BY THE SAME AUTHOR

Antonio's Gun and Delfino's Dream: True Tales of Mexican Migration

True Tales from Another Mexico: The Lynch Mob, the Popsicle Kings, Chalino, and the Bronx

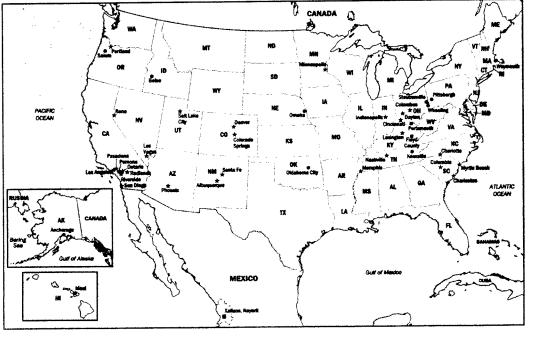
DREAMLAND

The True Tale of

America's Opiate Epidemic

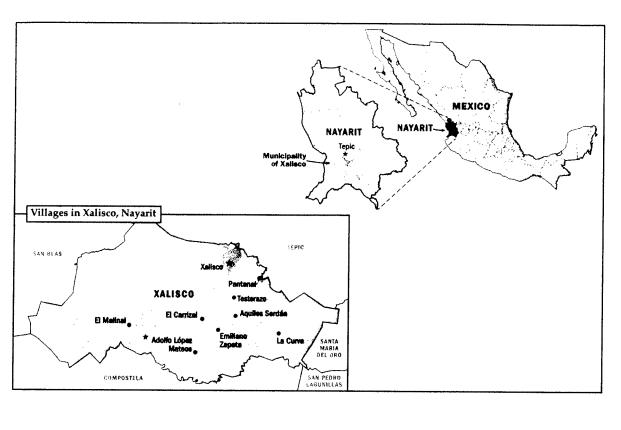
SAM QUINONES

The Xalisco Boys Heroin Cells in the United States



U.S. cities where the traffickers from Xalisco, Nayarit, have heroin cells (stars) or have at one time had cells working (dots). In most cases, the market for their black tar heroin stretches far beyond each city, sometimes for hundreds of miles.

Xalisco county in Nayarit, Mexico



A word on terminology: I have used the term "opiate" throughout this book to describe drugs like morphine and heroin, which derive directly from the opium poppy, and others that derive indirectly, or are synthesized from drugs derived, from the poppy and resemble morphine in their effects. These derivative drugs are often described as opioids. But I felt that going back and forth between the two terms throughout the book would confuse the lay reader.

ME LINE

- 1804: Morphine is distilled from opium for the first time.
- 1839: First Opium War breaks out as Britain forces China to sell its Indiagrown opium, and the British take Hong Kong. A second war erupts in 1957.
- 1853: The hypodermic syringe is invented. Inventor's wife is first to die of injected drug overdose.
- 1898: Bayer chemist invents diacetylmorphine, names it heroin.
- 1914: U.S. Congress passes Harrison Narcotics Tax Act.1928: What eventually becomes known as the Committee on the Problems of Drug Dependence forms to organize research in pursuit of the Holy Grail: a nonaddictive painkiller.
- 1935: The Narcotic Farm in Lexington, Kentucky, opens as federal prison/ drug rehabilitation and research center.
- 1951: Arthur Sackler revolutionizes drug advertising with campaign for antibiotic Terramycin.
- 1952: Arthur, Raymond, and Mortimer Sackler buy Purdue Frederick
- 1960: Arthur Sackler's campaign for Valium makes it the industry's first \$100 million drug.
- 1974: The Narcotic Farm closes and is transformed into a medical center and prison.
- 1980: Jan Stjernsward made chief of the cancer program for the World Health Organization. Devises WHO Ladder of pain treatment.1980: The New England Journal of Medicine publishes letter to editor that
- 1980: The New England Journal of Medicine publishes letter to editor that becomes known as Porter and Jick.
- Early 1980s: First Xalisco migrants set up heroin trafficking businesses in the San Fernando Valley of Los Angeles.
- 984: Purdue releases MS Contin, a timed-release morphine painkiller marketed to cancer patients.
- 1986: Drs. Kathleen Foley and Russell Portenoy publish paper in the journal Pain, opening a debate about use of opiate painkillers for wider variety of pain.
- 1987: Arthur Sackler dies, having revolutionized pharmaceutical advertising.
 v 1990s: Xalisco Boys heroin cells begin expanding beyond San Fernando
- Early 1990s: Xalisco Boys heroin cells begin expanding beyond San Fernando Valley to cities across western United States. Their pizza-deliverystyle system evolves.

XIV / TIME LINE

- 1996: Purdue releases OxyContin, timed-released oxycodone, marketed largely for chronic-pain patients.
- 1996: Dr. David Procter's clinic in South Shore, Kentucky, is presumed the nation's first pill mill.
- 1996: President of American Pain Society urges doctors to treat pain as a vital sign.
- 1998: "The Man" takes Xalisco black tar heroin east across the Mississippi River for the first time, lands in Columbus, Ohio.
- 1998: In Portsmouth, Ohio, Dr. David Procter has an auto accident that leaves him unable to practice medicine but still capable of running a pain clinic. He hires doctors who go on to open clinics.
- Late 1990s: Xalisco Boys heroin cells begin to spread to numerous cities and suburbs east of the Mississippi River.
- 1998–99: Veterans Administration and JCAHO adopt idea of pain as fifth vital sign.
- 2000: Operation Tar Pit targets Xalisco heroin networks—the largest joint DEA/FBI operation and first drug conspiracy case to stretch from coast to coast.
- 2001: Injured workers covered under Washington State's workers' comp system start dying of opiate overdoses.
- 2002: Dr. David Procter pleads guilty to drug trafficking and conspiracy and serves eleven years in federal prison.
- 2004: Washington State Department of Labor & Industries Drs. Gary Franklin and Jaymie Mai publish findings on deaths of injured workers due to overdoses on opiate painkillers.
- Mid-2000s: Xalisco black tar heroin cells are now in at least seventeen states. Portsmouth, Ohio, has more pill mills per capita than any U.S. town. Florida's lax regulations make it another center of illicit pill supply.
- 2006: Operation Black Gold Rush, a second DEA operation targeting Xalisco heroin cells across the country.
- 2007: Purdue and three executives plead guilty to misdemeanor charges of false branding of OxyContin; fined \$634 million.
- 2008: Drug overdoses, mostly from opiates, surpass auto fatalities as leading cause of accidental death in the United States.
- 2010: Drug violence between Los Zetas and Sinaloa cartels spreads to Xalisco, Nayarit.
- 2011: Ohio passes House Bill 93, regulating pain clinics.
- 2013: The College on the Problems of Drug Dependence turns seventyfive without finding the Holy Grail of a nonaddictive painkiller.
- 2014: Actor Philip Seymour Hoffman dies, focusing widespread attention for the first time on the United States' opiate-abuse epidemic and the transition from pills to heroin in particular.
- 014: The FDA approves Zohydro, a timed-release hydrocodone painkiller with no abuse deterrent. It also approves Purdue's Targiniq ER, combining timed-release oxycodone with naloxone, the opiate-overdose antidote.

PREFACE: Portsmouth, Ohio

In 1929, three decades into what were the great years for the bluedecollar town of Portsmouth, on the Ohio River, a private swimming pool opened and they called it Dreamland.

The pool was the size of a football field. Over the decades, generations of the town grew up at the edge of its crystal-blue water.

Dreamland was the summer babysitter. Parents left their children at the pool every day. Townsfolk found respite from the thick humidity at Dreamland and then went across the street to the A&W stand for hot dogs and root beer. The pool's french fries were the best around. Kids took the bus to the pool in the morning, and back home in the afternoon. They came from schools all over Scioto County and met each other and learned to swim. Some of them competed on the Dreamland Dolphins swim team, which practiced every morning and evening. WIOI, the local radio station, knowing so many of its listeners were sunbathing next to their transistor radios at Dreamland, would broadcast a jingle—"Time to turn so you won't burn"—every half hour.

The vast pool had room in the middle for two concrete platforms, from which kids sunned themselves, then dove back in. Poles topped with floodlights rose from the platforms for swimming at night. On one side of the pool was an immense lawn where families set their towels. On the opposite side were locker rooms and a restaurant.

Dreamland could fit hundreds of people, and yet, magically, the space around it kept growing and there was always room for more. Jaime Williams, the city treasurer, owned the pool for years. Williams was part owner of one of the shoe factories that were at the core of Portsmouth's industrial might. He bought more and more land, and for years Dreamland seemed to just get better. A large picnic area was added, and playgrounds for young children. Then fields for softball and football, and courts for basketball and shuffleboard, and a video arcade.

