

DOING GOOD

“Paper or plastic?”

After all these years I still feel just a little bit smug saying “Neither.” But does it really matter that I’ve lugged around my worn-out cotton bag all day? Should I feel less smug because it contains fruit trucked in from Florida? What about the lady behind me who has passed up oranges in favor of local apples?

Local is good. Fine. But when can I eat my daily apple? Local New York apples in the summer, after ten months in an upstate cool house, may well have a larger carbon footprint than apples flown in from Chile, harvested during the Southern Hemisphere’s growing season. It’s a global conundrum. Say you’re a Londoner. Dutch flowers raised in a greenhouse lose out against roses grown under the Kenyan sun and packed into a 747 before reaching your neighborhood florist.¹

I’m no No Impact Man, but I try to minimize my environmental footprint wherever possible. My wife and I live in a one-bedroom

apartment in New York without air-conditioning, much to the consternation of our superintendent, who has offered to install a unit for free. No way. We want to keep our combined monthly electricity and cooking gas bill under \$30. That's less than a third of the U.S. national average. We have taken our super up on the offer to install efficient compact fluorescent lightbulbs throughout our apartment, and I continue to stare in amazement at our low-water, high-intensity toilet. Which Ph.D. got to spend time testing that patent?

Why do I do all this? Is it pride, conviction, delusion? Yes, I enjoy the self-affirmation of my "neither" at the grocery store and my warm July apartment. Look at me! I understand what is going on around this planet and am trying to relate to it in a constructive way. But do I really think having an *überefficient* toilet flush will make a scintilla of difference in the final outcome? What if I have to flush twice? Even if I convince my parents, my in-laws, my relatives, my friends, everyone who ever passes through our home, and everyone who reads this book to take the exact same steps, *will the planet notice?*

I may not drive, but I fly. I fly a lot. Almost every vacation my wife and I go on is sealed by stamps in at least two of our four passports. I saw my family in Austria six times last year, mostly on the way to and from United Nations-sponsored climate meetings. So much for worrying about three-ply toilet paper and the occasional out-of-season grape. Whatever you and I do on a daily basis is dwarfed by a single cross-Atlantic flight. However much you recycle or turn off lights, it will be canceled out many times over by your driving a car. Driving ten thousand miles in even the most fuel-efficient Prius produces four tons of carbon dioxide. That matches annual emissions for the average human on the planet. It also equals two transatlantic round-trips on a commercial jet. Little wonder then that the average European emits around ten tons per year; the average American tops even that at twenty.²

Transport choices raise real questions. Flying from Washington to

New York or from Salzburg to Vienna is nuts—environmentally and as a matter of personal comfort, cost, and speed. Flying from New York to Vienna is a different matter altogether.

How to balance the benefits of seeing my brothers, parents, and grandparents—or simply of roaming around a Moroccan souk or lounging on a Caribbean beach during vacation—against the environmental impact of the inevitable plane ride needed to do so? How do any of us balance our responsibility to the planet and to each other? Is Epcot the only environmentally sensible way for Floridians to see Paris, and Euro Disney the only way for Parisians to experience life on Main Street, U.S.A.? What good are the (dwindling) snows of Kilimanjaro if we can't experience them with a clear conscience? What are we—individually and as a society—prepared to give up to keep the snowcap and a million other aspects of life as we know it today?

NO VOLUNTEERS, PLEASE

One answer is to forgo modern comforts and opt for a modest, sedentary life. Good luck with that. Abandoned farmhouses and empty monasteries point to how well that goes over in our age. Two weeks of silence in a Buddhist yoga retreat in the Himalayas with BlackBerrys checked at the door? Sure. An entire life voluntarily lived off the grid? Not so much.

More important, what you and I do individually does not make the least bit of difference on its own. For every environmentalist voluntarily living in a Mongolian yurt in Alaska, there are plenty of Mongolians, Chinese, Americans, and many others who gladly would—and do—make up for the missing environmental footprint. Worse, many of the perceived environmental improvements in the United States, Europe, and other wealthy parts of the globe are a sleight of hand, achieved by shuttering factories producing energy-intensive products. We still use the same stuff; we just don't produce it ourselves. The

planet doesn't care that it's now made in China and elsewhere with cheaper labor and resources. All else being equal, the planet would prefer products to be produced closer to where they are consumed to cut down on shipping.³

Short of the occasional rounding error or the off chance that your personal action will start a social movement, the small things you and I do in our daily lives, taken by themselves, have no effect. Not driving might keep me sane, safe, and save quite a bit of money, but it has virtually no global environmental impact. Going vegetarian? Zero. Wearing organic, natural fibers? Zip. Flying less, or offsetting emissions from flights? Zilch.

