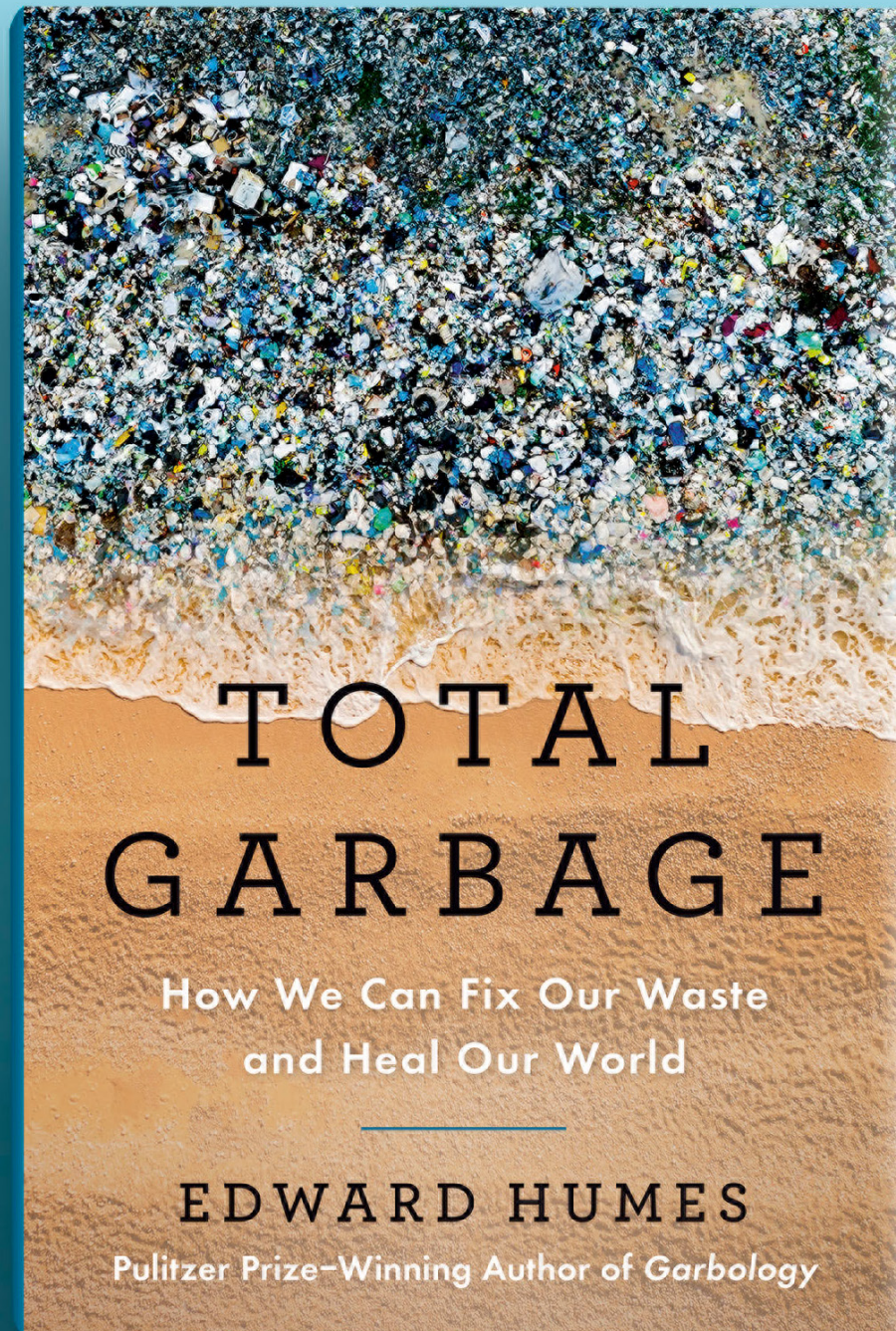


DISCUSSION GUIDE *for*
STUDENTS *and* EDUCATORS



OPENING

- What drew you to this title, and what were your assumptions about what the content within would be? How big of a problem did you know our waste on a human scale to be? What were you hoping to learn from this book?

