# The Importance of Environmental Justice

δ1.1 Preview. I begin this chapter by arguing that issues of justice, including issues of environmental justice, arise when people want more than they can have. Under these conditions, in which at least some people must give up at least some of what they want (1.2), a measure of agreement upon principles of justice is a practical necessity. In the absence of any agreement, the allocation of scarce goods might be determined by a free-for-all in which people get all they can by hook or crook. This would yield an insecure and violent existence for everyone (1.3). Coordinated restraint of people's actions is needed also if the environment is to remain habitable (1.4). In order to cooperate voluntarily under the required restraints, people must perceive the restraints imposed upon themselves to be just in relation to those imposed upon others (1.5). Voluntary cooperation is needed. Governments can influence people by force (1.6), but people in the modern world are increasingly vulnerable to the disruptive activities of relatively few dissidents whose behavior cannot be controlled completely by force (1.7). The vast majority must therefore perceive the social order to be tolerably just (1.8). Education and propaganda are used to achieve this result (1.9). The present book is part of the required educational effort. Discussions of environmental justice are in this regard increasingly important, especially in a society like ours where people wish to avoid the inconveniences associated with living under a dictatorial regime (1.10).

The present chapter concentrates on perceptions of justice. The relationship between what *seems* just and what *is* just will be discussed in Chapters 12 and 13. Until those chapters, the focus of attention will be on perceptions of justice. Finally, the present chapter, and the one which follows, do not offer *moral* arguments for discussing justice or for attempting to find mutually agreeable principles and theories of justice. The contention is merely that we had better do these things *for our own good*.

This is what philosophers call a *prudential* argument. In Chapters 13, 14, and 15, I offer a *moral* argument that I believe to be more decisive.

§1.2 The Context of Justice. When I was eleven years old, my friend Billy Rohmann often came over to my house on Saturdays. We usually made a pizza for lunch. I remember very little of who bought the pizza mix or how we made the pizza. But I do remember how we divided it between us. We flipped a coin to determine who would cut the pizza in half. After it was cut, the one who had not done the cutting would pick the half that he wanted. We both had seemingly insatiable appetites for pizza, and each would have been glad to eat the whole thing. Yet we never fought about the shares that we assigned to ourselves in this way.

This story illustrates several things about justice. Justice usually becomes an issue in contexts like this one, in which people's wants or needs exceed the means of their satisfaction. For example, if Billy and I had been given money by our parents to go to a restaurant where people could have all the pizza they could eat for a flat fee, the situation would have been entirely different. We would have developed no rules for dividing the first pizza brought to us, because neither would have been concerned about getting his fair share of that pizza. We would simply have gotten another pizza when that one was finished, and another after that, if need be. We might have been interested in how much pizza we ate, and we probably would have competed with one another to see who could eat the most. But because the supply would have raised no issues of justice between us. We would have taken no measures to ensure that each received his fair share.

The difference that an ample supply can make is illustrated well in the case of water. People need water wherever they live; but water is scarce in some places, ample in others. Where it is scarce, societies have devised elaborate methods of apportioning the water among those who need and desire it. Infringing upon the water rights of another is considered a serious injustice. In societies with advanced legal systems, such as in the United States, the apportionment of water in areas of scarcity is governed by intricate legal rules. But where water is plentiful, the situation is entirely different. In some parts of England, residents are charged a quarterly fee for the maintenance of the water works and sewage installation. The fee does not vary according to the amount of water used. In fact, there is no water meter to determine the amount used. Because there is enough water to serve everyone's wants and needs, people do not care how much they or their neighbors consume.

In sum, questions about justice arise concerning those things that are, or are perceived to be, in short supply relative to the demand for them. In these situations, people are concerned about getting their fair share, and arrangements are made, or institutions are generated, to allocate the scarce things among those who want or need them.

These generalizations are subject to two qualifications. First, the people sharing the scarce good must care enough about what they receive to desire their fair share. When I am sharing a pizza with one of my daughters, I (sometimes) care more about her enjoyment of the meal than about receiving my fair share. (I can always eat some leftovers if I'm still hungry.) Even if there is less pizza than we would like to eat (scarcity). arrangements are not made under these circumstances to ensure that each gets a fair share, nor do I feel cheated if she eats more than I do. However, when those with whom I must share something are not as personally important to me, and when the thing shared is more important, I am more likely to be concerned about getting my fair share. In a drought, I am likely to want my house to be allocated its fair share of water by those at our local utility. Water is very important to me. I am not personally acquainted with most people in my town. I am not so benevolent as to want those among them who are no worse off than I to be given more water than I am given. So limited benevolence is, along with scarcity, an element of situations in which issues of justice arise.

