

UC BERKELEY
GRADUATE SCHOOL OF JOURNALISM
PROFESSIONAL PROJECT
PLAN II

TITLE

Fresh Breath and Dirty Streets:
Exposing the dark side of chewing gum

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DEGREE CONFERRED: MAY 12 2003

The next time you stroll down a sidewalk, take a moment to look down. See the flat, black and gray splotches on all sides of you? That's gum. Once it was in somebody's mouth. But when the flavor ran out or lunchtime came around or their mother told them to spit out their gum before going upstairs to their grandmother's apartment, the gum wound up on the sidewalk. And it stayed there.

There is so much gum in some places that it looks as though wads of tar rained from the sky. Some froze on impact. Some oozed its way onto a neighboring square or stretched across several squares in messy threads, most likely via the bottom of some unlucky person's shoe. The place where a storefront meets the sidewalk is a well-known hideout for fresh pink, green or red cuds that still have teeth marks in them. Eventually these, too, will be trampled by herds of pedestrians and ground deeply into the cement.

Want more? Get down on your haunches inside a telephone booth and check out the underside of the shelf that holds the worn-out Yellow Pages. See the half-dozen gummy blobs hanging there? Observe the booth's corners – another prime spot for sightings.

This, my friend, is only the beginning.

All over San Francisco, an otherwise visually appealing American city, gum lies on streetcar tracks, gathers in planters and congregates at the base of newspaper boxes. Gum sticks to the rims of trashcans. Gum is squished onto bathroom stalls and the sides of paper towel dispensers. Gum hangs on the plastic lids of empty to-go coffee cups. Gum lurks under tables, movie seats and park benches, waiting for some poor sucker who might just put his hand there for an instant.

There are other lesser-known hiding places for gum that few people ever notice (except those who have to clean it up). Shoppers stick it between canned goods at the grocery store. The impious cram it under church pews. It lies in wait in airplane seatback pockets and hangs over the sides of vehicular ashtrays. It gathers around urinal cakes in men's bathrooms.

But unlike apple cores, banana peels and other already-consumed garbage we rationalize throwing out of a car window, gum doesn't return to the earth. It doesn't make good eating for squirrels or birds. It won't add nutrients of any kind to soil. When the flavor is chewed out of gum, which takes an average of 12 to 13 minutes, what's left is the gum base – a smooth rubbery substance, made of the same polymers used in paint thinner and tires, that holds all of gum's ingredients together. Neither grinding teeth nor spit nor pouring rain will make it dissolve. Nothing short of nuclear holocaust will melt it all away. When we're all dead and gone and the remains of our civilization are being unearthed by a group of futuristic anthropologists, they will find our ancient cuds of hardened gum.

Let me get this out of the way right now: I am a gum phobe. My aversion to chewing gum is no less real than a fear of heights, spiders or flying. Not only do I avoid putting the stuff in my mouth (yes, even if I have snacked on a raw onion and garlic bulb sandwich), I also really, truly hate being around other people when they chew it. I've abandoned gum-chewing friends halfway through movies, ended conversations abruptly and excused myself from meetings just to get away from the mind-numbing squish of gum between a co-worker's molars. Many an amused friend has called me just to say that a nearby gum smacker made her think of me.

I know that's not a good thing.

Maybe you don't harbor an irrational fear of chewing gum, but my gum problem is still your gum problem. Gum pollution is a serious, expensive urban blight, and it's getting worse. Even as sticky layers of gum grow thicker and more grotesque, and people are left scratching their heads trying to figure out what to do, manufacturing companies are cranking it out in record quantities. And as if people don't already chew enough, gum scientists are coming up with all kinds of newfangled ways to use it.

Look at the shelves of your local drugstore. Vitamin gum is being stocked next to Flintstone chewables. There's caffeinated gum for stressed-out students, dieter's gum that curbs overeating, and gum that guards your teeth against cavities and blasts away bad breath. If all the noisy chewing gets to you, you can stop by the drug aisle for some pain-

relieving aspirin gum. Not long ago, I went to get my morning coffee and found gum attached to the cup. It was encased in a shiny green sample packet of something called Mintastic Ice Breakers Unleashed! (The exclamation mark was part of the brand name.) I looked around – everyone drinking coffee or tea within a six-block radius had been infected. The stuff was everywhere.

