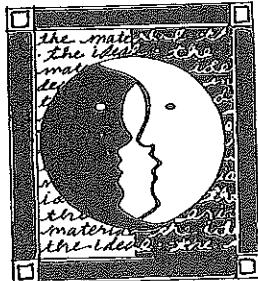


CHAPTER 10



Organizing the Ecological Society

There is no wealth but life.

—John Ruskin, 1863

I own a car. I admit it. And I often use it. I live in an 1,850-square-foot house with four bedrooms, plus two bathrooms. It is not a solar house. We also own a share in a vacation house on the St. Lawrence River. My family owns a washing machine, a television, a stereo system, an answering machine, several phones, three clock radios, and two laptop computers. I own nine pairs of footwear of various sorts; nevertheless I just bought another pair. Our closet is filled with clothes we rarely wear, and yet we buy more. We have loads of books. I'm a semi-pro musician on the side, so we have a small orchestra of musical instruments, including a piano. We also have a range of shop and yard tools, bicycles for everyone in the family, a kitchen full of dishes and cookware, and a house worth of furniture. We moved to a new state recently, and the bill of lading from the moving company came to about 12,000 pounds. Plus, at the vacation home there is another houseful of furniture, another collection of tools, and another collection of dishes

and cookware—not to mention seven boats of various sorts, a pile of recreational gear, and a boathouse to fit them all during the summer and an old barn to store them all during the winter. That's a lot of stuff, an awful lot of stuff. And we have two children.

So how could I fancy to call myself an environmentalist—let alone an environmental sociologist?

There are a few things I could point to in my defense. My wife and I do own only one car, a 1995 used model. (We recently sold our previous car, an 18-year-old one. Reuse is as environmentally important as recycling and reduction.) We've been averaging 8,200 miles a year of late, 4,100 per driver, well below the U.S. average of 13,673 annual miles per driver.¹ We bicycle to work (it's about 2 miles each way for both of us), and we bike for most of our shopping, even in winter (which gets pretty forbidding in Wisconsin, where we now live). We made sure to buy a house in a location that was relatively convenient for bicycling, and also for getting around by bus when the weather is bad. Although we own a washing machine, we use a solar-powered clothes drier in the summer—a clothesline, that is—and a line strung across the basement in the

winter. The television lives in the closet. It's just an old 17-inch model we picked up at a yard sale once. (You can't even hook cable to it.) We've watched it once in the past year, as far as I can recall. The kids can use the TV whenever they want to, but they're not much interested in it. As it's not out in a room, they don't think of it often. They easily enough find amusement in other ways.

Let's see . . . what else? We have no microwave oven, no cell phone, no VCR, no camcorder. There was a dishwasher already installed in our new house, but we hardly ever use it—once a month at most, if we've had a lot of company over. There was also central air conditioning installed, like almost every home in our neighborhood. But we've used it only once in the year and a half we've lived here, for about an hour, again when we had some company over. (It was a hot day and we were hosting a reception. Besides, we did think it a good idea to make sure it still works, should we ever decide to sell our house.) We keep no cupboard or closet full of household poisons. We grow some of our own vegetables during the summer, all organically, and we mow our small lawn, which is also organic, with a manual reel mower. We compost all our leaves, garden waste, and kitchen waste. The previous owners of the house installed a "rain garden" to promote infiltration and groundwater recharge, thus lessening the storm water and pollution load on the beleaguered lake in the park near our house. (The sewers for our neighborhood all dump into that poor little lake.) We use energy efficient light bulbs almost everywhere in the house, and we're very good about turning them off when a room's not in use. Our furnace is a high-efficiency model, and during the heating season we keep the thermostat at 62 degrees Fahrenheit for the day and 56 degrees Fahrenheit when we go to bed and when we're out, although we sometimes bump it up a degree or two in the evenings. All told, we use about 285 kilowatt hours of electricity a month, less than half of the 624 average for all households in Madison, Wisconsin, our city.² Considering that my household size is almost

double the Madison average of 2.19, we use about 25 percent as much electricity per person as the average local resident does. And we pay an extra fee with our local utility to support the small wind farm they've bought into. Our gas use is quite low; our local utility puts us in their "excellent" category in terms of BTUs of gas use per square foot. Although we do have a lot of books, as well as a few CDs, we've pretty much stopped buying them now. We use the library instead. (We pop down to our local branch several times a week.) We're avid recyclers too. We produce about a paper shopping bag of non-recyclable garbage a week, which isn't bad for an American family of four. And we aren't having any more kids.

I'm not a complete sinner, I think, but I'm certainly no environmental saint either. According to an online "ecological footprint" analysis I worked through once, my footprint is 16 biologically productive acres, in comparison with the U.S. average of 24. Not bad, huh? But according to footprint analysts, there are only 4.5 biologically productive acres per person on the planet. If everyone lived like I do, we'd need 3.6 planets, the site informed me.³ So, am I just another environmental hypocrite, big on the guilt trip and fairly small on action, mostly talk and little walk?

From a certain political perspective, yes. As that is a perspective I share—the perspective of the committed environmental moralist—my environmental inadequacies often pain me deeply. Yet from a sociological perspective, my situation does not necessarily indicate some deep personal moral failing. In fact, to the extent that my situation is typical of others, it represents some important opportunities for social and environmental change. It suggests the possibility of collective action toward making a society that more closely resembles what we say we want it to be. And indeed, the overwhelming majority of the public in both rich nations and poor are concerned about the environment, even though very few could be said to have yet put that concern into full action. This concluding chapter considers these opportunities for change, closing the

dialogic circle of the matter perhaps, better put, opening on the practical implicative sociology.

The A-B Split

Social psychologists have long noted often a sharp disjunction between what we profess to value and believe and what we actually act.⁴ The A-B split, as it is commonly standing for "attitude-behavior," is a characteristic that probably all of us exhibit to some degree. Often people are able to bring some of these inconsistencies into the behavior side to fit in with their attitudes at times, social psychologists have found. We adjust our attitudes to fit our behavior, and adjustments also go on in the other direction. A classic example of this process is the finding that parents who started raising families at a certain point in their careers often became more conservative in their attitudes—and enacted those attitudes more fully than they had been in the decade or two earlier.

But the point of the A-B split is that these 1960s radicals were not necessarily all the same. Nor necessarily are all the same now. We have adjusted what we believe to fit what we do. We have gone on doing things that we believe. It is very interesting to consider the sense of an A-B split. It strikes at the very core of who we are. Understanding the A-B split avoids conscious recognition of the mismatch, if they can. If they try to adjust their attitudes accordingly—which is a common response to an A-B split—it is a source of conflict. Contrary to the stereotype of the hypocrite, such a split is not something which most people feel.

The sociological point of view is that the main reasons people fit into an A-B split are

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dialogic circle of the material and the ideal—or perhaps, better put, opening it up—with a focus on the practical implications of environmental sociology.

The A-B Split

Social psychologists have long noted that there is often a sharp disjunction between what people profess to value and believe and how they really act.⁴ The *A-B split*, as it is sometimes called, standing for "attitude-behavior split," is a characteristic that probably all of us share, at least to some degree. Often people consciously recognize some of these inconsistencies. We work to adjust the behavior side to fit our attitudes, and sometimes, social psychologists find, we work to adjust our attitudes to fit our behaviors. These adjustments also go on unconsciously. One classic example of this process is the way 1960s radicals often became more conservative when they started raising families and entered the world of business. They found themselves taking on the very attitudes—and enacting the very behaviors—that they had been in the streets protesting a decade or two earlier.

But the point of the A-B split is not to suggest that these 1960s radicals are therefore hypocrites. Nor necessarily are all the rest of us who have adjusted what we believe to what we do, or who have gone on doing things that in fact do not fit what we believe. It is very hard to maintain a conscious sense of an A-B split. Such inconsistency strikes at the very core of our identity, our sense of who we are. Understandably, people tend to avoid conscious recognition of an ideological mismatch, if they can. But often they can't, and they try to adjust their lives and their thinking accordingly—which is also hard. In other words, an A-B split is a source of internal struggle and conflict. Contrary to the image of the complacent hypocrite, such a split is hardly something about which most people feel comfortable.

The sociological point here is that one of the main reasons people find their attitudes at odds

with their behaviors (and often find themselves adjusting those attitudes to fit or putting the conflict out of their mind as much as possible) is social structure.⁵ We do not have complete choice in what we do. Our lives are *socially organized*, with all the constraints that this implies. I own a car and use a car because the automobile-based planning of the past 50 years has led to the scattering of businesses, shopping, schools, parks, and homes. Our city has, for the United States, a pretty good system of bike paths, and an okay bus system. But they can't make up for the structured inconvenience of sprawl, so I often feel strongly pressured to use my car.

Social organization, however, also presents us with opportunities. When we as a community consider our collective attitudes and our collective behaviors—when we consider the ideal and the material implications of the current arrangement of our social and ecological lives—we have an opportunity to reconsider them as well. The social organization of our communities may be a large part of our problems, but the *social reorganization* of our communities can be a large part of the solutions. We can create new social structures, new constraining influences that shape and guide our lives.

Social structures are not necessarily bad things. It depends on what they guide us into doing. Social structures do not necessarily create the A-B split (or what is really an ideal-material split). Properly rearranged, properly reconsidered, social structures can help heal the splits in our communities—including that biggest community of all, the environment of which we are (thankfully, I say) an inescapable part.

Virtual Environmentalism

But it's never easy.⁶ People are busy, terribly busy, caught as we are on the treadmills of production and consumption. Although we are surrounded by modernity's supposed inducements of choice and leisure, modernity equally induces us into a treadmill-driven rush from home to work to the

point that work becomes home. And when we come home—late, probably—we're still in such a rush that what we do at home becomes work, as the sociologist Arlie Hochschild observes.⁷ The supper has to be cooked, the dishes done, the children put to bed, the toys picked up, the floor swept, the clothes washed, and the bills paid.

When work becomes home and home becomes work, daily decisions have to be made fast. This isn't going to change soon. And if being an environmentalist means a lot of extra thought about the consequences of each act of consumption, if it means delaying buying decisions for days or weeks or months while you track down suppliers of environmentally friendly products, then daily decisions are unlikely to be made with the environment in mind. Environmentalism on these terms is unlikely to become a significant part of everyday life in a modern world. Our daily experience is too full already.