Worse, all these steps may well be counterproductive. Just think of the rain forest that needs to be cleared to grow the soy for my tofu or the additional land that gets converted to agriculture to produce pesticide-free cotton. Even buying carbon offset credits may backfire, if buying them makes me feel better about flying and as a result I do more of it. If the money is used to subsidize a wind farm, your offset dollars help decrease the cost of energy overall, which in turn may well motivate others to use more.

Most do-gooders encounter a "rebound" effect of sorts: now that I'm offsetting my carbon footprint by spending a few bucks to plant trees, I get to drive and fly more. The same goes for spending money on buying green energy.⁴ Volunteering to spend a bit extra on my electricity bill ensures that my utility spends a bit extra on wind rather than on coal energy, but purchasing green electricity makes me think I can keep the air conditioner running without guilt, canceling some of the benefits.

In truth, broad-based studies of the rebound effect have shown that it hovers around 10 percent to 30 percent, most certainly less than a hundred.⁵ A more fuel-efficient car makes you visit Grandma a bit more often; it doesn't void all of the environmental benefits. But that says little about offsets as marketing ploys and the ways individuals react to them. Why else would some airlines draw attention to their carbon footprint on their booking sites, if not for the hope that you would fly more often—or at least choose them over their rivals?

Even the warm and fuzzy feeling these actions create may come with negative side effects. Psychologists talk about the “single-action bias.” I refuse to grab a plastic bag at the take-out place and falsely imagine that my token gesture somehow makes a difference that compensates for other environmental sins throughout the day. That bias can result in phenomenal mass delusion. Significantly more Democrats thought the environment was getting better after President Barack Obama took office than only a year earlier, as if the mere act of voting by itself made everything just dandy.⁶ Thus go the unintended effects of a well-meant climate absolution. In the end, of course, the atmosphere notices neither the tiny positive nor the tiny negative effect of individual actions.

The question is how to get to a critical mass that does make a difference. When is one plus one no longer zero or even just two?

One way is to start a movement. The Nobel laureate Wangari Maathai and her followers have planted millions of trees in sub-Saharan Africa. “Slow food” is quickly spreading beyond foodie enclaves and college campuses and changing the way more and more of us look at what we eat. The Earth Day movement in the United States has had profound effects since its inception over forty years ago. The very first Earth Day drew twenty million people, a tenth of the U.S. population at the time, and rang in the environmental decade. It turned Richard Nixon into an environmental president and led him to sign some of the most significant pieces of environmental legislation, such as the U.S. Clean Air and Water Acts. Still, the environmental movement has yet to garner enough momentum to fix many of the crucial problems we are facing now.

Bill McKibben’s 350.org is trying to rekindle that spirit and then some for a global climate movement. It has managed to mobilize some of the most widespread political protests in history, and it may yet end up pushing the needle. But the crucial point is that it’s not up to the thousands or millions coming to the streets with “350” signs demanding that greenhouse gas concentrations in the atmosphere return to that level. It will be up to a handful of politicians to pass laws that will

make the difference. That, of course, is exactly the point of these protests, and McKibben is the first to say as much.

The facts are brutally clear. The collective will and drive of billions voids most if not all feel-good efforts of freelance environmental heroism. It's the tremendous power of channeling those billions of individual decisions through markets that has provided Americans, Europeans, and a few lucky others with unprecedented levels of personal wealth. It has pulled hundreds of millions of Chinese out of poverty, and it is increasingly doing so for millions of others. Markets are the primary mechanism that produces modern growth and dynamism. They open up the playing field for innovators and entrepreneurs to create the creature comforts most of us can't imagine living without.

Yet this book is not an argument for market fundamentalism, shrinking government into oblivion and leaving everything to its own devices. Markets require property rights, a framework for legal institutions, and well-functioning enforcement mechanisms: no market without government.

Market forces unfettered by smart regulatory guidance have led to entire peoples being left behind, burst housing bubbles, and other assorted market crashes—the latest driving six million Americans to live off food stamps and pushing nations into the capitalist abyss.⁷

Despite these real and serious problems, whenever I get carried away deriding market inefficiencies and castigating capitalism, I am reminded of the brilliant *New Yorker* cartoon of two cavemen contemplating their short lives: “Something's just not right—our air is clean, our water is pure, we all get plenty of exercise, everything we eat is organic and free-range, and yet nobody lives past thirty.”

