Breast Cancer Fund’s campaign and the environmental breast cancer movement more generally often construct the environmental breast cancer problem through this particular lens. At the same time, the feminist perspective embraced by the campaign reflects only one of the ways in which activists, organizations, and others have constructed the environmental breast cancer problem as a women’s health issue. Not only do the gendered elements of environmental breast cancer activism sometimes take place outside a traditional feminist framework; the social, cultural, and political terrain of feminist breast cancer activism, like feminism in general, is also diverse in its own right. Consequently, the various ways in which activists construct the gendered dimensions of the environmental breast cancer issue lead to multiple approaches for addressing the problem. Such differences highlight the array of practices that activists use to inspire women and the broader public to partake in environmental breast cancer activism.

Mapping the Feminist Politics of Environmental Health

The Breast Cancer Fund’s 1999 letter to President Clinton outlined four research demands: increasing funding for the National Institute of Environmental Health Sciences (NIEHS), establishing a national registry and inventory of the endocrine-disrupting and carcinogenic chemicals found in our bodies, fully funding the EPA’s Endocrine Disrupter Screening Program (EDSP), and establishing a cross-agency committee to oversee government funding for environmental health research. The letter went on to explain how each of these research goals would lead to better understandings of the relationship between breast cancer and toxic exposures. The Breast Cancer Fund argued that increasing the overall NIEHS budget would make more financial and institutional resources available for the study of breast cancer, while increased “biomonitoring” would include a wider range of chemicals as well as the testing of breast milk, which “often contains high levels of carcinogenic and hormone-disrupting chemicals.” The letter justifies the EDSP budget by describing how hormone mimickers cause “the rapid growth of cancer cells.” Regarding the final demand, the Breast Cancer Fund observed that “recently, a $15 million appropriation earmarked for a study that would have explored environmental factors in regions with high breast cancer incidence was diverted to unrelated projects on genetics and air pollution. A cross-agency oversight committee that includes consumer participation would ensure the correct and wisest placement of new funding.”

In making these demands, the coalition did not simply construct breast cancer as an environmental health issue. Rather, it framed the environmental breast cancer problem as a women’s health issue. After outlining the four actions that the Breast Cancer Fund wanted President Clinton to take, the letter
stated, "We welcome the opportunity to discuss the above in greater detail with you and your staff. Time is of the essence. Women at risk for breast cancer—which is all women—are engaged in a battle to save our bodies and our lives. Until we arm ourselves with new intelligence about the causes of the disease, we will continue to fight blindfolded. On behalf of our mothers, sisters, and daughters, we call on you to vigorously support policy and research that will empower us to fight with both eyes open." The "we" calling on Clinton to take action in this paragraph were the eighty women who signed the letter on behalf of their organizations, businesses, and universities. Although many of the listed parties were representatives from breast cancer organizations such as Breast Cancer Action, the African American Breast Cancer Alliance, and 1 in 9: The Long Island Breast Cancer Action Coalition, they also included representatives from women's cancer organizations, women's health organizations, and other women's groups.

This women's health framework structured the press conference that the Breast Cancer Fund organized on October 27 to discuss the formation of its coalition and the letter that it had sent President Clinton two days prior. Held in the Longwood House of Representatives Office Building on Capitol Hill, the press conference drew several dozen people, including breast cancer activists from East Coast organizations, congressional staffers, and journalists. The event featured speeches by coalition representatives Diane Balma of Susan G. Komen for the Cure, Breast Cancer Fund president Andreea Martin, and NOW president Patricia Ireland. Campaign supporters Wilma Brown of the American Medical Women's Association and Julia Brody, the director of the Silent Spring Institute, among others, also spoke. Both women signed the Breast Cancer Fund's letter on behalf of their organizations. Congresswoman Nancy Pelosi, Democrat of California, and Senator Olympia Snowe, Republican of Maine, longtime proponents of women and women's health issues, expressed their commitment to helping achieve the coalition's demands.

By situating breast cancer within the broader framework of women's health, the Breast Cancer Fund and the campaign's participating organizations formed a disease kinship, linking breast cancer to other health conditions that primarily affect women and to interest organizations working on behalf of women's health. In doing so, the campaign connected activists, affected persons, health care professionals, scientists, concerned citizens, and other individuals who have personal, professional, and political stakes in working together through the broader framework of women's health. The Breast Cancer Fund's focus on environmental health, particularly endocrine disruptors, further helped to construct breast cancer as a women's health issue. Just as xenoestrogens are linked to breast cancer, so too are they implicated in other women's health disorders. Some of these health conditions and their suspected environmental causes are priority issues for many of the organizations that signed the letter. The DES Cancer Network, for example, advocates on behalf of women who have clear-cell adenocarcinoma of the vagina or cervix resulting from in utero exposure to DES. Likewise, the National Women's Health Network takes on environmental causes of breast cancer, endometriosis, and ovarian cancer, while Planned Parenthood works to address the connections between xenoestrogens, reproductive health, and family planning. Indeed, several speakers at the press conference stressed the need to better understand the possible impact of these chemicals on both breast cancer and women's health more generally.

With 99 percent of breast cancer cases occurring in women, it should come as no surprise that the Breast Cancer Fund's 1999 campaign defined the disease as a women's health issue. The environment breast cancer movement—not to mention the broader breast cancer movement—does the same. Women's health is one of the most important disease frameworks used by activists of all kinds to conceptualize and address the breast cancer problem. Yet the Breast Cancer Fund's campaign constructed the category of women's health not simply in biomedical terms but also in feminist terms. That is, it invoked this category to situate its research demands in relation to the social, cultural, political, and economic factors that have historically hindered women's ability to achieve physical and emotional well-being in the United States and beyond.

The majority of those who signed the letter self-identify as feminist. Despite its use of masculine and military metaphors (such as women's "fights" and "battles" against breast cancer) to win the support of Congress, other elected officials, and the public at large, the letter relied on feminist rhetoric in making its case. The letter portrayed women as active participants and key players in scientific and political efforts to eradicate breast cancer. The success of prior campaigns sponsored by the National Breast Cancer Coalition and other organizations to increase federal spending on breast cancer research meant that the Breast Cancer Fund could not justify its demands by simply stating that breast cancer research was underfunded. Thus, it argued that as the federal government increased its environmental health research efforts, it should make sure not to leave women's health issues, particularly breast cancer, behind.

Speakers at the coalition's Capitol Hill press conference made explicit links between feminism, breast cancer, and the need to reform science and policy agendas as they relate to environmental causes of the disease. As Patricia Ireland put it, "Environmentalists and feminists alike share a common interest
in research on the impact of environmental degradation on women's health. This concern is reflected in the many women's rights activists who identify themselves as eco-feminists and the many environmental activists who are strong women's rights supporters. Now, we must challenge the scientific research community and policymakers to look for answers to the questions that plague every woman who has ever felt a lump in her breast: Why does this happen? How can we prevent it? And how can we cure it?\(^6\)

The feminism that structured the Breast Cancer Fund's 1999 campaign shapes the environmental breast cancer movement in broader terms. It fuels activists' arguments that the dominant breast cancer paradigm places blame for breast cancer on women's lifestyle choices rather than the social, political, and economic systems that often hinder women's opportunities to make healthy choices and avoid exposure to toxic substances. It also informs environmental breast cancer activists' engagements with science. Activists point to the historical lack of research on women's health issues, including breast cancer, in their efforts to demand that current and future environmental health research focus on women. They draw on their gender-inflected "embodied knowledge" and "ways of knowing" to make the case for why they should play a role in deciding how much research scientists should conduct, how they should conduct it, and to what politics and policy ends it should be used.\(^7\)

In recent years, scholars, activists, and social critics have written about the environmental breast cancer movement's feminist underpinnings, with many describing how this feminist movement differs from other facets of contemporary breast cancer activism. In particular, some have contrasted environmental breast cancer activism with what feminist, social critic, and breast cancer patient Barbara Ehrenreich calls the "mainstream of breast cancer culture"—a type of activist culture that has come to dominate the social, cultural, and political landscape in the 1990s and early 2000s.\(^8\) Although this mainstream culture emerged in part from the successful efforts of feminist breast cancer activists in raising public awareness about the disease, its critics argue that it is far from feminist.