What we need, then, is what might be termed *virtual environmentalism*—environmentalism you don't have to think about because you just find yourself doing it anyway. Virtual environmentalism is environmentalism that lies behind and beneath our daily lives. Like environmentalism in the usual sense, virtual environmentalism is taking your bicycle to work, buying food produced with sustainable production methods, replacing old appliances with energy efficient ones, and using less heating, cooling, construction materials, and water. But virtual environmentalism means doing these things not because you've made a conscious decision to be environmentally good today, but because they were the cheapest and most convenient things to do. Virtual environmentalism is being environmentally good without having to be environmentally good.

I think it is safe to say that virtual environmentalism is a lot more likely to be popular with the general public than environmentalism by guilt, cajoling, shaming, issuing court summons, imposing fines, and locking offenders in jail. But it will only become popular if we change the structures of the cheap and the convenient by reorganizing the social organization of production

and consumption. Environmental problems are problems of society, and problems of society require social solutions.

Social reorganization usually requires a terrific effort. But when you do reorganize society, you've really done something, something lasting and important—precisely *because* it is so hard to do. If social reorganization were easy, it probably wouldn't be social reorganization at all. But it can be done. And it is done, all the time. But you have to do it. We can become environmental without trying—but only if we try.

The Problem of Collective Action

What it takes is cooperation. One does not need to consider the matter closely, however, to recognize that human groups very often fail to act for the collective good.

The Tragedy of the Commons

The biologist Garret Hardin, in a famous 1968 article, "The Tragedy of the Commons," described the problem in stark terms. Imagine you are a shepherd grazing your sheep on your village's common pastureland, back in the hills above the village. As a member of the village, you have the right to graze your sheep there, just as every other village member does. You've got only 10 sheep, though, and after a while you think, "Well, I'd be a bit better off if I added a few more to my flock." Meanwhile, your fellow villagers are thinking the same thing about their own flocks. Pretty soon, as everyone adds a few more animals, there are a lot more sheep in the common pastureland.

The pastureland is only so big, though. Eventually overgrazing occurs. The grass cover gets thin, and the land starts to erode. Everybody's sheep start to die. You wind up with fewer sheep than you began with, and the eroded common land is no longer capable of supporting

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Commons

Hardin, in a famous parable of the Commons," in stark terms. Imagine your sheep on your land, back in the hills above the village, you put your sheep there, just as other does. You've got only after a while you think, off if I added a few more sheep, your fellow villagers are about their own flocks. He adds a few more animals to the common

only so big, though. This occurs. The grass cover starts to erode. Every year you wind up with fewer sheep, and the eroded land is no longer capable of supporting

as many sheep as it originally could: economic and environmental disaster.

Here's how Hardin, rather melodramatically, described the situation:

The inherent logic of the commons remorselessly generates tragedy.... The rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another; and another.... But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit—in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons.⁸

Hardin intended this parable as a master allegory for all environmental problems. Three examples he mentions in the article are traffic, pollution, and overfishing. Think of streets as a kind of commons, something we all collectively own—which, in fact, they are. As a member of the community, I am free to drive on my city's streets as much as I want. But what if everybody decides to get about this way? The result is traffic jams, smog, and the loss of alternatives as mass transit shuts down.

Or think of the lake where your summer cabin sits as a kind of commons. It's expensive to put in a good septic system, and it wouldn't hurt you much to flush into a shallow leaching field close to the water's edge where, as it happens, it would be the cheapest and easiest place to put the field. The lake is pretty big, and it can handle a little bit of pollution. Besides, it would be hard for anyone to determine that you're the one with the shallow leaching field close to the shoreline. Lots of cabins ring the lake. But what if everybody on the lake did what you're doing?

The oceans are a commons too. If I fish for a living, I might as well cast as big a net as I can.

What I do myself won't have that much effect on overall fish stocks. Anyway, the other fishers are probably going to do the same, right? And soon the fish are gone.

Hardin's analysis is far from perfect, as I come to in a moment. But it is hard to ignore the fact that traffic jams are on the rise. In 1996, for example, there was a spectacular traffic jam in central London—8 hours of gridlock, involving an estimated 250,000 cars.⁹ Smog is also up worldwide, and mass transit is down. Many recreational lakes have been badly polluted by their users. Fishing stocks are in terrible shape in many parts of the oceans and have simply collapsed in the Grand Banks and Georges Bank, leaving hundreds of fishing communities from Newfoundland to New England economically devastated.

These are all examples of a more general class of circumstances, what social scientists call the *problem of collective action*: In a world of self-interested actors, how can we get people to cooperate for their own benefit? Individual actors pursuing their rational self-interest often lead us to irrational collective outcomes that in fact undermine the interests of those who enact them. The result is a striking paradox of social life: We often do not act in our own interests when we act in our own interests. Or, to put it another way, when we all do what we want, it often leads to outcomes nobody wants.

Why It Really Isn't as Bad as All That

Hardin's account of the "tragedy of the commons" remains one of the most discussed theories in environmental sociology, even 30 years after it was written. The phrase "tragedy of the commons" is familiar to many in the general populace. Academics regularly employ it in analyses. In a quick search of the databases at my university library, for example, I found dozens of recent academic articles that discussed the concept. In as specialized a realm as academia, this

is a lot. Several of these articles extend the allegory of the commons far beyond environmental concerns, applying it to analyses of management-employee relations, prisons, and political action committees.¹⁰

Much of the reason for the continuing attention, though, is to point out how spectacularly oversimplified and overstated Hardin's allegory is and how it diverts attention from some fundamental social processes at work in environmental problems.¹¹

To begin with, Hardin seemed to blame common ownership of resources for the tragedy. But in fact, we can find countless examples of highly successful use of commons for resource management. Grazing lands all across Africa, Asia, and South America; traditional systems of fisheries management in India and Brazil; even the private homes of modern families, which are a kind of commons in miniature and remain a highly popular form of social arrangement—these are just a few of the many examples of generally successful commons management.¹² Indeed, common ownership is the primary way that people have managed their affairs for centuries. And it has, at least until recent years, largely worked.¹³

Rather than the tragedy of the commons, Hardin's allegory is better characterized as the tragedy of individualism. For what breaks down Hardin's commons is not collective ownership itself but rather the inability (and perhaps unwillingness) of the herders to take a view wider than their own narrowly conceived self-interests.

Herders, in fact, are unlikely to conceive of their interests so narrowly, at least in traditional commons. For one thing, Hardin assumes that no one will notice the overgrazing until it is too late. But herders out there in the pasture every day with their sheep are likely very quickly to note the deteriorating condition of the grass. For another thing, Hardin assumes that the herders do not communicate with one another. More likely, as soon as the herders notice the beginnings of overgrazing, they will walk over to each other's houses in the village and have a few words about the situation. They will likely convene a gathering of some sort to try to

work out an arrangement that restores the grass, while following local norms about the number of sheep each herder is fairly entitled to graze.

More significant, however, is the reliance of Hardin's allegory on a rational-choice view of human motivation. People are, simply put, more complex—and thankfully so. We are moved by more than our own narrowly conceived self-interests, as Chapters 2 and 9 described. Equally important are the sentiments—the norms, the feelings of affection and lack of affection for others—we have in social life. These sentiments are a crucial aspect not only of our humanity but, as we shall see, of our interests as well.

The Dialogue of Solidarities, or, Why the Lion Spared Androcles

Let's hear instead from Aesop, the ancient Greek storyteller, who used to tell quite a different allegory from that of the tragedy of the commons: the story of "Androcles and the Lion."¹⁴ It's been a familiar tale to children from Western cultures for over two thousand years—I used to tell it to my own children when they were young—and with good reason, for it expresses some home truths that parents have long thought we would do well to recognize. In case you've forgotten this classic fable (or somehow never encountered it), let me retell it here.¹⁵

A slave named Androcles escapes from his cruel master and runs away into the forest. As he's walking through the woods, Androcles comes upon a lion, who is roaring loudly. Androcles is scared, but he notices that there's a nail stuck in one of the lion's paws. So he cautiously comes up to the lion, takes the lame paw in his hands, and pulls out the nail. And rather than eating him, the thankful lion suggests that they hunt together, using the lion's teeth and claws, and Androcles's hands and wit. The arrangement works well, and they grow fond of each other, living together for many years.

But they're a little careless one day, and some of the Emperor's men capture them both and lead

that restores the grass, as about the number of entitled to graze, ever, is the reliance ofational-choice view of e are, simply put, more so. We are moved by rrowly conceived self-id 9 described. Equally ients—the norms, the lack of affection for life. These sentiments y of our humanity but, rests as well.

Solidarities, And Androcles

In Aesop, the ancient d to tell quite a difference tragedy of the com-les and the Lion.”¹⁴ It’s tren from Western cul- d years—I used to tell en they were young—or it expresses some have long thought we In case you’ve forgot- nehow never encoun-¹⁵

les escapes from his ay into the forest. As e woods, Androcles o is roaring loudly. notices that there’s a on’s paws. So he cau- n, takes the lame paw t the nail. And rather ful lion suggests that the lion’s teeth and ands and wit. The id they grow fond of or many years. ss one day, and some re them both and lead

them away to the Coliseum. In those days before television, people enjoyed going to the Coliseum to watch lions eat defenseless captives, and to watch other gruesome sports. Androcles and the lion are to be used for this unhappy purpose.

On the day of the event, great excitement fills the air. Even the Emperor is there. After all, it’s good for your opinion poll numbers to be seen putting on a satisfyingly bloody Coliseum show. (OK, so that bit wasn’t the way I used to tell it to my kids.) Tension mounts as the preliminary acts—foot races, weight lifting, gladiator fights—are held. Finally, Androcles is thrown into the ring, naked and unarmed. The lion, who has been starved for days, is also released into the ring. “With a terrible roar, he bounded toward the poor slave,” is how our favorite version tells the story.¹⁶

At first, so hungry is the lion that he does not recognize Androcles. But as he approaches Androcles, he sees who it is. The lion lies down in front of Androcles and makes soft mewing sounds.

The Emperor is astonished. He asks to have Androcles brought over to his viewing platform so he can question him. Androcles explains the strange history of his friendship with the lion. The crowd roars its approval. The Emperor thinks for a moment, does a mental poll, and then proclaims, “Release him, and release the lion. Let them go free.” The lion returns to the forest, and so does Androcles. After all, even though he is now free, Androcles has no education, money, relatives, or friends. Androcles and the lion live out the rest of their days together, the closest of companions.