The second qualification is this: Arrangements or institutions designed to allocate scarce things make sense only for those things that people are able to distribute. Billy and I were able to distribute pizza, and the people at City Water, Light, and Power are able to distribute water from the reservoir. But the ability people have to distribute rain, good fortune, and perfect pitch is very limited. These things may be scarce, and people may want their fair shares, but there are no arrangements or institutions designed to allocate them, because people lack the power of distribution.

§1.3 The Free-for-All Response to Scarcity. I have so far discussed the kinds of situations in which considerations of justice arise. They are characterized by scarcity, power over the distribution of what is scarce, and limited benevolence. In these situations, arrangements are often made, or institutions are generated, to effect a just distribution of what is scarce.

[CHALLENGE] But why? People could be left to fend for themselves. A distribution of some sort would result from a no-holds-barred scramble for the objects of people's desires. Some people would get more, others less. The more determined, or less benevolent, or stronger, or quicker, or smarter people would probably get more, while others got less. This system would have a significant advantage. It would no longer be necessary to search for the nature of justice or for acceptable principles of justice. Some philosophers would probably be put out of work, but that would release their energies for more practical pursuits. Perhaps philosophy is, from the practical point of view, a waste of time.

Ever since its inception in the Western world, philosophy has been attacked for its lack of practical significance. In the sixth century B.C., a Greek named Thales became interested in the general nature of the physical universe, for which he later gained recognition as the (Western) world's first philosopher.<sup>1</sup> It is said that he was sometimes so steeped in contemplation that, failing to look where he was walking, he would fall into a ditch. This gave his philosophical vocation a reputation for impracticality. Reacting to this reputation, which he believed to be undeserved, Thales is reported to have used his knowledge of the physical world to predict the arrival of an unusually abundant olive crop. Keeping this knowledge to himself, he bought all the olive presses in the region and was therefore able to make a fortune pressing olives that year. So, the story goes, philosophy can be practical.

This story is not very convincing, but it does serve to indicate the antiquity of the dispute between philosophers and nonphilosophers concerning the practical importance of philosophy. Of particular concern in the present context is *the practical importance of engaging in a philosophical consideration of justice*. Such a consideration is a practical necessity if it is necessary to allocate scarce goods in a manner that most people perceive to be just. But is a system of allocation people perceive to be just really necessary? Why not let each grab all she can get?

[RESPONSE] There are reasons why an apparently just system is a practical necessity. Allowing people to grab what they can with no holds barred would allow people to attack one another in order to gain what they wanted. Everyone would be vulnerable to attack in this state of anarchy. Those who are strong would eventually meet others who are stronger, or a band of people whose collective strength is greater than theirs. The strong might be outsmarted by those who are clever, or the clever beaten to the punch by those who are quick. Everyone would have to sleep from time to time and would then be vulnerable to attack. The seventeenth-century English philosopher Thomas Hobbes concluded that life under these conditions would be solitary, poor, mean, brutish, and short.<sup>2</sup> Avoiding such conditions is clearly a practical necessity.

[CHALLENGE] But does this make an apparently just allocation of scarce goods a practical necessity? It would seem that people could avoid the brutality of what Hobbes called The State of Nature by agreeing to rules forbidding direct attacks upon one another. They could enforce these rules through the might of collective action against transgressors. Within the limits of these rules, a free-for-all could still be allowed. People could have whatever they grabbed first, or were clever enough to convince others to give them, or were industrious enough to make for themselves, and so forth. Some people would get more scarce goods than others, and there would seem to be no need to control the distribution so as to ensure a result that is believed to be just. §1.4 The Need for Coordinated Environmental Restraint. IRESPONSEI Allowing people to make, take, or receive whatever they can get-so long as they do not directly attack, brutalize, or steal from others-will sometimes make scarcity worse, hurting everyone in the long run. Garrett Hardin calls this "The Tragedy of the Commons."<sup>3</sup> Imagine a pasture that can be used in common by many herdsmen. It is a limited resource, but one capable of supplying enough food for the animals that the herdsmen depend upon for their livelihood. Suppose that one of the herdsmen wants to increase his income. He can do this by doubling his herd. He will have to work harder to care for the larger herd, but he feels that the increased income is worth the effort. He is not directly attacking, brutalizing, or stealing from anyone else, so his extra income is earned within the rules that prohibit these things. The pasture is not appreciably damaged by the grazing of these extra animals because, though they double the individual's herd, they do not significantly increase the total number of animals grazing on the common pasture.

