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ENVIRONMENTAL JUSTICE

Creating Equality,
Reclaiming Democracy



Kristin Shrader-Frechette

Acceptable Evidence
Science and Values in Risk Management
Edited by Deborah Mayo and Rachelle D. Hollander

Experts in Uncertainty
Opinion and Subjective Probability in Science
Roger M. Cooke

Regulating Toxic Substances
A Philosophy of Science and the Law
Carl F. Cranor

In Nature's Interests?
Interests, Animal Rights, and Environmental Ethics
Gary E. Varner

Privatizing Public Lands
Scott Lehman

Democracy, Risk, and the Community
Technological Hazards and the Evolution of Liberalism
Richard P. Hiskes

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grounds for defending a double standard with respect to occupational and public risks. Compensation and even apparently voluntary choice of occupation may not guarantee that a particular level of worker risk is ethically acceptable, any more than compensation and consent, alone, guarantee that other alleged environmental injustices are ethically acceptable. As already pointed out, if a particular action is wrong, such as engaging in nontherapeutic experimentation on human beings, then the fact that the people may have consented to it or received compensation for it does not always change the ethical quality of the act from "undesirable" to "desirable." As already argued, questionable "background conditions" may compromise the alleged consent and compensation.

But if compensation and consent are not the only relevant considerations in deciding whether the double standard for occupational and public risk is ethically acceptable, then the CWD, alone, does not provide grounds for accepting a double standard. In the absence of some ethical justification for the double standard, the best policy might be to follow the PPFPE, as outlined in chapter 2. If it turns out that there are plausible reasons, other than the CWD, for maintaining a double standard with respect to occupational and public risk and for allowing alleged environmental injustice in the workplace, then those reasons need to be investigated. One place to begin such an ethical investigation might be to think of worker risk as analogous to patient risk. Although there is an ethical and legal requirement for informed consent on the part of patients being treated by a medical doctor, one of the limitations of the current CWD policy is that there are no comparable legal requirements for guaranteeing background conditions for informed consent in the workplace. Applying the medical ethics analogy, one might well argue that just as people now claim⁸ that a doctor's withholding information from a patient is a violation of the medical doctor's fiduciary role and a way of undermining the patient's autonomy, an analogous point holds in the workplace. Were there recognized ethical and legal requirements for attempting to guarantee background conditions necessary to informed consent in the workplace, then the case for the ethical acceptability of the CWD would be much stronger.

Regardless of possible justifications for the current double standard for risk, one thing seems apparent. The CWD, as now implemented, does not adequately safeguard either worker autonomy and welfare or distributive and participative justice, for all the reasons spelled out earlier. Even the fact of nearly one hundred thousand annual workplace-induced premature U.S. fatalities suggests that the occupational environment, for high-risk jobs and for minority or poor workers, may be unjust. If so, society needs both to take steps to correct this environmental injustice and to reassess the CWD theory that supports it.

8

Developing Nations, Equal Protection, and the Limits of Moral Heroism

Ever since 1927, scientists have known that asbestos is a carcinogen for humans. A British study showed that by the year 2030, asbestos exposure will have led to five hundred thousand premature deaths in the European Union alone. In 1996, France joined Germany, Austria, Denmark, the Netherlands, Finland, Italy, Sweden, and Belgium in banning all forms of asbestos. Canada, the second largest exporter of asbestos in the world, challenged this ban in 1998 as a violation of the World Trade Organization (WTO) Agreement and the General Agreement on Tariffs and Trade (GATT). Established in 1995 as part of GATT agreements, the WTO now has 134 member nations: under the current WTO requirements, any member nation can challenge health, safety, environmental, child labor, or human rights regulations of other nations on the grounds that they are barriers to "free trade." Although the WTO panel has not ruled on the 1998 Canadian challenge, to date the WTO has never supported any health, safety, or environmental regulation of any nation once another country has challenged it. Instead the WTO has declared all such regulations "illegal trade barriers." If offending nations do not reject such "barriers," then the WTO panel issues economic sanctions against them. For example, when all the countries of the European Union banned beef containing artificial hormone residues, the WTO rejected this ban as an illegal trade barrier. When the EU nations refused to remove their ban and argued that it was necessary to protect public health, the WTO leveled \$116.8 million in sanctions against the member nations.¹

As the asbestos and beef hormone examples illustrate, the WTO provides a way for vested interests to impose environmental injustices on those who, against their will, are forced to accept environmentally dangerous imported products or risky, tainted food. The WTO actions are arguably unjust because

one exporting nation has no right to threaten the health and bodily security of another country into which it wishes to bring risky products, especially when the importing nation has refused to give free informed consent to the physical threat brought to it.

In the case of environmental injustices caused by the WTO, most of the victims have been people in developed countries who are eager to preserve their health and their environment. The most troubling cases of environmental injustice, however, do not concern informed Western nations' seeking to avoid risks that other countries want to impose on them but threats that developed nations impose on developing ones. The cases are bothersome precisely because Third World peoples are likely to be much less well informed and thus much less able to protect their health and welfare than those in developed countries. In the wake of the WTO, if even Western nations cannot rely on their own health, safety, and environmental regulations to protect them against other nations' imports, consider how much more vulnerable are those in poorer countries. Pesticides provide a case in point.

According to the GAO, 29 percent of all U.S. pesticide exports are products that are banned (20 percent) or not registered (9 percent) for use in the United States. The World Health Organization (WHO) estimates that there are approximately half a million cases of pesticide poisoning annually, with a death-to-poisoning ratio of one to ten. This means that about 49,000 persons, many in developing nations, die annually from pesticides. In developing countries, one person is poisoned by pesticides every minute.²

Pesticides are not the only Western products that raise questions of harms to those in developing nations. Between three hundred thousand and four hundred thousand of the one million current and former U.S. asbestos workers are expected to die of occupation-induced cancer. Rather than installing safer technologies mandated by OSHA, many U.S. corporations are continuing to use dirtier manufacturing methods and moving their operations to other countries, such as Mexico. For example, Amatex, a Norristown, Pennsylvania, firm, closed its U.S. asbestos facilities and opened plants in Agua Prieta and Ciudad Juarez, Mexico, both just across the U.S. border. There are no Mexican regulations to protect workers from asbestos, dust levels in the Mexican plants are not monitored, and workers wear no respirators. Employees receive minimum wage and are told nothing about the hazards they face. Asbestos waste covers the factory floor and clings to the fence and the dirt road, behind the factories, where Mexican children walk to school.³