Americans may live slightly shorter lives than many Europeans and the centenarian-producing Japanese. Recent gains in life expectancy may have stalled, and the leaky social net and obesity epidemic might even mean we're creeping backward, but people in the United States still live twice as long as much less fortunate ones in dirt-poor

Zambia, Angola, and Swaziland, which grace the bottom of the global ranking.⁸

Wealth is not everything in this calculus. Cuba's life expectancy famously rivals that of the United States without much free-market ideology. And of course, you won't be able to eat money when the last tree has been cut, the last river poisoned, and the last fish caught. But at least up to a point, having it sure seems to help.

SOME GROUND RULES

Money makes the world go 'round. I take this statement as my starting point. Whether we like it or not, our values and priorities have made this true. The nearly ubiquitous pursuit of wealth and status makes it a practical guide for both studying and nudging human behavior. After all is said and done, that pursuit is how most people behave on average. The question of whether or not this should be true is significant, profound, and pressing. It's also not one I attempt to answer. I leave that to theologians, philosophers, poets, and new-age yogis searching for a deeper meaning in life.

With money making the world go 'round, it's also no doubt true that free markets left to themselves are destroying our environment. We are eating raw, mercury-laced endangered species from ever-less-populated seas while cooking the planet under a blanket of greenhouse gas pollution. It's no longer a question of *if* New York City will be underwater if we don't turn things around soon. It's a question of *when*. No continent will be unaffected, with up to a billion people on the move.⁹ Talk about extreme events. And that—without action—is what *will* happen.

That's a starting point as well. I am not setting out to prove and reprove the science. Plenty of volumes have been written on the topic that do so admirably. I do not pretend to know more than entire National Academies of Science or to be able to recount the facts of global warming more persuasively than award-winning science writers from

Heidi Cullen to Tim Flannery, Ross Gelbspan, Mark Hertsgaard, Elizabeth Kolbert, Mark Lynas, Bill McKibben, Carl Safina, the late Steve Schneider, and, yes, Al Gore.¹⁰ The recent politicization of basic chemistry and physics is unfortunate, but it does not change the facts—nor is it a matter of “belief.” As astrophysicist Neil deGrasse Tyson says, “The good thing about science is that it’s true, whether you believe in it or not.” Climate change is a serious threat to our planet and human welfare. Case closed.¹¹

To be sure, there are many aspects of an increasingly unstable climate that have yet to be clarified. Most of them make things more urgent, not less so. There is indeed a teeny, tiny chance that the vast scientific consensus is missing something crucial and that the planet will somehow cope with greenhouse gas concentrations at twice their preindustrial levels, and growing. Yet the chance is much greater that the notoriously conservative scientific community is lagging behind the latest trends.

The North Pole seems to be turning free from summer sea ice fifty years ahead of schedule—within this decade rather than the latter half of the century, as predicted in consensus documents as late as 2007.¹² That even has effects on the length of days. The melting poles act like an ice skater stretching out her arms while spinning. More weight farther from the axis slows her down. The same happens when ice melts on the poles and more water accumulates near the equator. Dumping carbon into the atmosphere is literally slowing the rotation of the planet. Things are bad and getting worse, and behind the remaining uncertainties is the strong possibility that they are much worse than we understand.

Moreover, climate may be the defining environmental issue of our time, but it’s not all that’s out of whack and getting worse because of misguided market forces. The global carbon cycle is only one of many we as humans are now dominating and changing beyond recognition. Our influence on the nitrogen cycle is arguably much worse, and we have long taken over the oceans and changed entire ecosystems irreversibly.

BUT WILL THE PLANET NOTICE?

Science begone. This book is about both more personal and much larger questions: What about the energy-saving lightbulb? Or passing on the beef?—questions that haunt us every day. To which we should always add, does the planet notice what you and I do personally? That, if anything, is *the* question we need to ask ourselves, and it turns all these personal questions on their heads.

If you are hung up on whether or not you should order the skirt steak, you are missing the mark by several orders of magnitude. The question is whether society at large should—and not in a paternalistic red-meat-is-bad-for-you kind of way.

Let's imagine everyone suddenly started ordering steak. If that happens in a single restaurant, the kitchen would run out soon enough, and the waiter would have to start apologizing profusely. Of course, you are free to leave the restaurant in search of your meat fix. On the planet, that's impossible. At that scale, we are indeed facing real limits. Moreover, we can't influence these limits—and the way we are coping with them—by ourselves.

The fundamental forces guiding the behavior of billions are much larger than any one of us. It's about changing our system, creating a new business as usual. And to do that we need to think about what makes our system run. In the end, it comes down to markets, and the rules of the game that govern what we chase and how we chase it.