As the story traditionally concludes, “And so we learn that no act of kindness is ever wasted.”¹⁷

The above is not the usual sort of evidence that sociologists draw upon, but nonetheless let me try a bit of analysis of the home truths Aesop tries to get across to us. To begin with, why did the lion spare Androcles in the ring? At that moment the lion could have had no idea that refusing to eat his former partner would result in freedom. Indeed, the Coliseum operators might

have decided to kill this apparently hopeless lion for failing to put on a good show. (Coliseum operators were like that.)

And why did Androcles initially pull the nail from the lion’s paw? At that moment Androcles could have had no idea that pulling the nail would result in his gaining a friend and hunting partner. (Hunting partnerships between humans and lions are, after all, rather unusual.) And neither could he know that they would eventually be able to return to the forest to live out their days together.

The reason was, according to Aesop, that the lion and Androcles were moved by more than narrow calculations of their own pure self-interest. They were moved as well by their sentiments: Androcles for a lion in pain, and the lion for a friend and former companion; Androcles for reasons of commitment to certain norms of behavior, and the lion for reasons of friendship, of affective commitment. These sentimental commitments in turn led—and this is a crucial point of criticism of the rational-actor model described in the tragedy of the commons—to the promotion of their interests, *although they could not know that at the time*. In other words, sentiments may promote interests but do not reduce to them.

At the same time, interests promote sentiments. A large part of the reason Androcles and the lion liked each other is that, beginning with Androcles’s act of pulling the nail and extending through the lion’s refusal to eat Androcles, they had learned to rely on each other to promote each other’s interests. Because they helped each other out, they liked each other and shared a sense of commitment to common norms of social behavior. And because they liked each other and shared a commitment to common norms, they helped each other out. The story is thus another example of a dialogue, this time what I like to call the *dialogue of solidarities*. (See Figure 10.1.)

I use the plural because this dialogue is based on the interaction between two mutually supporting bases for social commitment: a *solidarity*

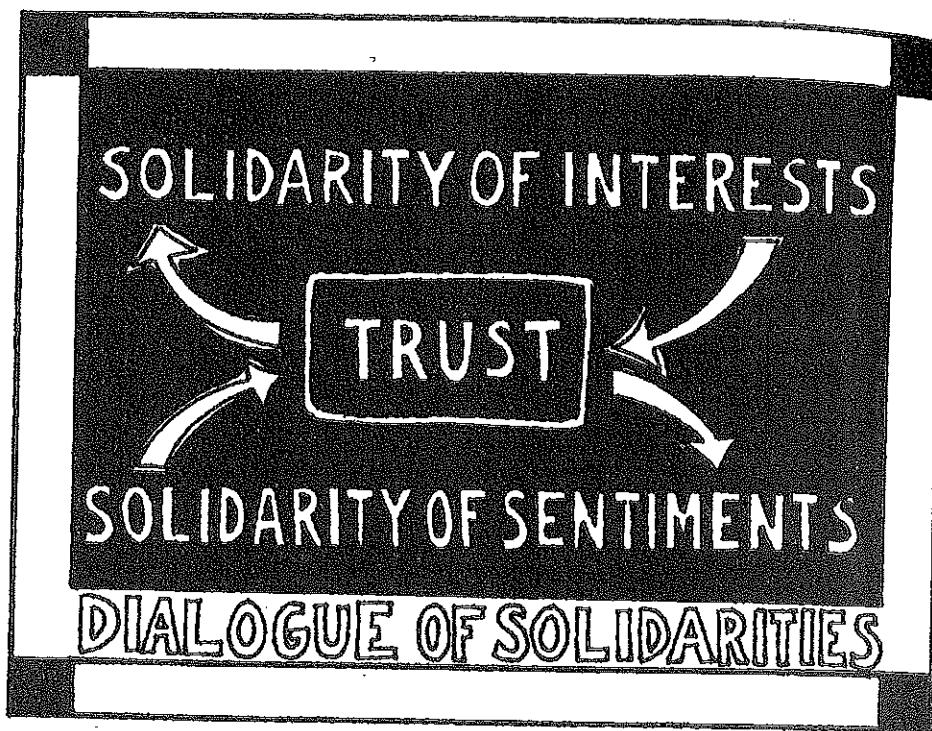


Figure 10.1 The dialogue of solidarities.

of interests and a *solidarity of sentiments*. The interests of both Androcles and the lion were served through their relationship. But as well, they sensed the existence of sentimental ties—affection and common norms—between them. And the one constantly shaped and maintained the other.

All this emphasis on sentiment may sound a little idealistic, the kind of rare altruism we sometimes hear about in stories, or, as in this case, in an ancient fable. But sentiment is actually quite common—and quite necessary—in social relationships, at least those that endure across time and space.

Consider, for example, a domestic union of some kind, two recent college graduates perhaps. They each have interests, such as careers. They support each other through graduate school. They make their job choices with the other partner's interests in mind. They manage their home

in ways that allow each to succeed at work. And thus they maintain a solidarity of interests.

However, there are always time delays involved in reciprocal and cooperative action. How does one partner know that the other will come through when it is the other partner's turn to make a career sacrifice? There are also always issues of space in reciprocal and cooperative action. The two domestic partners cannot keep each other under constant surveillance. How does each know that the other can be relied upon to coordinate shopping, to maintain monogamy (if the union is based on that understanding), to cover for each other when situations require it?

The answer is *trust*. This trust can exist because each believes the relationship to be based upon more than the narrow calculation of self-interests. Because each has affection for the other or because each has a sense of common commitment to common norms of interaction—or both—they can

trust that the other will come through across the isolating reaches of time and space. Without this sense of trust that a solidarity of sentiments gives, no solidarity of interests can last long.

The process works the other way too. The persistence of a solidarity of interests is one of the principal ways that each partner comes to sense real affection and common normative commitment on the part of the other. If one partner violates that trust by not looking out for the other's interests, chances are, frankly, that pretty soon they won't like each other anymore, nor have faith that they share some crucial norms. Trust is the essential glue of both a solidarity of interests and a solidarity of sentiments.

So, to return finally to the tragedy of the commons, one of the main reasons why herders on a commons have usually managed to keep from overgrazing the pastures is that *they trust each other*. These are their neighbors, after all, and likely their kinfolk too. These are the people they relax with, dance with, worship with, and marry. Of course, villages sometimes fall into considerable internal conflict, and when they do, those sentimental ties may go. If so, the grass on the pastures will likely go too.¹⁸

The dialogue of solidarities is a kind of ecologic dialogue, a constant and mutually constituting interaction between the realm of the material (a solidarity of interests) and the realm of the ideal (a solidarity of sentiments). From this dialogue emerge solidarities of solidarities, if you will, within families, organizations, businesses, neighborhoods, villages, towns, cities, counties, provinces, states, nations, species, ecosystems, and all other kinds of commons. What I mean is, from this dialogue emerges *community*.

A Tale of Two Villages

Or so my colleague Peggy Petzelka found in the Atlas Mountains of Morocco, home of the Imazighen people, who are more widely known as the Berber.¹⁹ (*Imazighen* is the name they prefer.) Along the Imdras River Valley lie two

villages, some 13 kilometers apart: Tilmi and M'semrir. It's not great cropland, and the Imazighen in the area have traditionally relied on grazing sheep and goats for income and sustenance. It's not great grazing land either, however. The land is steep and the climate is dry. So local villages use what they call the *agdal* system of collective management of the grazing lands, which have traditionally been held almost entirely in common.

Under *agdal*, grazing schedules and any disputes are worked out through a local representative council of herders, known as the *jemaat*. The head of the *jemaat* is called the *Amghrar*, and he (it is always a he) is elected by the local villagers. If signs of overgrazing start showing up, or if there's been a particularly dry spell, the *jemaat* will close certain areas of the commons to allow regeneration. The *nuadar*, two men from each village, are selected annually to keep watch on the commons to make sure that the guidelines of the *jemaat* are being followed. If someone violates the guidelines, they may be forced to pay an *izma*, a penalty. When fence repair, harvesting, or other work needs to be done, the villagers organize *touiza*—communal work teams. It's a system that has worked for centuries.

Has worked. Peggy, who speaks Arabic, got a chance to live for most of a year in the area, during the course of a fellowship. She soon noted what many in the area now frequently complain about: that in M'semrir, the *agdal* system is breaking down. The grass looks bad. Stocking rates are double what they should be. Violators are getting away without paying *izmas*. Much of the land has been privatized. Some people seem to be getting quite a bit richer, and satellite TV dishes have sprouted from a number of rooftops. *Touiza* is disappearing. People are scared of the *Amghrar*. The *jemaat* is increasingly an in-group who distribute grazing rights to each other and their friends. People are angry with each other.

But in Tilmi, the grass still looks good. Stocking rates are just what they should be. Very little of the traditional commons land has been

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privatized. The *jemaâ* distributes grazing rights in ways that everyone Peggy spoke with found generally equitable. *Touiza* is still going strong. There are very few satellite dishes. When they disagree with him, Tilmî residents tell the *Amghar* to his face. That's because they like him, and are confident that he likes them, even when there are disagreements. Which there aren't very often, because people in Tilmî still like each other.

In fact, the people in Tilmî like each so much that they dance together. A lot. It may sound romantic, but most evenings when the weather is fine and the work is done, a group of villagers gets together to sing and dance in the village center. When there are family celebrations—a wedding, a circumcision—virtually the entire village attends, and the dancing can go on for days, and until 2 or 3 in the morning. And they sing when they practice *touiza*, helping each other harvest their personal garden plots, or as they repair the road or clear snow. All this astounded Peggy. Yes, it may sound romantic, because it is romantic. But it is also what they really do.

In M'semrir, however, people don't dance much anymore. There may be a bit at family celebrations, but the whole village is no longer invited. Just close family and friends. In Tilmî, weddings are usually held together during the same season of the year, and the brides walk through the village together amid the throwing of dates, almonds, and figs from the roofs of the grooms' houses to the crowds below. But in M'semrir, weddings are individual and scattered throughout the year, and the rich and festive foods are thrown only to the guests.

Peggy went for a walk one day with Amina, a woman from M'semrir, up into the hills above the village. They paused for a rest on a high rock, overlooking M'semrir and the Imdras Valley below. They got to talking about changing traditions in M'semrir.

