

Navigating The Household Waste Stream

Alternating between personal observations and statistical barrage, the author of Garbage Land dwells on trash, tactics, and the search for moral (as well as amoral) clarity.

Jennifer Weeks

FEW OF US voluntarily sift through our household trash (unless we accidentally threw out something valuable), but freelance writer Elizabeth Royte sorted and cataloged the contents of her family's kitchen trash can for nearly a year in the course of writing *Garbage Land: On the Secret Trail of Trash* (Little, Brown, 2005). A short kayak excursion on the Gowanus Canal, an urban channel near her home in Brooklyn, made Royte wonder whether any of the waste drifting by came from her house — or, if not, where exactly her trash went. Asking that question led her to write this book

about how we generate garbage and what we do with it.

Most Americans know little about where waste goes when they throw it out. “People think there’s a garbage fairy,” says one of her neighborhood trash collectors. “You put your trash on the curb, and *pffft*, it’s gone. They don’t have a clue.” And Royte (who writes frequently about science and nature for magazines including *Outside*, *Smithsonian*, and *National Geographic*) acknowledges that even people who consider themselves environmentally aware often think more about where their goods come from than where they go post-use: “Enlightened consumers, we don’t want to eat endangered fish or buy rare hardwoods. We care about animal rights and clean water. But it wasn’t fair, I reasoned, to feel connected to the rest of the world only on the front end, to the waving fields of grain and the sparkling mountain streams. We need to cop to a downstream connection as well.”

Royte follows the branches of her household waste stream around New York City and out of state, reporting on where trash goes, how well current disposal methods work, and prospects for generating less garbage. She alternates personal observations in her kitchen and at waste-management and recycling facilities with a barrage of statistics about waste generation and its environmental impacts (including indirect effects such as air pollution from operating heavy-duty collection trucks and barges). Her findings are not a comprehensive analysis of U.S. waste practices: she writes about household garbage, not industrial or agricultural waste — which, as she notes, are larger shares of our total output. But *Garbage Land* is a bracing and often entertaining look at the big picture.

FROM HOUSEHOLD CAN TO NATIONAL AVERAGES

Royte weighs and inventories her kitchen trash throughout the book to see how her family of three ranks compared to national waste-generation averages. They’re on the low end, as it turns out — averaging 4.65 pounds of trash weekly — because she recycles metal, plastic, and paper (she leaves beer bottles on the sidewalk for a local homeless man named Willie, who redeems them for the deposit) and composts her organics, albeit with mixed success. Then Royte tracks her garbage, starting with landfills, the most “secret” part of the trail: she is refused entry to the site in Bethlehem, Pennsylvania where her own waste ends up, as well as initially to the Fresh Kills landfill in her “backyard”). “I found that from the moment my trash left my house and entered the public domain — where no higher authority than the U.S. Supreme Court had determined it was open for general inspection — it became *terra incognita*, forbidden fruit, a mystery that I lacked the talent or credentials to solve,” she writes in frustration.

Later Royte tours Fresh Kills, where she is impressed by sweeping views across New York Harbor from the reclaimed hills. She provides a useful explanation for nonspecialists of the landfill decomposition process and its uncertainties, noting that “depending on its burial context, a Granny Smith apple can biodegrade completely in two weeks or last several thousand years.”

Paper recycling is a clear economic winner, averting substantial emissions from virgin paper production and generating a valuable product. The question here is why paper diversion rates aren’t higher: in New

York City, according to Royte's figures, the high water mark is about 19 percent. She reminds readers that buying recycled paper will generate market pull.

The picture is less rosy for electronic waste such as computer parts, DVDs, and cell phones. As Royte tells it, the relatively small degree of e-recycling that takes place often sends components to China and other developing countries, where untrained laborers extract copper, gold, and other metals from circuit boards without protective gear. There are few more attractive options for computer recycling, she writes, because the process is labor-intensive and markets for the harvested materials fluctuate, and because high-tech recycling programs are difficult (by design, she suggests) compared to scrapping old components and buying new ones. A few states, including California and Massachusetts, ban e-waste from landfills and from shipment overseas — perhaps as the beginning of a system that will require producers at some point to assume responsibility for product disposal.