Gum had come onto my turf uninvited. I wasn't running my hand under a grimy café table or watching for gooey detritus on the sidewalk; I considered this an act of aggression. I felt personally violated. I couldn't even get a cup of coffee undisturbed. For some weeks afterward, I could still feel the weight of gum's foot on my neck. The memory was with me as I stood on a dark street corner in downtown San Francisco about to eradicate a block's worth of gum wads with a giant power washer. One of my gloved hands was wrapped around the trigger and the other was firmly over the long nozzle as I prepared to unleash a blast of 180-degree water that would disperse these blobs of gum into the ether. My attempts to uncover the dark side of chewing gum led me from San Francisco to Fairfield, California and eventually on a cross-country trip to The Ford Gum and Machine Company, the only gum manufacturer that would let a journalist through its front door. They agreed to this, I am ashamed to admit, only after I convinced them of something that may be the biggest, most flamingly outrageous lie I've ever told: that I love chewing gum.

The Ford Gum and Machine Company is a boxy brick-walled factory on the edge of Akron, New York, a small town east of Buffalo. On an unseasonably warm day this spring, I drove my rental Pontiac into Ford's cracked asphalt parking lot and pulled in next to an old pickup truck. The air smelled sweet and sugary – the distinctive scent, I was about to find out, of gumballs. When the wind is just right, the smell carries all the way up the hill to the town's main square.

The lot was muddy, and I took a circuitous path around the pools of brown water past a handful of workers on a cigarette break. I noticed a blue door propped open with a brick near the wooden picnic tables where the workers were talking and flicking cigarette ashes into old coffee cans. I briefly considered ducking into it, since it looked like a direct route into the belly of this gum-making beast, and then I imagined the humiliation of being tackled to the floor by a pack of gum factory workers in white shower caps. I continued to the front door instead. The history of how gum has achieved its mythic status as a piece of Americana as sacred as baseball and apple pie can be traced through the fortunes of The Ford Gum and Machine Company.

Untangling the origins of chewing gum's worldwide popularity is a fairly complex matter. Ancient Greeks, the Mayans and Native Americans all chewed resins and saps from trees. But the commercialization of chewing gum really began with two men: Mexican general Antonio Lopez de Santa Anna and New York inventor Thomas Adams.

In 1869, the men conspired to turn a warehouse full of Mexican chicle, coagulated sap bled from Sapodilla trees, into a cheap rubber substitute. As it turned out, chicle was useless as a sturdy rubber, but it made great chewing gum – something the Mayans had discovered thousands of years earlier. Adams craftily transformed his chicle supply into gum with the slogan, “Adams New York No. 1 – Snapping and Stretching.”

Chewing gum wizards and their scientists have tinkered with gum’s formula ever since in a quest for the perfect piece of gum: soft and slippery, with flavor that lasts long after lockjaw sets in. The first big gum breakthrough came when manufacturers discovered that mixing chicle with flavored corn syrup could produce peppermint, cinnamon, fruit-flavored and licorice gum. Once flavored gum hit store shelves, all hell broke loose. An editorial from the New York Sun in 1890 declared, “The habit has reached such a stage now that makes it impossible for a New Yorker to go to the theater or to church, or enter the street cars or the railway train, or walk on a fashionable promenade without meeting men and women whose jaws are working.” Then came pepsin gum, candy coated gum and in 1928, the mother of all gum-related inventions: bubble gum.

Chewing gum has stayed current for more than 100 years thanks to new formulas and gimmicks, not to mention cunning manufacturers who have continued to dream up new ways to bolster gum’s wholesome image. In Akron, children grow up breathing Ford Gum’s chewing gum-scented air. It’s a smell that has become familiar to generations of Akron families.