For a while, to remain white only, the pool became a private club and the name changed to the Terrace Club. But Portsmouth was a largely integrated town. Its chief of police was black. Black and white kids went to the same schools. Only the pool remained segregated. Then, in the summer of 1961, a black boy named Eugene McKinley drowned in the Scioto River, where he was swimming because he was kept out of the pool. The Portsmouth NAACP pushed back, held a wade-in, and quietly they integrated the pool. With integration, the pool was rechristened Dreamland, though blacks were never made to feel particularly comfortable there.

Dreamland did wash away class distinctions, though. In a swimming suit, a factory worker looked no different from the factory manager or clothing-shop owner. Wealthy families on Portsmouth's hilltop donated money to a fund that would go to pay for summer passes for families from the town's East End, down between the tracks and the Ohio River. East End river rats and upscale hilltoppers all met at Dreamland.

California had its beaches. Heartland America spent its summers at swimming pools, and, down at a far end of Ohio, Dreamland took on an outsized importance to the town of Portsmouth. A family's season pass was only twenty-five dollars, and this was a prized possession often given as a Christmas present. Kids whose families couldn't afford that could cut a neighbor's grass for the fifteen cents that a daily pool pass cost.

Friday swim dances began at midnight. They hauled out a jukebox and kids spent the night twisting by the pool. Couples announced new romances by walking hand in hand around Dreamland. Girls walked home from those dances and families left their doors unlocked. "The heat of the evening combined with the cool water was wonderful," one woman remembered. "It was my entire world. I did nothing else. As I grew up and had my own children, I took them, too."

In fact, the cycle of life in Portsmouth was repeated over and over at Dreamland. A toddler spent her first years at the shallow end watched by her parents, particularly her mother, who sat on a towel on the concrete near the water with other young moms. When the child left elementary school, she migrated out to the middle section of Dreamland as her parents retreated to the grass. By high school, she was hanging out on the grass around the pool's ten-foot deep end, near the high dive and the head lifeguard's chair, and her parents were far away. When she married and had children, she returned to the shallow end of Dreamland to watch over her own children, and the whole thing began again.

"My father, a Navy Vet from WWII, insisted that his 4 children learn not only how to swim but how not to be afraid of water," one man

wrote. "My younger sister jumped off the 15-foot high diving board at age 3. Yes, my father, myself & brother were in the water just in case. Sister pops up out of the water and screams . . . 'Again!'"

For many years, Dreamland's manager, Chuck Lorentz, a Portsmouth High School coach and strict disciplinarian, walked the grounds with a yardstick, making sure teenagers minded his "three-foot rule" and stayed that far apart. He wasn't that successful. It seems half the town got their first kiss at the pool, and plenty lost their virginity in Dreamland's endless grass.

Lorentz's son, meanwhile, learned to swim before he could walk and became a Dreamland lifeguard in high school. "To be the lifeguard in that chair, you were right in the center of all the action, all the strutting, all the flirting," said John Lorentz, now a retired history professor. "You were like a king on a throne."

Through these years, Portsmouth also supported two bowling allevs, a JCPenney, a Sears, and a Montgomery Ward with an escalator, and locally owned Marting's Department Store, with a photo studio where graduating seniors had their portraits taken. Chillicothe Street bustled. Big U.S.-made sedans and station wagons lined the street. People cashed their checks at the Kresge's on Saturdays, and the owners of Morgan Brothers Jewelry, Herrmann's Meats, Counts' Bakery, and Atlas Fashion earned a middle-class living. Kids took the bus downtown to the movie theater or for cherry Cokes at Smith's Drugstore and stayed out late trick-or-treating on Halloween. On Friday and Saturday nights, teenagers cruised Chillicothe Street, from Staker's Drugs down to Smith's, then turned around and did it again.

Throughout the year, the shoe factories would deduct Christmas Club money from each worker's paycheck. Before Christmas, they issued each worker a check and he would cash it at the bank. Chillicothe Street was festive then. Bells rang as shoppers went shoulder to shoulder, watching the mechanical puppets in displays in store windows painted with candy canes, Christmas trees, and snowmen. Marting's had a Santa on its second floor.

So, in 1979 and 1980, Portsmouth felt worthy to be selected an All-American City. The town had more than forty-two thousand people then. Very few were wealthy, and the U.S. Labor Department would have gauged many Portsmouthians poor. "But we weren't aware of it, nor did we care," one woman recalled. Its industry supported a community for all. No one had pools in their backyards. Rather, there were parks, tennis and basketball courts, and window-shopping and levees to

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slide down. Families ice-skated at Millbrook Park in winter and picnicked at Roosevelt Lake in summer, or sat late into the evening as their kids played Kick the Can in the street.

"My family used to picnic down by the Ohio River in a little park, where my dad would push me so high on the swings I thought I'd land in Kentucky," another woman said.

All of this recreation let a working-class family feel well-off. But the center of it all was that gleaming, glorious swimming pool. Memories of Dreamland, drenched in the smell of chlorine, Coppertone, and french fries, were what almost everyone who grew up in Portsmouth took with them as the town declined.

Two Portsmouths exist today. One is a town of abandoned buildings at the edge of the Ohio River. The other resides in the memories of thousands in the town's diaspora who grew up during its better years and return to the actual Portsmouth rarely, if at all.

When you ask them what the town was back then, it was Dreamland

INTRODUCTION

In the middle-class neighborhood on the east side of Columbus, Ohio, where Myles Schoonover grew up, the kids smoked weed and drank. But while Myles was growing up he knew no one who did heroin. He and his younger brother, Matt, went to a private Christian high school in a Columbus suburb. Their father, Paul Schoonover, co-owns an insurance agency. Ellen Schoonover, their mother, is a stavat-home mom and part-time consultant.

Myles partied, but found it easy to bear down and focus. He went off to a Christian university in Tennessee in 2005 and was away from home for most of Matt's adolescence. Matt had attention deficit hyperactivity disorder and schoolwork came harder to him. He started partying—smoking pot and drinking—about his junior year in high school.

The two brothers got to know each other again when Matt joined Myles at college for his freshman year in 2009. His parents were never sure when exactly Matt began using pills that by then were all over central Ohio and Tennessee. But that year Myles saw that pills were already a big part of Matt's life.

Matt hoped school would be a new beginning. It wasn't. Instead, he accumulated a crew of friends who lacked basic skills and motivation. They slept on Myles's sofa. Myles ended up cooking for them. For a while he did his brother's laundry, because Matt could wear the same clothes for weeks on end. Matt, at six feet six and burly, was a caring fellow with a soft side. His cards could be heartfelt and sweet. "I love you, mommy," he wrote the last time to his mother, after his grandmother had been hospitalized for some time. "All this stuff with grandma has made me realize you really don't know how long you have on this earth. You're the best mom I could ask for." Yet the pills seemed to keep him in a fog. Myles once had to take him to a post office so he could mail their mother a birthday card, as Matt seemed otherwise incapable of finding the place.

Myles was a graduate teaching assistant and saw kids his brother's age all the time. It seemed to him that a large chunk of Matt's generation could not navigate life's demands and consequences. Myles had taught English in Beijing to Chinese kids who strove ferociously to differentiate themselves from millions of other young people. American kids a world away had enormous quantities of the world's resources lavished on them to little result; they coasted along, doing the bare minimum and depending on their parents to resolve problems, big and small.

At year's end, Matt returned home to live with his parents. Myles spent the next years at Yale getting a master's degree in Judaic and biblical studies and never knew all that happened later. At home, Matt seemed to have lost the aimlessness he displayed in college. He dressed neatly and worked full-time at catering companies. But by the time he moved home, his parents later realized, he had become a functional addict, using opiate prescription painkillers, and Percocet above all. From there, he moved eventually to OxyContin, a powerful pill made by a company in the small state of Connecticut—Purdue Pharma.

In early 2012, his parents found out. They were worried, but the pills Matt had been abusing were pharmaceuticals prescribed by a doctor. They weren't some street drug that you could die from, or so they believed. They took him to a doctor, who prescribed a weeklong home detoxification, using blood pressure and sleep medicine to calm the symptoms of opiate withdrawal.

He relapsed a short time later. Unable to afford street OxyContin, Matt at some point switched to the black tar heroin that had saturated the Columbus market, brought in by young Mexican men from a small state on Mexico's Pacific coast called Nayarit. Looking back later, his parents believe this had happened months before they knew of his addiction. But in April 2012, Matt tearfully admitted his heroin problem to his parents. Stunned, they got him into a treatment center.

Myles hadn't spoken to his brother for some time when he called his parents.

"He's in drug rehab," said his mother.

"What? For what?"

Ellen paused, not knowing how to say it.

"Matt is addicted to heroin."

Myles burst into tears.

Matt Schoonover came home from three weeks of rehab on May 10, 2012, and with that, his parents felt the nightmare was over. The next day, they bought him a new battery for his car, and a new cell phone.