"We used to gather everyone and had one big party—now everyone has their own tradition," Amina remarked.

She pointed out what used to be the communal property, now divided into small private plots.

"*Nizha*," she said to Peggy, "the words of today are not like the words of yesterday, and that which we did early is not that which we do today."

Why, then, this difference between the two villages? The Moroccan government has been working hard to "develop" the local economy, trying to increase the nation's productivity and also people's personal incomes. So they've developed regional market centers, and have begun promoting tourism. They have also promoted privatizing much of the communal land, figuring that production would go up. But in the rugged terrain of the Atlas Mountains, it's harder to bring "development" to the more remote villages. M'semrir is lower down the Imdras Valley, more accessible to the Jeeps of government officials and the delivery vans of the central Moroccan economy. Tilmî may be only 13 kilometers from M'semrir, but that 13 kilometers is up a twisty, rutted, dirt road, and the officials, tourists, and other bearers of "development" just don't make it up there so often.

People in Tilmî have heard of privatization, though. They aren't that isolated. After all, they often go to M'semrir for its bigger, more vibrant marketplace. And they've toyed with some the practices that the people of M'semrir have taken to. But thus far they've only toyed with them. Thus far they are still singing and dancing together. Thus far they still have a dialogue of solidarities. Thus far the grass is still green.

Dialogue, Democracy, and Environmental Problems

It's not just in the Atlas Mountains that the dialogue of solidarities is breaking down, of course, and not just in the Atlas Mountains that ecological dialogue is breaking down with it. We have considered these indications throughout the book—the challenges to sustainability, environmental justice, and the rights and beauty of nature. These challenges have material origins,

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such as the treadmills of production and consumption, technological somnambulism, and the interplay of population and inequality. They also have ideal origins, such as hierarchical and antidemocratic attitudes about society and the environment, and simplistic and uncritical conceptions of nature and a natural conscience. (There are, as well, important material bases to the "ideal" origins of our environmental challenges, and important ideal bases to the "material" origins, as earlier chapters discussed.) All these challenges relate issues of community to how we socially organize ourselves; to how we envision our relations with others, both human and non-human; and to how we dialogically organize our envisioning and envision our organizing.

Clearly, we need to be having a better dialogue about ecological dialogue.

Perhaps, in a perverse way, herein lies the value of Hardin's theory of the "tragedy of the commons." However historically inaccurate an allegory it may be, it does effectively portray what life might be like if we repudiate the lessons of dialogue. "Ruin is the destination toward which all men rush," Hardin gloomily wrote. If we all act individualistically, if we refuse to communicate with one another, and if we disregard the consequences for others (and thus for ourselves as well) of what we are doing, Hardin will surely be right. Such a logic, we cannot doubt, would indeed "remorselessly generate" environmental decline—as well as social inequality—which in turn would perpetuate a society desperate enough to follow such a logic to begin with.

We all know at some level that this possibility exists, it seems to me. This is why Hardin's allegory is, despite its inaccuracies, so frighteningly realistic. It reminds us of what we realize we could indeed become. This fright is a hopeful sign. It suggests that we recognize the value of broadening the dialogue of solidarities and the dialogue of ecology, even if we often fail to actually accomplish this broadness of conversation and consideration.

However, it must be said that a dialogic solidarity is not in itself a good thing; its value

depends very much on the openness and inclusiveness of that dialogue. Solidarities that gain their social power from the exclusion of others can be very destructive. Nor is ecological dialogue in itself a good thing; Its value depends very much on the extent to which we have truly considered the potential interactions of the material and the ideal. The value of both forms of dialogue depends on the extent to which we have allowed these potential "voices" to be heard. What we want is not just dialogue, but broad and open dialogue.

Indeed, it could be said that the only true dialogue is a broad and open one. Otherwise, what we really have is what the theorist Mikhail Bakhtin called "monologue," people speaking without paying attention to the response of others, be those others people or the environment.²⁰ One important value of true dialogue is that it encourages us to take others into account and at the same time provides the means for doing so.²¹ It is hard to establish a solidarity of interests unless we know what the interests of others are. We need to communicate and to have a sentimental commitment to the value of communication. We need to have what another theorist, Jürgen Habermas, has described as "an attitude oriented toward reaching understanding."²²

Another important value of true dialogue is that, while promoting solidarities and the congruency of the material and the ideal, it also has an essential openness to change. True dialogue doesn't begin with a preconceived end point or a final solution but rather adjusts to new ideas and new material changes that emerge from the ongoing conversation of life. As Bakhtin once wrote, "There is neither a first word nor a last word and there are no limits to the dialogic context."²³ True social dialogue and true ecological dialogue encourage new possibilities and welcome critical evaluations of what is going on and what is being said, and of how we might reorganize our community life in ways more appropriate to our material conditions and our ideological orientations. Only in this way can we nourish what I take to be two of our most vital social

and environmental joys: words and worlds without end.

The "Top" and "Bottom" of Social-Environmental Change

This is all rather abstract. Practically speaking, the message I've tried to convey is that environmental solutions depend fundamentally on participation. If we are to reorganize our communities in ways that endure, we need to encourage as many people as possible to be involved in the discussions.

How impractical, you may say. All this talk, and we never get anything done! *How impractical*, I may say right back. All this doing without any real talk about what we really want, and really need, to get done!

The problem of doing without talking is that effective doing requires cooperation. Changes that come only from on high encourage foot-dragging on the part of those down below and encourage authoritarianism on the part of those up above. Neither seems a good route to social change. Isolated individual changes that come only from below, on the other hand, tend not to be noticed when only a few are involved and tend to be actively ignored or actively restrained when many are involved. Again, neither of these seems a good route to social change.

We are coming to recognize, I think, that a "top-down" approach—"command and control" on the part of governments, corporations, and technologies—relies on unsatisfying means and produces unworkable ends. The top cannot keep the bottom under constant watch without intolerable levels of social intrusion, nor can it achieve effective policies if only the concerns of a powerful few have been taken into consideration. A "bottom-up" approach is now often advocated as the solution, and there is some wisdom in this suggestion.²⁴ A bottom-up approach is inherently based on the participation and willingness of those who enact any coordinated change, and thus obviates the need for intrusive surveillance

and encourages the formation of broadly based and broadly supported policies. But by itself, change coming from the bottom alone is unlikely to lead to lasting, substantial, and coordinated outcomes.

Rather, there is both a "top" and a "bottom" to effective social change, connected (yet again) by dialogue. The top represents our patterns of social organization based on government, the economy, technology, and other social structures. But without the participation and willingness of the bottom, these patterns of social organization cannot easily take hold. (Nor would they likely be fair.) The bottom represents social activism, the citizen pressure that indicates that change is desired and therefore ultimately possible. But without the participation of the top, the bottom will find it hard to coordinate its activities in the ways it desires. (See Figure 10.2.)

What I'm talking about here, of course, is *power*. For the bottom to have power, it needs the top. For the top to have power, it needs the bottom. And for effective social reorganization to occur, they both need dialogue. That is, they both need, as Anthony Giddens has termed it, "dialogic democracy"—a democracy in which all, including the environment, are taken into account.²⁵

Reorganizing Communities

Perhaps, in fits and starts, stumbles and leaps, we're getting there. We *have* managed in recent years to coordinate some important social reorganization of environmental relations, generally through the cooperation of the bottom and the top.

Recycling in the United States

Recycling is a good example. Back in the early 1980s, some friends of mine in college lived in what they called Ecology House, a big old Victorian home owned by our university. These students lived there as a demonstration of urban

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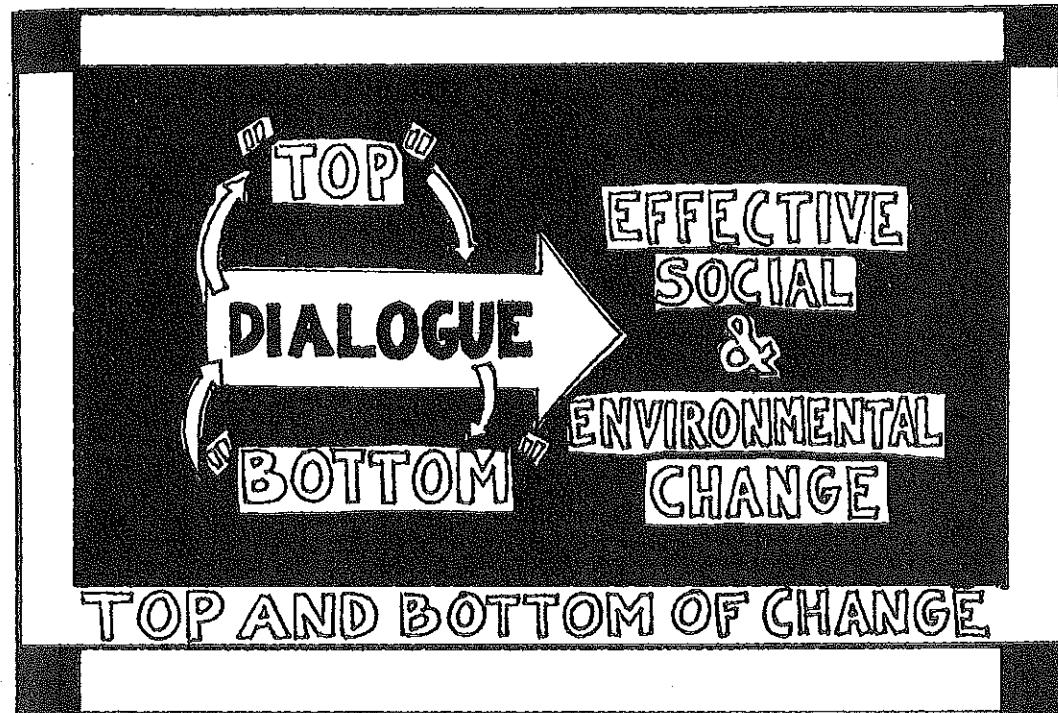


Figure 10.2 The "top" and "bottom" of social change.

environmental living. The students raised money for and installed a backyard compost bin, a com-posting toilet, energy efficient lighting, a solar greenhouse for heating, and other environmental improvements. But most impressive, I always thought, was the way these roughly 10 students, all of whom cooked and ate in the house, produced one lonely paper shopping bag of garbage a week. (About the same as my family of four does today.) Everything else was either precycled, recycled, or reused. They didn't generate much garbage to begin with, they returned to the production stream what they did generate, and they found other uses for a lot of stuff other people would have simply pitched.