Ehrenreich's April 2001 Harper's article, "Welcome to Cancerland: A Mammogram Leads to a Cult of Pink Kitsch" is a particularly scathing critique of mainstream breast cancer culture. In recounting her venture into this culture in the wake of her diagnosis with the disease in 2000, she describes it as pink and frilly: "You can dress in pink-beribboned sweatshirts, denim shirts, lingerie, aprons, loungewear, shoelaces, and socks; accessorize with pink rhinestones brooches, angel pins, scarves, caps, earrings, and bracelets; brighten up your home with breast-cancer candles, stained-glass pink-ribbon candleholders, coffee mugs, pendants, wind chimes, and night-lights; pay your bills with special BreastChecks or a separate line of Checks for the Cure."\(^9\) She further notes how mainstream breast cancer culture promotes traditional feminine values through commercialism. Ehrenreich describes the plethora of breast cancer-themed products sold by organizations and businesses—from T-shirts to designer bank checks and teddy bears—in efforts to raise funds for breast cancer research. Such groups also sponsor walks, races, and other fundraising events. For Ehrenreich, this culture embodies a "perkiness" and "cheerfulness" that discourages complaining and getting angry at the disease. The Breast Friends Web site, for instance, offers inspirational quotes and verses, among them "Don't Cry over Anything That Can't Cry over You" and "I Can't Stop the Birds of Sorrow from Circling My Head, but I Can Stop Them from Building a Nest in My Hair."\(^10\) "What does not destroy you," writes Ehrenreich, "to paraphrase Nietzsche, makes you a spunkier, more evolved, sort of person. . . . And in our implacably optimistic breast-cancer culture, the disease offers more than intangible benefits of spiritual upward mobility. You can defy the inevitable disfigurements and come out on the survivor side actually prettier, sexier, more femme."\(^11\)

Ultimately, Ehrenreich claims, the ultrafeminine and infantilizing tendencies of mainstream breast cancer culture perpetuate complacency about the social, political, economic, and environmental policies that she and many others believe are responsible for causing the current breast cancer epidemic. For example, the culture directs women diagnosed with breast cancer to learn makeup techniques so they can look prettier after their treatments, rather than encouraging them to ask what caused their cancer. It promotes the belief that breast cancer is a blessing in disguise and that a cure is just around the corner, instead of cultivating anger at a social system that values financial profit over women's health. It inspires women to become consumers of items decorated with pink ribbons and participants in races that fund research for the ever elusive cure rather than empowering them to become activists who challenge and reform the social, political, and economic system that supports the dominant breast cancer paradigm. The final paragraph of Ehrenreich's article sums up her feelings about mainstream breast cancer culture: "No, this is not my sisterhood. For me at least, breast cancer will never be a source of identity or pride. . . . What it is, along with cancer more generally or any slow and painful way of dying, is an abomination, and to the extent that it's man made, also a crime. This is the one great truth that I bring out of the breast cancer experience, which did not, I can now report, make me prettier or stronger, more feminine or more spiritual—only more deeply angry. What sustained me through the 'treatments'
is a purifying rage, a resolve, framed in the sleepless nights of chemotherapy, to see the last polluter, along with, say, the last smug health insurance operative, strangled along with the last pink ribbon."

Ehrenreich’s Harper’s article received considerable public attention and praise. Bloggers, journalists, and others wrote about it in their posts, essays, and editorials. Professors taught it in their women’s studies courses. In 2003, the essay was a finalist for a National Magazine Award. It also inspired breast cancer activists. San Francisco’s Breast Cancer Action invited Ehrenreich to give the keynote speech at its fifth annual town hall meeting, “Beyond the Pink Ribbon: Challenging the Culture of Breast Cancer,” in April 2002. Founded in 1998, this event brings together community members and activists to develop new partnerships and political strategies for addressing the environmental breast cancer problem. Basing the town meeting on Ehrenreich’s critique reflected Breast Cancer Action’s desire to discuss and dissect what it viewed as the problems with mainstream breast cancer culture.

Accounts such as Ehrenreich’s provide important insights into the multiple and often contradictory cultures of action that constitute breast cancer politics and activism. Although the breast cancer movement as a whole often views the breast cancer problem through the lens of women’s health, not all facets of the movement necessarily embrace the disease category in the same way. The particular ways in which activists and others conceptualize it carry implications for how they understand the gendered dimensions of living with breast cancer; the impact of gender on the disease’s social, cultural, and political dimensions; and the political and public health implications of treating breast cancer as a women’s health issue. How activists construct the category of women’s health also influences their beliefs and decisions about the best ways to alleviate the breast cancer problem, the specific political actions that they should take, the role that the public (particularly women) should play in this work, and the outreach strategies for getting such individuals involved.

By emphasizing the differences between activist cultures, however, accounts such as Ehrenreich’s neglect the heterogeneity that exists within the environmental breast cancer movement. The boundaries between this movement and its mainstream counterpart are not always clear cut. Individuals, organizations, discourses, practices, and political symbols often travel back and forth between these two arenas, embraced by activists and organizations in each. Furthermore, the feminist perspective behind the environmental breast cancer activism is not as unified as the Breast Cancer Fund’s 1999 campaign and other accounts such as Ehrenreich’s suggest. Rather, the movement is a socially, culturally, and politically diverse terrain when it comes to such perspectives, and downplaying this heterogeneity has the potential to oversimplify the issues of what political and public health efforts best promote women’s health in regard to breast cancer prevention, what role feminism should play in these efforts, and what counts as feminist breast cancer activism.

Symbols, Discourses, and Practices

The Breast Cancer Fund’s 1999 campaign is a useful springboard for discussing the heterogeneity of feminist environmental breast cancer activism. By signing on to the same letter and set of research demands, the coalition members and the other signatories spoke with a unified activist voice. This form of “strategic essentialism” served an important political purpose: coming together as a unified bloc increased their chances that federal officials would take their demands seriously. In speaking with one voice, however, the Breast Cancer Fund’s 1999 campaign erased the differences within the broader environmental breast cancer movement, particularly among the specific groups that signed on to the letter.

In their activist work outside the campaign, these groups have sometimes approached the environmental breast cancer problem in different and even contradictory ways. Such differences, in turn, relate to a wide range of ideological, agenda-setting, practical, organizational, and social factors. One important set of differences relates to the ways in which environmental breast cancer activists define feminist activism and determine what role it should play in their political work. Three issues—the role of corporate support and commercialism, the use of the pink ribbon as a symbol of the breast cancer movement, and the politics of “survivor” identity—exemplify the complexity of feminist breast cancer activism. They also complicate the boundary between mainstream and feminist breast cancer culture.

Corporate Involvement

One facet of mainstream breast cancer culture that Ehrenreich and others critique is corporate involvement in breast cancer advocacy efforts. Since the early 1990s, dozens, if not hundreds, of corporations and businesses have participated in these efforts. Ehrenreich observed, “You can ‘shop for the cure’ during the week when Saks donates 2 percent of sales to a breast-cancer fund.... You can even ‘invest for the cure,’ in the Kinetics Assets Management’s new no-load Medical Fund, which specializes entirely in businesses involved in cancer research. If you can’t run, hike, or climb a mountain for the cure—all of which endeavors are routine beneficiaries of corporate sponsorship—you can always purchase one of the many products with a breast
From Pink to Green

cancer theme." Ehrenreich dislikes such corporate sponsorship practices for several reasons. She points out, for example, that a significant portion of the money raised through them goes not to the causes that they supposedly support but to overhead and advertising costs: Avon’s Breast Cancer 2-Day Walk spends more than a third of the money it raises on such expenses, while Susan G. Komen’s Race for the Cure series “fritter away up to 25 percent of its profits.” Further, the money that does go to charity tends to support research to find a cure for breast cancer rather than disease prevention.