Shipping hazardous waste abroad also raises environmental justice issues. Several years ago, the Nedlog Technology Group of Arvada, Colorado, offered the president of Sierra Leone up to \$25 million to dump millions of tons of toxic chemical wastes in his west African nation. Each year U.S. companies offer nations in the Caribbean and in west Africa hundreds of dollars for every 55-gallon barrel of toxic waste that can be dumped legally. Although the United States and more than one hundred other nations have ratified the 1989 Basel Convention (on the Control of Transboundary Movements of Hazardous Wastes), they have not stopped such transfers. Accord-

Overview

The fundamental moral problem raised by each of the preceding cases is whether either corporations, or the nations in which they are located, have an obligation to guarantee equal protection from risks across national boundaries. Do corporations and nations simply have an obligation to provide whatever protection is legally required in the country to which they export? Perhaps the dominant attitude toward transfers of hazardous technologies is that environmental justice in developed nations is isolated or separate from analogous moral requirements in developing countries. I call this view the "isolationist strategy." It sanctions corporate transfers of hazardous technologies to other countries, provided only that the transfer meets whatever conditions are imposed by the host nation. For those in developing nations, these conditions are typically minimal or nonexistent. In chapter 2 I defended the principle of *prima facie* political equality (PPFPE) and argued for equal treatment under the law. But because people in different nations face such radically different circumstances, it is much more difficult to argue for the global applicability of the PPFPE, in part because there are no global laws in terms of which people can be held accountable for equal treatment of others. Another problem with global applications of the PPFPE is that often it simply is not possible to guarantee genuinely equal treatment to people in diverse areas of the world.

Advocates of the isolationist strategy characteristically reject environmental injustices close to them in space or time but sanction those that are distant from them. My object in this chapter is to provide some grounds for challenging the isolationist strategy—for questioning the view that one may ignore environmental injustices that are spatially or temporally distant. In order to evaluate this strategy, in this chapter I discuss four main arguments

ing to the convention, companies wishing to ship hazardous waste must notify the receiving country and obtain written permission. Often citizens are unaware of what their corrupt leaders have permitted, and few receiving nations have adequate information about the wastes they import. Such situations rarely include free informed consent.⁴

One of the greatest problems with transfer of hazardous technologies arises in connection not with dumping but with pesticides. Massive advertising campaigns by corporations such as Dow and Chevron have turned the Third World into a market for dangerous chemicals, especially DDT. For example, Ortho (a division of Chevron and an arm of Standard Oil of California) in Costa Rica is the main importer of eight banned or heavily restricted U.S. pesticides: parathion, DDT, aldrin, dieldrin, heptachlor, chlordane, endrin, and BHC. In Ecuador, Shell, Velsicol, Bayer, American Cyanamid, Hercules, and Monsanto are the main importers of pesticides banned in the United States. In Columbia, 14 different corporations import virtually every U.S. pesticide banned since 1970.⁵

used to justify transfers of hazardous technologies to developing nations that are likely to be unable to guarantee free informed consent to them: the social progress argument, the bloody loaf argument, the consent argument, and the economic reality argument. I show that all of these arguments, except the last, are seriously flawed. Because the economic reality argument offers persuasive reasons for the transfers, I argue that corporations and governments alone cannot protect those in developing nations. If the analysis here is correct, then effective action to safeguard citizens in the Third World may demand not only individual efforts but also coordinated political activity, particularly through nongovernmental organizations (NGOs). If this chapter is correct, then a rational and ethical response to global environmental injustices may require political activity that is more demanding than many people have thought.⁶

The Social Progress Argument

Often people defend transfers of hazardous technologies on the grounds that one is not ethically bound to accept any principles of environmental justice or equal protection for all persons. Many utilitarian moral philosophers, especially act utilitarians, for example, are opposed to accepting principles of equal protection, whether within a nation or across nations.⁷ For this reason, many act utilitarians probably would hold with some variant of what I call the social progress argument. They would maintain that, although they do not wish to see Latin American, Asian, or African people killed or injured by asbestos, hazardous wastes, or banned pesticides, adopting a principle of equal protection for all people, like the PPFPE defended in chapter 2, could jeopardize economic and social progress. Act utilitarians like J. J. C. Smart also typically believe that more human suffering is caused by following principles of equal treatment than by attempting to maximize the well-being of the majority. They believe there is no "right" to equal treatment and equal opportunity because, if there were, then this would delay making things economically and socially better for the majority of the people.⁸

Pursuing the social progress argument, act utilitarians might point out, for example, that worker fatalities during the building of the U.S. westward railroad reached a peak of approximately three per thousand per year.⁹ Although this death rate is three orders of magnitude greater than the current allegedly acceptable level of regulated risk in the United States,¹⁰ they might view it as a necessary evil. They might claim it was something essential to greater social progress, just as many current proponents of the North American Free Trade Agreement (NAFTA) and GATT claim that deaths caused by overriding environmental and safety requirements, in the name of "free trade," are necessary evils.¹¹ They might see such health threats as the price paid to bring prosperity to a greater number of people.

The main problem with the social progress argument, however, is its presupposition that there is no in-principle obligation to recognize individual rights—that there are ethical grounds for sacrificing the welfare of some people for the sake of the majority. As I already argued in chapter 2, this presupposition is questionable in part because it is inconsistent with basic principles of justice, including those underlying the liberal, democratic traditions that are embodied in the U.S. Bill of Rights. Act utilitarians even admit that, on their view, every individual would not be protected from capricious or expedient denials of justice.¹² This admission is problematic, for reasons already outlined in chapter 2: discrimination is unjustified unless it works to the advantage of everyone, including those discriminated against. The social progress argument also is doubtful because often the prosperity alleged to follow from ignoring health, environmental, or human rights concerns never materializes, just as the touted economic benefits of GATT and NAFTA have not materialized. Proponents of the 1995 establishment of the WTO, as part of GATT, promised that U.S. families would enjoy a \$1,700 annual income increase, that the U.S. trade deficit would decrease by \$60 billion in 10 years, and that developing nations would become more prosperous. Instead, all these predictions have failed to come true, and the U.S. trade deficit is increasing wildly. In developing nations, the WTO has brought increased wage inequality, increased food import prices, annual drops in export earnings of between 2 and 5 percent, and lowered tariffs on raw commodities exported by developing countries. In short, the attempt to justify environmental injustice by means of the social progress argument is doubtful.¹³