Some people thought they were crazy, though. Unless you have that kind of young idealistic zeal, who could be bothered to sort paper, metal, and glass, or to compost food scraps (let alone personal manures)? "Recycling sounds like a great idea, but almost nobody will ever do it," they

were often told. The doubters had some statistics to back them up, too. As late as 1980, the recycling rate in the great throwaway society, the United States, was just 10 percent of all municipal solid waste.²⁶

By 2001, the national rate was 30 percent and rising.²⁷ In 1988, there were just 600 curbside recycling programs in U.S. communities; by 1993, there were 3,700; by 2001, there were 9,700.²⁸ Waste reduction programs as of 2001 were removing some 55 million tons from ever entering the country's 230-million-ton waste stream—a vast improvement on the 0.6-million-ton figure for 1992.²⁹ The amount of solid waste sent to U.S. land fills every year is still high, some 161 million tons in 2001. But it's finally on the way down from the 1990 high-water mark of 172 million tons.³⁰

For a while the main barrier to increased recycling was an embarrassment of recycled riches. The market was glutted, prices dropped, and a

few communities were finding it necessary to send some of the materials they had collected to the landfill. But as more factories were set up to handle recycled materials, the situation rapidly reversed itself. Prices skyrocketed. In some cities, bundles of recycled newspapers were being stolen off the streets before official collection trucks could get to them.

Prices for recycled materials have dropped again since then and remain somewhat volatile, as is typical of raw materials markets. And recycling is now experiencing a political backlash—a sure sign, in a dialogic democracy, that an idea has hit prime time. Much of this backlash was unleashed in 1996 when Mayor Giuliani of New York sought to cut 38 percent from the city's recycling budget and the *New York Times* published a widely noticed (and, in my view, largely erroneous) piece criticizing recycling.³¹ (At the time of this writing the political climate has moderated somewhat, although recycling remains under fire from some quarters.³²)

Nevertheless, community recycling in the United States must be considered an astonishing success story. And why? Because people demanded it be done. They were tired of having incinerators and waste dumps foisted on their neighborhoods. And they wanted to do something good for the environment. It was a matter of their interests and their sentiments. All that was needed were the social structures that could make it possible: government action, corporate investment, and technological changes. And it happened because the top and the bottom found they had something to talk about together.

Supplying Water in a Costa Rican Village

For years, international agencies have been drilling wells, planting trees, providing new crop varieties, building dams, and promoting tourism in "less-developed" communities across the world, hoping to spur economic development. Sometimes this form of international aid has worked, but very

often it has not. Local people have often looked on with pleasant smiles while the dams were put up and have shaken hands in apparent thanks when given trees to plant, only to fail to maintain the dams and the trees later. Eventually—after the development reports were filed away back at the international aid agency's headquarters—the dams crumbled and the trees died.

Astonishing as it seems in retrospect, supporters of this 1970s-style approach to development rarely bothered to ask a crucial question of local people: What do you want? Such a top-down style of development assistance not only alienated the people it was supposed to help, but, because of the development officials' lack of knowledge of local conditions, top-down approaches often resulted in increased social inequality and environmental damage.

In the early 1990s, though, development agencies began to see both the practical and the democratic value of what has come to be called *participatory development*.³³ Involving local people as equal partners and leaders in development projects ensures a sense of ownership—of sentimental commitment—to a project. It also ensures that the project is more likely to do what people want, making the project fit their interests as well. This approach is so totally obvious in retrospect that it may seem incredible that development efforts ever took another course. But early development thinking often had little respect for the views of local people, seeing them as backward and incapable of understanding all the advantages of the modern techniques that were being offered to them, while assuming (rather contradictorily) that the modern way was what everyone wanted.

In 1994, I was fortunate enough to see firsthand the results of a more participatory approach to local development. An old friend lives in Platanillo, Costa Rica, a farming village of about 500 people in the foothills of the Talamanca Mountains. We had lost touch since meeting in the 1970s, but I happened to be in the country on university business. The village has no phone, and I wasn't even sure he was living

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there anymore. So I quite literally looked him up. I took the Platanillo bus up the dirt road into the mountains on a Saturday afternoon, got some directions from the barkeeper in the local tavern, and surprised my friend as he was returning from his fields for the day. He recognized me almost immediately, even after 17 years, and excitedly led me around his farm and the village.

One of the places he brought me to, with considerable pride, was the new water supply dam that he and some other villagers had installed earlier that year. The dam made a small impoundment on a stream up in the mountains above the village—not big enough to cause much damage should it give way some day, but large enough to supply all the houses on that side of the valley with running water. Before the dam was built, everyone was drawing water by hand from household wells, often dug dangerously close to outdoor toilets. Now everyone in the neighborhood had safe running water piped into their houses.

The people in Platanillo had some outside help in building the water system. My friend mentioned that several development agencies were involved, although he didn't mention which ones. That didn't seem important. Instead, he talked about the neighbors with whom he had worked on the project, about the way the sluice gate worked, about the way they arranged for the land where the dam sat, about the village committee that is maintaining the dam, and other local details. This clearly was the villagers' own water supply.

What really struck me, as my friend described the new system, was how much he knew about it—far, far more than I know about the water supply system in my own community. After all, my friend had helped build and design the one in his community. Should those pipes or that dam or the watershed up above or down below ever develop any problems, he and his neighbors would know what to do and would feel a sense of investment and responsibility for carrying out any repairs. Which was a good thing, I thought. In such a remote place, if the local people didn't

take care of a problem, it would be a long time before anyone else would.

As I took the bus back down the valley that evening, I passed a building in the next village down the road from Platanillo with a sign on it that said "U.S. Peace Corps." I don't know if Peace Corps volunteers were involved in Platanillo's dam—my friend never said. But if they were, I thought, they sure understood the value of participation.

Growing Local Knowledge in Honduras

Jeff Bentley is not your typical social scientist. I knew that as soon as I laid eyes on him in 1993, when he gave a seminar in my department. The title of his talk was suitably academic sounding—something like "Farmer-Scientists and Integrated Pest Management in Honduras," as I recall. But rarely, even in this informal age, is a seminar delivered by someone wearing old jeans whose bottom hem are frayed from continually catching beneath the wearer's construction-style boots. He did wear a sport coat, a tweed one, but it only made his jeans and uncombed hair seem that much more incongruous in a university seminar room.

And yet Bentley held the packed room (including several conservatively dressed scientists from the entomology department) absolutely spellbound. Bentley had been employed over the past few years in the Department of Crop Protection at the Escuela Agricola Panamericana in Zamorano, Honduras, trying out a radical new way of doing research on Honduras's farm problems, working with the country's poor peasant farmers. In collaboration with Werner Melara and others at Zamorano, Bentley had been going into Honduran villages and conducting entomology seminars with local farmers. "We don't tell them what to do to solve their pest problems," Bentley said. "We try to give them the intellectual tools for solving the problems themselves."³⁴

Over the past 40 years, the typical approach of agricultural scientists working on the problems

of tropical agriculture has been to encourage peasant farmers to adopt hybrid crop varieties developed by the scientists themselves. Such varieties generally yield more but also have fewer defenses against pests. The scientists have developed an answer for that problem too, though: pesticides. (It's a package deal.) But farmers have to buy the hybrid varieties and pesticides, rather than relying on seed saved from the previous crop and on lower-cost pest control practices. And if you're a poor Honduran farmer, money is something you don't have a lot of. Capital-intensive agriculture also promotes international economic inequality by draining scarce cash from the Honduran countryside. Plus, a high degree of literacy is required to read the label warnings on the safe and appropriate use of the pesticides. Thousands of people have been poisoned.³⁵

Bentley's view is that any solutions farmers devise for themselves are far more likely to be relevant to their ecological, economic, cultural, and agricultural circumstances. Also, Bentley stresses the importance and validity of farmers' own knowledge about local conditions and local farming practices—their *local knowledge*.³⁶ Honduran peasant farmers are poor, not stupid, and they know a lot of relevant things that the scientists don't. After all, the peasant farmers live there.

University scientists do have a lot to offer local people, though, particularly concerning phenomena that are not easily observed. In Bentley's rural seminars, he helps the farmers see inconspicuous connections that the university scientists have figured out. Most local farmers don't understand insect life cycles, so he puts larvae in glass jars for several days so that people can watch caterpillars and grubs develop into adult insects. Local farmers almost never go out into their fields at night, so Bentley takes them out to watch insect activities by flashlight. And then he steps back and lets them apply the knowledge.

In one village, the local farmers had been spending quite a bit of money on pesticides to

eradicate the fire ants that were infesting their fields, although they had no evidence that the ants were harming their yields. When Bentley took them out at night, though, they watched as the ants crawled up their corn plants and ate some other insects that were harming the crop. A local woman was very impressed with this observation and wondered how to encourage the ants. She recalled that ants were often attracted to the sugar in her kitchen, and she came up with the idea of mixing a dilute solution of sugar water and spraying it on infested plants to attract the ants.

This idea, suggested Bentley, has several advantages typical of local innovations. First, it's cheap, as sugar is relatively inexpensive. Second, it relies on easily accessible local materials—sugar and water. Third, it is something that the local people understand completely, which should allow them to refine the idea, generating further innovations. Fourth, it is safe, both for the environment and for the farmers. And fifth, as it is their own idea, local farmers feel a sense of ownership and are far more likely to be committed to making the idea work.

But does this idea from the bottom actually help control insect pests? Here's where the top—the scientists—can step in again, performing experiments and helping local people design their own experiments to assess the validity of the idea. With the Zamorano approach, scientists are still very important but, as Bentley and Melara explain, "We depend on farmers to help tell us what to study and to work with us in actually carrying out experiments in their fields, fine-tuning the technologies to their conditions."³⁷

The point of participatory development, in other words, is not that local people always know best. Rather, the point is to get a dialogue going between local people and scientists, between local knowledge and expert knowledge. Such a dialogue encourages the respect and concern of each party for the other and perhaps even genuine friendships, as each comes to know the other better: solidarities of interests and

that were infesting their fields. There was no evidence that the ants were harming the crop. A pressed with this observation to encourage the ants, he often attracted to the field she came up with the solution of sugar watered plants to attract

Bentley, has several innovations. First, it's very inexpensive. Second, sensible local materials—it is something that can completely, which means the idea, generating wealth, it is safe, both for the farmers. And fifth, farmers feel a sense of responsibility to be committed.