He set off to a Narcotics Anonymous meeting, then a golf date with friends. He was supposed to call his father after the NA meeting.

His parents waited all day for a call that never came. That night, a policeman knocked on their door.

More than eight hundred people attended Matt's funeral. He was twenty-one when he overdosed on black tar heroin.

In the months after Matt died, Paul and Ellen Schoonover were struck by all they didn't know. First, the pills: Doctors prescribed them, so how could they lead to heroin and death? And what was black tar heroin? People who lived in tents under overpasses used heroin. Matt grew up in the best neighborhoods, attended a Christian private school and a prominent church. He'd admitted his addiction, sought help, and received the best residential drug treatment in Columbus. Why wasn't that enough?

But across America, thousands of people like Matt Schoonover were dying. Drug overdoses were killing more people every year than car accidents. Auto fatalities had been the leading cause of accidental death for decades until this. Now most of the fatal overdoses were from opiates: prescription painkillers or heroin. If deaths were the measurement, this wave of opiate abuse was the worst drug scourge to ever hit the country.

This epidemic involved more users and far more death than the crack plague of the 1990s, or the heroin plague in the 1970s; but it was happening quietly. Kids were dying in the Rust Belt of Ohio and the Bible Belt of Tennessee. Some of the worst of it was in Charlotte's best country club enclaves. It was in Mission Viejo and Simi Valley in suburban Southern California, and in Indianapolis, Salt Lake, and Albuquerque, in Oregon and Minnesota and Oklahoma and Alabama. For each of the thousands who died every year, many hundreds more were addicted.

Via pills, heroin had entered the mainstream. The new addicts were football players and cheerleaders; football was almost a gateway to opiate addiction. Wounded soldiers returned from Afghanistan hooked on pain pills and died in America. Kids got hooked in college and died there. Some of these addicts were from rough corners of rural Appalachia. But many more were from the U.S. middle class. They lived in communities where the driveways were clean, the cars were new, and the shopping centers attracted congregations of Starbucks, Home Depot, CVS, and Applebee's. They were the daughters of preachers, the sons of cops and doctors, the children of contractors and teachers and business owners and bankers.

And almost every one was white.

we toured the fine neighborhoods south of Charlotte where he arrested epidemic numbers from substances meant to, of all things, numb pain. kids for pills and heroin. "What pain?" a South Carolina cop asked rhetorically one afternoon as the history of the world were getting hooked and dying in almost Children of the most privileged group in the wealthiest country in

happy façade covered a disturbing reality. Crime was at historic lows, drug overdose deaths at record highs. A

follow the threads sors and doctors, public health nurses and pharmacists, as I tried to of excess that began in the late 1990s. I met cops and addicts, profesand the gleaming suburbs of the cities that most benefited from our age ern Ohio. The story transported me through Appalachian Kentucky in Nayarit, Mexico, and a town of equal size in the Rust Belt of southmedicine. I followed the tale through a small town of sugarcane farmers over. It took me through the history of pain and a revolution in U.S. ness and how to achieve it. I saw it as an epic woven by threads from all about addiction and marketing, about wealth and poverty, about happi I grew consumed by this story. It was about America and Mexico

And I met parents.

a dozen members of a family celebrating a girl's birthday. I sat in a ball games on TV and the neon BAVARIAN BEER sign on the wall. corner, eating and writing for an hour in the glow of the college foot Herb & Thelma's Tavern—a cozy, darkened place for chili. Inside were ning full-time research on this book. The only place open for lunch was On New Year's Day 2013, I was in Covington, Kentucky, and begin-

mother in the group asked, "You're not from around here, are you?" I rose to leave when, seeing the Berkeley sweatshirt I wore, the grand-

and prescription pill abuse. home. I told her I was just beginning to research a book about heroin I told her I was from California. She asked why I was so far from

The party stopped. The tavern hushed

"Well, pull up a chair," she said, after a pause. "I have a story for you."

nephew who'd also died from heroin. overdose in a Cincinnati halfway house. Carol's daughter-in-law had a some, college-educated son, Chad, who was prescribed OxyContin for that. He lost home and family and five years later lay dead of a heroin his carpal tunnel syndrome, grew addicted, and never got unstuck after Her name was Carol Wagner. Carol went on to tell me of her hand-

INTRODUCTION / 9

prostitutes. "I no longer judge drug addicts," Carol said. "I no longer judge

an encounter in America's heartland could yield such personal connections to heroin. I left Herb & Thelma's and drove the streets, stunned that so random

mare opiate abuse had wreaked and how deeply it mangled their lives. suicide. They were shell-shocked and unprepared for the sudden nightprayed that the child they'd known would reemerge. Some considered calls from jail. They moved to where no one knew their shame. They McDonald's bathroom. They went broke paying for rehab, and collect had shape-shifted into lying, thieving slaves to an unseen molecule These parents feared each night the call that their child was dead in a Later, I met other parents whose children were still alive, but who

them anguished and bewildered a year after Matt's death. Among the parents I met were Paul and Ellen Schoonover. I found

together at his insurance agency in Columbus. "How could this have become devastated?" Paul Schoonover said to me the day we first got "I kept trying to figure out what just happened. Why did our lives

Here's how.

Enrique

Yuma, Arizona

ne hot day in the summer of 1999, a young Mexican man with tight-cropped hair, new shoes, a clean cream-colored button-down shirt, and pressed beige pants used a phony U.S. driver's license to cross the border into Arizona.

He took a cab to the Yuma International Airport, intending to fly to Phoenix.

Also in the airport, waiting for a plane, stood a dozen Mexican men. Short and brown, they wore dusty baseball caps, jeans, and faded T-shirts. They looked weather-beaten and callused—just like their hands, he imagined. He figured them for illegals, maybe construction workers, proud of their capacity for hard work, but without much else on their side.

He sometimes went by the name Enrique. He was tall, light-skinned, and handsome. The calluses on his hands, there since childhood, had softened. He had grown up in a hovel on the outskirts of a village in the Mexican state of Nayarit, fifteen hours by car south of Arizona. His father was a sugarcane farmer. His village depended on sugarcane, and thus it was poor, and life there was violent and mean. His relatives were split by a feud that began before he was born. He didn't know its cause, only that the two sides didn't get along.

But he had moved on; he had a business now, with employees and expenses. It allowed him to buy his first Levi's 501s and pay for his fade at the barbershop. His false U.S. ID allowed him to cross the border posing as another man, Alejandro Something.

Still, it wasn't hard for Enrique to see himself in those men at the airport in Yuma that day.

As he waited for his plane, he watched an immigration officer in the airport spot the men and make the same calculation he had. The officer asked them for identification. There was a discussion Enrique couldn't hear. But in the end, the men could produce none. As the other passengers watched, the officer led them off single file to be, Enrique assumed, deported.

Growing up in a poor Mexican village had attuned Enrique to the world's unfairness. Those who worked hard and honestly got left behind. Only those with power and money could insist on decent treatment. These facts, which he believed had been proven to him throughout his life, allowed him to rationalize what he did. Yet moral qualms still came like uninvited guests. He told others that he hadn't been raised to be a heroin trafficker and believed it when he said it, though he was one. Scenes like this convinced him that he was doing what he had to do to survive. He didn't make the rules.

Still, as the officer paraded the men by, he thought to himself, "I'm the dirtiest of them all and they don't ask me anything. If I'd have come to work derecho—honestly—they'd have treated me badly, too."

A while later he boarded a plane that took him to Phoenix and from there to Santa Fe, New Mexico.

Dr. Jick's Letter

Boston, Massachusetts

ne day twenty years earlier, in 1979, a doctor at Boston University School of Medicine named Hershel Jick sat in his office pondering the question of how often patients in a hospital, given narcotic pain-killers, grew addicted to these drugs.

He would not remember, years later, exactly why this question had occurred to him. "I think it was maybe a newspaper story," he said.

Hershel Jick was in a better position than most to gather findings on the topic. At Boston University, he had built a database of records of hospitalized patients. The database charted the effects of drugs of all kinds on these patients while they were in the hospital. The database grew from the thalidomide scandal of 1960, when babies were born with defects after their mothers were prescribed the drug. Only anecdotally did doctors discover the risk of thalidomide. In the early 1960s, Dr. Jick was asked to begin building a database of drugs used in hospitals and their effects.

The database grew as computers became more accessible. Today the Boston Collaborative Drug Surveillance Program, as it's known, includes millions of patients' hospital records in four databases. Yet even by the late 1970s, the database was a substantial thing, holding the records of three hundred thousand patients and the drugs they were given while hospitalized. Dr. Jick grew used to entertaining his curiosity with forays into the data. The doctor years later would say, "I don't even know how to turn on a computer." But he did have the sense to hire a bright computer technician, who had built the database and to whom Dr. Jick turned often with these requests.