The Bloody Loaf Argument

If failure to treat people equally sometimes can be justified on the grounds that this failure helps everyone, including those treated unequally, then perhaps there is a second defense of the environmental injustices associated with the transfer of hazardous technologies. This second argument, which might be called the "bloody loaf" argument, amounts to the claim that although it would normally be wrong to transfer technologies known to cause injury and death, recipients of risky technologies are better off than they would have been without them: a bloody loaf of bread is better than no loaf at all. Proponents of this argument admit that although there are health costs, for example, to Third World asbestos workers or victims supplied with banned U.S. pesticides and toxic wastes, there also are associated benefits, and these benefits outweigh the costs. They argue that the Mexican asbestos worker might not have a job if he did not work in substandard asbestos production facilities. They say that the African village might have neither a local school nor clean water were it not for the revenues supplied by storing toxic wastes from the United States.¹⁴ According to this argument, a dangerous job is preferable to no job. Food riddled with banned pesticides is better than no food at all.

Perhaps the greatest presupposition of the bloody loaf argument is that any cost is allowable, provided the benefits are greater.¹⁵ One could easily challenge this assumption, however, by arguing that some costs are *preventable evils* that ought never to be allowed, even for countervailing benefits. Fol-

lowing the principles of distributive justice outlined in chapter 2, one likewise might argue that some unfair distributions of risks or costs are so unacceptable that no benefits could counterbalance them. One also might argue that not everything—such as torturing innocent people—“has its price.” Instead one might agree with the authors of the 17 Principles of Environmental Justice adopted in 1992 at the National People of Color Summit, that people have inalienable rights. Principle 8 affirms that all people have rights to a healthy environment “without being forced to choose between an unsafe livelihood and unemployment.” Principle 4 requires “universal protection” from toxic and hazardous wastes, and principle 14 condemns the “destructive operations of multi-national corporations.”¹⁶ Each of these principles presupposes that not everything has a price. Safety ought not always to be traded for a job. Money ought not always be traded for dangerous exposure to toxins, and profits ought not be traded for destructive corporate actions. Because utilitarians typically would be the moral philosophers most likely to claim that every cost can be counterbalanced by some benefit or that “every-thing has its price,” one way to challenge the bloody loaf argument would be to show that not even all utilitarians would support it. Would John Stuart Mill, for example, be likely to defend the bloody loaf argument?

Mill and Violation of Rights to Security

Although Jeremy Bentham rejected the notion of moral rights that disallowed certain preventable evils, utilitarians such as John Stuart Mill challenged this rejection. One can read Mill as a rule utilitarian, as holding that utilitarian principles require adherence to rules, even rules conferring rights, and that such rules exclude a case-by-case appeal to the general welfare.¹⁷ After all, Mill does not apply the general-welfare standard to all cases of moral reasoning. In his classic essay, “On Liberty,” he does not condone paternalistic intervention in order to serve the general welfare. Instead, as I noted in chapter 6, he allows paternalism only to prevent harm to other people or to prevent persons from selling themselves into slavery. This position suggests that Mill believed a rule about paternalistic noninterference was the best way of serving the general welfare and that his principle of liberty can be construed as a defense of a related right.¹⁸

A second reason that Mill might be interpreted as a rule utilitarian, and even one with commitments to human rights, is that he specifically distinguishes between immorality and mere expediency.¹⁹ Mill also points out that utilitarians have particular obligations to recognize moral rights.

The moral rules which forbid mankind to hurt one another (in which we must never forget to include wrongful interference with each other’s

freedom) are more vital to human well-being than any maxims, however important, which only point out the best mode of managing some department of human affairs.²⁰

Mill explains that the primary object of moral rights is security, which he calls “the most vital of all interests,” “the most indispensable of all necessities, after physical nutrition,” and “the very groundwork of our existence.”²¹ He affirms: “to have a right, then, is, I conceive, to have something which society ought to defend me in the possession of. If the objector goes on to ask, why it ought? I can give him no other reason than general utility.”²² These passages suggest that Mill believes that, because of their basic needs, persons have something like “rights” to security and “rights” not to have their liberty constrained, apart from the requirements of the general welfare. Nevertheless, Mill believes that the reason society ought to recognize rights to security is that such recognition promotes the general welfare.²³ All this suggests, in turn, that classical utilitarian doctrine is not “a hunting license, allowing the infliction of whatever wounds one likes, provided only that one’s pleasure in the infliction is greater than the victim’s pain.”²⁴ Rather, one is not allowed, under classical utilitarian doctrine, to threaten another’s security. Were one allowed to do so, then maximization of net benefits could be said to justify the worst sort of barbarism or sadism.

There also are a number of nonutilitarian grounds for believing that all per-

sons have equal, basic rights to security. And if so, then it is not clear that there are any compensating benefits that might justify failure to recognize these rights. One of the strongest arguments for recognizing equal, transnational rights to security is that human *interdependence*, across national boundaries, creates transnational moral obligations to recognize basic human rights. As Lichtenberg puts it, certain kinds of actions by some people are likely to affect other persons in a significant way, and no one can escape such effects by staking out new territory.²⁵ As the argument goes, since the *effects* of one’s actions (e.g., burning fossil fuels and possibly causing the Greenhouse Effect) are not limited to those within one’s country, the *constraints* on one’s actions are not limited only to the basic rights of those in one’s nation. Following the reasoning already outlined in chapter 2, other considerations also suggest that all people in all nations have inalienable moral rights, regardless of their country or their generation.²⁶ (1) All persons possess the two essential powers of moral personality: a capacity for an effective sense of justice and the ability to form, amend, and pursue a conception of what is good.²⁷ (2) Individuals and national societies are not self-sufficient but exist within a *scheme* of social cooperation.²⁸ (3) The comparison class is all humans, and all humans have the same capacity for a happy life.²⁹ (4) Free, informed, rational people would agree to a social contract based on treating all humans equally.³⁰ (5) Equal treatment of all persons provides the basic justification of all schemes involving justice, fairness, rights, and autonomy.³¹ (6) All law presupposes a social contract guaranteeing equal rights.³² Therefore, without the recognition of basic human rights, it would be impossible for

anyone to enjoy any particular right (e.g., to property) that is legally guaranteed. It also seems reasonable to believe that there are ethical, as well as prudential, duties to provide some standard of equal protection to those outside our national borders. For example, on Peter Singer's scheme, reasonable and benevolent people ought not forego a chance to do great good for others, in order to avoid a trifling sacrifice. If so, then there may be duties to protect others from environmental injustices such as transfer of hazardous technologies, especially if it is possible to do so without great sacrifice of comparable values.³³