Many breast cancer groups share Ehrenreich’s concerns. In 2001, ten breast cancer and women’s cancer organizations formed a coalition, Follow the Money: An Alliance for Accountability in Breast Cancer, to raise public awareness about the ways in which profits from corporate-sponsored fund-raising events such as Avon’s 2-Day Walk and the Susan G. Komen’s Race for the Cure series are spent. One member of this coalition, the Massachusetts Breast Cancer Coalition, described the group’s mission on its Web site: “We applaud organizations that are committed to raising money to fight the epidemic of breast cancer, and we know that every dollar is critical. The dedication and commitment that participants in fundraising walks, runs, swims, bikes and every other mode of fundraising events show is inspiring. We are concerned with what happened to the money that these walkers, runners, swimmers, and bikers have raised and want to ensure that it is ultimately directed to fighting the breast cancer epidemic.” To this end, the coalition lists questions for the public to ask event sponsors before participating in or supporting such events: “What percentage of the events’ proceeds will be designated for research? What kind of research will be funded? Will there be funding into environmental links to breast cancer? Will there be local breast cancer advocates involved in the research selection and funding decision process?”

Breast Cancer Action, a member of Follow the Money, established the Think Before You Pink campaign in the wake of its town hall meeting in April 2002. Through brochures, articles, postcards, and other educational materials, Breast Cancer Action seeks to educate the public about the perils of “cause marketing,” whereby corporations donate a portion of their sales profits to charitable causes such as breast cancer awareness. The organization maintains that corporations raise little money from these efforts and that they establish such campaigns to gain customers who want to support companies with a social conscience. Think Before You Pink encourages consumers to learn how corporations allocate the profits from their cause marketing campaigns to breast cancer efforts: “How much money from each product sold actually goes toward breast cancer? ... To what breast cancer organization does the money go, and what types of programs does it support?” Think Before You Pink pushes buyers to consider the ways in which cause marketing campaigns may directly undermine breast cancer prevention, especially as it pertains to potential environmental causes of the disease: “What is the company doing to assure that its products are not contributing to the breast cancer epidemic? ... Is the promotion a golf tournament on a golf course sprayed with pesticides? Is $1 being given each time you test-drive a polluting car, as in BMW’s Ultimate Drive Campaign? Are the products being sold cosmetics containing chemicals linked to breast cancer?”

In October 16, 2002, Breast Cancer Action placed an ad in the New York Times illustrating Think Before You Pink’s message. In the ad, Breast Cancer Action plays off a cause-marketing campaign promoted by the company Eureka. Eureka (whose name was changed to Electrolux Home Care Products of North America in 2004) is one of the nation’s leading producers of vacuum cleaners and their parts. In June 2002, Eureka established its Clean for the Cure campaign. For every Whirlwind LiteSpeed vacuum cleaner purchased, Eureka donated one dollar to research efforts to find a breast cancer cure, with a maximum contribution of $250,000. Breast Cancer Action criticized this and other cause-marketing campaigns—specifically, American Express’s Charge for the Cure and BMW’s The Ultimate Drive—by suggesting that it is the corporations that “clean up” financially from such campaigns rather than the breast cancer efforts they supposedly benefit. Given that the Whirlwind LiteSpeed vacuums cost $170 each, Eureka donated less than 1 percent of its profits to breast cancer research. Breast Cancer Action’s release of its ad in October, National Breast Cancer Awareness Month, is especially appropriate, as many companies promote their cause-marketing efforts at that time, when public sympathy toward breast cancer issues is at its peak. American Express’s Charge for the Cure, for instance, took place in 2002 during the month of October.

The fact that many activist groups raise concerns about cause-marketing practices and other corporate fund-raising efforts, however, does not mean that they shun them altogether. Indeed, many groups welcome donations from businesses and corporations that readily extend financial support to environmental breast cancer and prevention fund-raising events. Each year in Cape Cod and in Hopkinton State Park, the Massachusetts Breast Cancer Coalition holds its event Against the Tide, an outdoor fund-raiser involving a one-mile swim, a two-mile kayak ride, and a three-mile walk. Individuals of all ages and skill levels can participate in as many of the events as they want, as long as they raise a minimum of $150 beforehand. Families that want to participate need to raise a minimum of $250. National and local businesses such as Whole Foods Market,
Blue Cross/Blue Shield, Dana-Farber Cancer Institute, Edy's Ice Cream, and Quantum Communications of Cape Cod sponsor the event. Net proceeds go not to research efforts to find the cure but to the Silent Spring Institute's research efforts to study environmental links to breast cancer. They have also gone toward the Massachusetts Breast Cancer Coalition's educational and advocacy efforts, the bulk of which focus on environmental breast cancer prevention.19

Similarly, the Breast Cancer Fund participates in corporate-sponsored events to raise money for breast cancer prevention and research into environmental causes. Since 1995, it has organized eight mountain expeditions, called Climb Against the Odds, as "collective effort[s] to prevent breast cancer and a personal challenge to beat the disease." Climbing groups have consisted of "breast cancer survivors, supporters and others impacted by the disease." Each climber must raise a minimum of five thousand dollars for research into environmental causes of breast cancer. The expeditions have taken place on Argentina's Mount Aconcagua (1995), Alaska's Mount McKinley (1996), Japan's Mount Fuji (2000), Washington's Mount Rainier (2005), and California's Mount Shasta (2003, 2004, 2006, and 2007). Corporate sponsors of these climbs have included Clif Bar, ISIS, Mountain Hardware, Western Athletic Clubs, and Solomon Sports.20

Such corporate-sponsored environmental breast cancer efforts extend beyond public fund-raising events. They also include cause marketing campaigns that support the types of organizations that Barbara Ehrenreich lauds. In October 2002, for instance, Utne Reader, a left-leaning monthly magazine focusing on arts, culture, and politics, donated half its new subscription profits to the Breast Cancer Fund.21 Likewise, the Berkeley-based company Clif Bar donated sales profits from its LUNA bar—an all-natural energy snack marketed to women—to the Breast Cancer Fund's environmental health program in 2003. Since then, the company has identified the organization as the recipient one of several social causes it supports. The company not only raises awareness about the Breast Cancer Fund's environmental breast cancer efforts on the former's product wrappers and Web site, but also sponsors an array of the organization's activities.22

Last but not least, some environmental breast cancer groups raise money through online stores. The Breast Cancer Fund sells breast cancer-themed jewelry, clothing, CDs, books, videos, and gifts. The organization's products do not embody the depoliticized "pink kitsch" associated with the marketing practices of mainstream groups. Rather, they promote the feminist values and the preventative efforts that critics of mainstream breast cancer culture espouse. On the Breast Cancer Fund's Web site, one can purchase the documentary Rachel's
Daughters: Searching for the Causes of Breast Cancer and Art.Rage.US: Art and Writing by Women with Breast Cancer, the latter published by Chronicle Books in 1998. This “powerful juried collection of paintings, drawings, sculpture, poetry, essays, and journals provides a compelling account of the experience of breast cancer and the healing power of art.” The art and writings in the book also provide alternatives to the representations of heteronormative white women’s bodies and subjectivities that dominate mainstream breast cancer culture. Also on sale are T-shirts that bring attention to environmental health concerns. One top designed for women bears the statement “WARNING: This area contains chemicals known to cause cancer,” emblazoned in orange and black across the chest.23

The Pink Ribbon

In the past fifteen years, the pink ribbon has become the dominant symbol of the breast cancer movement and breast cancer culture more generally. The use of ribbons during the Iran hostage crisis in 1979 and the AIDS activist movement in the early 1980s led Susan G. Komen for the Cure to devise the pink ribbon, which made its first public appearance at the 1991 New York City’s Race for the Cure. Every participant received a ribbon. This massive distribution of pink ribbons at a well-known and highly attended event set the stage for the corporate cooptation that began in 1992, when Alexandra Penney of Self magazine collaborated with the Estée Lauder company for that year’s National Breast Cancer Awareness Month.24 Although some businesses have used other symbols to promote breast cancer awareness (such as the blue bull’s eye developed by the international fashion industry), the vast majority rely on the pink ribbon. The public at large has embraced the symbol, with many concerned citizens attaching them to lapels, backpacks, cars, and other personal belongings.