Since it is a common pasture, other herdsmen who wish to increase their income are also free to double or triple their flocks. However, as more and more animals graze in the common pasture, the flora is ruined owing to overgrazing. The result is the destruction of the common resource, the pasture, on which all had depended for a livelihood. No one committed barbarous acts against anyone else; yet, while literally minding their own business, they ruined the basis of that business. Their efforts to increase their incomes were self-defeating. In situations like this one, allowing people to take whatever they want of a scarce resource results in its destruction. The appropriation made by each person must be coordinated with those of others to ensure that the collective appropriation is not excessive and ruinous. So in these situations it is practical to determine each person's fair share of the collective good in order to avoid the tragedy of the commons. Such a determination can be made only by reference to an agreed standard of justice. Philosophical investigations into the nature and principles of justice are required.

Many environmental resources are like the pasture in Hardin's story. The oceans, the air, and the ozone layer are as important to our lives as was the pasture to the herdsmen. Yet no one owns them. If, in the pursuit of her own pleasure, gain, or preferred lifestyle, each person is free to use or despoil these natural resources in any way that does not directly brutalize other human beings, everyone will suffer in the long run. The ozone layer, for example, protects us all from solar radiation that can cause cancer. Suppose that the use of aerosol sprays diminishes the ozone layer. No single individual's use of aerosol sprays has an appreciable effect on the layer, so anyone can use such sprays without harming anyone else. But if millions use these sprays over long periods of time, the protection provided by the layer against harmful solar radiation could be significantly

diminished. This could harm everyone, including those who make and use aerosol sprays. So if millions of people would like to use these sprays, some restraint must be exercised. One way of effecting such restraint would be to devise and enforce a system that permits people to use only limited amounts of aerosol spray. But what should the limit be? As in the case of the common pasture, it makes sense for each to be given her fair share, whatever that may be. Practicality again suggests that mutually agreeable principles of justice be discovered and employed in order to determine everyone's fair share.

This reasoning applies to pollution, generally. Whether it is a banana peel tossed from a car window on the highway or a gram of carbon monoxide emitted from the car's exhaust, every litter bit does *not* hurt. It is the concentration of litter bits that hurts, and this concentration usually hurts those who do the polluting as well as others. Our waste products are integral to our life processes. In limited concentrations, they aid the life process as a whole. But our preferred lifestyles and activities tend to generate kinds and levels of waste that pollute our environment and can eventually make it uninhabitable. So restraint is necessary in a great many matters, ranging from our use of the National Parks to our consumption of fossil fuels. And again, when restraint is necessary to preserve the environment, it seems that everyone should receive a fair share, and be restrained to a fair degree, in accordance with reasonable principles of justice. This is environmental justice.

[CHALLENGE] A shared vision of environmental justice may not yet be considered absolutely essential, however. The preservation of the environment requires restraint. If the restraint is sufficient, the environment will be preserved regardless of who makes the required sacrifices. From the environmental perspective, the sacrifice could be distributed very unfairly or unjustly. Philosophical investigations into the nature and principles of justice may be useful, because they facilitate an acceptable distribution of the benefits and burdens associated with the interaction between human beings and their environment. But is an equitable distribution, and the philosophical discussion that facilitates it, really a practical necessity? The environment requires only restraint, not justice.

§1.5 The Necessity of Justice in Voluntary Groups. [RESPONSE] People require justice. They must not feel that they characteristically experience gross injustice.

[CHALLENGE] In a world characterized by so much injustice, it may seem naive to claim that people require justice. Millions of people around the world suffer from malnutrition, and many die of starvation, while other people waste food or are paid to curtail agricultural production.<sup>4</sup> Armed conflicts in the Middle East and in Central America claim the lives of innocent civilians who desire nothing but peace. Some wealthy people in the United States pay no taxes, while middle-and lower-middle-income families are subject to taxation and are hard-pressed to make ends meet. The public education available to some children in the United States is so poor that many who are granted high school diplomas are functionally illiterate, whereas other children are given excellent educations at public expense. These examples suggest that allocating benefits and burdens in an equitable manner is not a practical necessity. The world seems to move along without anything approaching justice. It would seem that people do not really require justice.