But if there are potential grounds for recognizing either a moral right to security or a duty to protect others from threats to their security, then the bloody loaf argument could be wrong. It could be wrong to try to justify violations of rights to security in exchange for a job or economic well-being. If so, a critical question is whether the transfer of hazardous goods or technologies threatens security. As Henry Shue points out,³⁴ in the case of Mexican asbestos workers, for example, their security is threatened because (1) the technology does *physical damage* to their life, limb, and vitality, not just harm to their lifestyle; (2) it injures them in a *life-threatening* way; (3) the technology damages them in a way that is *irreversible*; (4) the technology does bodily harm that is *avoidably undetectable* (because people in such a situation are likely to be poor and hence unlikely to have proper medical advice and examination); (5) it does damage that is *avoidably unpredictable* (because workers lack the technical information about the risk, even though their employers may have it); and (6) the technology induces injury having a *high probability of occurrence*.

Is Hazardous Technology Beneficial?

Even if transfer of hazardous technologies, especially to developing nations, were not questionable on the moral grounds that it jeopardized individuals' rights to bodily security, it still might be problematic for factual or practical reasons. The whole bloody loaf argument, like the social progress argument, rests on a central factual assumption, namely, that transferring hazardous technology provides great benefits to those who receive it. Some proponents of this argument claim, for example, that exporting banned pesticides to developing countries is defensible because they are cheaper than other forms of pest control and thus beneficial to poor nations. For them the chemicals are a necessary evil, the price of averting famine. An executive of Velsicol Chemical Company, defending his company's sales of Phosvel after it was banned in the United States, said: "We see nothing wrong with helping the hungry world eat."³⁵

The problem with such an argument, however, is that it is built on several doubtful factual premises: that hungry people are helped and that those in developed nations are not harmed. Yet, as the earlier discussion of GATT and NAFTA noted, this premise is questionable. Between 50 and 70 percent of pesticides used in underdeveloped countries are applied to crops destined

for export. Although the poor and hungry labor in the fields and expose themselves to pesticides, they rarely are able to eat the crops on which they work. In Latin America, 70 percent of agricultural production (mainly coffee, cocoa, and cotton) is exported. Moreover, cotton is the crop to which most pesticides are applied.³⁶

It might be assumed, however, that even if those in developing nations do not benefit directly from the pesticide-ridden crops they grow, they might benefit *indirectly* from the foreign exchange earned. Even this assumption is questionable, however, because foreign exchange monies often are not used to improve wages, housing, schools, and medical care for farm laborers. Instead they are typically used for luxury consumer goods, urban industrialization, tourist facilities, and office buildings. Most of these goods, in turn, benefit the upper classes living in the cities.³⁷ Such use of foreign exchange earnings brings benefits to farm workers and pesticide users only if one is able to assume that "trickle-down" economic procedures improve the overall welfare of those workers who are most subject to the hazards of transported technology. Yet especially since 1995, when the WTO began undercutting many health, safety, and environmental regulations as "illegal trade barriers," such "trickle-down" theories are even more doubtful. As the UN Commission on Trade and Development puts it, after WTO, the gains in national income "have been captured by profit—and not by wages."³⁸

If the preceding analysis is correct, then the bloody loaf argument is questionable on both moral and practical grounds. The *practical* problem is that many of the benefits alleged to accompany environmental injustice might be overestimated. The *moral* problem is that the argument could lead to undesirable consequences (e.g., justifying sadism) because it is premised on the assumption that great benefits could justify any cost, however great. It also erroneously ignores classical emphases on rights to security.

The Consent Argument and a Moral Response to It

In response, however, one easily could argue that, even if such environmental injustices do threaten individual security, the recipients of hazardous technology have consented to them. Moreover, as I noted in chapter 6, some people believe it is paternalistic to tell other nations what things are good for them. Unless one denies the autonomy of native peoples and their rights to make their own choices, they say one is bound to allow them to have the technology transfers they request. Even if such transfers involve substandard asbestos processing or importing pesticides banned in the United States, goes the argument, native peoples have a right to determine their own fate. In a nutshell, this "consent argument" is that corporations are not morally responsible for inflicting harm through technology transfer so long as the recipients agreed to it.

The plausibility of the consent argument rests in part on the classical economic theory of the compensating wage differential, discussed earlier in

chapter 7. According to the theory of the CWD, when people accept risky jobs for higher pay, they implicitly consent to the hazards. As Adam Smith expressed it, "the whole of the advantages and disadvantages of the different employments of labor" continually tend toward equality because the wages vary according to the hardship of the occupation.³⁹ Analogously, proponents of the consent argument might claim that imposition of greater public health risks is acceptable because citizens voluntarily agree to trade some societal safety for greater public benefits, such as a stronger economy or a higher standard of living.

Clearly the acceptability of the consent argument is a function of whether recipients of technology transfer accepted these risks, in situations of informed consent. This acceptance depends both (1) on whether the *workers* and citizens were informed of the severity and probability of harm and (2) on whether the *governments* allowing imports of hazardous technologies, for example, banned pesticides, also gave free informed consent on behalf of their citizens. Consider first the freedom issue with respect to workers.

As I argued in chapter 7, just because a worker holds a particular risky job, one ought not assume that the occupation is an expression of freely expressed preferences. And as already noted in this chapter, prominent principles of environmental justice proclaim that workers ought not to have to choose between no employment and unsafe working conditions. Many people engage in certain work not because they voluntarily and autonomously choose to do so but because they have no alternatives. Several years ago the official U.K. government scientific Advisory Committee on the Safety of Pesticides (PAC) was locked in battle with the National Union of Agricultural and Allied Workers (NUAAW) over the spraying of 2,4,5-T by farm workers. On the one hand,⁴⁰ the PAC asserted that the pesticide was safe when used properly. On the other hand, the NUAAW argued that

the organizational realities of farm life often do not allow a farm worker to refuse to spray just because the climate is not correct, or because specified protective equipment is defective or nonexistent. Chemicals, called "adjuvants" that speed up the action of the main chemical are often added... and new spraying technologies designed to improve economic efficiency have had marked effects on exposures.