Scientists can tell us how bad it will get. Activists can make us pay attention to the ensuing instabilities and make politicians take note. When the task comes to formulating policy, only economists can help guide us out of this morass and save the planet.

In an earlier time with simpler problems, environmentalists took direct action against the market's brutal forces by erecting roadblocks or chaining themselves to trees. That works if the opposing force is a lumberjack with a chain saw. It might even work for an entire industry when the task is to ban a particular chemical or scrub a pollutant out of

smokestacks. But that model breaks down when the opposing force is ourselves: each and every one of us demanding that the globalized market provide us with cheaper and better food, clothes, and vacations.

There is no blocking the full, collective desires of the billions who are now part of the market economy and the billions more who want to—and ought to—be part of it. The only solution is to guide all-powerful market forces in the right direction and create incentives for each of us to make choices that work for all of us.

The guideposts we have today for market forces evolved helter-skelter from a historical process that gave almost no weight to the survival of the planet, largely because the survival of the planet was not at stake. Now it is. Since we can't live without market forces, we need to guide them to help us keep the human adventure going in workable ways, rather than continue on the present path right off the edge of a cliff.

Presidential candidate Barack Obama said it most succinctly: “Well, the truth is, Brian, we can't solve global warming because I f—ing changed light bulbs in my house. It's because of something collective.”¹³ He was cautious enough to say this after the debate moderated by Brian Williams and not in front of rolling cameras, or he might not have been elected. But the spirit of his remark is absolutely right.

It's not that everyone shouldn't be insulating homes, carrying around cotton canvas bags, and taking public transport. The point is exactly that *everyone* should do these things, and not from the desire for smugness or personal satisfaction, but because it's the cheapest, easiest thing to do.

As much as this issue has been politicized, this is not about right versus left, Republicans versus Democrats, conservatives versus conservationists, or markets versus the environment. This is about liberating markets and consequently turning each and every one of us into a force for good; it's about making sure that increasing GDP, gross domestic product, does not decrease collective well-being.

It's about taking personal responsibility for costs we now socialize and impose on society and the planet as a whole. Our choices are already being influenced by forces much larger than ourselves. They always have been and will be. The question is whether the nudging we submit to is guiding us where we want to go, preserving life and the rotation of the planet as we know it.

This equation has no neutral ground. It's not a clear-cut moral issue, nor is it a personal question that has a simple answer based on one's belief system. This isn't as easy as the decision to go vegetarian, as much as I would have liked to write a book like Jonathan Safran Foer's *Eating Animals*, a gripping essay that convinced Natalie Portman, a lifelong vegetarian, to turn vegan and one that convinced my wife, a lifelong seafood lover, and me, a lifelong Austrian, to give up meat once and for all. The conclusion is simple: Don't eat animals. Saving the planet is in a different league altogether. It's not something that can be resolved by yourself, or in a personal conversation between you and your God. It's between you and the seven billion people breathing the same air, drinking from the same interconnected water system, and looking to the same sun for light, energy, and heat.

Foer had an additional benefit: fuzzy animals, most of whom are cute. Alas, my argument means keeping company with economists. Some of these encounters will be pleasant, friendly exchanges of ideas. Some will be like bitter pills. It's easy to like economists when they work on cutesy topics from baby names to sumo wrestlers. It's tougher to like them when they prescribe trillion-dollar bailouts of loathed financial companies, or when they work on ensuring that we will never find ourselves in a situation where we wished we could bail out the planet. But in the spirit of remaining on a livable Earth, here goes.

GAME PLAN

Many of the questions in this book are at the very heart of human survival. How can we guide market forces in the right direction, away from the earth-shattering, planet-destroying ways of the past into a low-carbon, high-efficiency, low-impact future? Or, most simply, how the heck do we get out of this mess?

There will be lots of questions, some data, fewer firm conclusions. One conclusion, though, is already clear: pick your battles wisely, don't sweat the small stuff, live the 80-20 rule, and generally follow whichever cliché prompts you to avoid missing the biodiversity of an entire carbon-sequestering, life-giving forest for a single tree.

This is not about recycling the battery or putting your milk carton into the right receptacle. (Which one is it anyway? It's not just paper. It's not plastic either. And what about the thin film of sour milk inside? Is it worth the water or perhaps even dish soap to get it all out?) It's about freeing ourselves from those worries and instead fretting about the big issues.

It doesn't get much bigger than a near-total collapse of the financial system and a planet on life support. That's where we will start.