[RESPONSE] But in many ways and in many circumstances people do require justice, or a reasonable approximation of it. Recall the division of the pizza between Billy Rohmann and me. If I had grabbed two-thirds of the pizza, instead of attempting to share it equally, Billy and I would not have gotten along very well. Feeling that he had not gotten his fair share, Billy might have stolen my baseball cap or gone home quickly after lunch in order to have something more to eat. Repeated actions on either's part that the other considered to be unjust would eventually have destroyed the friendship.

Perceptions of injustice figure prominently in many divorces. One spouse feels that the other has an unjustified monopoly over the family's spending decisions. A woman may feel that she is required to bear more than her fair share of child-rearing responsibilities. One spouse may feel that it is unfair for the family to spend more time and money visiting one set of relatives than the other set. Divorces are, of course, sometimes motivated by considerations other than perceived injustices. But such perceptions are often influential, and sometimes determinative.

Many voluntary relationships are based on love or on sacrifice. But even such relationships as these can be and usually will be upset when one or more parties comes to consider the relationship inherently unjust. Friendships are voluntary, and marriages, though legally recognized and binding, are also mostly voluntary. Divorce is usually possible. Sooner or later, the perception of injustice will usually break the psychological bond that is the core of a voluntary relationship, and almost all relationships are to a significant degree voluntary.

§1.6 The State Seems Not to Require Voluntary Cooperation. [YOU KNOW WHAT] At first glance it may not seem to be true that almost all relationships are to a significant degree voluntary. The relationship of a nation's citizens to their government and, through their government, to one another, may not seem to be voluntary at all. Except for immigrants, who may voluntarily place themselves under a nation's jurisdiction, people live in the country of their birth, which they had no part in choosing. The legal possibilities for

emigration are limited and, since every place on Earth is under the jurisdiction of one government or another, emigration does not in any case allow for the possibility of escaping the rule of law. So living under the rule of law, subject to some government's jurisdiction, is required of everyone. It is not at all voluntary.

The rule of law is coercive. The most influential definition of the state was given by the sociologist Max Weber.<sup>5</sup> He defined the state as that organization which claims the right to make final determinations concerning the use of force in society. This does not mean that the state allows only legal officials to use force. Parents can spank their children, defensive ends can tackle quarterbacks, and employers can lock out employees during a job action. But the state reserves the right to determine how far these uses of force are allowed to go. Parents may be prosecuted by the state for child abuse if they go too far. Defensive ends may be prosecuted for assault if they rip the quarterback's helment off and punch him in the nose. The nation state has laws that set limits to the force that others are allowed to use. It enforces these laws with force, or with the threat of force. No organization in society limits the state 's use of force the way that the state limits others' use of it. So the state is the supreme organization in society through its control over the use of force.

What is forced or coerced would seem to be the opposite of what is voluntary. If I am forced by someone holding a knife at my back to give ten dollars to United Way, my gift is not voluntary. If I am forced by threat of dismissal from my job to work a Saturday shift, this usually means that I did not choose voluntarily to work that shift. Similarly, if the state forces me by threat of imprisonment to pay taxes, refrain from stealing my neighbor's car, and avoid trespassing on government military installations, my compliance would also seem to be nonvoluntary.

In sum, since I am required to live in one country or another, and countries coerce their residents by threat of force to obey their laws, one very important organization in society seems not to be based upon voluntary cooperation. Using friendships and marriages as examples, I had noted earlier that voluntary relationships are stable and continuing only when the parties to a relationship perceive themselves to be treated in a reasonably just manner. I maintained that almost all relationships are to a significant degree voluntary, implying that in almost all relationships, the participants must perceive themselves to be treated with a reasonable degree of justice. This would make investigations into the nature of justice, and agreement on its principles, a practical necessity. Now, however, it seems that the relationship of people to their governments is based on force rather than on voluntary cooperation. Since the relationship is not voluntary, it would seem that the government can ignore considerations of justice. It can obtain by force, or by the threat of force, whatever cooperation is necessary for people to live together in a single society. It can use force to insure that people curtail the use of aerosol sprays so as not to damage the ozone layer. It can coerce people by fines or threats of imprisonment into installing scrubbers on their smokestacks so as to reduce harmful air pollution. It can similarly use force to limit access to national parks so that wilderness areas are preserved. Whatever the environmental problem, the state seems capable of preventing the recurrence of an episode like the tragedy of the commons by using force or the threat of force. People must restrain themselves or be restrained if the environment is to remain habitable. Environmental restraint is a practical necessity. But if this restraint can be accomplished by force rather than by voluntary cooperation, environmental justice may not be necessary. It may be replaced by environmental force, by which I mean force that is applied without any regard for principles of justice.

