"Perhaps the most comprehensive indictment of consumer capitalism since Rachel Carson's *Silent Spring*." —MISHA GLENNY, author of *McMafia*

The WILD AFTERLIFE of YOUR TRASH

WASTE WARS

ALEXANDER CLAPP

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INTRODUCTION

Mayhem in Mesopotamia

A Strange Arrival

> He who possesses many things is constantly on guard.
>
> —ancient Sumerian proverb [1]

ON A CHILLY evening in late 2016, a few miles from the Turkish city of Adana, a Kurdish farmer named İzzettin Akman was sitting on the second-floor balcony of his concrete ranch house when a white construction truck backed up to the edge of his citrus groves, paused, then dumped a great load of trash along the roadside. Before he pulled away, the truck's driver set a paper bag on fire and tossed it atop the garbage, triggering an outpouring of flames blacker than the night sky into which they ascended. *"Ji dil?"* Akman leapt up, put on his sandals, and sprinted out along his dirt driveway toward the crackling trash pile fuming several hundred feet in the distance. "Seriously?"

The trash, by the time İzzettin Akman got to it, was a hissing mass of fire; plastic is less flammable than wood or paper but burns more intensely, with a higher heat of combustion, and is at least as capable of getting swept up in a gust of wind and setting some fifty acres and six-thousand-odd orange and lemon trees alight. *"Kurê qahpê!"* Akman wheeled around, ran back home, located a bucket, then rushed back to the conflagration, which he began dousing with water lifted out of a stream running along the edge of the road. "Son of a bitch!"

Akman kept pouring. After about an hour, the flames started to dampen, then die, revealing with their retreat a bed of thousands of half-incinerated

fragments of garbage, not unlike the way the topsoil of nearby Adana gets brushed away by archaeologists to reveal underlying tiles of ancient mosaics. Akman knelt down—disaster averted!—to examine the strange, unsolicited new arrival to his farm, turning over slices of candy wrappers and makeup containers with his fingers, before being struck by something peculiar. The writing on the packaging wasn't Kurdish. It wasn't Turkish either. Akman kept clawing through the still-scalding plastic, now looking for price labels to be sure. He found several. They were not in Turkish liras. They were in euros and pounds.

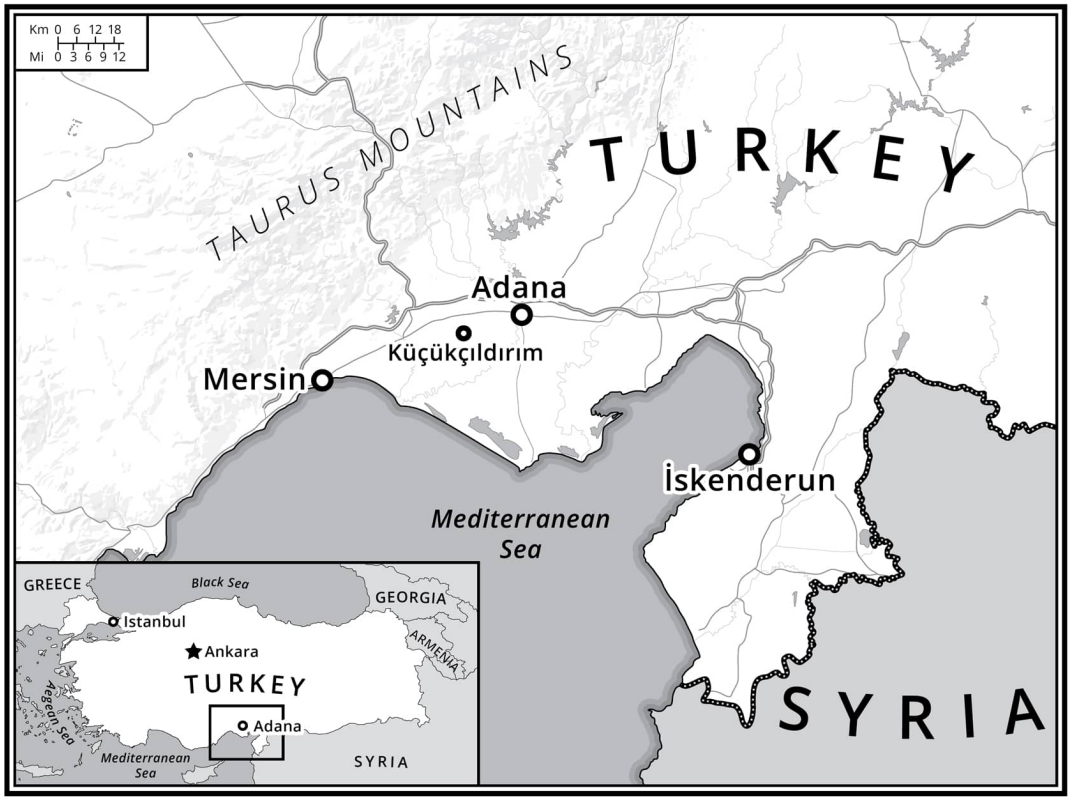
For decades, İzzettin Akman—a slim, middle-aged man with a face peppered by scraggly red-brown stubble—had, like generations of Akmans before him, made his living harvesting oranges and lemons and exporting them to Europe. Now Europe appeared to be sending its trash in the opposite direction, to the very cusp of his groves, where Akman couldn't help but be bemused by the occasional charred carton of juice jutting out of the pile.