The Great Wars played a big role in getting people all over the world hooked on chewing gum. After it was sent overseas with American Expeditionary forces during World War I, the War Department issued a statement saying chewing gum alleviated soldiers' thirst during long marches. In response, The Red Cross sent 4.5 million packs of chewing gum to the front in 1918, and the British press urged citizens to include gum in soldiers' care packages. Publicity-savvy William Wrigley, Jr. took advantage of gum's association with the war effort, even using his advertising billboards to urge Americans to buy War Savings Stamps and contribute to the Red Cross.

Like McDonalds, Baywatch, Michael Jackson and other dubious American ideas, chewing gum became an international craze. By the end of World War I, the United States was shipping more than \$2 million worth of chewing gum to more than 80 countries, including Italy, Mexico, The Netherlands, Egypt and The Philippines. Before the war, that number had been a paltry \$200,000.

Chewing gum's heroic role in both World Wars – there are legends of soldiers patching jeep tires, gas tanks, life rafts and radio connections with their sticks of gum – established the chew as an essential part of American lore. Gum was even used as a propaganda tool to help the allied effort. Wrigley's Australian factory wrapped its sticks of gum in wrappers that showed the crossed flags of the United States and the Philippines and said, "I shall return – MacArthur." Thousands of packs were dropped from planes over the occupied Philippines. (As if occupation wasn't bad enough. I shudder to think how many innocent islanders were done in by a plummeting pack of gum.)

But as the popularity of chewing gum soared, the supply of natural chicle was running out. Chemists began working to develop artificial gum base using styrene-butadiene, a synthetic rubber used in car tires, belts, hoses and gaskets; and polyvinyl acetate, a water-resistant resin used in paints, adhesives, lacquers, and cements. These man-made polymers acted just like the stuff tapped from trees in faraway exotic jungles. Each company kept its own recipes secret from the rest of the industry, a practice that continues in the gum business today.

Looking around the quaint Ford Gum and Machine Co., it's hard to believe that this place can compete with the likes of the Wrigley's empire. Ford's modest reception area is decorated with commendations in ordinary wooden frames, including a certificate of appreciation for making the gum for military rations during Operation Desert Storm. A series of gumball machines exhibit cardboard signs on top indicating which charities benefit from the pennies collecting inside. A team picture of the Akron Men's Softball League is propped up amidst a mess of outdated industry magazines.

Ford Gum and Machine Co. may look like the little old lady of the gum business – gumballs are certainly old-fashioned and sweet – but looks are deceiving. This little company produces 72 million pieces of gum every year for the U.S. military's MRE's – or Meals Ready-to-Eat – for the tidy sum of \$600,000. A decade ago, Ford expanded its operations to include Arm & Hammer Advance White chewing gum, a menthol chewing gum sold by a cosmetics company, and its own line of sugar-free gum.

Warren Clark is Ford Gum's Vice President of Research and Development and Quality Assurance. He is a white haired man with watery blue eyes and a western New York twang that makes him seem more like a farmer than a hard-nosed businessman. When I first met Clark, he was fresh from a morning spent on the factory floor. He came into the waiting area and shook my hand warmly. Then he reached up and removed the shower cap from his head. In spite of his low voice and monotone delivery, Clark is an engaging storyteller. He spins colorful yarns about his days at Beech Nut Lifesavers when he invented Tropical Punch Bubble Yum and worked on the development of Fruit Stripe Gum. "That was kind of like the epitome of gimmicks," said Clark about the sugary gum striped with lemon and orange flavors.

From years of sampling different flavored chunks of gum in the lab, Clark had cultivated the discerning sensibilities of a sommelier. "You'll have a ripe strawberry, or a fresh strawberry," he said, leaning forward on the brown scratchy couch. "Or you'll get what they refer to as a hull note – which is kind of a green note."

And then he let me in on a secret. "The most popular watermelon is not really watermelon flavor," he said. "It's honeydew."

Clark was being so nice. When we'd spoken on the phone a few days earlier and he'd flatly refused to give me a tour of the factory, saying that for insurance reasons, they no longer let people get close to the gum machines. But as he was showing me out, I asked

one last time. He paused at the door and grimaced for a moment. Then his face softened. "Ok," he said. "Come back tomorrow."