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sentiments. Participatory development is thus *dialogic development*.

Reorganizing Our Own Communities

Innovative ideas and cooperative social reorganizations are improving our ecological dialogue in communities all across the world. In this section, I discuss a few examples from the town I lived in until recently, Ames, Iowa, still the town I know best. These are not especially noteworthy social reorganizations. They have not attracted national and international attention, nor are they likely to do so. But their significance lies in the fact that they are *not* unique: Changes like these are happening in lots of places.³⁸

A Bicycle-Powered Hauling and Delivery Business

Ames is a pleasant college town of about 50,000 residents. Its economy is based mainly on retail, government agencies, and Iowa State University, where I used to teach. (I teach at the University of Wisconsin-Madison now.) Despite the presence of a major university, Ames is not one of those funky college towns with a lot of alternative businesses run by aging, or New Age, hippies. It's a pretty ordinary place. "Ames—the center of it all" is the Chamber of Commerce's motto for the city, and they mean that both geographically and culturally. Still, new things happen even in ordinary places.

The sight of a bicycle hauling two trailers hooked up in tandem and loaded 5 feet high with recycling bins and loose cardboard is one of the striking sights of Ames. In 1992, Joan Stein and Jim Gregory began Fresh Aire Delivery, a bicycle-powered hauling and delivery service in Ames. Bicycle delivery services can be found in most major U.S. cities now. The hauling side of Fresh Aire is distinctive, though. Most of their hauls consist of recycled materials collected

from households, businesses, and the university. Ames has a city-operated trash incinerator. With little need to put waste in landfills, the city has instituted only a rudimentary recycling program. Joan and Jim sought to correct the problem. Using trailers they design and build themselves, they expanded the business to the point where it employed 20 riders, including Jim and Joan. I used to see one of their riders almost every day.

"A lot of people just look, just stare," Joan explained to me one morning when I came over to interview them in their small but comfortable house. "And to be quite frank, it's worked to our advantage. It's kind of like a free form of advertising."

"I've hauled over a thousand pounds," said Jim. "You don't want to do that too much. You feel real tired!"

"And you thank the lord that Ames is flat," added Joan, laughing.

They both used to own cars, but neither does now. Joan's brother trashed hers some years ago. "I was thinking about getting rid of it anyway," she says. "So it worked out for the best.... It's been very liberating to live without one." Jim hasn't owned a car in 15 years, although in high school he used to fix up trucks and sell them. "When I finally got into college, I guess I kind of outgrew that stage," he says.

Why did they start this business? Not because they're anti-technology. They own a computer, a telephone, and a microwave oven. And I've watched Jim mow a lawn pushing a reel mower in one hand—they also used to run a non-power lawn mowing service—while holding a cell phone up to his ear with his other hand.

Eventually, Jim and Joan sold the recycling part of the business, so they could focus on making and selling the cargo trailers Jim had invented. (The trailers proved quite popular and can be seen in many American cities now.) Jim and Joan also make pedicabs and operate a holiday rickshaw service around town. And they still deliver furniture by bike. The new business is

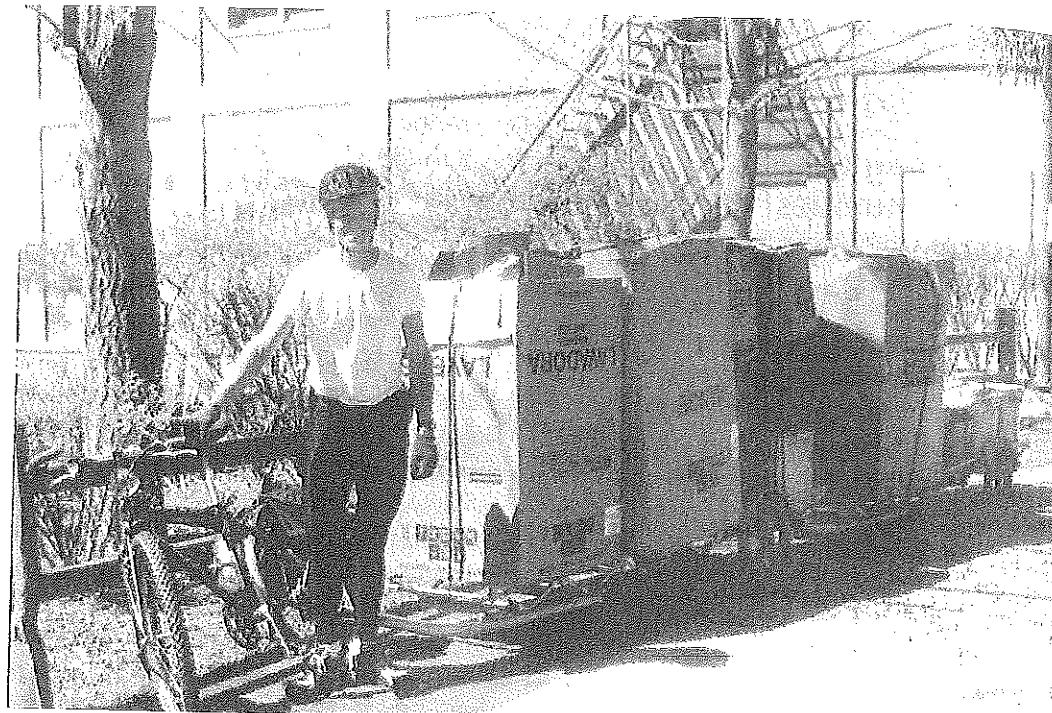


Figure 10.3 Jim Gregory of Bikes at Work with his double-tandem bike trailers loaded up. Jim's trailers are a familiar sight in Ames, Iowa.

called Bikes at Work. (See Figure 10.3.) You can read all about it in Jim's book, *Cycling for Profit*.³⁹

"People assume that doing things by bike is backward. I don't think it's that at all. I think it's just appropriate," Jim reasons.

And what makes bikes appropriate for Jim and Joan are their social and environmental consequences. "People view being inside the car as being inside their own body armor where they feel safe," Jim told me. "And I'm not sure that's the best way to go. You want to feel you're part of your environment as much as possible."

On a bike, Joan added, one stays "tuned in to the environment. And you don't abuse it so much if you're out there in the elements."

"Living this way for the past decade," agreed Jim, "I can't imagine not knowing there are kids playing, because you can hear them outside."

Maybe Joan put it best: "I just think our lifestyle keeps you accessible to other people. . . . It gives a feeling of openness."

It's the feeling of dialogue—social and ecological.

Community-Supported Agriculture

That same feeling of dialogue underlies another relatively new organization in Ames: the Magic Beanstalk CSA. The acronym "CSA" stands for "community-supported agriculture" projects, partnerships between farmers and consumers to support local agricultural production. Typically, consumers pay a set amount at the beginning of the season for a share in the farms' yield and get the produce directly from the farms. The idea began in Japan, where local food partnerships called *teikei* have existed since the 1960s. In Britain, they're called "box schemes," as the produce usually comes once a week in a big box. And since the late 1980s, about 1,000 CSAs have sprouted across the United States.⁴⁰ Iowa's first

CSAs started in 1995, and the Magic Beanstalk is one of the three that began that summer. As of 2003, some 15 local farms were producing vegetables, apples, strawberries, raspberries, honey, wool, pork, beef, chicken, lamb, turkey, eggs, goat cheese, herbs, whole grains, and cider—all following sustainable and humane farming methods—for about 100 Magic Beanstalk households.

Shelly Gradwell-Brenneman, then a graduate student at Iowa State University, was one of several people who were key to getting the Magic Beanstalk going. Sitting under a pine tree on Iowa State's central campus, she explained to me why.

"Our closest connection to the environment is through what we eat three times a day," Shelley pointed out. "That's our most close, direct, and intimate connection with the land. And that was totally missing in 1990s environmentalism."

Shelly used to work for the U.S. Park Service, doing environmental education, and she got frustrated with the contradictions she saw in some wilderness-preservation enthusiasts.

"They talk all about conservation and preservation of wilderness, jump in their Saabs on the weekends, and drive up into the mountains and bag peaks—and buy all that expensive gear and petroleum-based clothing," she observed. "It almost seemed to me like an extractive kind of use, even though they were total wilderness preservationists. They only seemed to think about the environment on the weekends."

CSAs, on the other hand, decrease energy use by promoting a local food supply. Typically, CSAs use sustainable (usually organic) and humane methods, and yet they deliver the food at a competitive price. The elimination of retailing allows farmers to claim a bigger share of the food dollar and still keep prices low, making sustainable, organic, and humane produce affordable. Thus, CSAs are not necessarily Saab-and-Gore-Tex environmentalism. Magic Beanstalk charges \$285 for six months of vegetables enough for a hungry family of four or five. (Think about it. That's pretty cheap, especially for organic produce. And if you put in a few hours volunteering, the price is \$250.) Also, Magic Beanstalk, like many CSAs,

has a special program to make food more affordable for lower-income households. CSAs provide a way for people to connect symbolically with the land, as Shelly described, and a way for people to connect with each other, rich and poor, rural and urban. CSAs are about more than food. They are also about community, social and ecological. (See Figure 10.4.)

A CSA clearly depends in part upon a solidarity of interests. By committing to a price up front, consumers share in the risk of agricultural production. Farmers have guaranteed sales, which is a great comfort when you are about to sink a lot of money and time into the ground. Consumers' interests are served by getting a good product at a good price. Each side gets something they are interested in.

The success of a CSA depends as well upon a solidarity of sentiments—at least the Magic Beanstalk does. Both producers and consumers share a commitment to a common norm: promoting sustainable community. This common desire is central to the group. Producers and consumers interact socially through harvest festivals, field days, kids' days, cooking and canning classes, short chitchats when the produce is delivered, and more. They *like* each other, and the group wouldn't operate so smoothly if that weren't the case.

All of these solidarities were severely threatened during the Magic Beanstalk's first year, though. The spring of 1995 was very wet and cold in Iowa. People had signed up expecting weekly vegetable deliveries to start in mid-May, but the main producer's fields were under several inches of water. By mid-June, not a leaf of lettuce had been delivered—a rather inauspicious beginning. The organizers were panicked, convinced the CSA was about to collapse before it had really even begun. But no customer called to complain. The producers sent out letters offering a full refund to anyone who wanted out. No one did. Because of normative and affective commitments, the solidarity held across this trust-busting moment. And when regular vegetable deliveries finally began in the first week of July, a loud collective whoop could be heard in central

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Figure 10.4 Picking peas and weeding onions at the Magic Beanstalk CSA. Members of a community-supported agriculture project sometimes help out with the chores on a volunteer basis.