"That might have been made with my oranges," he told me as we walked the edge of his farm, where, six years after its unceremonious dumping, the heap of garbage—a lumpy mound of ash-cum-plastic that resembled an unmarked grave coated with filthy confetti—still abutted acres of redolent trees.[2]

A month or so after the trash was dumped beside Akman's property, something more bizarre happened. For the first time in more than thirty years of farming, the leaves of scores of his citrus trees started turning yellow. Then their oranges and lemons began dropping to the ground. A year later, by which time Akman's losses had brought his family to the brink of serious financial trouble, the trees bore no fruit at all. It turned out that a truckload of garbage set alight along the side of a citrus farm, even if it burns for just an hour, can be the catalyst of much longer-term damage, the environmental equivalent of a delayed-fuse bomb. The smoke that continued to waft from the trash pile after its extinguishing hadn't just streaked across

the sky for an evening; it had killed off parts of the bee population that helps citrus trees pollinate. And the innumerable pieces of half-melted plastic that had washed into the creek that provides water for Akman's irrigation system hadn't merely floated away to some distant place downstream; they had broken down into billions of microplastics and contaminants that circulated toward his groves, before eventually getting sucked up into the trees themselves, crowding their roots like particles of fat in human arteries.

İzzettin Akman's farmhouse sits just west of Adana, on the outskirts of the bare agricultural village of Küçükçıldırım, two hours' drive from the Syrian border, in a lush plain across which snowmelt from the Taurus Mountains to the north trickles out toward the Mediterranean Sea shimmering to the south. It's a stunning landscape; the roads really do smell of fresh oranges, the rocky outcrops are ringed with medieval monasteries and ancient fortresses, and the fertility has been legendary since—literally—as long as anyone can remember. For good reason, it was here, of all possible places on Earth, that humanity likely first made the shift from so many tens of thousands of years of a wandering, hunting existence to a settled, agricultural one. A hundred miles east of Akman's farm sits the mysterious Neolithic mound of Göbekli Tepe, perhaps a sacred monument to that transition. And to the south of it unfurls the riverine lands that once constituted Mesopotamia, where writing was first invented, stars were first mapped, mathematics was first attempted, and civilization itself was first endeavored.



By the time I met Akman, his orange and lemon trees had begun to recover. But the land around Adana had not. The several tons of trash that had been dumped along the edge of his farm, it turned out, was no one-off. It was the vanguard of something larger, more organized, and more insane to come.

In the summer of 2017, Turkey's First Lady emerged on a stage in the capital of Ankara and announced a grand new plan for Akman's nation. Over the next fifteen years, Emine Erdoğan proclaimed, Turkey would be turning itself into a "zero waste" country. Sure, other countries began their pivots to a green future by slashing fuel emissions or constructing wind farms or taxing carbon outputs. But Turkey's transition, Emine Erdoğan explained, would begin elsewhere. It would begin within the homes of eighty-five

million Turkish citizens.

Turks would be eliminating their trash.

True enough, their country's recent track record of discarding garbage had been dreadful. Over the previous generation, Turkey had become as addicted to plastic as any other place on Earth. Its network of public fountains—a tradition dating back half a millennium to the Ottoman sultans who aspired to adorn every community of their domain with marble *sebils,* "kiosks" of free-flowing water—had stood no chance against the unrelenting convenience of a water bottle made of polyethylene terephthalate, or PET, introduced to Turkey in 1984 and which, by the early 2000s, Turks were purchasing in the tens of millions every day. Street bazaars that sold fruits and nuts to shoppers bearing cotton sacks had given way to supermarkets that inserted every conceivable purchase into a low-density polyethylene bag—those plastic bags that are so flimsy you can see through them—which by 2010 Turks were discarding at a thirty-five billion annual clip.[3] More than 90 percent of all of this plastic was ending up in landfills, the countryside, or the sea, a travesty captured in real time in Fatih Akin's *Garbage in the Garden of Eden,* in which the acclaimed Turkish German filmmaker, returning after a long absence to his grandparents' picturesque tea-growing village in the mountains above the Black Sea, chronicles a plan to convert its outskirts into an open-air dumpsite. No one in the village wanted the landfill; the authorities schemed behind their backs and zoned it anyway; the result is the entirely foreseeable problem of plastic sloshing down into town, leading Akin to a grim—albeit self-evident—conclusion: "Trash is the global excrement of our society." [4]

That Turkey, assured First Lady Erdoğan, would soon be just another sour memory in the long history of Anatolian tragedies. Her campaign would effect a "clean Turkey" through a state-sponsored campaign that would "prevent uncontrolled waste" by collecting plastic efficiently and recycling it, resulting in a "livable world for future generations." [5]