To its critics, the pink ribbon symbolizes all that is wrong with mainstream breast cancer culture. Some believe that the pink color—a pastel pink at that—reeks of the feminization and infantilization that belittle women and lead to political complacency.25 They note that the ribbon is a commodity in its own right, with companies such as Avon selling pink ribbon pens, mugs, and key chains not only to raise money for the breast cancer cause but also to garner profits for themselves.26 Critics also complain that many businesses and mainstream breast cancer organizations evoke the pink ribbon to promote advocacy focusing on early detection and treatment rather than activism pushing for disease prevention, especially with regard to potential environmental causes.

Environmental breast cancer activists respond to this issue by publicly challenging what they call “pinkwashing.” This concept draws on the earlier notion of “greenwashing,” a term coined by critics of corporations that constructed themselves as environmentally friendly as a means to bolster their public image at a time of growing public concern about environmental issues. By the same logic, pinkwashing refers to the ways in which businesses seek to attract customers by presenting themselves as caring about women’s health and wanting to improve it through breast cancer advocacy at a time of rising public concern about breast cancer.27

Corporate pinkwashing consists of sponsoring breast cancer fund-raising events such as Komen’s Race for the Cure and developing cause-marketing campaigns such as Eureka’s Clean for the Cure. It also entails providing breast cancer–related products and information to customers either for free or for a cost. Eureka, for instance, included a postcard in each of its Clean for the Cure Whirlwind LiteSpeed vacuum that explained how to conduct breast self-exams. Given that housework such as vacuuming has historically been construed as women’s work, Eureka’s decision to design a card geared toward women makes sense.28 As one component of its Ultimate Drive campaign, BMW developed the Pink Ribbon Collection, a line of pins, watches, T-shirts, teddy bears, photo albums, gym bags, and other products—many of which bear the Ultimate Drive Logo. BMW sells these products at its dealerships, at its Ultimate Drive events, and on its Web site, donating between 22 percent and 55 percent of the profits, depending on the item.29

As evidenced by Breast Cancer Action’s Think Before You Pink campaign, activists dislike corporate pinkwashing because in their view it benefits the businesses more than the breast cancer efforts the companies supposedly support, by increasing their public visibility and, more important, their profit margins. Corporations focus on breast cancer, as opposed to other diseases such as AIDS (which also had a strong social presence in the early 1990s to mid-1990s) because it is a politically safe disease. Breast cancer, unlike AIDS, is not connected to socially stigmatized populations such as gay men and IV drug users.30 Similarly, breast cancer is relatively safe in comparison to more controversial women’s health issues. As Barbara Ehrenreich asks, “Where were [these companies] . . . when the Women’s Health Movement was fighting for abortion rights and against involuntary sterilization?”31

Given the pink ribbon’s problematic meanings, some groups have chosen a different symbol to represent their activist work. In 1996, Breast Cancer Action embraced a design created by one of its interns, Catherine Bullock Theuriet (now Catherine Freeman), that it believes reflects women’s collective spirit and power in a way that the pink ribbon does not. Barbara Brenner, the organization’s president, explained, “The symbol is an artistic interpretation of a coil
that symbolized the full moon to an ancient Maltese matriarchal society. That culture believed that the lunar cycle was a cycle of rejuvenation, and its women warriors carried the symbol of the moon on breast plates that they wore into battle. I wear that symbol now—embossed in gold color on a deep purple background—as part of the battle I wage everyday against breast cancer. So I don’t wear pink ribbons. . . . I don’t have time for empty symbols.”32

Breast Cancer Action put its symbol on its prayer flag pins, sold to the public for five dollars each. The organization also placed the symbol on its alternative to the U.S. Postal Service’s original Breast Cancer Awareness stamp, adding in a corner of the stamp a three-sided toxic hazards sign, to link breast cancer to environmental contamination. The stamp, issued in 1996 in conjunction with the Washington, D.C., leg of the Susan G. Komen Race for the Cure, depicts a young, attractive white woman’s naked back, with a pink ribbon in the lower right-hand corner and the words “Breast Cancer Awareness” running up the left edge. “I guess it would be too radical to portray an actual women’s breast on a postage stamp, and certainly stamps glorifying empty symbols is nothing new,” said Brennan, “but I find this stamp particularly offensive in the way it combines a clichéd image of an unclothed woman with the pink ribbon symbol that does nothing to bring attention to what is really needed to end the breast cancer epidemic.”33

Another strategy organizations take to distance themselves from the pink ribbon is to associate themselves with alternative colors. Zero Breast Cancer, for example, uses the color green in order to emphasize the organization’s focus on environmental issues.34 The Massachusetts Breast Cancer Coalition (MBCC) takes a similar approach. When the organization first opened in the early 1990s, it chose pink and black as its official colors. In 2003, however, it decided to dissociate itself from the colors because of the pink ribbon’s increasing exploitation by health organizations, corporations, and other institutions for their own economic gain. MBCC wanted to make its growing focus on environmental issues more explicit. To these ends, MBCC chose green and blue for its new colors. Green is the traditional color of the environmental movement, while blue evokes the sky and water, both of which are polluted spaces of concern to breast cancer and other environmental health activists. Moreover, blue evokes the coastal area of Cape Cod, a region that has inspired as well as served as a political and scientific focus of MBCC’s environmental efforts over the years.35

Not all environmental breast cancer groups, however, reject the pink ribbon. Some “radicalize” it, as Zillah Eisenstein puts it, by transforming it into a symbol of feminist and environmental breast cancer activism.36 Long Island’s Babylon Breast Cancer Coalition (BBCC) uses the symbol in this way. As shown by its participation in the Follow the Money campaign, the group understands the problems associated with mainstream breast cancer culture, including the pink ribbon commercialization and advocacy that is part of it. Still, the organization continues to use the ribbon as a logo on its Web site and in its newsletters and other campaign materials.

Debbie Basile, who has served as BBCC’s president since its founding in 1993, explains that the organization has gone beyond its initial focus on breast cancer to emphasize environmental health issues more generally. In this regard, the pink ribbon signifies the organization’s breast cancer origins. Moreover, BBCC runs various outreach services geared primarily toward women with breast cancer and their families. Thus, Basile believes that the organization’s use of the pink ribbon serves as a “great visual”—that is, a highly recognizable symbol—to raise public awareness about the availability of these services.37 BBCC’s Lend a Helping Hand program provides women with breast cancer (and other gynecological cancers) free housecleaning services, helps them purchase prostheses, and arranges transportation for medical appointments, among other services.38 Its SOS program provides financial assistance to the families of women who died of the disease to help them pay for funeral costs, housecleaning services, child care, and mental health counseling.39

Although MBCC had valid reasons for discontinuing its reliance on pink, its previous use of this color also challenged and complicated the pink ribbon’s hegemonic representations in significant ways. Consider the organization’s September 2001 newsletter. The pastel pink column that ran up and down the left hand side of the front page proclaimed the organization’s mission statement: “Through activism, advocacy and education, our goal is the cure, prevention, and ultimate eradication of breast cancer.” It also contained the newsletter’s table of contents, which listed articles about a recent Against the Tide event, a research update on environmental links to breast cancer, and Prevention First’s efforts to challenge AstraZeneca’s marketing practices for
The Identity Politics of Breast Cancer “Survivors”

Another contested issue among feminist activists is the breast cancer “survivor” identity. The term survivor, prevalent in many activist and public discourses about breast cancer, refers to women who experienced breast cancer, and presumably, overcame the disease. The term manifests itself socially and materially. In June 2001, I participated in the Washington, D.C., leg of Susan G. Komen Race for the Cure. Several weeks before my race, I filled out the application for the event. Besides requesting my name, age, gender, and other personal information, the application required me to check off whether I was a breast cancer survivor (I checked no). At the time, I assumed that Komen wanted this information solely for statistical purposes. On race day, however, I realized that the organization collected the information to determine which colored T-shirt to give to event participants; women with a history of breast cancer received pink T-shirt, while everyone else received a white one. Standing among a sea of pink at the race’s starting line helped me experience firsthand the extent of the breast cancer problem.