This time, Dr. Jick asked for the numbers of patients in the database who had developed addictions after being given narcotic painkillers. Soon he had the data in hand. Figuring others might find it interesting, he wrote a paragraph in longhand describing the findings. Then he gave it to his secretary to type. The paragraph she typed said this: Of

almost twelve thousand patients treated with opiates while in a hospital before 1979, and whose records were in the Boston database, only four had grown addicted. There was no data about how often, how long, or at what dose these patients were given opiates, nor the ailments the drugs treated. The paragraph simply cited the numbers and made no claim beyond that.

"That's all it pretended to be," Dr. Jick said later.

A graduate student named Jane Porter helped with his calculations in some way that Dr. Jick could not remember years later. As is the practice in medical research papers, she received top byline, though Dr. Jick said he wrote the thing. The secretary put the letter in an envelope and sent it off to the prestigious New England Journal of Medicine, which, in due course, in its edition of January 10, 1980, published Dr. Jick's paragraph on page 123 alongside myriad letters from researchers and physicians from around the country. It bore the title "Addiction Rare in Patients Treated with Narcotics."

With that, Hershel Jick filed the paragraph away and gave the letter scant thought for years thereafter. He published dozens of articles—including more than twenty in the *NEJM* alone. Jane Porter left the hospital and Dr. Jick lost track of her.

All from the Same Town

Huntington, West Virginia

ne Monday in September 2007, Teddy Johnson, a well-to-do plumber in Huntington, West Virginia, visited the apartment of nis son, Adam.

Adam Johnson was a chubby, redheaded kid. As a fan of alt-rockers like the New York Dolls, Brian Eno, and Captain Beefheart, he was a bit of a misfit in socially conservative West Virginia. He played the drums and guitar and grew up in a wealthy neighborhood. He was twenty-three and just starting college at Marshall University in Huntington. He already had a radio show, the Oscillating Zoo, which featured his eclectic taste in music on the school's station. Adam's mother was an alcoholic and he had used drugs off and on for several years. He started with cough syrup, but quickly moved on to other substances, including prescription painkillers, his friends said.

Adam had dropped out of high school, gotten his GED. He cast about for something to do with his life. He worked for Teddy. It seemed to Teddy that Adam was turning things around. He was playing music with friends and seemed sober. Teddy was heartened when his son enrolled in Marshall, planning to major in history.

Then, that Monday morning, Teddy came to Adam's apartment and found his son dead in bed.

Adam's autopsy showed a heroin overdose; police said Adam was using a sticky, dark substance known as "black tar," a semiprocessed heroin that comes from Mexico's Pacific coast, where opium poppies grow. That stunned Teddy almost as much as Adam's death. Heroin? That was for New York City. Huntington was in the middle of Appalachia.

"I had no clue," he said later. "We're a small town. We weren't orepared."

Two other men also died of black tar heroin overdoses in Huntington that weekend: Patrick Byars, forty-two, a Papa John's Pizza employee,

and George Shore, fifty-four, former owner of an antique store. One black tar heroin overdose after another racked Huntington over the next five months. The town had seen only four heroin deaths since 2001. But twelve people died in five months; another two had died the previous spring. Dozens more would have died had paramedics not responded quickly.

"We had scores of overdoses occurring—medics finding [people] unresponsive," said Huntington police chief Skip Holbrook. Police in Huntington had never seen black tar before 2007.

Two years later, I stood on the southern banks of the Ohio River on what is uncharacteristically flat land for West Virginia. To the north is Ohio and to the west, Kentucky. Huntington lies in a long, narrow grid next to the flat, quiet river. The town was founded as a western terminus for the Chesapeake and Ohio Railway. Railcars carried the coal the region mined to Huntington, where river barges shipped it to the rest of the country.

The city is at the nexus of America's North and South—much like West Virginia itself. Democrats ran the state like a Tammany Hall. They created a legal and political system supportive of coal and railroad interests. The name of the state's best-known senator, Robert C. Byrd, is on a dozen public buildings in Huntington alone—including a bridge over the Ohio River. Yet West Virginia sent its raw materials elsewhere to be transformed into profitable, higher-value products. Parts of the South threw off this third world model of economic development. West Virginia did not. Resource extraction mechanized and jobs left. Railroads declined and economic turbulence set in. But the state's political system prevented a robust response or new direction. Poverty intensified. Marijuana became the state's number one crop. In 2005, the state produced more coal than ever, but with the fewest workers ever.

Immigrants avoided West Virginia. Only I percent of the state's population is foreign-born, ranking it last in that category in the United States. West Virginians with aspirations streamed north, thinking always of returning. The state does significant business in family reunions. Many of the families who remained lived on government assistance.

Huntington's population fell from eighty-three thousand in 1960 to forty-nine thousand today. The three R's became "reading, writing, and Route 23" as people headed north on the famous highway to Columbus, Cleveland, or Detroit. In 2008, the city was selected

as the fattest in America; it had, the Associated Press reported, more pizza places than the entire state of West Virginia had gyms and health spas.

Through all this, what grew steadily in Huntington, besides the waistlines of its dwindling population, was drug use and fatalism. Dealers called the town Moneyington. Dealers from Detroit moved in and cops grew suspicious of any car with Michigan plates.

Yet Mexican drug traffickers avoided the town, police told me. This made Huntington rare. Mexican traffickers operated all over America—in Tennessee and Idaho and Alaska. But not in West Virginia. West Virginia was one of the seven states with no known Mexican drug-trafficking presence, according to a U.S. Department of Justice 2009 report I had seen. Police had a simple reason for this: There was no Mexican community in which to hide. Mexican immigrants followed the jobs, functioning as a sort of economic barometer: Mexicans in your community meant your area was growing. Huntington and West Virginia had no jobs, no Mexicans either.

So, I wondered, how is it black tar heroin from Mexico could have killed so many people here over so many months? And what's more, since when did West Virginia have heroin of any kind?

I began my journalism career as a crime reporter in Stockton, California. Up to then, I knew heroin only from the 1970s movies about New York City: The French Connection, Serpico, and Prince of the City, the drug was always white powder. New York City was our national heroin hub. But in Stockton I saw only this stuff called black tar. Narcotics officers told me black tar was made in Mexico. It was semi-processed opium base. Like other forms of heroin, it could be smoked or injected, and was just as potent as the more refined white powder I'd seen in The French Connection. The difference was that it had more impurities. Also, they said, black tar was a West Coast drug, sold in California, Oregon, and Washington. Denver had a lot, as did Arizona. But it was unknown east of the Mississippi River. For years, DEA reports showed that as well.

So what was black tar heroin now doing east of the Mississippi River? Those questions brought me to Huntington and that Ohio River bank. I was a reporter for the *Los Angeles Times* on a team covering Mexico's drug wars. My job was to write about Mexican trafficking in

story to do, I had come upon reports of Huntington's 2007 black tar outbreak and called a Huntington police narcotics sergeant.

the United States, a topic no one covered much at all. Searching for a

All our black tar heroin comes from Columbus, Ohio, he told me.
I called the DEA in Columbus and spoke with an especially loquations agent

"We got dozens of Mexican heroin traffickers. They all drive around selling their dope in small balloons, delivering it to the addicts. They're like teams, or cells. We arrest the drivers all the time and they send new ones up from Mexico," he said. "They never go away."

He discoursed at some length on the frustration of arduous investigations ending with the arrest of young men who were replaced so quickly. They hide among Columbus's large Mexican population, he said. The drivers all know each other and never talk. They're never armed. They come, give false names, rent apartments, and are gone six months later. This was not the kind of heroin mafia Ohio and the eastern United States was used to.

"Crazy thing," he said. "They're all from the same town."

I sat up in my chair.

"Yeah, which one's that?"

He called over a colleague. They talked in muffled tones for a couple minutes.

I had lived in Mexico for ten years as a freelance writer after I left Stockton. I spent a lot of time in small towns and villages writing about people who migrated north. I wrote two books of nonfiction stories about Mexico. Many of the stories took place in the smallest villages, known as *ranchos*.

Ranchos were villages on the outskirts of civilization. Throughout history, rancheros had moved to the outback to escape the towns' stifling classism. They formed outposts and tried to carve a living from tough land that no one else wanted. Rancheros embodied Mexico's best pioneering impulse. They fled the government's suffocating embrace. They were dedicated to escaping poverty, usually by finding a way to be their own bosses.

Rancheros had little access to education. They learned a trade from relatives—farming or ranching, mostly. But I also knew villages where all the men were itinerant construction workers. Families from one village in the state of Zacatecas I knew started tortilla shops all over Mexico; in another, men hired out as cops around the state. I wrote about Tocumbo, Michoacan, where everyone learned to make popsicles, and run popsicle shops, known as Paleterias La Michoacana, that spread across Mexico, transforming the town and the lives of these rancheros. I had also been to Tenancingo, Tlaxcala, where the young men are all

pimps, exporting country girls to Mexico City and to Queens, New York, and building garish mansions back home.