A clean Turkey! A livable world! In the years to come, the Zero Waste

Project would garner Emine Erdoğan accolades—"Zero Waste Project is not just campaign[,] it is an emotion," gushed one Istanbul daily—and award after award courtesy of global institutions ranging from the United Nations to the World Bank.[6] She would write a book on her initiative, *The World Is Our Common Home,* and read it aloud to Turkish children herded into the garden of Ankara's Presidential Complex, her husband's 1,150-room palace, whose construction had recently razed an ancient forest. The Zero Waste Project would even be deployed as an instrument of foreign policy, espoused by Turkey's 257 diplomatic missions around the world to underscore its standalone commitment in the environmental badlands of the Middle East to combating the climate crisis. "As members of a religion where waste is forbidden and a civilization that kisses bread on the ground and puts it on their forehead, we have assumed a leading role against this threat," vowed Turkey's minister of foreign affairs, Mevlüt Çavuşoğlu.[7]

Only there was one small problem with Turkey's self-coronation as a "zero waste" nation worthy of such international emulation. No sooner had First Lady Emine Erdoğan announced her initiative than Turkey emerged as one of the biggest recipients—and one of the biggest dumpsites—of plastic waste anywhere on the planet.

Global Waste Mismanagement

> There is a gap between what the citizens know about their waste and what actually happens to their waste.
>
> —Yeo Bee Yin, former minister of Malaysia, 2018[8]

Just a few months after a truckload of Western garbage was set alight next to İzzettin Akman's citrus trees, and only weeks after Emine Erdoğan pronounced Turkey a "zero waste" nation, the Chinese Communist Party informed the world that it, too, was recalibrating its relationship with trash.

It would no longer be accepting it.

Since the early 1990s, when your discarded plastic Coke bottle first

emerged as a major object of global commerce, China had been the recipient of *half* the plastic placed into a recycling bin *anywhere* on Earth. If you're reading this now, consider for a moment that hundreds and hundreds of pounds of trash that you've discarded over the course of your life and probably never thought about again went on to live a strange, hot-potato second existence. Dusty bags of cereal, crumpled soda fountain straws, squished Styrofoam egg cartons—for years all these things you deemed so worthless you were willing to freely dispense with them became the objects of arduous, globe-spanning, carbon-spewing journeys, getting trucked tens, perhaps hundreds, of miles from your house to a nearby materials recovery facility and thereafter to a port, then shipped thousands of miles beyond that to any number of hundreds of Chinese villages that specialized in processing the contents of your recycling bin.

From the United States, much of it was transported aboard cargo container ships that had first crossed the Pacific loaded with cheap consumer goods—dog toys, key chains, selfie sticks, you name it—before returning to China packed with (what else?) the plastic and paper in which those goods had been packaged.

By the early 2000s, America's biggest export to China was the stuff Americans tossed away. At least as much plastic was getting jettisoned out of the European Union, from self-congratulating environmental stewards like Germany, whose state recycling quotas were often reliant on a filthy secret: Much of the plastic that Germans claimed was getting "recycled" was in fact getting shipped to the far side of the world, where its true fate was far from clear.

In 2017, China may have informed the world that it would no longer be accepting its plastic waste.[9] But this hardly stopped rich countries from angling to get it all as far away as possible. Many just located desperate new buyers—or unguarded borders—and continued to insist that it was getting recycled. Within months, Greek garbage started surfacing in Liberia. Italian trash wrecked the beaches of Tunisia. Dutch plastic overwhelmed Thailand.

Poland would be forced to charter a special police unit to patrol for waste getting trucked in from Germany, while French cops who had once busied themselves with checking the fenders of cars arriving from neighboring Belgium for heroin became tasked instead with inspecting trunks for bags of garbage.[10] Trash exports from Europe to Africa quadrupled, Malaysia became the world's greatest recipient of US plastic waste, and the Philippines threatened Canada with war for dispatching containers of dirty diapers to the capital of Manila.

And within less than a year of Mrs. Erdoğan's launch of the Zero Waste Project, more than 200,000 tons of plastic waste that would have headed to southeastern China at any point in the previous thirty years made its way instead to… southeastern Turkey.

At its most innocuous, the global waste trade shifts garbage from the world's richest countries to those places that can least afford to handle it. At its most nefarious, the global waste trade is an outright criminal enterprise.

Turkey was to prove a showcase in both. Most of its imported plastic was arriving from the United Kingdom, whose waste brokers—the businesses that function as intermediaries between the (often) publicly funded collection of your trash and the (often) privatized business of what becomes of it—had narrowed in on an egregious incentive for exporting garbage. They received paychecks from a state that, in the wake of Brexit, struggled to find truck drivers and port workers, resulting in surging transport costs and massive delays and mounting piles of refuse.[11] Just when China had stopped taking the world's plastic, the United Kingdom threw up its hands and offloaded the task of waste management onto anyone willing to take a stab at it. In exchange for claiming to have collected one ton of household plastic for "recycling," a British waste broker could receive up to £70. More than 250,000 waste brokers in the United Kingdom would eventually be found to be operating without legal permits, garbage parvenus looking to make quick cash off the UK's desperate attempt to appear like a global paragon of environmentalism—and its even more desperate need to turn its plastic