

Rubbernecking the Commons

It's a familiar question, one that environmental authorities are often asked by frustrated folks to whom they have just delivered yet another grim lecture about the precariousness of life on our ever more crowded, depleted, and polluted planet:

"What can I do?"

It's a question of ambiguous meaning, though—the verbal equivalent of an image some of us may recall from our psychology 101 courses in college. When you looked at it you saw either an "attractive young woman" or an "old hag." Whichever image you saw, if you stared at it for a few seconds, it suddenly flipped, and then you saw only the other. Same visual stimulus, completely different perception.

On one hand, this question so often asked of environmentalists—what can I do?—comes up as a straightforward inquiry about what actions a conscientious citizen can take to deal with some pervasive environmental challenge: How can I do my part to combat global warming, or suburban sprawl, or the decline of birds? We get frequent reminders at Worldwatch that our readers and supporters want this kind of information. They understand that one person out of 6 billion doesn't seem likely to make a noticeable difference, yet also know that the collective movement of humanity as a whole is made up entirely of the movement of individuals.

On the other hand, shift the intonation of this question just slightly—What can *I* do?—and it becomes less a request for information than a rhetorical question that means, essentially, "There's nothing I can do that makes a difference, so forget it." It's a disavowal of responsibility, a shrugging off. It may even be a kind of fatalistic surrender, a reflection of a subconscious decision that you might as well live it up now, while there's anything left to enjoy.

It's possible, though, that this sense of futility is founded on an illusion. The idea that you are only one of 6 billion implies that the

actions individuals take are simply additive. But there's reason to believe they're far more than that. To begin with, it is ecologically naïve to think of any individual as an independent actor. All individuals exist as interdependent members of communities, and communities share large complexes of commonalities, beginning with common physical and cultural environments, or "commons." Any act you take is very likely to be taken by others who share your environment, and who are therefore responsive to the same stimuli. When an action is taken by a number of people (even when they are a small minority of the community) in quick succession or all at once, the effect can be disproportionately large.

For example, look at what happens when an auto accident occurs on a crowded highway. Even if the wreck is quickly pulled off the pavement, the traffic begins to slow. Most of the passing drivers are just curious, and slow up just a bit to see what's going on. The key to what will shortly happen is that they *share* this curiosity. The ultimate result will be a huge disparity between the individual driver's perception of his momentary slowdown and the collective effect of the highway's "community" on drivers down the road.

Suppose, for example, that the individual's pause takes 3 seconds. If you could be privy to the driver's thoughts, it's likely that the 3 seconds is regarded as causing no inconvenience to anyone—it has no "effect."

That's where the illusion lies. The driver is not thinking about how his 3-second delay interacts with his social environment—because in Western industrialized cultures we are trained to think reductively rather than systemically, and to put our primary emphasis on individual experience rather than on community.

Of course, anyone who stops to think about it can see that what's a brief pause for the individual becomes a maddening delay for the community. But we don't stop to think about it. When it's our turn to pass the wreck, we too take our 3 seconds (what differ-



ence does it make now?) and move on.

The math is quite telling. When 10 cars are waiting at a red light and the light turns green, they don't all start moving at once. For each car, the cue to start moving is the movement of the car directly in front of it. The first car moves, then the second, and so on—each in turn. Similarly, if a car slows for 3 seconds, or just long enough to force the car behind it to slow too, the car behind must delay resuming speed long enough to rebuild buffer distance. At 60 miles (or about 100 km) per hour, cars are supposed to maintain 6 car-lengths. That's 75 feet for each car plus the buffer behind it, or a highway capacity (per lane) of 70 cars per mile.

At 60 mph, or a mile a minute, that's 70 cars a minute. Now go back to that 3-second slowdown. If each car in turn takes just that much time to take its own peek and regain buffer, the first 70 cars—which would normally have passed in one minute—now take 70 times 3 seconds, or 3½ minutes. If you're 2 miles back when the accident happens, it takes you 7 minutes, instead of 2, to reach it. If you happen to be 10 miles back, it takes you 35 minutes instead of 10. By the time the wreck has been hauled away, a lot of meetings and doctors' appointments have been missed, and a lot of productivity has been lost for the community as a whole.

What's most interesting about this situation is the degree of willful obliviousness it demonstrates. When a driver who's been crawling for 35 minutes finally reaches the accident, having just experienced the most direct possible demonstration of how seemingly tiny individual actions generate large social impacts, he still manages to dissociate and slow down with Pavlovian predictability to take his own quick peek at the wreck.

The bad news in this is that if we don't see the links between individual and social action when they're virtually in our face, it's going to be formidably hard to see them when they're more indirect or obscured or delayed, as most such connections are. Social science has done a fairly good job of finding these links, but unless they're perceived by the general public and consciously considered in voting and policymaking, those findings are largely wasted. (If the evidence of links between child abuse and subsequent adult crime, or between education of girls and population stabilization, or SUVs and climate change, were as close to the daily awareness of Americans as are the events of the entertainment and sports worlds, for example, a radically different—and immeasurably wiser—set of people would be running the congress and presidency.)

The good news, though, is that if small personal actions are not simply additive, but can have exponentially expanding impacts on social movement, then small acts of a consci-

entious nature, as well, may have larger impacts than they appear to. In the November/December 2002 issue of *World Watch*, for example, an article by Erik Assadourian discusses the power of community gardens to change the world. The title, "The Butterfly Effect," refers to a proposition of chaos theory, that "the motion of the wings of a single butterfly can affect the tides on the far side of the Earth." Many readers may view this sort of claim as merely metaphorical, or at best hyperbolic. Quantitatively, the jet planes roiling the Earth's air in a single minute are probably enough to obliterate the reverberations of all the butterflies that have lived in a billion years.



And the enormous scale of industrial agriculture is to your backyard garden as a battleship is to a seed pod. But this kind of simple quantitative comparison misses the point, which is that that tiny initial effort expands exponentially and in ways that are not immediately obvious.

Take the elementary school garden Assadourian describes, next to a freeway ramp in downtown Los Angeles. Suppose a child who works in that garden, watching carrots grow and then getting to eat them freshly cooked (lightly boiled, not too soft, with a little butter) grows up with a memory of that taste which, years later when she's trying to decide what courses to take, tips her into a biology elective...and then into studies of food and health...and one day into pioneering work on the relationships between food and emotional health. Suppose she finds her way to studying the power of local, organic, hands-on food production to strengthen a community's sense of self-sufficiency and connectedness, and then to quantifying the economic value of that local productivity in helping to stem the still rising tide of health-care costs. Her work attracts attention and triggers a shift in agricultural investment, from factory farming to community farming (not "back" to the farms of the past, but "forward" to forms of local sustenance that integrate the cultural integrity of traditional communities with the new disclosures of mid-twenty-first century biology, psychology, and health sciences.) A child's memory becomes the path to an economic shift. A butterfly's wing to a tidal wave. It has happened before.

The point is that no human act is insignificant, though we may only rarely learn what its eventual effect will be. Every effect has myriad causes, and every cause myriad reverberations, so no sequence is isolated or easy to track. Our science is too reductionist, too myopic, to let us see. But if we think 3 seconds of selfishness hurts no one, we're wrong. And if we think a small act of kindness or conscientiousness makes no difference, we're wrong about that too.

—Ed Ayres, *Editor*