In other words, the cultural realities of low-paid, "dispensable" farm workers do not allow them to say that they are concerned about risks. And if not, such workers are not likely to be able to give *free* informed consent to the risks they incur.⁴¹ A similar example concerns the conflict over beef-cattle hormones. In 1985 a scientific committee of the European Commission said certain "growth promoters" were safe if used (1) by means of earlobe injection; (2) with a specified dose threshold; and (3) in connection with a 90-day waiting period before sale of the cattle. The Council of Ministers rejected the alleged safe use of the hormones on the grounds that, in reality, such conditions of use are not enforceable. Similarly, when the WTO recently allowed Australia to use the "USDA Approved" stamp on its meat exports so as not to

give the United States an unfair trade advantage, the conditions of use of the stamp clearly were not enforceable in reality, since there was no USDA inspection. Nor did consumers really consent to the risks of the Australian meat, since those risks were unknown to them, given the misleading use of the USDA stamp. And if not, then there are grounds for believing the public often may not be able to give *informed* consent to many societal risks, given the cultural realities of international trade and the threats to health and safety they present.⁴²

Often market constraints or greed militate against conditions necessary for free informed consent to environmentally dangerous imports. For example, after the 1985 Bhopal chemical disaster, which killed thousands of Indians, a French inquiry discovered numerous improprieties in France in the handling of the same toxin, methyl isocyanate (MIC). The MIC was imported through Marseilles and sent to a plant in Beziers. At the Marseilles docks, because of the economics of unloading operations (e.g., piece rates being paid to increase productivity) and the necessity to fill shifts productively, barrels of MIC were being thrown, lifted, and hauled as if they were bales of straw. The cultural and economic realities of the dock situation made *free informed* consent (among workers and residents living near the docks) highly questionable.⁴³ One reason that an occupation and its associated risks may not be the result of a free decision is that job choices are often *not* made in the context of what John Rawls might call ethically desirable "background conditions." As I noted in chapter 3, such background conditions might include the operation of a free market, lack of coercion by employers, and the existence of alternative employment opportunities. This means that, if background conditions necessary for procedurally just, voluntary, employment decisions are not met, then appeal to the theory of informed consent cannot justify exposing persons to workplace hazards created because of technology transfer.⁴³

Consider a farm worker, for example, hired to apply pesticides in a developing country. It is well known that such jobs are very risky and also that, as education and income rise, employees are far less likely to remain in hazardous occupations. This means that workers in high-risk jobs are more likely than not to be both financially strapped and poorly educated. Moreover, the situations in which African, Asian, or Latin American peoples would be most in need of work are precisely those in which background conditions are likely to preclude genuine *free* consent to accepting those jobs. In Mexico, for example, the unemployment rate is typically 50 percent, and the average wages are \$3–4 per day. This suggests that, in rural developing countries likely to employ pesticides, for instance, there is probably no diversified economy that would provide a variety of alternative employment options. Hence the situations in which people would be most likely to take risky work are precisely those in which genuine *free* consent probably could not be given to the job.⁴⁴

Indeed, for half the world's population, free informed consent may not be possible. About eight hundred million people, one-fifth of the humans on the

planet, are deprived of all income, goods, and hope. They live primarily in India, Bangladesh, Pakistan, Indonesia, sub-Saharan Africa, the Middle East, Latin America, and the Caribbean. Another one-fifth to two-fifths of the world's population, above the one-fifth that Robert McNamara called the "absolute poor," are chronically malnourished. Moreover, according to the UN Development Program (UNDP), the situation is getting worse for the poor of the world. The ratio of average income of the richest 20 percent of people on the planet, as compared to that of the poorest 20 percent, has gone from 30:1 in 1960, to 60:1 in 1990, to 74:1 in 1997. Although in 1960, people in rich nations made \$30 for every dollar earned by those in poor countries, by 1997, rich people earned \$74 for every dollar earned by the poor. And according to the UN Food and Agriculture Organization (FAO), when relative earnings drop, so does nutrition. In 1999, more than half the children in nations such as Bangladesh and India were underweight. In Africa there were 22 million underweight children in 1980, and that number rose to 38 million in the year 2000. Given pervasive and increasing disease, malnutrition, illiteracy, and squalor—not to mention few job alternatives and an economy that is probably not diversified—it is questionable whether, even with perfect information about the relevant risks, half of the world's workers could be said to *freely* choose to work with environmentally hazardous technology, like banned pesticides shipped from abroad.⁴⁵

Often consent is not likely to be truly *informed*, since the same conditions that militate against free consent (in the developing world) also militate against education. An isolated African or Latin-American region where banned pesticides are used, for example, is unlikely to have an educated populace to help make citizens aware of pesticide danger. It also is unlikely to have a local chapter of the Sierra Club or of Ralph Nader's Public Interest Research Group (PIRG). This means that people in many developing countries not only lack the ability to be informed but, more important, lack the *societal institutions*—the background conditions, such as education and a free press, that could help remedy their inability to give free informed consent. Moreover, even in some of the most developed countries of the world, like the United States, where *societal institutions* are in place, free informed consent is sometimes rare. When the state office building caught fire recently in Binghamton, New York, it was highly questionable whether the accident victims gave free informed consent to the risk of reentering the building. The fire spewed about 180 gallons of coolant (containing polychlorinated biphenyls, or PCBs) from the electrical transformers throughout the building. Later, despite the fact that the building's garage was contaminated with PCBs, officials opened the garage because of "the shortage of parking space in downtown Binghamton." Officials were allowed to open it only because they withheld crucial information about testing the garage and about the toxicity of PCBs. The director of health for the state "intentionally concealed important information . . . to mollify public concern." Likewise, it is not clear that U.S. citizens, in general, consent to the health, safety, and environmental threats to which they are exposed from imported goods. After all, the WTO

specifically disallows importing governments from providing health, safety, environmental, and human rights information—about particular products—on the grounds that such information is a barrier to free trade. If even highly developed nations cannot always guarantee free informed consent and participative justice to their citizens, then surely such consent and participative justice is even less likely to be available to those in developing nations. And if not, it is questionable whether the consent argument is able to justify transfers of hazardous technologies to less developed countries.⁴⁶

The Economic-Reality Argument and a Moral Response to It

If the analysis thus far has been correct, then all three arguments enlisted to support transfer of hazardous technologies—the social progress argument, the bloody loaf argument, and the consent argument—face serious objections. However, someone still could maintain that such transfers are legitimate on the grounds that it is impossible to prevent them. This response might be called the "economic reality" argument. This fourth argument is based on the ethical maxim, "*ought implies can*"; if governments or corporations *ought* to be required not to transfer banned technologies to developing countries, then this requirement must be one that *can* be achieved. If the requirement is not achievable, then it *ought* not to be required.