[LAST HINT] I will now explain why a complete replacement of justice by force is not possible among human beings. Force is sometimes necessary, but it is never sufficient. Human cooperation must be to a large degree voluntary, and voluntary cooperation requires that people agree upon general principles of justice. Practicality therefore requires that these principles be investigated. I will use the nation state, which is defined in terms of its ability to use force and control the use of force, as an example of an organization in which force is not sufficient. A sense of justice is also required. If this is true of the nation state, it will be true of almost any organization.

§1.7 The Vulnerability of Modern Societies. It is an essential condition of a nation state, especially of one that seeks to provide some liberty for its people, that the vast majority of people perceive the divisions of benefits and burdens to be reasonably just. The importance of this condition, like the importance of many essentials, is most clearly evident when the condition is not met. Consider, for example, the situation in Northern Ireland. In the mid-1960s, the condition of Catholics in Northern Ireland resembled that of blacks in the south of the United States. They went to separate schools, received poorer educational opportunities, had lower incomes, were discriminated against in employment, and held fewer government jobs. A movement of peaceful protest against these conditions was begun in the late 1960s. It was modeled on the protests of Martin Luther King, Jr., in the American south. Unlike the government of the United States, which compromised with the civil rights movement, the British Government made few concessions. Many Catholics in Northern Ireland lost faith that a reasonable degree of justice could be obtained by working through the system, so they began to oppose the system with force.<sup>6</sup> Relative to the Royal Ulster Constabulary and the British Army, these people have very little force. But it is enough to be devastatingly

disruptive, because modern societies are vulnerable. It is unlikely for this reason that even the most authoritarian measures would suffice to completely eliminate the IRA as a disruptive force. But even if authoritarian measures were sufficient to do this, how many of us would like to live in an extremely authoritarian state? Vulnerability can easily give way to repression when there is no concensus about justice.

Let us examine the roots of this vulnerability. Industrial societies contain more division of labor than do agricultural or technologically simpler societies. Productivity is increased partly by people specializing in areas of work. This enables them to become more expert at a given task than they could become were they required to learn many different skills. Such expertise is made necessary, also, by technological innovations. Many of these innovations, designed to increase productivity, require that workers have increased levels of knowledge and skill. Not only is the method of production more complicated-and, therefore, more difficult to understand-it is also extremely expensive. Workers must be skilled enough not to mess it up, and other workers must be skilled enough to repair it when it breaks down. Production tends also to be geographically concentrated. Many things can be produced more cheaply per unit when a large number of units are produced in one location. What is produced in one location is often a constituent part of something produced in a different location. The tires for a car assembled inDetroit may be made in Wisconsin.

All of this specialization, expensive technological innovation, and geographic concentration creates an important, unintended by-productvulnerability, especially vulnerability to terrorism, obstruction, and other forms of noncooperation. People whose skills are specialized must depend upon others to supply most of their needs. Many good dentists do not know how to grow a garden, fix a car, or build a house. They must depend upon others for these things and are therefore more vulnerable than were their pioneer ancestors, for example. Almost all of us are similarly dependent and vulnerable. The geographic concentration of production makes everyone dependent upon the transportation system. If a product that we all need is made in only one or two parts of the country, our lives can be jeopardized by a disruption of transportation between those areas and the areas where we live. Recall the obstruction of the French highways by truck drivers in February 1984.7 They were protesting (primarily) delays at the Italian border, and the price of fuel. Their perception of injustice made the Alps inaccessible by car, causing many French citizens to miss their winter skiing vacation. The alpine resort industry suffered badly. Throughout France, fruits and vegetables rotted on the clogged highways because no one could bring them to market. Produce became scarce in food stores. Fifty-one thousand automobile workers were laid off due to a lack of parts. Had the obstruction continued, more factories would have closed for want of parts. The entire economy could have been crippled.

Technological innovations increase our vulnerability in more than one way. They foster the establishment of vulnerable physical facilities and styles of life. For example, advances in metallurgy, architecture, and so forth have enabled us to build skyscrapers. If there is a loss of electricity, one does not have access to an apartment on the seventieth floor as one does to a technologically simpler dwelling on the ground. The style of life in the United States prominently features use of the automobile, another technological innovation of the past one hundred years. Our home, work, and recreational areas are spaced in such a way as to make a car a necessity rather than a luxury for most Americans. The unavailability of gasoline or spare parts can therefore have a crippling effect. Technological innovations increase our vulnerability also by making available powerful methods of destruction that can be transported and used by almost anyone. Almost anyone can buy and use a gun, or make a bomb powerful enough to kill many people and destroy physical facilities upon which many more depend.