PROLOGUE

The Credit Card

- “You swallowed 285 pieces of plastic today” (xiii). Were you startled by this number and the weekly sum of up to five grams (which is enough to constitute a credit card)? In what ways?
- When you break down your daily routines, using the simple Starbucks cup of coffee example (xv), is it easy to see where waste and plastic enter our lives at every sip?
- “Simple, prosaic, heedless waste, trashiness in its innumerable forms, is our archvillain” (xvii). If waste is the root crisis, how does the author suggest we can begin to reframe our thinking? Should anyone be excused from playing a role in the solution? How have we as a culture accepted waste in all forms as normal, even beneficial?
- “Change comes in two ways. It can be driven from the top down, with the sorts of new laws championed in Maine and elsewhere aimed at ending the free ride that makers of wasteful products have long enjoyed. . . . Change is also driven from the ground up, home by home, neighborhood by neighborhood, and community by community” (xxi). Is it useful to consider both these aspects of the fight to fix our waste in your work? Where do you have the most influence today?
- What are the new “8 Rs”—Rethink, Repower, Refuse, Reduce, Reuse, Repair, Recycle, Rot (xxiii)? Did any of these upgrades surprise you? Why has it become necessary to expand the initial list of themes in our current age (from the “Reduce, Reuse, Recycle” mantra of decades ago)?

PART ONE

Our Dirty Love Affair with Trash

1 OUR DISPOSABLE AGE

- How did “Owen’s List” serve as a messaging “link between what their neighbors thought was waste and the businesses that saw it as a valuable resource” (5)? What business model did it create?
- How did the invention of Bakelite in 1924 define the beginnings of our “plastic planet” (6)? From jewelry to clocks to trailers, how did these Bakelite goods begin to dominate the consumer’s world? What did product designers working with this new “miracle” material fail to foresee in considering the fate and impact of their products, and why were they so shortsighted?
- How has plastic powered our scientific, military, medical, and technological wins (9)?
- When we design products with their “use in mind, not their *demise*” (10), what are the risks? How does the concept of disposable, “smaller bits of instant trash” further complicate our relationship to plastic?
- How did disposability go from being a “strange and possibly wicked” idea to a “desirable and inevitable” habit (12)? What were the results of these inventions, stemming from the 1960s to the 1990s to today, when we generate a staggering 400 million tons of this kind of trash a year?
- How does Ridwell’s success and transparency with their subscriber-driven community recycling program speak to the potential for other businesses modeled on their framework? How did Ridwell bust the “black hole” of knowledge around recycling for the customers they serve (16)? What are some of the products sustained by Ridwell’s work (for example, Trex)?

2 TRASH GENIUS

- Why is Jenna Jambeck called the “Trash Genius” (21)? How does a CAP (Circularity Assessment Protocol) yield Jambeck data on what kind of plastic waste is flowing out of a community? What are communities able to accomplish with such site-specific data?
- When Jambeck looks at how rice is packaged, what does that tell her about consumer choice or “consumer confusion” (26)? What does packaging variety tell us or conceal from us? Explain.
- How did outsourcing and offshoring in the 1990s impact recycling efforts (27)? How did trash become the United States’ largest export?
- How did Jambeck’s data collection projects like the Marine Debris Tracker (32) shine light on the scale of pollution and “zombie waste”?
- Why must a community action plan built on data be sensitive to local customs and values?

Our Dirty Love Affair with Trash

- What are the elements of Jambeck’s plastic pollution flowchart (35)? How does that shine a light on where waste can be reduced or eliminated?

3 MESSAGE IN A BOTTLE

- Describe Sarah Nichols’s and the state of Maine’s strategy to fix the state’s broken recycling system (41). What is an EPR (extended producer responsibility) law, and what are its goals? Is it likely to be effective? Why or why not? Do you think it’s an equitable or unfair approach, and why? Who do you believe should ultimately pay for the costs of cleaning up and repurposing single-use packaging and container waste?
- Discuss the history of the glass bottle and how its value and ownership have fluctuated over time as our first recyclable (43). How did the advent of seltzers and sodas reshape the destiny of the glass bottle?
- How does the concentration of an item (soda, soap, detergent) contribute value to the consumer while reducing the waste, shipping, packaging, and pollution associated with diluted formulations (46)?
- How does charging container deposits to consumers prevent waste and contribute to a circular low-waste economy (47)? Why didn’t we keep, or shift back to, reusable containers and packaging?
- Before reading *Total Garbage*, were you familiar with Keep America Beautiful’s “Crying Indian” advertisement (48)? Why did the beverage and packaging industries finance and push anti-litter messaging and the idea that “People start pollution. People can stop it”? Do you agree that advertisement and its underlying message constitute greenwashing? Explain why or why not.
- “Americans were throwing out a bit more than seven pounds [of garbage] a day” (52–53) and recycling less than a quarter of that. Were you surprised by this volume or the recycle rate from 2012? What accounts for our increase to 8.2 pounds a day in 2017 (per Columbia’s data)?
- From the section “What You Can Do Right Now About the Disposable Economy” (55), are there any strategies you are excited to try or ones you’d find daunting in your everyday routine?
- Did you find Sarah Nichols’s “How to Be a Marge” tips (59) inspiring or practical? How will you push yourself as an activist, citizen, or organizer?