The main reason for believing that it might be neither possible nor realistic for a corporation to introduce safer technology on its own, without mechanisms to control the behavior of competing firms, is that such an action could financially destroy a company. According to the economic reality argument, governments, not individual corporations, are in the business of securing environmental justice and regulating worker and citizen safety. To expect a firm to introduce safer technology, and thus be undercut by other corporations with fewer moral qualms, is thus ethically questionable because it is unrealistic. Such expectations might impose a self-sacrificial burden on a corporation. But morality does not require heroism, only justice.⁴⁷ Because it does not, Alan Gewirth, in his classic argument for the absolute right not to have cancer inflicted on one, argues that it is necessary for the state to regulate and enforce this right. Similarly, one cannot expect corporations to give voluntary compliance to strict environmental and technological standards that could undercut profits and perhaps make them bankrupt. Admittedly, as discussed in chapter 2, there is evidence that stringent global environmental standards are competitive assets for the companies using them. Even if such companies perform better economically, nevertheless they have no obligations to employ strict standards that could destroy them because they have no obligation to behave heroically.⁴⁸

Attorney Richard Stewart likewise has recognized that strong federal regulation, rather than heroism, is necessary to restrain dangerous technologies and to secure environmental justice. Stewart points out that even states cannot afford to impose more stringent environmental standards than their

neighbors, unless they want to hurt their economy. Otherwise, industry would simply move to a less-regulated state. For similar reasons, some corporations cannot be required to accept more stringent environmental standards than other firms, unless they want to go out of business or lose customers to less ethical competitors.⁴⁹

Despite the plausibility of Gewirth's and Stewart's suggestions that morality cannot rest on heroism, several considerations suggest that it is both reasonable and possible—not heroic—to reject the economic reality argument and to work against transfer of banned, hazardous technologies. Henry Shue, for example, argues that corporations are morally bound to cease transfer of hazardous technologies because: (1) no institution has the right to inflict harm, even to hold down production costs; and (2) underdeveloped countries, alone, cannot be expected to impose strict environmental and technological standards because they are competing with other countries for foreign investments.⁵⁰ Although Shue's first argument may be correct, that one ought not inflict harm, so as to hold down production costs, a critical problem is knowing how to define "infliction of harm." At what point does inflicting a higher *probability* of damage constitute infliction of harm?⁵¹ Contrary to an assumption behind Shue's argument, manufacturers do inflict harm in the form of increased *probability* of risk, in order to hold down production costs in the United States. United States pollution-control regulations are specifically designed to trade a particular amount of safety for a given amount of production savings. The typical norm, adopted by the EPA, a NAS panel, the NRC, and other government groups, is that safer technology is not required unless it imposes greater than a one in a million increase on the average annual probability of fatality faced by the public. Moreover, allowable worker risk is typically 10 times greater than that for the public, in part because permitting higher workplace risks is sometimes more cost effective than prohibiting them.⁵²

In the case of many technologies, U.S. corporations are merely required to keep environmental hazards "as low as is reasonably achievable," on the basis of a "favorable cost-benefit analysis." In the case of nuclear technology, for example, if it costs the licensee more than \$1,000 to avoid an additional person-rem of radiation exposure to the public, then he is not required to do so. If it costs less, then the licensee must aim at reducing maximum radiation exposure to the public to 0.0005 rem per person per year. Hence, according to current law, there is no absolute prohibition against harm (where "harm" includes increased probability of risk), in part because such a prohibition would be impossible to achieve in a technological society.⁵³ And if not, then Shue's argument (1), as it stands, may sanction a proposed ethics (absolute prohibition of harm) that is impossible to fulfill. Therefore this ethics cannot be binding.

Shue's objection (2), that underdeveloped countries cannot be expected to impose strict environmental standards because they are competing with other nations for foreign investment, also makes a reasonable point, but it contains a flawed assumption. This assumption is that because *countries* compete with

each other for foreign technology investment dollars just as *corporations* compete with each other for profits, nations have no more responsibility (than do private industries) to protect their citizens' health and safety by regulating technology. This assumption is flawed because it presupposes that countries and corporations have the same level of responsibilities to protect citizens. But do they? Firms are concerned primarily with promoting *private* interests, that is, maximizing shareholders' profits, whereas nations are obliged to promote *public* welfare. A strong case also could be made for the claim that citizens, by virtue of their citizenship, share an explicit contract with their country. If so, then in exchange for citizens' acts such as paying taxes, the country performs many services, such as protecting citizens' health and welfare. Except in the case of the employer-employee relationship, there is no comparably strong contract between a corporation and members of the public. And if not, then it easily could be argued that the greater responsibility for protecting public health and welfare belongs to the country. Moreover, at least in part, the nation appears to have the stronger obligation to protect citizens because corporations so often fail to do so.

Consider the consequences that would follow if one were to accept Shue's objection (2) that corporations have more responsibility to force use of safe technology than do host countries. If private industries did have more responsibility but did not willingly *accept* this responsibility, then they would be more likely to do as they wished—in the face of governments that were alleged to have *less* responsibility (than corporations) to protect their people. In such a case, firms would be able to act with impunity, knowing that governments would not be checking on them. In the situation prescribed by Shue, governments would be less able to "right" corporate wrongs, since they would have no mandate to protect citizens working in risky facilities. Indeed, one of the most common industry arguments against government regulation is that it is "not needed" and that corporations themselves can do the job. This seems to be the argument made by Henry Shue. Obviously, however, industries cannot police themselves completely, as the actions of Shell Oil described in chapter 6 suggest.⁵⁴ If they could, then they might have nothing to lose through government regulation. If firms believe they have something to lose, however, they are likely to oppose governmental regulation. And if so, then the regulation appears to be needed.