Of course, technological innovations also enhance the ability of governments to detect and capture or destroy those who would be disruptive. Bugging devices, helicopters, and guns can and are used by those dedicated to the preservation of order. But these uses of technology do not make our social existence safer from sabotage than it was in technologically simpler times. Compare the vulnerability of social life today with that of a hunter-gatherer group eons ago, or a farming community in the Middle Ages. These groups were vulnerable to drought, pestilence, and invasion. Our vulnerability to these things is perhaps less than theirs; but our vulnerability to dissidents in our midst is greatly increased. How much damage to the social fabric could be done by one or a few dissident medieval farmers? Armed with knives, spades, or swords, the dissidents could possibly kill a few people before they were overwhelmed by others, but they could not kill many, much less could they cripple the economy. The economy was based on the soil. They could hardly cart it away. In any case, nearby villages would not be affected at all. Today, on the other hand, several terrorists with trucks full of explosives could seriously disrupt the economic lives of millions of people by blowing up several related electric power installations. An attack on a nuclear power plant could spread radiation that would jeopardize many lives over a large area. Less extreme activities can also be crippling. The obstruction of highways has already been mentioned. Strikes can also be significant. Many thousands of people can be thrown out of work when a large car manufacturer is forced to shut down due to a strike at a relatively small subsidiary company. The unemployment of these people can have a rippling effect throughout the economy.

 $\S1.8$  The Necessity of Justice in the Social Order. As the damage that a small group of people can inflict on the social fabric increases, so does the necessity of keeping almost everyone in the population mollified, if not happy. Almost everyone must be convinced that their own stake in the social order is sufficient to justify playing ball with the establishment. This requires that people's sense of justice be not greatly outraged, because people want changes to be made when they believe that they are being treated unjustly. If they become convinced that changes will not be made, some will sooner or later cease to cooperate in the maintenance of social order, and they will take action to disrupt it. And, as we have seen, the actions of relatively few people can have wide-ranging effects. Force and the threat of force are necessary for the maintenance of order, but they are not sufficient, especially if any civil liberties are to be maintained. It is difficult for a government to intimidate or incarcerate all of those who become revolutionaries or cooperate with revolutionaries when the social order is perceived to be extremely unjust. This is the lesson of Northern Ireland.

Most Catholics in Northern Ireland are not terrorists. But the relatively few terrorists are given active support by those who hide them, and passive support by those who fail to report IRA activities to the authorities. Intimidation by the IRA may be an important factor in the failure to report, but a critical mass of people participating in and cooperating with IRA activities is essential for such intimidation to be effective. This is why the Symbianese Liberation Army was not able to intimidate large sections of the population in the United States.

In sum, if a modern, vulnerable social order is perceived by a significant percentage of its members to be irremediably and grossly unjust, it can be crippled or destroyed by relatively few people, with the active and passive support of others. This has happened in Northern Ireland. The application of force is inadequate to prevent this. The modern social order requires the voluntary cooperation of the vast majority, especially in a relatively free society. In order to receive this cooperation, the social order must be perceived as tolerably just. Discussions of the nature and principles of justice are therefore a practical necessity.

There are, of course, exceptions to the rule that a social order must be tolerably just. Some of these have already been mentioned. There is no justice in the fact that millions of people go hungry while millions of others waste food, or that innocent people are killed in civil wars. In these cases, the victims are powerless to affect the situation. This is why injustice can be perpetrated with impunity. Those committing the injustices are almost completely invulnerable—at present, at any rate—to retaliation from those who are suffering the injustices. Starving Africans, for example, are not part of an industrial society which can be sabotaged, and they have none of the physical means needed to engage in sabotage. Similarly, in the midst of a civil war in Central America, the social order is already so disrupted by the war that acts of terrorism, like those in Northern Ireland, have little effect. There is no industrial social order to disrupt. These exceptions serve, then, to prove the rule that an industrial social order, because it is highly vulnerable to attack from within, must be perceived as tolerably just by the vast majority of its members.

The rule might seem to be disproved by other exceptions that have already been noted. In the United States, some rich people pay little or no tax, while the middle class is burdened with taxation. Some children do not have decent public education available to them, while others have excellent educational opportunities. In addition, the average earnings for a gainfully employed woman are less than 60% of that for a man.<sup>8</sup> Black families earn considerably less than what is earned by white families.<sup>9</sup>

These examples are noteworthy because they are controversial. Many people in the United States, including many poor and middle-class people, many women and blacks, do not believe these to be examples of genuine injustice. Women and blacks earn less than men and whites. According to many people, this is because men and whites perform jobs that are more essential, require greater skill and training, or involve more responsibility than the jobs performed by women and blacks. Rich people deserve extra tax breaks because they are the country's most productive citizens. Their work helps to keep millions of others employed. Taxing them heavily would amount to killing the goose that laid the golden egg.