Iowa. They had done it. They had created a lasting community.

Here's how one Iowa CSA producer described the dialogical bonds a CSA depends upon: "My shareholders are friends of mine; they trust me." Shareholders and friends; interests and sentiments.

Here's another producer: "Before we started working together in the CSA, we didn't know each other at all. . . . [Now] we respect each other and know that we will help each other." Respect and helping each other; sentiments and interests.

Here's a CSA member: "We became members because we enjoy fresh vegetables and because we really believe in the philosophies behind CSA." Fresh vegetables and philosophies; interests and sentiments.⁴¹

The Magic Beanstalk takes its name from the traditional story "Jack and the Beanstalk," in

which Jack, a poor starving farm boy, grows a huge beanstalk from a magic bean in order to steal some food from the airborne castle of a giant. For the Magic Beanstalk CSA, the giant represents modern agriculture and its efforts to take away the market of small, local farms. Jack represents the courage of local farms trying to get back some of that market.

As Shelly explained, "In the version that we have, the giant gets his head cut off. The beanstalk doesn't get cut down. It's the victory of local agriculture over the military-agricultural complex."

That image of a "military-agricultural complex" describes a depressingly frequent feature of market developments: social and environmental fragmentation. But markets do not have to develop in that way. Instead of being a site of pure competitive individualism, a production

and consumption treadmill, a market can be a place of cooperation and connection. It all depends on whether a market is conceived of as a solidarity or as a "solo"-darity. The Magic Beanstalk CSA demonstrates that the former is possible—and preferable.⁴²

Smart Growth

Suburban sprawl isn't as bad in Ames as it is in a lot of places. Because of the farm crisis of the 1980s, the population of Iowa actually dropped during that decade of explosive suburbanization in much of the United States. Money was tight, so there wasn't a lot of development then, and there isn't much compared to most of the rest of the country. "We have a real opportunity to avoid some of the mistakes that were made elsewhere," says Joe Lynch, a local Ames activist for sound urban planning.

But sprawl is nevertheless well under way in Ames, promoting automobile dependency, isolating people and neighborhoods, and leading to what Joe calls "retail strip mines"—strip developments of huge stores that close down local businesses, mine a community's economy, and ship the profits to an out-of-town corporation. Ames has a couple of big strip malls now, and a controversial regional mall is soon to be built there. Plus, recent residential development has followed the standard separationist model in which housing types are segregated and kept far removed from commercial development, forcing people to drive to work and shops. This approach has come to be what people in town generally expect now. Commercial development today always seems to bring cars, traffic, and parking lots, so understandably no one wants that near their homes—which only promotes greater use of cars and more ugly "retail strip mines."

Joe has been one of a number of Ames residents who in the past few years have tried to change the town's vision of development. He goes to city council meetings, he writes occasional guest columns in a local paper, he reads up

on what is going on in other communities, and—perhaps most important—he talks to people. Time and again he engages townspeople in conversation, describing the importance of what he calls "relationships" and the need to "look at systems in comprehensive ways." He stops them in the streets. He goes into local stores and chats with the owners and workers. His principal message is, as he explained to me one afternoon on the deck of his self-built solar home, "You don't solve pollution problems by worrying about what comes out at the end. You solve pollution problems by looking at the system and redesigning what people need."

The vision that Joe and other activists in town are advocating is what is often called *smart growth*. The basic idea of smart growth is to reject the standard polarization between anti-growth naysayers and pro-growth yea-sayers, familiar to development controversies across the country. Smart growth says, yes, there are serious problems with how development usually goes on in the United States. But we can use the power of development forces to "grow out of" sprawl. Pressures for growth provide the capital to reshape what we have done and give us the opportunity to rethink what we might do. Besides, there are good economic reasons for reshaping what we've done and might do—let alone the environmental reasons. It's expensive to construct and maintain the necessary roads, sewer lines, and power lines and to provide police, fire, and emergency services to spread-out developments. Although sprawl is often defended for adding tax base to a community, the cost of providing for it can easily be more than the added government revenue.

Smart growth is often coupled with an architectural style and approach to planning called *new urbanism*.⁴³ The basic idea of new urbanism is to model new developments on the kind of traditional neighborhoods that cities routinely turn into historic districts. If we think such areas are nice enough to make special efforts to preserve them and to visit them as tourists, new urbanists ask, why not design all our neighborhoods that

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Figure 10.5 A street in Kentlands, Maryland, the best-known “new urbanism” development. Note the space-saving, close-together houses with small front yards and the community-building presence of porches. Although this view shows single-family homes, Kentlands has a wide variety of housing types—as is characteristic of “smart growth” initiatives.

way? New urbanism is thus in many ways the traditional urbanism, the urbanism of a time when cities were built for people rather than cars. And if we build with people first in mind instead of cars, the result will be not only pleasing to the eye but pleasing to the balance sheets of local governments, because of new urbanism’s efficient land use. That’s the smart growth part. But also, new urbanism advocates argue that such an approach helps reduce the impact of development on community in the ecological sense and helps promote more interactiveness in the community in the social sense. (See Figure 10.5.)

New urbanism designers typically recommend the following guidelines for people-friendly development: Build houses up, not out, so lots can be narrower and land use efficiency can go up. Bring back the front porch, the sidewalk,

and the alleyway, all zones of interaction between neighbors. Make most streets through-streets so all the traffic doesn’t get channeled onto a few trunk roads, causing traffic jams even in suburbs. Bring back the corner shop. Provide a diversity of housing types within a neighborhood so that people with all kinds of household situations can live there, from singles, to families with children, to the elderly. Locate stores and schools and workplaces near homes—and without the traffic and oversized parking lots that make most commercial life so unappealing and environmentally unsound today. Don’t mix stores and housing types higgledy-piggledy, but instead institute far more detailed zoning plans than the current big-blob style of zoning with huge areas devoted to a single type of use. Increase density, so walking and public transit are more realistic options. (See Figure 10.6.)



development. Note the community-building pres-
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Figure 10.6 A street in Providence, Rhode Island, developed in the 1890s. New urbanism takes as its model "old urbanism" developments like this one. Note here too the close-together houses, the small yards, the front porches. Also note the mixing of single-family homes with the duplex in the foreground.

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Ames's developers and city planners thought these ideas were completely unrealistic at first. Also, they interpreted Joe and other planning activists as anti-business, applying the standard naysayer/yea-sayer model to public debate. "I'm not against commercial activity," responds Joe, who is a small business person himself. (He and his wife, Lonna Nachtigal, operate a small vegetable farm just outside of town, among other activities.) "That's not the issue. The issue is how can we design commercial activity so that it doesn't destroy our communities and our neighborhoods."

Through a long series of meetings and discussions over several years, often heated, and finally culminating in a one-day seminar at which some of the United States' leading new urbanism designers spoke, local developers and city officials and activists began to see that they had a lot in

common. Some developers and officials, it turned out, didn't particularly like putting in the same old sprawling developments. They realized sprawl was a financial drain on a community. Moreover, some members of the local business community were worried about the problem of retail strip mining too. They just thought that's what people wanted.

The result is that one of Ames's new developments, its biggest in years, is following many features of the new urbanism approach. Lot sizes are smaller. There are front porches, sidewalks on both sides of the streets, and some alleyways. Builders are putting in a wide range of housing types, from apartments to townhouses to detached single-family homes. And there's a small main street with multistory commercial buildings that front directly on the sidewalk,

instead of having a big parking lot in front. If it works, it will be the kind of place where parents feel safe sending their children to the corner store for milk, where people walk to work or to the bus stop, where neighbors know each other a little bit better, and where fewer resources are demanded from the environment.⁴⁴

In other words, the activists and developers and city officials built a solidarity of solidarities, across interests and sentiments, from bottom to top, and made a change. The process was not without conflict. The parties still don't always trust one another, and the plan does not follow the new urbanism model in some ways that the activists and the designer hired by the developers regard as crucial. (The designer was upset enough to ask to have his name removed from the project.) And there have been a few charges that the developers were slow to build the project in order to wrest a few extra financial concessions from a nervous Ames City Council, which was anxious about the success of this novel development. Yet they still managed to make enough connections, social and environmental, to achieve a small but significant reorganization of the pattern of life in Ames.

As Joe says, "It's a matter of relationships, all these relationships: That's what nature teaches us." He paused and then asked me, nodding toward my tape recorder, "Did you turn that thing off?" I shook my head, and he repeated with a grin, leaning toward the machine, and saying in a dramatic voice, "That's what nature teaches us—the value of relationships! I hope that's what your book teaches."

I hope so too.

Reorganizing Societies

Finally, we need to reorganize the larger societies of which we are all a part. Here too there is a "top" and a "bottom" to social change, as well as interests and sentiments that must be gathered together into the interactive solidarities of dialogic democracy.

To begin with, we need better sources of communication about the environment so that we will better understand what our interests really are. The basic political thermometer of social health remains growth in GDP (Gross Domestic Product).⁴⁵ But as the environmental economist Herman Daly has noted, GDP is often a perverse measure of environmental health.⁴⁶ For example, under current accounting, a disaster like the *Exxon Valdez* oil spill shows up as a positive contribution to GDP because it stimulates so much economic activity in cleaning up the spill. So, too, for cleaning up hazardous waste sites, removing asbestos and lead paint from old buildings, and paying any medical costs incurred from environmental contamination. Moreover, depletion of nonrenewable resources shows up as income under GDP calculations instead of what it really is: an irreplaceable withdrawal from our ecological bank account. In other words, as far GDP is concerned, environmental degradation is good for the economy because, at least in the short run—and the short run is all GDP measures—it creates jobs and gives us spending money.