Despite the term’s popularity, some environmental breast cancer activists and social critics dislike it. They believe that it perpetuates the cheerful perkiness of mainstream breast cancer culture and leads to political complacency among women afflicted by the disease. The survivor culture of Komen’s Race for the Cure reinforces this point: it equates living with breast cancer with running the race. If you just run hard enough and grit your teeth through the pain, you can finish the race; you can survive it—just as you can survive breast cancer or at least keep yourself alive long enough until a cure is found. In this context, being a breast cancer survivor is all about possessing enough individual strength, courage, and determination to get through the ordeal. It is also about remaining hopeful that a cure—which works on an individual, not collective, level—will be found. Although many women with breast cancer run the race together and cheer one another on, this collective support empowers women to continue running their individual races and to continue fighting their individual diseases. It does not encourage them to band together and change the social, political, and economic conditions that have caused their diseases in the first place. The fact that the event is a race, which by its very nature has individual winners and losers, further perpetuates this social Darwinian rhetoric. As with breast cancer, some will make it, some will not.

For those who reject the survivor identity, this individualizing rhetoric disrespect the dead and dying, especially by erasing the social, political, and economic factors such as access to effective early detection and treatment that make it easier for some people to “survive” breast cancer than others. Barbara Ehrenreich asks, “Did we who live ‘fight’ harder than those who’ve died? Can we claim to be ‘braver,’ better, people than the dead? And why isтhere no room in this cult for some gracious acceptance of death, when the time comes, which it surely will, through cancer or some other misfortune?” Feminist cancer activist Sandra Steinraper feels that the term “divides [women with cancer] in half and at the same time denies the uncertainty of our prognosis.” Similarly, Barbara Brennan chooses not to refer to herself as a survivor because “the term suggests to the world—wrongly—that breast cancer is curable . . . the term survivor also carried a notion that I am not dead of breast cancer because I am somehow better or different from the hundreds of thousands of women who have died of the disease.”

For all these reasons, some activists have chosen alternative terms. In the early 1990s, Cambridge’s Women’s Community Cancer Project replaced the term survivor with the phrase “women with cancer and cancer histories.” Around the same time, Judy Brady espoused the term victim, noting that women with cancer are “victims of a social crime, the crime of poisoning our environment.” A decade later, Ehrenreich also used the word, in reference to herself. When discussing the problems with mainstream breast cancer culture at Breast Cancer Action’s 2002 town meeting, she asked, “Is there any other disease that has been so warmly embraced by its victims? (And yes, I use the word ‘victim’—that’s another part of the perkiness—the failure to acknowledge that some of us are in fact victims of a hideous disease).” Currently, Breast Cancer Action employs the phrase “women living with breast cancer” in its materials. Still, Brenner grapples with this term. On the one hand, she likes it because it “tells others that it is possible to live with the disease, while acknowledging implicitly that not all of us are so lucky. It also communicates in a small way that the diagnosis is a life-transforming event.” On the other hand, she finds the phrase problematic because “it suggests . . . that the person referred to is currently in treatment or in need of treatment. And, because of the
common use of the term ‘living with AIDS,’ it implies that women with breast cancer will die of the disease, unless something else kills them first.\textsuperscript{48}

Other activists do not reject the term \textit{survivor}, instead constructing it in ways that resonate with their feminist and environmental health agendas. The Breast Cancer Fund uses the term “breast cancer survivor” to describe some of the participants in its Climb Against the Odds series. In these mountain treks, breast cancer survivors are women whose fight against breast cancer is equated with climbing a mountain. Some may make it, others may not. Unlike Komen’s Race for the Cure, the climb is not just about mobilizing one’s physical, technical, and mental strengths; it is also about successfully negotiating the mountain’s steep, rocky, snowy, cold, and sometimes unpredictable environment. Moreover, the Climb Against the Odds treks are not races with winner and losers; they are physical, emotional, and spiritual challenges that women take on both individually and collectively. Although individual strength and courage are necessary for women to finish the climbs, reaching the peak of a mountain is truly a team effort. Women help one another up steep inclines, share responsibilities for food and tent preparation, and take turns carrying equipment. In contrast to the Race for Cure—in which it is possible for some individual women to finish with no outside assistance—it is only through collective efforts that individual women can complete these mountain climbs. Thus, individual survival and group survival are intertwined.

When viewed from this perspective, breast cancer survivors are women who have overcome not only their individual diseases but also the harsh environment that may have caused their breast cancers to occur in the first place. To survive their environment, then, women can choose strategies other than finding a cure for their disease; they can also work to clean up their environment so that it no longer poses a threat to their health. It makes sense, then, that the climbing series raises money for the Breast Cancer Fund’s efforts to promote research on potential environmental causes of breast cancer and disease prevention policies. Further, women with breast cancer cannot take on their environment alone if they want to succeed at these efforts; although individuals can make a difference, comprehensive social and structural change requires people to work together over the long haul. More broadly, the collective approach embodied by the Climb Against the Odds challenges popular representations of environmental health activism. Although representations of such activism in popular culture often depict determined, strong-willed individuals who fight lone battles against the polluters (such as Jan Schlichtmann, the lawyer depicted by John Travolta in the 1998 movie \textit{A Civil Action}, who tirelessly pursued legal action against polluters in Woburn, Massachusetts), in reality these efforts require the work and cooperation of many other individuals, such as lawyers, activists, community members, scientists, public health officials, government representatives, and journalists.

In offering examples that complicate the division between mainstream and feminist breast cancer cultures, I am not suggesting that such distinctions are meaningless. Rather, my counterexamples demonstrate how political values, practices, and symbols do not necessarily have inherent meanings, feminist or not. Instead, such values, practices, and symbols generate meaning from the social, material, and discursive contexts in which they are used by activists and others. Thus, they carry different meanings depending on how breast cancer activists assemble them in relation to their political objectives. In some circumstances, corporate advocacy can perpetuate a culture of action that detracts attention from environmental causes of breast cancer. In other circumstances, corporate advocacy can foster such attention. Although survivor rhetoric can place the burden of health on individual women, it can also place responsibility on the social institutions and policies that expose women to harmful environmental toxicants. The pink ribbon may symbolize political and environmental complacency in some contexts, but in others it symbolizes political and environmental radicalism.

My counterexamples also highlight some of the differences that exist within the feminist environmental breast cancer movement. It is true that many feminist groups share the same goal, to prevent breast cancer, especially by addressing environmental causes of the disease, and often work together to help achieve this goal (as in the Breast Cancer Fund’s campaign to increase federal research on environmental causes of breast cancer). At the same time, activists have their differences. Some are practical; for example, the Breast Cancer Fund tends to spearhead state and national legislative efforts, whereas WomenCARE in Santa Cruz tends to conduct local outreach. Others are discursive and ideological, as with the pink ribbon and survivor rhetoric. In either case, such differences demonstrate that activists can assemble the feminist politics of environmental breast cancer issues in multiple ways. Moreover, such differences demonstrate that the boundary between the so-called feminist and mainstream breast cancer cultures is not as well defined as some critics suggest. This blurring is particularly evident in the work of Susan G. Komen for the Cure.