This is a justification of the status quo in the United States. It is controversial because many people would reject it or accept it only in part. There is a lack of consensus on principles of justice. As I noted in Chapter 1, this book contains examinations of alternate, competing theories of justice and principles of justice. Disagreement concerning these theories and principles lay at the root of disagreement about some examples of injustice, and about justifications of the status quo. I maintain in these chapters that people not only disagree with one another, but that most of them are also ambivalent. They can see and sympathize with more than one point of view, because they respect the principles that lay behind two or more competing views. In addition, most people, even when convinced that some aspect of the status quo is unjust, are unwilling to support radical disruption. They believe that the status quo is in most respects tolerably just, and they fear that disruptive attempts to eliminate pockets of injustice will create more injustice than they eliminate. They also believe that the status quo can be altered without the use of radical disruption. Reform is possible within the basic guidelines of the establishment. Finally, their own life situations are far from desperate. The vast majority of Americans believe themselves to have adequate food and tolerable housing. Given these beliefs, they are not willing to engage in or to support terrorism.

In sum, we live in a society that many believe to be characterized by

significant injustices. The society is vulnerable to radical disruption from within. But beliefs concerning justice are sufficient to mollify the vast majority of people so as to dissuade them from engaging in or supporting terrorism.

Education and Propaganda. For order to be maintained in a modern **δ**1.9 society, it is essential that the populace perceive the institutions of that society to be reasonably just. Force is also necessary for the maintenance of order, but it is not sufficient. Modern regimes are aware of this, and they take pains to cultivate the voluntary cooperation of their people. Compulsory education in state-approved schools exists in every modern industrial society. Principles of justice are taught in these schools, along with lessons in history and the social sciences. Together, they are designed to show that the social order is essentially just. Some instances of apparent injustice are shown to be instances of justice, when properly understood. Other instances of apparent injustice are said to be transitory. Things are much better than they used to be, and the society's institutions, if allowed to operate properly, are sufficient to gradually eliminate these remaining injustices. People should be patient. This outline of reasoning is as applicable to the education provided in the United States as it is to that provided in the Soviet Union.

In several ways, governments foster appreciation for the country's foundation and preservation. The celebration of Independence Day, for example, is designed to impress upon the populace the improvement in the world that occurred on that day. The implication is that, since the government represents a clear improvement over what came before, it is worthy of allegiance. Celebrations of the American, French, and Russian revolutions share this theme. The currency in many countries contains depictions of revolutionary events or portraits of revolutionary leaders. In school, the lives and accomplishments of these leaders are featured repeatedly in history lessons. Every regime realizes that its continuity depends upon the allegiance of its people, so steps are taken to win their hearts and minds.

In his novel 1984,<sup>10</sup> George Orwell stresses the importance that even the most totalitarian and physically coercive regime places on people's perceptions. The propaganda of the regime in 1984 is designed to depict the government as always concerned with the welfare of the people. Though hard-pressed by foreign wars, it is making progress in its campaign to provide more and better consumer goods. Individuals are publicly commended in the media for their contributions to the nation's welfare. Most directly related to perceptions of justice, the government provides its people with a political philosophy, ENGSOC, which is designed to explain what justice is and how the regime is the world's most effective force for its realization. Thus, governments in fiction as well as reality recognize the need to provide justice-related instruction designed to convince people that the policies and institutions of their society are reasonably just.

In sum, few topics are of greater importance than the topic of justice. When the conditions of justice exist (there is scarcity relative to people's wants or needs, there is power over the distribution of what is scarce, and benevolence is limited), people are required to forego at least some of what they desire or need (more than benevolence suggests) in order better to accommodate the needs and desires of others. For many people, it is psychologically difficult to submit under these conditions to restraints imposed by other human beings. When such restraints are deemed intolerable, antisocial behavior, even if only by a minority, can degrade considerably the general level of well-being in a modern society. Restrictions imposed by force are insufficient to contain such antisocial behavior (except, perhaps, when used to impose measures that are so draconian as to be equally destructive of the social fabric and prejudicial to human well-being). People must be convinced, then, to tolerate and to submit (somewhat) willingly to restraints that exceed the promptings of benevolence. The perception that society's institutions and policies are reasonably just is necessary for such (relatively) willing submission to restraint. So when the conditions of justice exist, few topics are of greater practical importance than the topic of justice.