The following afternoon, Clark and I descended a series of metal staircases towards the bowels of the factory. He wore a button down shirt and a pair of khakis. He turned left – a quick detour, to show me an old photo hanging in a wood-paneled conference room cluttered with old, broken gumball machines and messy piles of paper.

In the photo, which was yellowed with age, a stern-looking man with slicked-back hair parted on the far left side of his head stared out in a manner much too dignified to be confined to this crappy room. The staring gentleman was Ford S. Mason. From his purposeful look and dark suit, I gathered he could have lorded over a pulpit, like his Baptist minister father. Except this Mason's vision was not about God. It was also about gumballs.

Ford S. Mason was a 22 year-old unsuccessful traveling roof salesman, when he decided in 1918 to get into the gumball business. Gumball machines dispensing candy-coated gum for a penny apiece had been popular since the late 1800's. Mason bought a bunch of vending machines from a salesman and drove up and down the East Coast placing the one-cent gumball machines in stores and gas stations. But the machines were unreliable.

They gobbled customers' pennies, and when the machines did work, the gum proved to be unchewable. Mason's father decided to help his son by building a better gumball machine. According to Ford Gum legend, Mason's father then told him, "Make your own machines, my boy, and share your profits with God."

The younger Mason spent a decade perfecting his own gumball. He experimented with different kinds of natural gum bases and softeners to create a softer chew. He also discovered that coating the finished gumballs with food-grade shellac would keep their colors from running when the candy was exposed to humidity. The superior quality of Mason's confections earned them the nickname "Cadillac of Gumballs."

Ford Gum and Machine Company opened in 1938; and in line with his father's wishes that he share his profits with God, Mason encouraged civic groups to lease gumball machines and funnel the profits into charitable causes. The program, called Fordway, still exists today. Mason hired actor Ronald Reagan as his pitchman and bought an army surplus DC-10 to fly his gumballs all over the country.

From the conference room, Clark and I continued down another flight of metal stairs. I smelled gum. At the bottom of the staircase, Clark grabbed two white shower caps from a bin, handed one to me and pulled the other over his own head. Then we proceeded silently through a warehouse, stocked floor to ceiling with cardboard boxes that Clark said were mostly filled with packing supplies. Finally, we walked through a set of gray

double doors into the restricted area. Machinery roared. A sheet of icy cold air stung my eyes and nose. I suddenly felt like I was choking on an icicle.

“What is that?” I gasped.

Clark cleared his throat. His eyes were misty, too. “Menthol,” he said. “We use it in the Arm & Hammer gum to give it a stronger mint flavor.”

I stood in a dusting of white powder and breathed in, adjusting to the polar atmosphere. Rows of plastic crates filled with perfect squares of gum stretched as far as I could see. It was glorious.

From industrial sized mixers with big metal whirligigs to rolling conveyer belts that stretched from one room to another, I felt like I’d set foot in Wonka land. I half expected to spot Slugworth sneaking around in search of the recipe for the Everlasting Gobstopper.

We proceeded into what looked like an industrial kitchen. The same white powder that I’d been standing in covered everything in here, too, like a layer of flour. Clark explained that the ubiquitous powder was a mixture of sugar, cornstarch and calcium carbonate.

“It keeps the gum from sticking to everything,” he said.

Gum production begins with gum base. Most companies buy giant bricks of gum base—made of synthetic rubber and polymers— from a supplier. The base is melted in a large, steam-jacketed kettle until it is the consistency of hot molten lava. Then it's filtered, clarified and strained to remove any impurities.

Ford happens to use granulated gum base, which doesn't have to be melted down and can simply be mixed as-is with sweeteners, softeners like corn syrup and glucose and flavoring. Every kind of gum— whether it's ball gum or tablet gum— starts out the same flavor, known as Tutti-Frutti or "common." Individual flavors, like banana, mint or cinnamon, are added later, in the coating process.