\textbf{The Multiple Facets of Komen}

In many respects, Susan G. Komen for the Cure epitomizes the mainstream of breast cancer culture. Nancy Brinker established the Texas-based organization—then known as the Susan G. Komen Foundation—in 1982 following the death
of her sister, Susan Komen, from breast cancer at the age of thirty-six. By the early 2000s, Komen had become the largest and arguably best-known breast cancer group in the United States. In 2007, the organization celebrated its twenty-five-year anniversary by redefining its focus and changing its name. Although Komen still works to promote education, early detection, and effective treatments, it makes “energizing science to find the cure” its top priority.

To accomplish its goals, Komen runs a grants and awards program to fund promising biomedical and health research. Since 1982, the group has spent $400 million to fund eleven hundred such projects, most of which focus on basic, clinical, and translational breast cancer research. It also provides financial support for research in the areas of breast cancer education, screening, and treatment. In addition, Komen works on public policy. It educates congressional members about breast cancer issues and encourages them to increase federal funding for breast cancer research, improve mammography equipment standards, and mandate better access to early detection and quality treatment for disadvantaged women. To complement this policy work, the organization established the Komen Champions for a Cure program in 2006, which allows citizens to join forces with their local Komen affiliate to talk with their state and federal representatives about breast cancer issues, especially the importance of finding a cure for the disease.

Along with its research and policy activities, Komen educates the public about breast cancer issues such as early detection, health care options for those with the disease, and ways to support efforts to find a cure. The organization conducts much of this outreach through its 125 affiliates, which work in local communities across the nation and in several foreign countries. It also conducts outreach through public awareness campaigns and fund-raising events. The Race for the Cure series is one of Komen’s most popular events. The first race took place in Dallas in 1983. Over the following two decades, the Race for the Cure grew into the largest five-kilometer running/walking series in the world, with more than one hundred events held across the United States, Italy, and Germany each year. Since 2005, more than a million people have participated in the series. In addition to running, walking, or simply watching the event, participants add to their knowledge of breast cancer by meeting other racers affected by the disease; listening to keynote speakers; perusing the information booths set up by Komen and like-minded health organizations, pharmaceutical companies, and businesses; and reading the free literature provided to racers and their supporters by these institutions. Passionately Pink for the Cure is another Komen awareness campaign. Founded in 2006, the program asks individuals to wear pink during the month of October and encourage their friends, family members, and colleagues to show their support by also wearing pink, as well as by contributing money to the organization's breast cancer programs.

In keeping with this pink theme, Komen further encourages individuals to raise awareness by purchasing the pink-ribbon-themed products (coffee mugs, necklaces, holiday ornaments, socks, shoelaces, and T-shirts) that it sells in its online Promise Shop. In April 2008, Komen offered fifty-six such items for sale. The group relies on celebrity spokespeople to bring attention to breast cancer issues and the work that the organization does to address them and to encourage participation in Komen’s fund-raising campaigns and events. Charlie Sheen, for instance, encouraged the public to participate in the ninth annual Lee Jeans for Lee National Denim Day, held on October 8, 2004, which Komen touted as the “world’s largest single day fund-raiser for breast cancer.” For the event, employees at more than twenty-five thousand companies wore denim to work and donated five dollars each to the organization. The following year, Desperate Housewives stars James Denton and Richard Chavira served as spokespeople for the event.

In fiscal year 2005–2006, Komen amassed a $268 million budget for its activities. While the organization generated almost $15 million of this budget through “other public support and revenue,” it garnered almost $120 million from the Race for Cure series. It is contributions, however, that represent the largest portion of Komen’s budget, at $133 million. Although individuals donated a significant portion of this sum, the bulk of it came from businesses and corporations. As of 2007, Komen had identified fifty-one donor businesses and corporations as “corporate partners,” meaning that they raise money for the foundation’s research efforts through cause-marketing campaigns. The organization’s corporate partners include Boston Market, Dell, LPGA, the Kellogg Company, and Einstein Bros. Komen counts twenty-two of these corporate partners as members of its Million Dollar Council. Each of these selected businesses—among them BMW of North America, Yoplait USA, and American Airlines—has raised more than a million dollars for Komen’s research efforts and found “new and innovative ways to spread two important messages: early detection saves lives and only through research can we find a cure.”

Despite the ways in which Susan G. Komen for the Cure embodies mainstream breast cancer culture, the organization has taken up numerous efforts since the late 1990s to address the environmental breast cancer problem. In particular, the national organization participated in the Breast Cancer Fund’s 1999
campaign to increase federal research on environmental causes of breast cancer. In this campaign, Komen did not merely sign on to the group letter; along with the Breast Cancer Fund and NOW, it was a member of the campaign’s founding coalition. More recently, Komen supported the Breast Cancer and Environmental Research Act, which led to the establishment of four national research centers devoted to the study of childhood environmental risk factors that predispose women to the disease. The organization also funded the Silent Spring Institute’s Breast Cancer and Environment: Science Reviews project. Indeed, the organization states on its Web site that it “supports the establishment of grant programs to expand biomedical, epidemiological, and behavioral research related to the etiology of breast cancer and the role of the environment” and “ask[s] Congress to devote the necessary resources to fund meaningful research on the potential links between the environment and breast cancer.”

Komen’s regional affiliates have ties to environmental breast cancer activism as well. Consider the organization’s North Jersey affiliate, about which I first learned while working at the World Resources Institute with Devra Davis. Given my prior assumptions about Komen, I was surprised when Davis told me that she had been working closely with the affiliate for the past year on environmental breast cancer issues. Indeed, the organization provided several small grants for Davis’s public outreach work. The affiliate also hosted “Exposure: Environmental Links to Breast Cancer,” a conference on environmental causes of breast cancer held in October 1999 at Temple B’nai Jeshurun in Livingston, New Jersey. Steven Adubato, an Emmy Award–winning Public Broadcasting Service anchor, moderated the panel discussion. Other participants included Deborah Axelrod, chief of the Comprehensive Breast Cancer Center of the St. Vincent’s Comprehensive Cancer Center in New York City; Michael Gallo, director of the National Institute of Environmental Health Sciences Center of Excellence at Robert Wood Johnson Medical School and associate director of Cancer Prevention, Control and Population Sciences at the Cancer Institute of New Jersey; Cheryl Osimo, a co-founder of the Silent Spring Institute and coordinator of its Cape Cod environmental breast cancer study; Annie J. Sasco, a researcher at the International Agency for Research on Cancer and Institut National de la Santé et la Recherche Médicale in Lyon, France; and Shawna C. Willey, chief of breast surgery at the George Washington University Medical Center in Washington, D.C. Barbara Waters, the affiliate’s outreach coordinator, also traveled to Washington, D.C., on various occasions to discuss her organization’s possible involvement in several environmental breast cancer projects that Davis wanted to develop.

I had the opportunity to work with Waters at other public events. In January 2001, Rutgers University invited me to give a talk about environmental causes of breast cancer following a screening of the 1997 documentary Rachel’s Daughters: Searching for the Causes of Breast Cancer. Given Rutgers’s geographic proximity to Komen’s North Jersey affiliate, I encouraged the university’s student event coordinator to ask Waters whether the organization would co-sponsor the event. The student called, and Waters agreed. Several months after the Rutgers event, Waters asked me to participate in a panel discussion on environmental causes of breast cancer that she co-organized at nearby Drew University. As with the Rutgers event, a panel discussion followed a public screening of Rachel’s Daughters. The panel’s other two speakers were Deborah Axelrod and Lisa Rodríguez, a twenty-nine-year-old woman with breast cancer who worked at Komen on issues pertaining to young women with the disease.