The other sector that receives intensive treatment from Royte is plastics, which she refers to as "Satan's Resin." She explains why the triangular chasing-arrow symbol on plastic containers gives processors headaches: consumers toss everything that bears it into the recycling bin, but fail to read the ranking numbers and distinguish between the types that are and are not easily processed. Royte's bottom line is that plastic is not readily recycled: "Streams of mixed plastic can be turned into only one other product (plastic wood, garden pavers, or toothbrush handles, for example). When their useful life is over, these products cannot be 'recycled' again. They have to be burned or buried. Either way they add toxins to the environment." Choosing between paper and plastic bags at the supermarket may not be a toss-up after all.

Royte's tour of the waste environment also includes household sewage, which she tracks first to a treatment plant in southern Brooklyn (noting en route the continued problem of combined sewer overflows in U.S. cities) and then to the New York Organic Fertilizer Company's pelletization plant in the South Bronx. This section allows Royte to spotlight a theme that she sounds throughout the book: the over-concentration of waste disposal

and processing sites in low-income and minority communities.

STAGGERING RATES VS. MORAL CLARITY

Assessing what she's seen, Royte focuses on the staggering rate at which Americans generate waste and identifies some driving forces, including over-packaging and increased demand for single-serving portions and disposable products. Royte notes that single-use items such as paper towels and sanitary napkins have been marketed as "scientific, modern, and hygienic" since the 1920s, and that many Americans view the option to throw unwanted goods away (rather than reusing them) as a privilege that comes with affluence. She fingers the environmental movement for playing along with this mindset by urging consumers to buy green products when source reduction is really the issue: "Green purchasing tells us to vote with our wallets, but it ignores a third choice: not buying at all. I resist the green buying message because I hate to think our strength is based in consumption, not moral clarity."

The waste industry provides Royte with many good stories in *Garbage Land*, but few moments of moral clarity. When she visits New York's Lower East Side Ecology Center to discuss composting, she learns that the program is subsidized by grants and pours its leachate down the drain. Like many advocates, Royte appears to have mixed feelings about relying on the profit motive to further environmental goals: when an executive at the Hugo Neu steel recycling firm describes the company's round-the-clock push to process steel from the World Trade Center towers Royte concludes, "Hugo Neu had, in the end, done what it always did. It profited by trading waste." Later she assesses San Francisco's organics separation and composting program: "I pondered how much energy it took to push around San Francisco's carrot tops, pinot noir bottles, and sushi containers. The work provided jobs, and it probably kept some natural resources — nitrogen, silica, fossil fuels — in the ground. But I couldn't help thinking at times that we were, at great cost, shifting our messes from one place to another while a private waste management company greedily toted up its earnings."

However, Royte clearly wants these programs to succeed, and ultimately

she works through her ambivalence about the usefulness of personal actions such as recycling and taking part in beach cleanups (she finds them worthwhile less for their net impact on waste than because they remind her of her own connection to the natural world). She finishes by linking the relatively small municipal solid waste stream to the larger volumes of industrial and other wastes that are generated in producing goods that consumers buy and discard. Our own consumption, she argues, is just the tip of the iceberg, and managing waste is not enough in the long run: "We can recycle and compost as much as we want, but if the total waste stream continues to grow — and it is growing, whether in places where recycling is on steroids, like Seattle, or in places where recycling is anemic, like the entire state of Mississippi — we'll never escape our own mess."

Paper recycling is a clear economic winner, averting substantial emissions from virgin paper production and generating a valuable product. The picture is less rosy for electronic waste

Royte doesn't offer specific policies for reducing waste, and doubts (correctly) that any silver-bullet solutions are pending. The problem is every bit as daunting as the challenge of transitioning away from fossil fuels to a sustainable energy future. Indeed, these two issues are linked: the energy shift is about finding more sustainable ways to power our economy, and the waste challenge is about what we do with its outputs. Many energy experts stress that moving to a clean energy future will be a process of small steps, applying individual fuels and technologies where they are most appropriate. □

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