Daly's ideas have recently been used to devise a new thermometer, the GPI—the genuine progress indicator, a complex index of more than 20 different economic factors. These factors include measures of environmental health such as pollution, resource depletion, and long-term environmental damage, as well as measures of social health such as crime and income distribution. The GPI gives a very different picture of how we're doing than does GDP. For example, in the United States GDP per capita has shown continuous gains since World War II, whereas GPI steadily declined for most of this period. The GPI dropped 1 percent in the 1970s, 2 percent in the 1980s, and 6 percent in the 1990s through to 1995.⁴⁷ Things ticked up during the last half of the 1990s, though, growing 3.3 percent from 1994 to 2000, largely because of gains in wealth and in income equality during the go-go years of the booming '90s. All told, the GDP rose 125 percent from 1974 to 2000, while the GPI rose just 25 percent during this period—which is still

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something, but a lot less rosy a record than we usually think of.⁴⁸ Unfortunately, a lot more of us have heard of GDP than have yet heard of the GPI.

Another way to increase environmental communication is by putting the environment right where we're all sure to notice: in costs. Currently, many environmental consequences of our economic activity are external to the costs of goods and services. One way to internalize the environment in our economic thinking is through *green taxes*, sometimes called "Pigouvian taxes" after Nicholas Pigou, the English economist who proposed the idea in the early 1900s. Green taxes are an attempt to make the price of goods and services reflect their true costs and to shift the burden of government revenue generation away from regressive taxation schemes like sales taxes and value-added taxes. Finland, for example, now has a carbon tax aimed at internalizing the costs of global warming and other pollution issues associated with fossil fuel use. Britain has a landfill tax. The Netherlands and several Scandinavian countries now have energy taxes.

Green taxes offer a lot of possibilities, but like any taxation scheme they have to be handled with great care. Taxes are perhaps the most hotly contested of any issue these days. If they are not supported by public sentiment, and if they harm public interests, perhaps by being instituted in regressive ways, green taxes will be a political disaster. Also, powerful interests often get the upper hand in taxation debates, as when Belgium instituted a pesticide tax that exempted farmers and when the early versions of energy taxes in Scandinavia exempted some energy-intensive industries. But perhaps we can learn the lessons of these early experiments and use green taxes to help build an economy that reflects what things really cost.

There is also increasing excitement these days among business leaders about *industrial ecology*, as Chapter 8 discussed—about treating industry as a part of ecologic systems as opposed to a means of dominating ecologic systems.⁴⁹ The key principle of industrial ecology is regarding pollution

as a sign of inefficiency in an industry. Waste products should be regarded as wasted opportunities, not leftovers to be gotten rid of in the cheapest and faster and least conspicuous way possible. "Closing the loop" is the way advocates of industrial ecology often describe the greener approach. By greening business, we can prevent environmental problems instead of having to ameliorate them. Environmental standards such as ISO 14000 alert industry to places where the loop is perhaps not yet closed and opportunities are being wasted. Industrial ecology thus advises business to see environmental standards and environmental regulation as business opportunities rather than obstructions to be fought or dodged.

This is the process environmental sociologists refer to as "ecological modernization," as Chapter 7 also described. Rather than the old big-smokestacks-and-big-technology-that-nobody-controls vision of modernity, ecological modernization takes a greener view of modernity's potential. Is ecological modernization a contradiction in terms? It is perhaps too soon to tell. But without a more participatory and dialogic vision of modernization—a vision that includes the participation of the "top," the "bottom," and the environment itself—we may never get a chance to find out. (See Figure 10.7.)

And to get that chance we need to recognize that, among other things, there is still a crucially important place for law and good government in organizing the ecological society. We need regulation and regulatory agencies; we need laws and legislatures; we need international treaties and international treaty organizations. But we also need them to be more participatory than they have generally been in the past. As the political scientist Elinor Ostrom has observed, "In contemporary conceptions of social order, the 'government' often is seen as an external agent whose behavior is exogenous to the situation."⁵⁰ This conception of an external government has, of late, been equally characteristic of some elected officials and some of those who elected them, or have chosen not to participate in the electoral

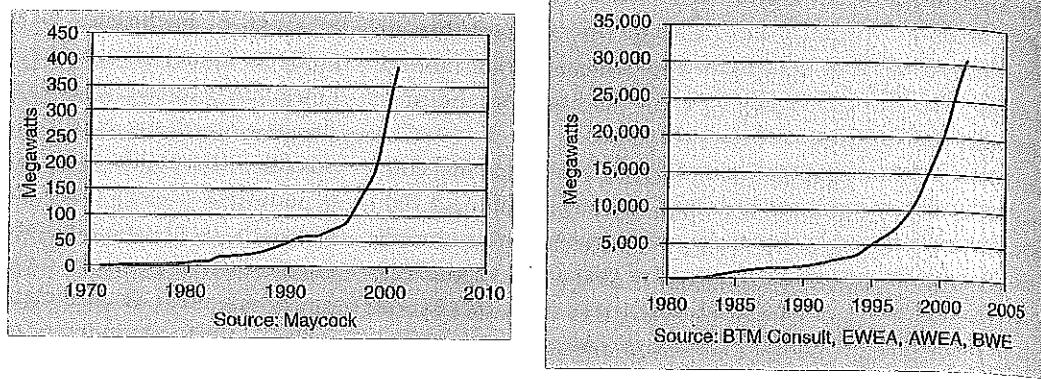


Figure 10.7 Ecological modernization: World wind energy generating capacity (left panel) and world production of photovoltaic cells (right panel). With technologies such as these, industrialism can become more a source of environmental solutions and less a source of environmental problems, argue ecological modernization advocates.

process. The us-versus-them view of the relationship between the government and the people will have to be repaired. For the government is, or rather should be, us.

Reorganizing Ourselves

In all these ways, we can achieve virtual environmentalism—the virtue of being environmental without being virtuous. And, I believe, we not only can. We must. For in the end, there is nothing virtual about virtual environmentalism. It's the real thing.

We are, however, unlikely to work to change our local communities and the bigger communities that whole societies represent unless we have personally committed to change. Reorganizing our communities also involves reorganizing ourselves. It's going to take some virtue to become virtual environmentalists.

It's important to recognize the interaction, the dialogue, between reorganizing community and reorganizing ourselves. We are more likely to regard the environment in environmentally appropriate ways when our community life is organized to encourage such regard. But we can't simply wait around for that community reorganization to

happen. We need to make it happen. Individuals are the agents of community change as much as communities are the agents of individual change.

In other words, our personal values and actions do matter. There is a crucial ethical dimension to our ecological dialogues. Our virtues, at least, need to be more than virtual.

Which brings us back to community, for ethical ideas are always ideas about community relationships. Aldo Leopold put it well in "The Land Ethic," probably the twentieth century's most influential essay on environmental ethics: "All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts."⁵¹ But how we draw the boundary of community membership shapes (and is shaped by) our sense of with whom we feel interdependent, and thus for whom we feel a sense of moral concern. (Moral concern and interdependent parts—it's the interplay of sentiments and interests again.) Our fellowship with others implies that they are entitled to our moral concern, just as we are entitled to their moral concern.

My point is that in the idea of community is the idea of equality—and the idea of inequality. There is a constant tension between community and inequality, between commitment to those included

within the community's boundaries and lack of commitment, and consequent inattention, to the troubles of those excluded from the community. Ideas of community, inequality, and the boundaries of moral concern are thus closely intertwined.

Each of the three central issues of environmentalism—sustainability, environmental justice, and the rights and beauty of nature—challenges a different dimension of these boundaries of concern. Sustainability considers how we draw boundaries of concern between present and future generations. Environmental justice considers how we draw boundaries of concern between human groups. The rights and beauty of nature considers how we draw boundaries of concern between humans and the rest of creation.

This last boundary is perhaps the most difficult. How can we form a sense of community with the ecosystem, something we're not even sure is an intentional actor? How can we form a solidarity of interests and sentiments with something we're not even sure has interests and sentiments? Would not such an "ethical extension," as Leopold termed it, be mere anthropomorphism—treating the inherently nonhuman as the human—and therefore highly unstable?

Environmental sociology can help us here, I think. We must begin by recognizing that all communities are imagined.⁵² This is why trust is so important. We cannot get into the mind of the other, so we are always guessing, trusting, and closely watching for the signs of solidarity.

The same may be the case for human-environmental interactions. We need to imagine this form of community too. And this imagination is what the environmental movement has long promoted, at least as I interpret the two sides of what has long been the main debate in environmental ethics: anthropocentric environmentalism versus ecocentric environmentalism.

Anthropocentric environmentalism suggests that we consider our own interests first in our interactions with the environment—interests in sustainability and environmental justice—and also that we need to consider the environment's interests in

order to gain our own. (That last clause, I should point out, is what distinguishes anthropocentric environmentalism from mere anthropocentrism.) In other words, anthropocentric environmentalism says, Treat the environment well and it will treat us well in return: hence, a solidarity of interests.

Ecocentric environmentalism, on the other hand, suggests that we consider the environment as a moral entity in its own right and with its own beauty and that we see ourselves as a part of that moral entity. It argues that we need to go beyond questions of calculated human interest and recognize the importance of what the environmental philosopher Paul Taylor, for example, termed "respect for nature."⁵³ But we are part of that beautiful nature for which respect is due: hence, a solidarity of sentiments.

As with purely human communities, the solidarity-of-sentiments side of environmental ethics is the harder argument to make. This difficulty stems, we cannot doubt, from the individual and instrumental thinking so characteristic of our time and place. The challenge of imagination is particularly hard here because the environment does not speak, at least not directly. Which may in part be why anthropomorphism, as in the story of Androcles and the lion, is such a popular way to think about the environment: It helps us imagine the voice of the other in the ecological dialogue.

But I believe the environmental movement is right to try to make the case for a solidarity of environmental sentiments. Even though it is a hard case to make, the evidence suggests to me that it is a vital case. Moments that threaten to bust the glue of trust are too frequent. Also, we can't always wait to figure out what part of the ecosystem is crucial to our interests before we act, and sentiments may add some efficiency here. If for no other reason than they are good for our interests, we need to have sentimental bonds with the ecosystem as well. But the bonds of sentiment are unlikely to last unless they are also good for our interests—which, I believe, they are. Thus, the wise anthropocentrist is also an ecocentrist and vice versa, not one or the other.

If the paradox of collective action is that people often do not act in their own interests when they act in their own interests, the solution is clear: Also act on your sentiments. But consider those sentiments and those interests broadly and openly. We need each to participate in the maintenance of the dialogue, the ecological

dialogue, over what our sentiments and interests—our ideals and our material conditions—in fact are.

Maintaining this dialogue is the basic work of the democratic community, from the smallest to that biggest community of all. It is also the sustainable, just, right, and beautiful thing to do.