After the ingredients are thoroughly blended, the thick, doughy batch travels via conveyer belt to a cooling tunnel where it's cooled down with a blast of wintery air. The gum continues into an extruder, which kneads the batch and spits it out in long ropes. The ropes pass into a series of giant rollers that flatten them into sheets. (The thickness of the sheet depends on what kind of gum you're making. Stick gum is the thinnest, candy-coated gum, like the stuff made in this room, is a little thicker. Bubble gum is the thickest.) The sheets of gum are cut into the right shape— pillow shape for tablet gum, pencil shaped for ball gum. The pencil-shaped pieces continue into special forming machines that mold it into hollow balls. Then the gum— which is coated in white powder— drops off the conveyer belt and is collected in plastic crates, like the ones I had seen earlier. The gum is then left to cure for a couple of days before it goes through the coating process.

Stacks of crates had been shoved into every bit of available space in the room. I realized that Ford's output today is probably higher than founder Mason could ever have imagined when he bought this modest factory. Clark absently plucked a white tablet out of a nearby crate, popped it into his mouth and began chewing. With all of the gum at my feet, I was tempted to do the same, but he didn't offer. Clark was a closed-mouth chewer, the most polite type. I don't think he made a sound, although the machines were really loud so I couldn't be certain.

He motioned for me to follow him to the other side of the room. A woman wearing a white uniform, a white shower cap and a white mask over her nose and mouth stood alongside a row of giant rotating stainless steel drums suspended from the ceiling. She was performing the last order of the day: coating and polishing a cured batch of gum. I got as close to her as I could. Every few minutes, she scooped a ladleful of liquid from the silver bucket she carried under her arm and poured it into one of the drums.

I looked at Clark and pointed towards the obstreperous drums. "Can I get closer?" I mouthed, over the cacophony. He nodded, so I walked up to the drums to see what 300 pounds of gum tumbling in on itself over and over again looks like. It was mesmerizing.

Between chews, Clark told me that after this, the gum is polished with a mixture of carnauba wax and beeswax. The liquefied wax is ladled into the drums and the pellets are

tumbled until they're shiny. The final stage of the coating process is the application of the special shellac Mason formulated decades ago to prevent the gum's colors from running.

Then the gum goes through a printing press, where it is stamped with the Ford name. A printing cylinder rotates in an ink bath. A blade doctors off excess ink and the name is rolled onto the gumballs and tablets before they drop off into tubs.

We left the coating area and stepped over some plastic sheeting into the quality assurance room. After the gum is stamped, it is fed into a hopper that separates out pieces that are too big or small. The tablets bounced downward and sideways amidst small metal pegs, like a game of Plinko. The rejects were diverted to a metal chute and spit out into a bucket. These pieces would eventually get mixed into another batch of gum and go through the whole process again. The good pieces were ferried underneath a square metal detector – to make sure flecks of the machines haven't come off in the gum, explained Clark.

The pellets that from the Plinko machine passed by two women seated on metal stools next to the conveyer belt. They pushed the gum back and forth with gloved hands, picking out deformed or chipped pieces. A man who looked like someone's grandpa crouched down facing the very end of the conveyer belt. He wore a mesh cap and thick eyeglasses. He filled the white buckets and sealed them shut, hitting their plastic tops with a metal hammer.

From batch to ball or tablet, the entire process takes about four to five days.

Looking at this continuous torrent of gum, I wondered how long it would take before the whole supply ended up as ugly black splotches on sidewalks all over the country. They might as well just dump the gum directly out the window and into the street, I thought. But I was conflicted. Did I dare ask Clark about this?

On the one hand, he'd been kind and trusting enough to bring me into this inner sanctum, but on the other, he was lording over the production of a hell of a lot of chewing gum. I coughed out the question before I lost my nerve: Had Ford had ever considered making biodegradable chewing gum?

"A lot of work is being done on it," Clark said, without stiffening or giving off a whiff of culpability. But, he explained, market forces took precedence over environmental concerns. "Most people are concerned with functionality," he explained. "How does it chew? How does it taste? Can you blow a bubble with it?" Then he continued to chew silently on his gum.

Clark tossed our white shower caps into a big garbage can and we hiked back up the metal stairs back to the reception area. The tour was over.