PART TWO

Power Hungry

4 RING OF FIRE

- How did Chef Christopher Galarza’s experience in broiling kitchens and then his work at Chatham’s Eden Hall and with induction cooking (65–68) shape his career choices and mission?
- How does induction work and who discovered it (68)? How has it been refined, and what are some of the applications for induction—in our lives and across technology?
- How did Chef Galarza shape his kitchen around the pros of the induction cooking system (73)? What impact on the environment, his staff, and his budget has induction cooking had?
- How do Chef Rachelle Boucher’s campaigning for kitchen electrification and her business Kitchens to Life impact her community and her homelife (78–79)?
- What are the dangers of gas stoves (80–82)? What pollutants, particulates, and chemicals are released, and what health risks do they pose? Does learning about these emissions cause you to question your use of and feelings about cooking with gas?
- Did you find Chef Boucher’s list of risk-reducing steps for cooking with gas useful (84)? What steps or practices will you immediately implement?

5 TAKING THE HEAT

- What helped propel the induction cooker out of the shadows, making it an affordable option for most home cooks (85)? What was the backlash, and what areas or organizations did it stem from?
- “Only stoves inspire the equivalent of brand loyalty to a fuel. . . . Many of us feel an emotional attachment to our gas stoves, tied to so many happy events from the past” (91). How is this association a hard one for consumers to break? What do you think could sway them to shift to a safer and arguably superior way of cooking? How is the gas stove a gateway to “keeping consumers hooked on gas for everything in the house—and beyond”?
- Describe the influence of the 1893 world’s fair in Chicago and the “City of Light” on the American imagination for an electric future (92). What influences stood in the way of turning the demo into widespread urban reality?
- “This gas smelled, burned, and polluted differently than today’s natural gas, lacking the potent heat-trapping pollutant methane that today’s natural gas is made of” (95). Why is this distinction relevant to the arguments of consumers, industry, and policymakers?
- How do heat pumps work and how are they a win for “pocketbooks, pollution, and climate” (97)?

PART TWO

Power Hungry

- How could investment in an education campaign on the respiratory impacts of gas on the health of children and vulnerable adults make a difference? How does Walmart's push for organic kids' clothes (98) provide a model?

6 SQUEEZING THE JUICE

- How is the Banana Farm a model for a "more energy efficient, sustainable, and resilient" and more economical way of building (103)? What are the principles that can be used even to retrofit existing buildings?
- What is the Passive House movement (106)? What are the goals of this sustainability standard, and what are its roots? How does it banish indoor pollution? How could it create new affordability standards for all families and income levels?

7 CHUTES AND LADDERS

- How did Donnel Baird's lack of reliable heating and cooling in his early years shape his drive at BlocPower to bring efficiency and decarbonization to urban dwellings, starting in "the most underserved neighborhoods and communities of color" (114)? What are some of the wins and challenges the company has faced with their work?
- Why is the energy we waste the core reason to swap to renewables? What are the biggest waste culprits in America's energy generation, use, and rejection (120)?
- What are the opportunities and roadblocks right now to shifting to an America powered primarily by renewables? What role does America's aging power grid play in rolling out investments in renewable energy (123)?
- How can solar gardens or community solar begin to address power needs for consumers who can't support their own independent solar power systems? What are some obstacles proponents might face, such as building codes or homeowners' association policies? What is the main "barrier to change" (126)?
- How does Iowa lead the nation in renewable energy production (127)? What does this suggest for the future of renewable energy growth in the US?
- Which tips in the "Squeeze the Juice" section (128) will you work to implement in your life to reduce energy waste? Which will you find easiest to complete, and which will be more challenging?

PART THREE

Eating Up, Driving Off, Buying Out

8 STICK A FORK IN IT

- According to Jamiah Hargins, “our green lawns may be the most senseless and wasteful inventions in history” (134). What does he mean by this? Do you agree with his assessment or see value in green grass lawns that he disregards? Explain.
- What work does Crop Swap LA do, and how do their conversions work (134)? How can microfarms provide for the community as a whole? What benefits are reaped?
- Where does the idea of the ultra-manicured, non-native lawn come from? How does its maintenance lead to waste, emissions, and risk to our bodies (141–42)?
- What did the Crouches’ legal battle with their homeowners’ association over their native plant and pollinator garden (144) accomplish? Would you support or oppose a similar outcome in your state?
- In 2021, “Eighty million tons, 33 percent of our food, ended up in landfills” (145). Do you find this a staggering or surprising statistic? Why or why not? Unpacking the roots of this number—from “ugly” produce being discarded, to overaggressive food processing and pruning, to overbuying on the consumer side—can you see how pervasive food waste is and how impactful reducing it could be?
- Reading the tips in the book, what steps will you take to reduce or eliminate food waste at home (147), to garden (150), or to make swaps in your diet to be more climate friendly (157)?
- How does industrially grown produce vary from homegrown and heirloom varieties (151)?
- Why is it difficult to restrict chemical pesticides to their intended areas (154)? How dangerous is ammonia as a pollutant?
- How is the American appetite and preference for beef responsible for the most food-related greenhouse gas emissions? How do government subsidies further the problem and prioritize “the worst kinds of food, which, if not so heavily subsidized, would not be financially viable” (157)?
- What are regenerative agriculture and no-till farming (160)? What are the benefits, and what are the goals in concert with restoring soil health?