§1.10 The Need for Environmental Justice. The conditions of justice recur frequently with respect to the environment. Arrangements must often be made to allocate access to activities and commodities so as to insure that the uses people make of the environment are compatible with one another, and with the environment's continued habitability. For example, it is now widely believed that burning large amounts of coal that contain significant quantities of sulfur results in acid rain.11 This rain is blamed for the defoliation of forests in the northeastern United States, southeastern Canada, and southern Germany. Many people use these forests as sources of recreation. They are also used by the lumber industry, and serve to retard soil erosion. So there is pressure to decrease significantly the amount of high sulfur coal that is burned, or to require that smokestacks of furnaces using this coal be fitted with scrubbers that prevent a very high percentage of the sulfur from escaping into the atmosphere. The coal is burned hundreds of miles away from the affected forests. It is used to power factories and to provide people with electricity. Significant reductions in the use of this coal would adversely affect the owners of the mines from which the coal is extracted, as well as the workers in those mines. The factories that currently use this coal would have either to use alternate, usually more expensive fuels, or else install expensive scrubbers. Either

course would make their products more expensive. Products that become too expensive will no longer be marketable, and the factories that produce them will have to shut down, putting many people out of work. Electricity that is produced for household consumption would have to become more expensive for the same reasons.

Because the areas where the mines are located and where the coal is used are so far from the areas where the forests are damaged, the people who benefit from the current use of high sulfur coal, and who would be adversely affected by proposed changes, are for the most part different from the direct beneficiaries of forest preservation. Their interests are opposed. The more that one group gets of what it wants, the less the other group can get. The two groups are in this respect situated as Billy Rohmann and I were with respect to the pizza. The more he got, the less I would get, and the more I got, the less he would get. Each wants to get his fair share. Decisions of public policy are required concerning the use of high-sulfur coal. People will not feel well-served by their government if this policy, which could put them out of work, or result in a mud slide covering their houses, is not clearly defensible. People will want to know why they should have to make the scarifices that are required of them, and how these sacrifices compare to those that are required of others. The government will have to employ defensible principles of justice in fashioning its environmental policy if those affected by it are to believe that the sacrifices required of them are justified.

The same is true of most other environmental policies. They require people to make important sacrifices. Many policies are designed to deal with situations resembling the tragedy of the commons. As already noted, the air we breathe is like the commons. Uncontrolled automobile emissions of carbon monoxide would jeopardize the health of many people, especially children, the aged, and those with emphysema. Emissions could be reduced by improving mass transit systems at public expense, on the assumption that the use of mass transit would then replace some automobile use. The improvement in air quality would in this case be paid for by the taxpaying public. This may seem equitable, since clean air is a public good. But members of the public would not benefit equally from this policy. Those living in urban areas would benefit most for two reasons: The air quality would be improved most in those areas, and urban residents would have available inexpensive public transportation. Should all taxpavers have to pay for benefits that accrue disproportionately to urban residents?

Alternatively, automobile emissions could be reduced by placing heavy taxes on gasoline, thereby discouraging its use. The improvement in air quality would be more widespread, because automobile use would be reduced generally, not just in urban areas. But do rural areas require such improvement? And are the burdens allocated equitably? On this plan, the user pays. This would hit hardest lower-income people and those in rural areas who must use their cars to get to work. Rich people would be virtually unaffected.

Many other plans could be devised to reduce air pollution caused by automobile emissions, and various plans can be combined with one another. Although all are aimed at reducing air pollution, each plan, and each combination of plans, benefits different people and/or places different burdens on different groups. Because these benefits and burdens can be significant, it will be necessary to assure people that they are receiving their fair share of benefits and are not being required unfairly to shoulder great burdens. The social fabric will not be destroyed by any one environmental policy that is perceived to be unjust. But the number and extent of environmental policies has increased and will continue to increase considerably. The perception that these policies are consistently biased in favor of some groups and against others could undermine the voluntary cooperation that is necessary for the maintenance of social order. Voluntary cooperation is especially necessary if the social order is to be maintained in a relatively open society where authoritarian measures are the exception rather than the rule. Thus, because social solidarity and the maintenance of order in a relatively free society require that people consider their sacrifices to be justified in relation to the sacrifices of others, environmental public policies will have to embody principles of environmental justice that the vast majority of people consider reasonable.