The DEA agent came back to the phone.

"Tepic," he said.

No, that's wrong, I thought. Tepic is the capital of one of Mexico's smallest states—Nayarit, on the Pacific coast. But it's still a big city, population 330,000. The agent wasn't lying. But my hunch was that the family and personal connections crucial to the system he was describing would only be forged in a small town or rancho. By the time I got off the phone, that prospect had me mesmerized. I imagined some rancho of heroin traffickers expert enough to supply a town the size of Columbus.

It helped that I loved ranchos. They were lawless, wild places, full of amazing tales of family feuds, stolen women, pistoleros, caciques (town bosses), and especially the tough guys—ralientes—rebels who backed down from no one, and thus leapt like superheroes from the rancho into a place in Mexican movies, novels, and ballads.

Mine was a romantic infatuation. I didn't have to live in a rancho. They were brutish places and received outsiders uneasily. Rancho families wove together in vast clans, where everyone was related to almost everyone else. You did not penetrate that easily. To learn their secret stories, you had to spend a lot of time. But I could sit for hours listening to old men tell how their village had, say, split in half over a family feud. The stories melded fact and myth into accounts of doomed bravery or steel-cold vengeance. One tale I included in a book was about Antonio Carrillo, who went to the United States in the 1920s, worked in a steel mill, bought a pistol, then wrote to the man who killed his father, telling him his time had come. He went home and in the town plaza he shot the man to death with that pistol.

I learned, too, that envidia—envy, jealousy—was a destructive force in the rancho. That people were related didn't mean they got along. Families split over what one had and another did not. In the rancho, I saw that immigration was powered by what a poor man felt when he returned home with new boots, a new car, better clothes. That he could buy the beer in the plaza that night, pay for his daughter's quinceañera equal to that of the daughter of the local merchant, and act the magnanimous don if only for a week; that was a potent narcotic to any poor man. A have-not's success was sweeter if he could show it off to the backbiters back home. Thus few Mexicans started out aiming to melt into America. Returning home to the rancho was the point of going north. This homecoming had no power in anonymous big cities.

Migrants wanted to display their success to those who'd humiliated them years before. In the rancho.

I'd learned too that venturing into the unknown was in rancheros' DNA. The United States was the one place where the promise of the unknown had paid off. In turn, the Mexican rancho had become a huge influence in American life. It gave rise to millions of our new working class. Mexican immigrant customs and attitudes toward work, sex, politics, civic engagement, government, education, debt, leisure—they were forged in the rancho. They arrived intact in the United States, and changed slowly.

I ponder this all that day after the chat with the Columbus DEA agent. Only a small town or rancho could forge the connections that sustained the kind of heroin business the agent described. A village of master heroin retailers. Could it be?

I wrote to a dozen of the drivers arrested in Columbus who were doing time in federal prisons. I asked if they wanted to talk to a reporter. Weeks passed. I heard nothing from them. I was about to turn to other stories when one of them called collect. He'd worked, and was arrested, in Columbus. He was now doing many years in prison. He had lots of information. Most startling: Columbus was not the only town they worked, he told me.

"They're in many others. All over the country," he said. Salt Lake, Charlotte, Las Vegas, Cincinnati, Nashville, Minneapolis, Columbia, Indianapolis, Honolulu. They were working full-time in seventeen states. They'd been in another seven or eight states at one time or another. He went on. The cities he mentioned all had large white middle classes that benefited hugely from the economic booms of the previous dozen years, and now had large Mexican immigrant populations as well. I hardly associated these cities with heroin. Were there heroin markets in these towns? I wondered. Yes, he assured me, they were big and getting bigger. He hadn't even mentioned America's traditional heroin capital, I noticed.

"No, in New York are gangs, with guns," he said. "They're afraid of New York City. They don't go to New York."

Mexican traffickers afraid of gangs and gunplay? From one tiny town? Selling tar heroin in not just Columbus, but as much as half the United States, including now a bunch of cities east of the Mississippi River for the first time?

Right there, I was hooked.

Cops say they're from Tepic, I said finally.

"No, they're not from Tepic," he said. "That's what they say, but they're not."

Liberace in Appalachia

South Shore, Kentucky

In tiny South Shore, Kentucky, huddled next to the Ohio River, Biggs Lane amounts to a rural strip mall.

For its entire hundred yards, Biggs Lane hugs Route 23. Wright Pharmacy has been on Biggs a long time. Near Wright's is a dentist's office and a chiropractor, a gas station and a Subway sandwich shop. Farther down is a flooring shop. Next to that stands a good-sized beige metal-framed building.

To the south of Biggs is a street named Tootsie Drive and a neighborhood of small white wood houses that would be called quiet except that would be redundant. Everything in South Shore, Kentucky, population 2,100, is quiet, including the majestic Ohio River a hundred yards north. Across the river is Portsmouth, Ohio, wedged onto land where the Scioto River angles into the Ohio. In Portsmouth and South Shore is where another part of our story begins.

In 1979, the same year that Hershel Jick up in Boston wrote his letter to the New England Journal of Medicine, a doctor named David Procter moved into that beige metal-framed building on Biggs Lane in South Shore and called his new clinic Plaza Healthcare.

Procter had come to South Shore at the behest of Billy Riddle, the town's family doc. Billy Riddle had been in South Shore for years. He delivered many of the kids in town, and treated every ailment as best he could. He had trouble turning down patients and needed help. Somehow he found Procter, a Canadian, who'd just completed an internship in Nova Scotia, and enticed him to South Shore in 1977.

But within two years, Riddle had separated his practice from Procter's and changed the locks on his doors. Not long after that, in 1979, Billy Riddle died of a heart attack and then only David Procter remained.

Procter was a talkative and easygoing fellow. But he was flashy in a way foreign to the Ohio River valley. He wore diamond rings. He wore

fur jackets. He drove a Porsche. "He dressed like Little Richard or Liberace," said one nurse.

PORTSMOUTH IS AN INDUSTRIAL town in the rural heartland, an outpost on the Ohio River far from other towns. In their glory days, river towns were places for rambunctious men to explode after days cooped up on barges. Portsmouth once felt it necessary to outlaw swimming naked in the river. Back then, seven shoe factories and the country's largest shoelace manufacturer were in downtown Portsmouth. A brickyard, a foundry, and the massive Detroit Steel Company attracted people from Ohio and Kentucky and employed thousands. Detroit Steel made bombs during World War II. Hundreds of people attended the inauguration of its new blast furnace in 1953, marveling at its size and happy with the jobs it would provide. Meanwhile, railroads took Portsmouth's steel and shoes to the rest of the country. For years, sons took jobs at the factories where their fathers worked, and, like a Bruce Springsteen song, that's how life went.

The town was a cradle of professional football. Jim Thorpe coached the Portsmouth Shoe-Steels. Later, the Portsmouth Spartans joined the National Football League. The Spartans moved to Detroit during the Great Depression and became the Detroit Lions.

Some say Portsmouth's long trip down began with the flood of 1937, when the Ohio River rose seventy-four feet after forty days of rain. What is true is that by the 1970s, Portsmouth was collapsing, along with the rest of what was becoming the American Rust Belt—a region unprepared for globalization, competition, and the cheaper labor in countries like Mexico. The shoe factories began closing. Selby Shoes was long gone. Williams Shoes hung on longer, trying to compete with Italy and Taiwan and Mexico. But soon Williams left, too, and the factories' empty shells remained as reminders of what had been.

Detroit Steel departed in 1980, the year Portsmouth was named an All-American City for the second time. Thousands of jobs went with it. The city didn't recover from that. The brickyard closed, too. So did the atomic energy plant up in Piketon. The coke plant that supplied Detroit Steel, meanwhile, closed in stages and finally gave up in 2000. A Walmart replaced them both. Near the retailer still stands the coke plant's smokestack.

Families fled to Columbus or Cincinnati or Nashville. A group of artists moved to Austin, Texas. Portsmouth's population deflated to twenty thousand. Unsellable houses were rented out or stood empty

after landlords moved away. Stores on Chillicothe Street closed one by one until there wasn't much left there at all.

Remaining behind was a thin slice of educated people. They found work in the schools or the hospitals, in some way or other tending to those for whom factory closings were the beginning of an American nightmare.

About the only new folks who came to Portsmouth then were merchants of the poor economy. Portsmouth got its first check-cashing places and its first rent-to-owns. Pawnshops and scrap metal yards opened. And David Procter expanded his practice.

Many swore by Procter. Hard work was part of life in the area, and by then so was unemployment. The region slumped and the numbers of people applying for disability or workers' compensation shot up. Federal disability became long-term unemployment insurance for many in the Ohio River valley. Some were legitimately hurt or disabled; some weren't. But they all needed a doctor's diagnosis. Procter processed workers' comp paperwork fast. At Portsmouth's small Southern Hills Hospital, where Procter had privileges, nurses remembered him as the top admitter to the psych ward—mostly in an attempt to make patients eligible for disability.