Citizens' Responsibilities for Environmental Justice

But if government regulation typically is needed to protect citizens and workers from environmental hazards, and if industry alone cannot do the job, then it may be neither reasonable nor possible, as the economic reality argument notes, to expect corporations to cease transfer of hazardous or banned technologies, especially if government does not require them to do so. Because "ought implies can," corporations are morally obliged to use safer technologies only if they can do so without heroic sacrifices.

Even if it were reasonable to argue that firms are morally obliged to make heroic sacrifices, they are unlikely to do so, at least for long, because they will not survive. Hence, regardless of the degree to which one believes that corporations are *morally* required to use safer technologies, the fact remains that they are *likely* to do so only if government requires it and if the safety does not threaten their competitive advantage. Apart from what is ethically desirable, one cannot realistically expect companies to cut their profits, in the name of safety, unless governments, corporate employees, and consumers force them to do so. But if not, then society is faced with an interesting practical problem, one quite different from the one with which this chapter began: Do citizens have any ethical obligations, as consumers in developed nations, to help avoid environmental injustice or to force transfer only of the safest technologies? Consumers in developed countries may have the greatest power, and thus also the greatest obligation, to help ensure environmental justice abroad and to help solve the problems of transferring hazardous technologies, in part because they have special duties generated by special circumstances.

Responsibility through Ability

Citizens in developed countries arguably have a moral obligation, proportional to their ability, to help prevent transfer of hazardous technologies to underdeveloped countries. This is a "responsibility through ability."⁵⁵ To the degree that people have the ability to make a positive difference in such situations, therefore they are obliged to do so. Special abilities generate special duties. (Later I will discuss *how* one might make a positive difference.) As already mentioned, duties to help largely defenseless people, like victims of environmental injustice, arise in part from the fact that human beings are interdependent and not self-sufficient and hence share an implicit social contract. Some people thus are more obliged to help other persons because they are more able to do so and because they are human beings.⁵⁶

The fact that people have no *explicit* social contract with members of other nations as they do with citizens in their own country, however, need not significantly change this obligation. For example, if two people are facing almost certain death, either because of banned pesticides or because of their working in substandard asbestos-processing plants, why should people be bound to aid one set of victims, merely because they are fellow citizens and not bound at all to aid the other victims, simply because they are not compatriots? Admittedly, fellow citizens have prior claim to personal loyalties, in large part because of an explicit social contract citizens share with each other. But because citizens have *prior* claims does not mean that they have *exclusive* claims to each others' loyalties. What all people share as humans, with common conceptions of the good life and with equality as members of the same species, is at least as important a foundation for interpersonal duties as is common citizenship. And if so, then people arguably have some obligation to aid Third World victims of the transfer of hazardous technologies as is common citizenship. And if so, then people arguably have some obligation to aid Third World victims of the transfer of hazardous technologies as is common citizenship.

gues.⁵⁷ Even the U.S. Agency for International Development (USAID) has been forced, in recent years, to perform environmental impact assessments for the technologies they transfer abroad: USAID has implemented the NEPA so as to review, for example, its pesticide programs in other nations. These reviews have "resulted in significant changes in USAID's operations," particularly in the area of pest management. This suggests that U.S. agencies are beginning to recognize that recipients of technology have rights to protection from their hazardous transfer.⁵⁸

The obvious problem with the argument that people are obliged to help citizens in other nations, however, is specifying the limits on such a duty. One could explain, "Look, I have my own life to lead and my own children to raise. I ought to be free of the obligation to help developing nations by promoting transfer of only the safest technologies."⁵⁹ As James Fishkin formulates this objection, people are morally required to "prevent great harm" when they are able to do so and when the costs to them are minor. He says that this moral obligation breaks down, however, when it is applied to large numbers of people. Fishkin's reasoning is as follows. If one has only a modest number of occasions to help others, then the obligation to prevent great harm is not excessively burdensome and does not restrict one's freedom of action. This "minimal altruism," however, could have the *cumulative effect* of imposing great burdens and severely restricting one's choices. The result, says Fishkin, could be "breakdown," or "overload."⁶⁰

Fishkin's objection is obviously correct in the sense that there is an upper bound to the cost that can be said to be required of people striving to help those who need more physical security. Individuals clearly have a right to pursue their own commitments, apart from the sacrifices that appear to be demanded by impersonal global morality. Nevertheless, if people believe in a transnational social contract among all humans or even minimal decency, then as was already mentioned, they ought not forgo a chance to do great good for others in order to avoid a trifling sacrifice.⁶¹ Likewise, a nation ought not forgo a chance to do a great good for the people of other nations in order to avoid a trifling sacrifice. The obvious question this raises, of course, is whether the sacrifice is indeed trifling. Subsequent paragraphs address this issue.

Another limit on the duty to help others is set by the fact that individual sacrifices are more burdensome and hence less of a moral imperative when they set people, either individually or as nations, at a disadvantage relative to others who have sacrificed less. For example, poorer people obviously have less of an obligation (than do wealthier individuals) to share their goods with someone less fortunate. In particular they have less of an obligation if their doing so puts them (relative to wealthier persons) at a greater disadvantage with respect to others who have shared less of their goods. Henry Shue's distinction between the *scope* and *magnitude* of justice also provides some clues for an "upper bound" on obligations to sacrifice for others.⁶² With respect to scope, everyone on the planet may have rights and duties grounded in global justice, because all may be said to share a social contract. Of course,

cause there are a number of considerations that limit individual obligations to bring about social change. For example, duties to others cannot be so great that fulfilling them jeopardizes one's own bodily security or the welfare of those for whom one is personally responsible. This principle is obvious on the grounds of consistency.