Lately, Komen’s North Jersey affiliate has been working on other environmental projects. In 2007, it developed Reduce Your Risk, a twelve-page booklet outlining ten steps women can take to reduce their risk of breast cancer. Lisa Rubin of the North Jersey affiliate wrote the booklet, and Devra Davis and Deborah Axelrod edited it. The booklet encourages women to buy local produce, which is less likely to be treated with pesticides and other preservatives, and to avoid cleaning products, personal care items, and home goods that contain phthalates, parabens, and other xenoestrogens. It also encourages women to avoid certain types of plastics and eliminate the use of outdoor pesticides. The booklet presents alternatives to toxic products and practices, such as natural cleaning recipes and alternative strategies for reducing garden pests. Finally, it lists various organizations to which women can turn for further information, among them the Environmental Working Group, Silent Spring Institute, and the Green Guide.

To be sure, Komen’s forays into environmental breast cancer activism account for only a small part of the organization’s activities. Even so, recognizing their presence within the group’s broader mainstream framework is important, as they help to highlight Komen’s multidimensional existence. Although the many dimensions of Komen function as integral parts of the organization’s overarching social, discursive, material, and institutional infrastructure, they also possess their own individual identities and ways of being. First, Komen is not a monolithic organization. Rather, it consists of many branches, with each focusing on a particular area of breast cancer activism—scientific and biomedical research, policy, outreach and education, fund-raising, and public relations, among others.
Second, Komen is a multi-sited institution, with offices in not only this country but also abroad. With national headquarters in Dallas, Texas, it has 125 affiliates, found in every state except Alaska and North Dakota, as well as in Puerto Rico, Germany, and Italy. Although the affiliates are overseen by headquarters, they also have a degree of geographic, material, and social autonomy. Each has its own staff, board members, funding sources, goals, practices, and organizational culture. Each has roots in the local community, which influences how it defines its mission and approaches its work.

Third, Komen constitutes what anthropologist James Clifford calls a “regional/national/global nexus” of breast cancer activism. That is, Komen conducts its work at the community, state, national, and international levels. The organization initially took a community-based approach. Over the following two decades, it expanded its focus to include state and national issues as well. In the early 2000s, the organization began to reposition itself from a national organization to an international one. It funded more than $14.8 million in breast cancer research taking place outside of the United States and more than $3.5 million in overseas community education and early detection efforts. Another international project that the organization runs is the Susan G. Komen for the Cure Global Initiative. Founded in 2007, this program “aims to create a dynamic global network of dedicated activists with the skills, knowledge and vision to play a strategic role in shaping their country’s response to the breast cancer crisis.”

Finally, Komen’s existence has multiple temporal dimensions as well as spatial ones. Although it retains a general level of organizational stability, Komen’s identity, infrastructure, and everyday practices are constantly in flux: staff members come and go, board members change, and volunteers help out on some projects but not others. Additionally, Komen revamps its policies and campaigns on a regular basis, gains funding sources at the same time that it loses older ones, and provides grant money to a new set of research projects each year.

In the end, we cannot fully understand how each particular facet of Komen functions within—and perhaps apart from—the broader organization without also considering the local webs of people, places, institutions, policies, practices, communities, and cultures in which it is embedded. It is not surprising that the North Jersey Komen affiliate is environmentally active; it is located near Long Island, one of the nation’s epicenters of environmental breast cancer activism and community-based environmental breast cancer research. The North Jersey area is also home to its own share of toxic sites. Additionally, Deborah Axelrod’s involvement in the organization—first as a member of its board of trustees and then as a member of its Medical Advisory Board—has shaped its environmental efforts. Axelrod devotes some of her professional work to the environmental breast cancer problem, including co-writing several articles with Devra Davis on the subject. Moreover, her relationship with Davis led the latter to become involved with the North Jersey organization. Furthermore, Barbara Water’s personal initiative has driven much of the North Jersey Affiliate’s environmental focus. Soon after her breast cancer diagnosis at age forty-six, she began working at the organization. She believed that environmental factors contribute to breast cancer—it’s “common sense” she told me—even before she began her environmental work at the organization.

Komen is not the only mainstream cancer organization to have multiple existences in regards to environmental issues. So, too, does the American Cancer Society (ACS). Although the institution as a whole, led by its national headquarters, tends to dismiss environmental theories of breast cancer causation, facets of it have acknowledged their possible validity. For example, Breast Cancer Action met with the California division in 1993 to encourage it to give more attention to possible environmental causes of breast cancer and other cancers. This meeting led the San Francisco ACS chapter to organize—with the cooperation of Breast Cancer Action and other local groups—a November 2004 program examining the possible role of agricultural chemicals, exercise, and nutrition in the development of breast cancer. Although Nancy Evans, Breast Cancer Action’s president at the time, criticized ACS national headquarters for dismissing environmental factors, she called this regional conference a “baby step forward” for the cancer organization. In 2007, Cancer, the ACS’s scientific journal, published the review articles that the Silent Spring Institute wrote as part of its Breast Cancer and Environment: Science Reviews database project.

Viewing Komen and other mainstream organizations through the lens of their multiple existences allows us to understand the complex and sometimes contradictory relationships that they have formed with different environmental breast cancer groups. This perspective helps to explain, for instance, how Breast Cancer Action teamed with Komen’s national headquarters for the Breast Cancer Fund’s 1999 environmental health research campaign but protested Komen’s San Francisco affiliate a year later by chanting, “You can run for the cure but you can’t run from the cause” at the San Francisco Race for the Cure.” It offers insight into a similar set of dynamics between Komen and the Massachusetts Breast Cancer Coalition. On the one hand, Komen’s Boston affiliate donated money from its Race for the Cure funds to help pay for the production of the coalition’s May 2001 “Beyond the Headlines,” a paper that discussed the
formation of Prevention First and its campaign to challenge the FDA's regulation of direct-to-consumer ads, particularly those created by AstraZeneca to market tamoxifen to healthy women. The focus on AstraZeneca's ads was part of Prevention First's broader campaign against the prescribing of tamoxifen to such women and the National Cancer Institute's "chemoprevention research" more generally. On the other hand, Komen's national organization supported this research and the use of tamoxifen in healthy women.

Examining Komen's environmental efforts complicates what counts as environmental breast cancer activism and its long-standing feminist culture. After all, the fact that Komen's North Jersey affiliate helped to organize — among other things — the environmental breast cancer events at Rutgers and Drew universities does not mean that it completely lost its mainstream identity. On the contrary, the written materials that lined the tables at these events focused on early detection and treatment issues, the free Komen pens were pastel pink, and the Komen film that Barbara Waters showed at the start of each event left the audience feeling hopeful that a cure was just around the corner. Waters brought enough pink ribbons for everyone who wanted one. Yet the seeming disjuncture between Komen's being situated in the mainstream and the environmental breast cancer activism that it espouses may signify not so much an ideological contradiction as an alternative way to assemble the social and cultural terrain of this body of activism. Moreover, the social and political significance of Komen's particular type of environmental breast cancer activism should not be overlooked, as it may appeal to some facets of the public in ways that more radical types of feminist activism may not.

**Women Living Their Environmental Health Politics**

When I registered for the 2001 Washington, D.C., Race for the Cure, I sought to glean from the experience ethnographic insight into its cultural politics. I wanted to observe how many people attended this race, who walked it, and who ran it. I wanted to understand the ways in which the breast cancer problem was depicted on the T-shirts that people wore, the signs that people carried, and the materials that one could pick up from the organizations and businesses that ran booths near the race's finish line. In sum, I wanted to learn more about the event's culture of action. Given my prior knowledge of Komen and its Race for the Cure series, I entered the event expecting to be saturated by mainstream breast cancer culture. In many ways, I was not surprised by what I saw: lots of pink this and that; white people; survivor rhetoric; and written materials addressing early detection, treatments, and research on a cure. I did not hear a single statement about prevention or environmental links to breast cancer, nor did any of the written materials I gathered mention these subjects.