PART THREE

Eating Up, Driving Off, Buying Out

9 THE CAR OF THE FUTURE ISN'T WHAT YOU THINK

- “The true future of transportation is the lowly electric golf cart” (164). Did this prediction surprise you in any way? How are our transportation patterns solidly in a green golf cart’s sweet spot for speed and distance? Why are cars “terrible substitutes for golf carts” rather than the reverse?
- Why do cars and their current design ethos and capabilities have such a hold on our habits and emotions? Could you anticipate making a complete swap to alternate modes of transport? What would hold you back or be simple to implement?
- “The cost of all that automotive waste . . . is estimated by the National Safety Council to be a half trillion dollars a year” (170). After tallying the cost to our lives and safety, time spent in traffic jams and road closures, and environmental damage from fuel and exhaust, did this statistic give you pause? What additional solutions does the author offer to break our addiction to cars?
- How would a radical traffic redesign to discourage car use help make cities more livable and save both energy and emissions (171)?
- Even with “better technology, better materials, and modern manufacturing processes,” how are our predominant car designs set in the past, and at exceedingly high costs to the consumer (174)? Are they truly not “designed for the way we actually use them”? What stands in the way of us choosing more purpose-driven, less expensive, less wasteful, and less polluting vehicles than our current cars?
- How has the city of Peachtree, Georgia, embraced the benefits of golf cart travel and structured their city and pathways around it (179)? How has this intentional process set up the city for success, access, and affordability for residents?
- If you could design a car for maximum affordability that would suit your needs as you actually drive and use your vehicle, would it differ from the predominant designs offered today by major carmakers? How so?
- Do you have access to or own an electric vehicle (EV)? What are the perks (or hiccups) you find or think could exist with ownership? How has this vehicle—whether car, bike, or cart—impacted your travels, your lifestyle, and your finances?
- What stands in the way—for example, profits, incentives, or perceptions—of an affordable, powerful alt-EV for American consumers (like a “Beetle-Civic”) to replace traditional car use (185)?

PART THREE

Eating Up, Driving Off, Buying Out

10 THE WALLET BALLOT

- How does shopping at a low-waste store such as GoGo Refill work (189)? What benefits does a consumer obtain there—to their wallet, health, lifestyle, and the planet? What are the drawbacks?
- Which steps in Laura Marston’s list (194) are you hoping will become second nature to you? Which will pose more of a challenge for your lifestyle?
- How has fast fashion (and the aggressive cycle of buying, replacing, and tossing it) become a major environmental issue, from waste to plastic pollution (197)? How are clothing resale, upcycling, and thrifting meaningful solutions?
- “Our shopping choices are the low-hanging fruit of sustainability” (203). How do we “vote with our wallets”? How has this idea also been turned against consumers in the past (for example, not-ready-for-market products or Exxon’s research)?
- Which tools at the end of the chapter (205) will you be excited to fold into your routines and shopping toolkit for the most impact?

11 SCHOoled

- How do the “Bert and Ernie” wind turbines produce twice the electricity the University of Minnesota Morris campus needs (207)? What is the Morris Model? How do schools and student leaders function in this space?
- Who are the “Montana 16” and Nalleli Cobo (215), and what did they accomplish in 2023? How will their work and legal wins set precedents across the world? How is showing up, asking questions, and petitioning for change still the best way forward?
- “Taking action is, in fact, an act of hope” (218). What does the author mean by this? Al Gore has also said, “The will to act is itself a renewable resource.” In what ways is this true?

IN CONCLUSION

- What form of community or consumer activism do you think you will advocate for after reading this book?
- Would you consider any of your shopping or lifestyle habits a challenge to break? How will you plan to attack your thinking around this? What choices will be easier to on-ramp into your schedule and lifestyle?
- Is our wastefulness a grave environmental, health, and economic problem? Or do you believe it is the inevitable price of and tradeoff for our modern lifestyle and economy? Explain.
- Can you envision a less wasteful world that is also more prosperous, healthy, and green? Explain.
- What would you be willing to do to fix our waste and heal our world? List at least five concrete steps you will undertake.