A final constraint is that justice ought to be said to require only what some normal, nonheroic people are capable of being convinced to do. If at least some people (having healthy self-interest) do not *freely* and *noncoercively* assent to these demands, then it is questionable whether the proposed standards of justice are legitimate. This is because people are bound to do only what it is possible to do. Moreover, people are not required to pay any price in order to achieve what is possible. Gains in security bought at the price of either bloody revolution or totalitarian enforcement are highly questionable, primarily because of the cost in lives and in civil liberties. "Sometimes an unbloody half loaf is better than a bloody loaf."⁶³

What all these limits (on duties to others) suggest is that it is impossible for citizens in developed countries to reject completely the duty of helping to ensure environmental justice for citizens in underdeveloped nations. Although people cannot be expected to help protect everyone, they can, as Henry Shue puts it, protect "a few at a time until it becomes too heavy a burden."⁶⁴

Responsibility through Complicity

People also have a "responsibility through complicity" to help Third World victims of technology transfer, to the degree that they have accepted lower inflation and lower prices for foreign-produced goods. These are two benefits bought, at least in part, at the price of health hazards for peoples in underdeveloped countries.⁶⁵ Therefore, those in richer nations owe them a debt of compensation or reparation. Judith Lichtenberg formulates a similar argument.

Suppose we consider a relationship, R, between a developed country, D, and an underdeveloped one, U. It may be that both D and U are better off with R than without it (though, of course, we make the artificial assumption here that the state to which we compare R is just the absence of R, with nothing replacing it). But suppose that by any reasonable standard, D benefits much more than U, not just in the sense that D ends up absolutely better off but also that it is improved more incrementally as well. This accords with the claim that economic relations between rich and poor countries widen the gap between them even if those relations bring absolute gains for all. So D is benefitted more by U's participation than U is by D's. Here the principle of unequal benefit applies to show that D owes something to U by way of compensation, for D owes its advantageous position in part to U's participation.⁶⁶

Lichtenberg's argument, that because D has benefited from U and is dependent on U, D has obligations of compensation, and perhaps reparation, to help

U, is similar to rebuttals to "lifeboat ethics." When Garrett Hardin proposed his famous "lifeboat ethics," he argued that members of developed nations had no obligations to help those in underdeveloped countries because doing so was futile, in that it would only cause the poorer populations to increase, making their progress even more difficult. Hardin also said that people in developed nations would have to reduce themselves to subsistence levels in order to make a difference in underdeveloped countries. To move, from a 5:1 ratio to a 3:1 ratio in the per capita income of developed to underdeveloped nations, would require about *eight times* the annual GNP of the United States. According to this argument, only massive redistribution could make much of a difference. Hardin also claimed that helping Third World people would cause only greater harm in the long term, both to the environment and to members of future generations,⁶⁷ because foreign aid might encourage population growth and greater poverty later.

Although there is no time here to analyze in detail the "lifeboat ethics" just outlined, it is important to sketch some of the responses to it, simply because those responses might help clarify the argument for "responsibility based on complicity." One can ignore this complicity-based argument only by making several erroneous assumptions also shared by proponents of lifeboat ethics. One such assumption is that developed countries are self-sufficient and do not need the help of underdeveloped nations. This assumption is false, however, as the oil crisis shows. It also is false because many of the wealthy countries were helped to prosperity through their buying resources cheaply from poor nations and then selling finished products back to them at high prices.⁶⁸

Other "lifeboat" objections to the complicity argument err because they ignore the fact that wealthy nations are using a disproportionate share of the planet's resources. This depletion of nonrenewable materials might be questioned both on the grounds that it violates the Lockean proviso to leave "as much and as good" for others (already discussed in chapter 3) and on the grounds that those in developing nations deserve some compensation or reparation for having their opportunities (to use these resources) reduced. If so, then citizens in wealthier countries may have some obligation to assist those in poorer nations who are victims of environmental injustice, like that caused by transfer of hazardous technologies.

Prudential Responsibilities

From a pragmatic point of view, people in developed nations also have moral and prudential obligations to help prevent environmental injustice in developing countries because many of the associated harms affect them. The question of transfer of hazardous technologies, such as pesticide- or hormone-contaminated food, is not a question of "them versus us." People in both the developed and the underdeveloped world are victims of unsafe technology transfer and inadequate environmental standards, in large part because of global trade. As already noted, pesticides used in the developing world actually help feed developed nations, but they endanger the poor and the hungry

throughout the globe. As already mentioned, up to 70 percent of the food crop in developing nations is exported to developed countries. As of 1998, for example, 52 percent of all U.S. fruits and vegetables came from Mexico.⁶⁹ Yet over 15 percent of the beans and 12 percent of the peppers imported from Mexico violate Food and Drug Administration (FDA) pesticide residue standards, and half of imported green coffee beans contain measurable levels of banned pesticides. The GAO estimates that 14 percent of all U.S. meat is now contaminated with illegal residues. In the wake of NAFTA and GATT, the problem is getting worse, in part because, since 1991, FDA inspections have declined from 8 percent of total imports to less than 2 percent. The pesticide residue problem has become so great that all beef imports from Mexico, Guatemala, and El Salvador have been halted. Moreover, government investigators found that half of all the imported food identified as pesticide contaminated was marketed without any penalty to the producers and without any warning to the consumers. No wonder the Center for Disease Control (CDC) says that nine thousand Americans die each year from food-related illnesses and that six million annually become seriously ill from the same causes.⁷⁰

What all these examples illustrate is that it is virtually impossible to protect even U.S. citizens from the hazardous effects of technology transfers to developing countries. Apart from the direct threats that return to U.S. consumers, for example, on imported food, there is still the problem of increasing global contamination because of hazards that initially are felt only in developing nations. There has been a significant increase in the concentration of lead in the successive snow layers from the Greenland ice cap and in seawater.⁷¹ For example, because of increasing levels of chlorofluorocarbons, there has been an expansion of the ozone hole over Antarctica.⁷² As these two examples suggest, no spot on earth is ever wholly protected from the chemical or atmospheric hazards occurring elsewhere on the planet. Just as planetary interdependence at the political and economic level establishes an ethical foundation for people's duties to help those in underdeveloped nations, so also ecological interdependence establishes a *prudential* basis for their obligations to help themselves by helping others avoid environmental injustice.

Conclusion

If the analyses in this chapter have been correct, then people have an obligation to "make a difference"—to make it difficult for governments and corporations to subject unwitting peoples in developing nations to environmental injustice like that caused by transfers of hazardous technology. But the only clear way that people can "make a difference" is through coordinated political activity, especially through nongovernmental organizations and not primarily through individual efforts. People need to put pressure on U.S. agen-

cies, like the USAID, and on international groups like the WTO and the World Bank. People need to recognize that they have a moral obligation to public-interest advocacy designed to protect those who are at serious risk. The next chapter provides additional reasons for this obligation and suggests some forms the advocacy might take.