Washington, D.C.-based feminist women's health groups such as NOW, National Women's Health Network, and the Mautner Foundation for Lesbians with Cancer did not attend the event, as far as I could tell.

What I did not anticipate was the emotional reaction that I had halfway through the race. Going into the event, I had taken for granted the criticisms of the race — it is not feminist enough, not political enough, and therefore not good enough. As I looked around at the people jogging in place and stretching before the gun went off, I wondered what they really thought of Komen and whether they knew about the organization's general lack of attention to environmental health issues and prevention. As I began walking the course and then, several minutes later, running it, my perspective on the race started to change.

Despite my initial criticisms of Komen's Race for the Cure, I wound up feeling moved by the event: so many women with breast cancer histories banding together and cheering each other on, so many people wearing T-shirts with pictures of their mothers, wives, partners, and daughters who had died of breast cancer. At times, I was close to tears, not only because I was reminded of the impact — both negative and positive — that breast cancer has had on people's lives, but also because the collective spirit and energy generated by the racers and their supporters on the sidelines motivated me to run the entire five kilometers. Before the race, I did not think that this would be possible, because a series of prior athletic injuries had left me unable to run for more than five minutes without pain. Running the race gave me a firsthand appreciation for the event's ability to inspire and empower women — an appreciation that I would not have experienced had I based my analysis solely on Komen's promotional materials and other people's written accounts of the event.

I know that critics of mainstream breast cancer culture would probably tell me that my emotional response was exactly what Komen and its corporate sponsors wanted — a reaction that kept me focused on my positive feelings rather than on the fact that Komen's races do nothing to address breast cancer's possible environmental links. To be sure, I do not completely disagree with this perspective. I do, however, find it limiting. Perhaps the event did not empower affected women to track down their local water polluters, but maybe it motivated them to get through another round of chemotherapy. Perhaps it did not lead affected family members to join Breast Cancer Action or stop buying breast cancer stamps, but maybe it made them feel more connected to the mothers, daughters, and sisters whom they had lost to the disease. If the event provided affected women with crucial psychological, spiritual, or even physical healing that they would not have received otherwise; if it made them feel more
confident about their athletic potential and their ability to take on physical challenges; if it made them feel more connected to and supported by other women with breast cancer who ran the race, then who am I to say that their experience at this event was not feminist enough?

I am not the only feminist to hold mixed feelings about the critiques of mainstream breast cancer culture. Describing her experiences with her own and her sister's breast cancer, Zillah Eisenstein writes, "I wear the [pink ribbon] pin to connect my individual self to a larger collectivity of women living with breast cancer. I like the fact that wearing the pin does not mean that I, personally, have breast cancer. My cancer is not just about my own body but involves women as a group more broadly. This collective identity that I wear publicly is more than simply personal." At the same time, Eisenstein recognizes how this symbol is used to boost corporate profits and support breast cancer action paradigms that she finds problematic. "Once again," Eisenstein observes, "there is no simple inside and outside in this instance." Similarly, Jennifer Keck, a Canadian woman living with breast cancer who concurs with negative critiques of the cancer industry and the commercialization of breast cancer, explains how her experiences in a breast cancer support group led her to question blanket criticism of mainstream breast cancer culture: "Sometime I look around the room and try to imagine how we would have come together without the curious tie of a disease. We certainly do not all share a common political worldview. But the women who call with messages of support, who are there when my world is collapsing and who want to help other women get through the worst part of the disease form an important part of my life. These women are my sisters."

The fact that I could see some good in Komen's Race for the Cure but still recognize its political downsides makes me wonder whether the women who like aspects of mainstream breast cancer culture—that is, women who may like the cheery pink teddy bears and T-shirts, who may want to learn makeup techniques that can hide the damaging effects of chemotherapy, and who may feel more comfortable participating in Komen's Race for the Cure than in Breast Cancer Action's protest of it—might also support breast cancer prevention and increased attention to environmental factors. After all, personal worldviews are often multifaceted and sometimes contradictory; they do not always fit into the clear ideological categories constructed by media, cultural, and other public narratives.

The complex relationship between the feminist breast cancer culture and its mainstream counterpart was in evidence at a talk about environmental breast cancer activism that I gave to members of a local New Jersey chapter of the Daughters of the American Revolution (DAR) at their monthly luncheon in May 2002. Although I do not know these women's opinion of feminism, I do know that their organization was built on a notion of "sisterhood" that promotes the patriotic values of their American forefathers more than the political values of their second-wave feminist foremothers. At one meeting the previous year, for instance, the guest speaker discussed the history of the American Revolution and afterward had members stand up and sing patriotic songs. My mother, a DAR member, who had invited me to speak to the group, told me that when she had raised the subject of my talk to the organization's board several months beforehand, one of its members expressed a worry that it would be "too negative and depressing."

I found the luncheon's setting quite appropriate—in an ironic sort of way—given the topic of my talk. The restaurant where I gave my talk was in a converted row house in an older working-class neighborhood of a postindustrial town near Trenton. Across the street from the restaurant was a large deteriorating industrial lot, which, according to the sign attached to the six-foot-high chain-link fence surrounding the property, happened to be an EPA Superfund site. That said, the scene in the restaurant's dining room did little to challenge the culture of conservatism that is associated with the organization. The twenty or so women who attended were white, and most were middle-aged or older. Some wore American flag pins or other red, white, and blue paraphernalia on their shirts and jackets. Even the gift package from DAR that each woman, including myself, received for attending this meeting reflected traditional gender values; it contained a small box holding several spools of thread, needles, and a black comb.

Given my initial reading of this group of women, I was unsure what they would think of my presentation, in which I gave an overview of environmental breast cancer activism and its links to the broader breast cancer and women's health movements, explained endocrine disrupters and other suspected environmental causes, and described strategies the women could take to reduce their risks. As I glanced around the room during my talk, it seemed that some of the women were nodding off. When I asked whether any of them had questions, however, it was apparent that most had paid attention. One woman asked me to give more details about pesticides and the benefits of organic food. Another wanted to know what I thought about a recent study that found some brands of bottled water to be just as contaminated as tap water. Some wanted me to explain why it was bad to microwave food in plastic containers (the heat causes the xenoestrogens in the plastic to leach into the food). Several women expressed their belief that environmental toxins caused their loved ones' cancers.
an in-depth exchange with a woman who worked in the environmental health division of New Jersey's Health and Human Services about the problems with science-based regulation and the need for the precautionary principle, during which other women chimed in to ask us questions about the topic at hand. After the discussion period ended and I was getting ready to leave, a woman who looked about eighty years old and who sported more than a dozen DAR and other patriotic pins on her jacket came over and, in a whisper, proudly told me how she had refused to take hormone replacement therapy even though her doctors had recommended it for years. "I don't like the idea of putting all those hormones in my body," she said. "I went through menopause the natural way, hot flashes and everything."

Certainly, environmental breast cancer activism entails research, policy, and public education campaigns run by bona fide activists. As this account suggests, however, it also involves common actions that all women may take to protect their health and that of their families and communities. The women who take these ordinary actions may not necessarily align themselves with the feminist culture that undergirds much of the environmental breast cancer movement. Instead, they may assemble the issue of environmental causes of breast cancer in ways that resonate with their own beliefs and lived experiences. Further, the multiple ways in which activists and other women incorporate the environmental breast cancer issue into their political work and daily lives is especially evident with regard to the race and class dimensions of the environmental breast cancer movement.