Procter was married, with two sons living in Kentucky. He was also a flirt, and staff saw him out in the parking lot at times in a lovers' quarrel with a nurse.

At Southern Hills, Procter ran through his rounds—literally ran. He was at high speed, animated. A new attitude was taking hold in American medicine at the time. The patient, it held, was always right, particularly when it came to pain. The doctor was to believe a patient who said he was in pain. David Procter embodied this new attitude, and then some. He had a folksy style, with a little of the evangelist in him.

"His patients loved him because he had the ability to figure out what that person believed or needed or wanted," said Lisa Roberts, who was a hospital nurse at the time. "He was brilliant in that way, to forensically identify vulnerable people and figure out what they needed or believed. He would tell them they had all these things wrong with them."

Procter was paid in cash at his South Shore clinic. In the mid-1980s, the medical world wrestled with how to use the new opiates that pharmaceutical companies were developing to treat pain. David Procter was an early and aggressive adopter. He prescribed opiates for neck, leg, and lower back pain, arthritis, and lower lumbar spine pain. He combined them with benzodiazepines—anxiety relievers, of which Valium and

Xanax, Procter's favorite, are the best known. In Portsmouth, people had anxiety and they had pain. Appalachia had a long history of using benzodiazepines—dating to the release of Valium in the early 1960s. Little old ladies used it. In this part of the country, anything that relieved pain was welcome. But opiates and benzos together also led quickly to addiction.

By the mid-1990s, Procter was also known to prescribe a lot of diet pills and stimulants, even to those who weren't fat. A modest industry evolved in and around Portsmouth of scamming prescriptions for diet pills from willing docs like Procter, then selling the pills for a profit. His Plaza Healthcare clinic boomed.

In 1996, one who went to visit him was a man named Randy, a guard at the state prison in Lucasville ten miles north of Portsmouth. Randy suffered deep bruises to his back in a fight with an inmate. He was given a list of approved doctors to see. One was David Procter.

"Several guys from the prison went there because his office could take care of the [workers' compensation] paperwork," Randy remembered.

Procter took him off work for six months and, sure enough, handled all the paperwork, charging him two hundred dollars cash. He also prescribed a drug called OxyContin—40 mg, twice a day, for thirty days. The drug was a new painkiller, he said, and they were having good results with it.

"Looking back on it, [the injury] was nothing that warranted that harsh of a drug," Randy recalled. "But at the time, you're thinking this is great because I don't feel my back."

Thirty days later, Randy figured he was better and didn't return to Procter for a refill. Soon he was gripped by what he thought was the worst flu of his life. He ached, couldn't get out of bed, had diarrhea, and was throwing up. He talked to some friends. One suggested he might be going through withdrawal.

Then it hit him: You've got to go back.

Procter prescribed him more of the same. Randy returned every month, paying two hundred dollars cash for a three-minute visit with Procter and an Oxy prescription. Procter's waiting room overflowed. People fought over space in line. Only a handful of patients were there for injuries. The rest were feigning pain, scamming prescriptions, with the doctor's connivance. Randy saw six fellow prison guards in the waiting room. He kept his head down, got his Oxy prescription, and left.

"You're seeing people who you know are probably going to be locked up in one of your cellblocks," he said. "It really humbles you.

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You think you're doing stuff the way it's supposed to be done. You're trusting the doctor. After a while you realize this isn't right but there really isn't anything you can do about it. You're stuck. You're addicted."

Before long, he found street dealers he could go to if he ran out during the month. He returned to his prison job. But by then fully addicted to an opiate, he began arriving late and making excuses Desperate, he finally went to a deputy warden. He got into treatment and got clean. Three and a half years after going to David Procter the first time, the addiction was over for Randy.

For the Ohio River valley and America, it was just beginning

The Adman

New York, New York

In 1951, an adman named Arthur Sackler from a little-known marketing firm met with the sales director of a small hundred-year-old chemical concern named Charles Pfizer and Company in New York City.

Arthur Mitchell Sackler was thirty-nine and already had a career of achievement as a psychiatrist behind him.

He and his brothers, Raymond and Mortimer, had grown up in New York, the sons of eastern European Jewish immigrants. They attended college during the Depression and all three passed briefly through the Communist Party, according to Alan Wald, author of American Night: The Literary Left in the Era of the Cold War. Arthur Sackler began his publishing career on his high school newspaper. During the Depression he printed single-handedly what Wald called a "crude strike bulletin" for the Communist Party. Sackler took art classes at night and paid for his schooling with odd jobs.

Finishing his medical studies, Sackler became a psychiatrist at Creedmoor, a New York mental hospital. There, he wrote more than 150 papers on psychiatry and experimental medicine, and identified some of the chemical causes in schizophrenia and manic depression. He was an antismoking crusader long before it was popular, and prohibited smoking at the companies he would later own. At Long Island University, he started Laboratories for Therapeutic Research, which he later directed and supported with large donations. Meanwhile, he established the first racially integrated blood bank in New York City.

Sackler watched medicine change radically during the postwar years. Scientific advances were allowing companies to produce life-altering drugs—antibiotics and vaccines in particular. It was an effervescent time, though less so for medical advertising, which remained plodding and gray even as the new drugs it promoted were changing the world. Sackler saw no reason this should be. He switched careers in the 1940s

and hired on at William Douglas McAdams, a small, rather staid medical advertising firm.

Before long one of his clients was Charles Pfizer and Company, then the world's largest manufacturer of vitamin C. The company's newly formed pharmaceutical research department had developed a synthetic antibiotic, first derived from soil bacteria, that it called Terramycin and that had proven effective on more than fifty diseases, including pneumonia. The company was moving from chemical manufacturing to pharmaceuticals. Instead of licensing it to a drug company, Pfizer wanted to sell the antibiotic itself.

In the office that day, Sackler told the company's sales director, Thomas Winn, that with a large enough advertising budget for Terramycin, he could turn Charles Pfizer and Company into a household name among doctors.

Winn gave him a budget larger than any company had ever spent to advertise a drug. Sackler "plastered the media with what would be called now a teaser campaign," said John Kallir, a copywriter at William Douglas McAdams at the time.

The Terramycin campaign aimed at frequent contact with individual doctors—a radical new concept. Sackler put large color ads in medical journals with plays on the word "terra" (Italian for earth): "Terra Bona" and some others. When the drug was finally released in America, he placed ads in the same font and color, saying "Terramycin."

Meanwhile, Sackler's ad writers in New York wrote thousands of postcards meant to appear as if they were from Egypt, Australia, Malta, and elsewhere. They mailed these cards, addressed individually to thousands of U.S. family doctors, pediatricians, and surgeons, describing how Terramycin was combating diseases in these exotic locales—"milk fever" in Malta, "Q fever" in Australia. The cards were signed "Sincerely, Pfizer." Doctors already known to prescribe a lot of drugs got extra direct mail.

Then Sackler sent salesmen on visits to doctors' offices. "They were intensive drives," Kallir said. "At the same time, we had a very heavy schedule of direct mailings, several mailings at a time to these doctors, along with journal ads."

Kallir remembered that Sackler paid to have a Pfizer Spectrum, an eight-page glossy house organ, inserted in the monthly Journal of the American Medical Association for a year.

All that combined with the drug's efficacy to make Terramycin a blockbuster—with forty-five million dollars in sales in 1952. Based on

its Terramycin success, Charles Pfizer and Company expanded to thirteen countries, and eventually changed its name to Pfizer.

Sackler's campaign marked the emergence of modern pharmaceutical advertising, a field that up to then, in the words of one executive, "existed but it didn't." Seeing the future, Sackler bought the firm he worked for, William Douglas McAdams.

As an aside, he and his brothers also purchased an unknown drug company: Purdue Frederick, formed in the 1890s, during the days of patent medicines, by John Purdue Gray and George Frederick Bingham. The company had limped along since then, and until our story begins to unfold in the 1980s, it was still known mainly for selling antiseptics, a laxative, and an earwax remover.

Arthur Sackler, meanwhile, continued to transform drug marketing. In 1963, he licensed from Hoffman-La Roche the right to import and sell a new tranquilizer called Valium. Sackler again emphasized direct doctor contact to promote the drug. "Detail men"—salesmen—frequently visited doctors' offices bearing free samples of Valium. He put booths at medical conventions, and frequent multipage color ads in medical journals. He published another glossy monthly magazine with stories about what well-known doctors were up to, along with other news, and Valium ads.

Part of the campaign aimed to convince doctors to prescribe Valium, which the public saw as dangerous. Ads urged doctors to view a patient's physical pain as connected to stress—with Valium the destresser. If a child was sick, maybe her mother was tense. Valium was marketed above all to women, pitched as way of bearing the stress of lives as wives and mothers. Before the feminist movement, women were presumed to need that kind of help for the rest of their lives, thus there was no worry then about its addictiveness.

Among Arthur Sackler's many talents was that he thought like a family practitioner. Docs were barraged with patients who were tense, worried. "The patient would walk in, 'I'm nervous all day long, doctor.' Or 'My son's in the army," said Win Gerson, who worked for Sackler for years and later became president of William Douglas McAdams. "People were walking around nervous, worried, and this drug absolutely calmed them. It worked for certain types of back pains. It kind of made junkies out of some people, but that drug worked."

Yet if Terramycin was an unmitigated benefit to humankind, Valium was less so; or rather, any benefits were offset by significant

risks. There was a little of nineteenth-century patent medicine in Valium's DNA. It didn't treat any root cause of stress. Instead, it treated vague symptoms and thus allowed doctors to avoid the complicated work of understanding the causes of that stress. Like patent medicines, Valium was a name-brand drug, promoted together with the idea that a pill could solve any ailment. Four decades later, and well after Arthur Sackler was gone, his company, Purdue, would produce and promote through his ad firm, William Douglas McAdams, a painkiller with similar characteristics.

Valium became the pharmaceutical industry's first hundred-million-dollar drug, and then its first billion-dollar drug. By the midseventies Valium was found indeed to be addictive and a street trade grew up around it. Hoffman-La Roche was accused of not warning of the drug's addictive potential.

Sackler, meanwhile, kept combining remarkable energy with great intellectual curiosity. He founded the *Medical Tribune*, a biweekly newspaper full of ads from the now-burgeoning pharmaceutical industry. In the newspaper, he wrote a column, One Man and Medicine. He became a world-class collector of Chinese art, and at parties at his house, guests hobnobbed with Luciano Pavarotti and Isaac Stern. As doctors raced to keep up with rapidly changing medicine, Sackler saw another marketing opportunity. He pushed his drug-company clients to fund CME—continuing medical education—seminars that were increasingly required for doctors to keep their licenses. By funding CME seminars, he saw, drug companies could grab the ears of physicians.

Arthur Sackler never retired. In 1987, at age seventy-three, he had a heart attack and died. He left behind a wife and two ex-wives, a spectacular fortune, and an industry so indebted that it referred to him by his first name. Today, his name is on galleries or wings of the Smithsonian Institution, the Metropolitan Museum of Art in New York City, the Royal Academy in London, as well as at Princeton, Harvard, and Beijing universities. Medical facilities bear his name at Tel Aviv, Tufts, and New York Universities. In 1996, he was one of the five first inductees into the Medical Advertising Hall of Fame.

But Arthur Sackler is important to this story because he founded modern pharmaceutical advertising and, in the words of John Kallir, showed the industry "that amazing things can be achieved with direct selling and intensive direct advertising."

Years later, Purdue would put those strategies to use marketing its new opiate painkiller OxyContin.

Enrique Begins

A Rancho in Nayarit, Mexico

nrique's mother hated rain. It dripped through the corrugated-tin roof of their cardboard shack, keeping them damp for weeks. She placed pans and buckets around the shack to catch the new streams of water finding their way through the roof. As a toddler, Enrique ran about in the rain, splashed in puddles, and chased after the town's stray dogs. But to his mother, cold and relentless rain embodied their poverty and reminded her of her husband.

Enrique's parents lived at the bottom of a rancho with no paved streets or electricity, in the Mexican state of Nayarit. His parents had married young and without land. They eked a living from selling charcoal and wood. Enrique was their second child. The family was wedged into a four-room house with two other families. A few years later, they found land in a barrio known as the Toad, near a bog at the village bottoms. They crafted that two-room shack from cardboard, tarp, and plywood that could be scavenged from garbage dumps. They had more children. Enrique remembers nothing from those years but yelling, and his father beating his mother, and his mother having no idea where each day's food was coming from.

Then, a miracle. Enrique's father inherited all fifty acres owned by his parents, who had decided not to share any of it with their other children. With that, Enrique's father became a landowner and grew sugarcane, which, this being Mexico's populist 1970s, enjoyed new government price supports. With savings, he bought an old sugarcane truck. Property didn't soften Enrique's father. It inflated him with arrogance. Coming home drunk at night, he yelled at his kids and beat his wife more often. He spoke no words that weren't orders. When Enrique's mother asked her husband for money to run the household, he gave it with insults. His truck roared like a beast, and he rode around the village high in the seat, as if it were a fine mare.

One morning, when Enrique was eight, he was helping his father, who was hungover and working under the truck. His father called for his son to find him a tool. Enrique had no idea what the tool was. Under the truck, his father grew angry. Enrique spun about, searching without knowing what he was looking for. His father cursed him. Enrique began to cry in desperation. His father crawled out from under the truck. Enrique ran off. His father chased him down and beat him. Enrique had never beaten an animal the way he was beaten that day. He cried himself to sleep that night, angry that his mother hadn't defended him, hating life and his father.

He heard people say they were happy in their poverty. But Enrique never knew anybody poor who was anything but miserable. An unbridge-able river seemed to separate the Toad from the world. In the Toad, poverty pitted villagers against each other in a vicious battle for an upper hand. Enrique milked cows for another farmer. He was paid two liters of milk a day and ten pesos a week, and with it endured the kicks and insults from the farmer's son, who was his age. Once, when Enrique was sick, his mother took him to a hospital in Tepic. He stared at perfumed women, and men in new cars, and children with new clothes. The city was only a few miles from his rancho, but it seemed a distant land on the other side of that river.

Enrique grew older and went to school. There he learned to hate his teachers like his mother hated rain. They treated kids from the village's upper barrio with respect, but spoke sharply to the ragged children who came up from the Toad without food for lunch. To the upper-barrio kids, the teachers awarded prizes of candy and toys that no one from the Toad had a chance of winning. Some teachers forbade the Toad kids from going to the bathroom until they wet themselves. A few teachers showed up drunk; others didn't show up for weeks at a time. Enrique's father mocked him for not knowing his multiplication tables, but how could he know them with teachers like these?

Life held one thrill: His mother's brothers were up in Los Angeles working, which gave his family a connection that other kids envied. Villagers spoke of his uncles like far-off explorers and traded their latest news. Enrique didn't let on to his friends that his father never got along with these uncles. There had been a fight years before, in which his father had been knifed and two people on his uncles' side of the family died. His father married into the family but he and his brothers-in-law never liked each other.

Then one day news spread that an uncle was returning from the San Fernando Valley. Relatives thrilled at the gifts he would bring. That day,

mothers washed their kids and lined them up in anticipation. The uncle, remembering the feud with Enrique's father, had gifts for everyone but Enrique, his sisters, and his mother. The children went home in tears of incomprehension.

Life improved only slowly. Somehow his mother saved enough to buy a cow and finally they were ranchers of a sort, and worked harder because of it. Enrique went to bed dreaming of life as a respected ranchero. For a while, he thought he glimpsed a future as a cop. Highway patrolman looked like an exciting job. But his father had no political connections to get him into the academy.

Besides, said his father, "I need an agronomist, not a patrolman. Remember, one day, this land will be yours. Your sisters will get married and go live with their husbands. You'll inherit the land and the house."

Enrique's father held that promise over him, and soon it seemed more like a threat. Enrique saw farmers like his father draining their lives into those fields. They remained the same ignorant, violent, cold men stuck in poverty, controlled by others. Escaping this fate became Enrique's greatest concern.

His urgency intensified when he spotted a girl. She was twelve and beautiful. Her father was a butcher in town. That placed her in the upper classes of the rancho, well above Enrique's station as the son of an alcoholic sugarcane farmer. She lived up the hill, which was more than just geographically above the Toad. The kids from that barrio had parents who owned stores, slightly better houses, and more land. They ruled the town playground and ran off kids from the Toad with rocks.

Enrique knew he could give this girl none of the life she, and her father, expected for her. But when he asked her to be his girlfriend, she accepted. Theirs was a chaste village romance, filled with kisses and hugs. For it to become more than that, Enrique knew he would have to get moving.

Then his mother went to California for a few months. She returned with gifts but also with the news that one of her brothers had been killed—by a police officer overstepping his authority, she said. People in the village accepted that story. His remaining uncles up north, whose anger at Enrique's mother for having married his father had subsided, sent Enrique his first clothes from America. Villagers viewed these men as heroes; some asked his uncles for help getting north. Enrique imagined his uncles were grand men in a place called Canoga Park.

His mother found work overseeing the village school's lunch program, so Enrique no longer went hungry at school. His father was

elected treasurer of the local sugarcane farmers' cooperative. He oversaw the installation of the first village streetlights. It surprised Enrique to see his father so diligent about putting in village light poles while he brought so much darkness home.

Then junior high ended. Enrique attempted high school in Tepic. He spent two weeks there, each day without anything to eat for lunch, before he ran out of bus money and withdrew. The threat of a life in the fields now seemed frighteningly real. Toiling in the cane would never allow him to give his girl what she and her father expected for her. In the village, girls married young; though she was only thirteen, Enrique had no time to lose.

Plumbing was at last coming to the village. Now townsfolk could get drinking water from the faucet instead of from distant wells. Toilets would replace the hills. But Enrique thought only of his uncles in Canoga Park. So he made plans and he kept them to himself. He'd get to Tijuana, find a coyote to take him to Canoga Park. He had no address or phone number for his uncles, but surely they were so well-known that they'd be easy to find.

One day he walked through the village, greeted his friends, spent time with his girlfriend, and said farewell to no one. The next, he took a birth certificate and put on his best black jacket, one that his uncles had sent to him, a white collared shirt and blue pants, kissed his mother, and said he'd be back later that day. He went to Tepic and boarded Tres Estrellas de Oro, the low-cost bus line that over the years took north hundreds of thousands of Mexicans intending to cross.

He paid for the ticket with two hundred pesos he had swiped from his parents. He considered the money a loan so he wouldn't feel had for taking it. He sat by the window for twenty-eight hours so he could see all the things he had never seen before.

It was 1989 and he was fourteen.

The Molecule

ment for heroin addicts. chemistry of drugs and addiction. In the 1960s, Lewis had discovered buprenorphine, an opiate that he later helped develop into a treatture. At the University of Bristol was John Lewis, who studied the time was aiming to find a new paint that dried at a certain temperachoice of where to continue his studies. At Cardiff University was a professor whose specialty was the chemistry of paint. Industry at the uate work in chemistry at Oxford University in 1991. He was given a hailed from Halifax in Northern England. He finished his undergrad-Andy Coop very nearly spent his career watching paint dry.

The son of a machinist and school cafereria works. The son of a machinist and school cafeteria worker, Coop

and that following surgery. opiates. In time, Andy Coop got hooked on the morphine moleculefiguratively, of course, for he only once took a drug that contained it encountered the morphine molecule-the essential element in all sounded more interesting than paint was all, so off to Bristol and John Lewis he went. It was there, in 1991, in a lab at Bristol that Andy Coop Coop didn't remember giving the choice much thought. Drugs

cule behind the story that consumed me. I looked up Andy Coop because I wanted to understand the mole-

even be worth it? Can we have it all? of man and human behavior, of free will and slavery, of God and evolu-Can mankind achieve happiness without pain? Would that happiness tion. Studying the molecule you naturally wandered into questions like, Faust, Dr. Jekyll and Mr. Hyde, discussions on the fundamental nature some of humankind's greatest cultural creations and deepest questions: to count with addiction and overdose. Discussing it, you could invoke improving too many lives to count. It stunted and ended too many lives possess heaven and hell. It allowed for modern surgery, saving and Like no other particle on earth, the morphine molecule seemed to

"I might have loved paint," Coop told me. "But the conversation

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when you're [studying paint]." over evolution, heaven and hell, psychology-none of that matters

the deprivation that temper his behavior. has always begun as soon as he has it all, and is free of friction, pain, and nent pleasure, numbness, and the avoidance of pain. But man's decay loss of free will and enslavement to what amounts to an idea: perma-In heroin addicts, I had seen the debasement that comes from the

yards in which to enjoy the California sun. three-bedroom houses in the 1950s, seven-thousand-square-foot California suburbs near where I grew up, on plots laid out with Hummers and SUVs were cars on steroids. In some of the Southern from Mexico during those years, I noticed a scary obesity emerging. It and the first decade of the twenty-first century. When I returned home in the period this book is about: the last decade of the twentieth century mansions barely squeezed between the lot lines, leaving no place for wasn't just the people. Everything seemed obese and excessive. Massive In fact, the United States achieved something like this state of affairs

once sought. growing this stuff helped destroy the natural world that their parents strains of pot. Their weed rippled like the muscles of bodybuilders, and children, like mad scientists, were using chemicals and thousand-watt and funded the venture by growing pot. Now their children and grandtheir parents' artificial world. They lived in tepees without electricity 1960s hippies became the last great American pioneers by escaping bulbs, in railroad cars buried to avoid detection, to forge hyperpotent In Northern California's Humboldt and Mendocino Counties,

children to work when they became teenagers. when they called them AAA. Well-off parents no longer asked their packaged rolls of bad mortgages and we believed Standard & Poor's Wall Street to create financial gimmicks that paid off handsomely and Street and corporate executives, no matter how poorly they did. Banks produced nothing. Exorbitant salaries, meanwhile, were paid to Wall liant students, yet too many of them now went not to science but to Excess contaminated the best of America. Caltech churned out bril-

credit, attempting to achieve happiness through more stuff. And I saw the country turning on this legacy in pursuit of comfort, living on class than had Mexico. Then I would return home and see too much of poor person limited by his own humble origins. I took great pride that America had turned more poor Mexicans into members of the middle In Mexico, I gained new appreciation of what America means to a

no coincidence that this was also when great new numbers of these same kids—most of them well-off and white—began consuming huge quantities of the morphine molecule, doping up and tuning out.

I looked up Andy Coop, who chairs the department of pharmaceutical sciences at the University of Maryland in Baltimore.

What gave the morphine molecule its immense power, he said, was that it evolved somehow to fit, key in lock, into the receptors that all mammals, especially humans, have in their brains and spines. The so-called mu-opioid receptors—designed to create pleasure sensations when they receive endorphins the body naturally produces—were especially welcoming to the morphine molecule. The receptor combines with endorphins to give us those glowing feelings at, say, the sight of an infant or the feel of a furry puppy. The morphine molecule overwhelms the receptor, creating a far more intense euphoria than anything we come by internally. It also produces drowsiness, constipation, and an end to physical pain. Aspirin had a limit to the amount of pain it could calm. But the more morphine you took, Coop said, the more pain was dulled.

For this reason, no plant has been more studied for its medicinal properties than the opium poppy. As the mature poppy's petals fall away, a golf-ball-sized bulb emerges atop the stem. The bulb houses a goo that contains opium. From opium, humans have derived laudanum, codeine, thebaine, hydrocodone, oxymorphone, and heroin, as well as almost two hundred other drugs—all containing the morphine molecule, or variations of it. Etorphine, derived from thebaine, is used in dart guns to tranquilize rhinoceroses and elephants.

Tobacco, coca leaves, and other plants had evolved to be pleasurable and addictive to humans, Coop said. But the morphine molecule surpassed them in euphoric intensity. Then it exacted a mighty vengeance when a human dared to stop using it. In withdrawal from the drug, an addict left narcotized numbness and returned to life and to feeling. Numbed addicts were notoriously impotent; in withdrawal they had frequent orgasms as they began to feel again. Humans with the temerity to attempt to withdraw from the morphine molecule were tormented first with excruciating pain that lasted for days. If an addict was always constipated and nodding off, his withdrawals brought ferocious diarrhea and a week of sleeplessness.

The morphine molecule resembled a spoiled lover, throwing a tantrum as it left. Junkies I talked to, in fact, said they had an almost constipated tingling when trying to urinate during the end of

withdrawal, as if the last of the molecule, now holed up in the kidney, was fighting like hell to keep from being expelled. Like a lover, no other molecule in nature provided such merciful pain relief, then hooked humans so completely, and punished them so mercilessly for wanting their freedom from it.

Certain parasites in nature exert the kind of control that makes a host act contrary to its own interests. One protozoan, *Toxoplasma gondii*, reproduces inside the belly of a cat, and is then excreted by the feline. One way it begins the cycle again is to infect a rat passing near the excrement. *Toxoplasma gondii* reprograms the infected rat to love cat urine, which to healthy rats is a predator warning. An infected rat wallows in cat urine, offering itself up as an easy meal to a nearby cat. This way, the parasite again enters the cat's stomach, reproduces, and is expelled in the cat's excrement—and the cycle continues.

The morphine molecule exerts an analogous brainwashing on humans, pushing them to act contrary to their self-interest in pursuit of the molecule. Addicts betray loved ones, steal, live under freeways in harsh weather, and run similarly horrific risks to use the molecule.

It became the poster molecule for an age of excess. No amount of it was ever enough. The molecule created ever-higher tolerance. Plus, it had a way of railing on when the body gathered the courage to throw it out. This wasn't only during withdrawals. Most drugs are easily reduced to water-soluble glucose in the human body, which then expels them. Alone in nature, the morphine molecule rebelled. It resisted being turned into glucose and it stayed in the body.

"We still can't explain why this happens. It just doesn't follow the rules. Every other drug in the world—thousands of them—follows this rule. Morphine doesn't," Coop said. "It really is almost like someone designed it that way—diabolically so."