I passed the picnic tables again on the way back to my car. I still hadn't had the chance to talk to any factory workers, and now that I'd gotten inside the factory, I decided I had

nothing to lose by walking over. I climbed onto one of the wooden benches across from a forty-ish woman eating a chilidog. Lynn Yeager told me that she worked on the military gum operation at Ford. Her son had just gotten out of the service, she said. When he found out that his mother made the gum tucked into every Meal Ready to Eat, he was so excited.

“Two packs of gum will save a soldier’s life for two days,” she beamed. I was sure she really believed it.

I sped along the rural route back to my motel in a state of disbelief. What *was* that place? It was like the gum spies knew I was a skeptic, so they replaced all of the pod-people who normally make gum at Ford with these genuinely likeable characters.

How could I hate a bunch of geriatrics who put their heart and souls into making what they hope is the best gum in the world? Gum that raises money for charity. Gum that might make a little kid squeal with delight. Gum that might save a soldier, trapped in the desert, with no food or water.

I needed to hightail it out of Akron as quickly as possible. As I checked out, the woman at the front desk of my motel asked me how my work had gone. She was as nice as Clark was. It was beginning to freak me out. I paid my bill and left without stopping to check the gumball machine in the motel lobby to see if it was a Ford. I didn’t want to know.

I settled into my airplane seat with the sense that I'd escaped Akron in the nick of time. I was getting sucked into its pastoral farmlands and friendly coffee shops where the same people sit at the same tables every single day. Damn Akron and its small town charm. I was wise to these gum manufacturers. I was on a mission by now to expose chewing gum for what it was: the Devil's candy, offensive to others, insidious, destructive, and a blight on our cities' sidewalks, landmarks and public spaces.

And this is how I found myself standing on the sidewalk in front of the downtown San Francisco Marriott steadying an industrial-sized power washer with the side of my body, preparing to annihilate every last blob of chewing gum I could find. It was after eight o'clock on a spring evening, and the surrounding blocks were mostly deserted, except for an occasional clump of teenagers headed towards the Cineplex nearby. I grasped the trigger with the yellow and gray work gloves that the foreman, Pepe Nunez had given me, waiting for him to wave his hands in the air – the signal that I could begin.

San Francisco is only one of many urban areas now grappling with the very real problem of gum pollution. In Washington D.C., Frank Russo, Deputy Executive Director of Programs and Services for the Downtown D.C. Business Improvement District said it takes his two-man cleaning crews almost two days to get all of the chewing gum off of every 300-foot long city block. Since he began a cleanup operation last year, his crews have picked up nearly a quarter of a million pieces of gum with Gumbuster machines.

Russo said the cleanup is costing the BID almost \$100,000 in man-hours and \$40,000 for enough solvent to fill their two \$7,000 GumBuster machines. "If people threw as much trash on the ground as they did gum, we'd be walking up to our kneecaps in trash every day," Russo told me.

In Canton, Ohio, the downtown-shopping district was covered with 4,754 pieces of gum before high school students removed it last summer. (The total was included in the city's formal write-up of the cleanup program; no details were offered as to who did the counting.) In Los Angeles, the woman who helps supervise the historic Palace Theater told me that last summer, she found hundreds of discolored wads in the long-abandoned, crumbling upper floor balcony. The gum was crammed underneath every one of the six rows of wooden benches where, even in the enlightened West, Blacks and Mexicans were made to sit before desegregation. "I would say there were hundreds of pieces," the lady from the Palace said. "It was wild. I've never seen anything like that."

Last fall, in an effort to beautify the city, San Francisco's Department of Public Works decided to put out a contract worth as much as \$70,000 for gum removal in six neighborhoods during a week-long campaign to educate the public about the city's gum problem. There was hefty competition for the contract. The DPW said that after a local television station aired a news segment showing GumBusters demonstrating its gum removal technique, companies began coming out of the woodwork touting their own

unique methods. The DPW agreed to offer eight companies, some from as far away as Virginia, a chance to show their stuff in what became a gum-cleaning showdown.

One company proposed burning the gum off the sidewalks with something resembling a blowtorch, then washing away the sticky bits with steam. Others boasted special scrub brushes and top-secret chemical agents that dissolved gum on contact.

Jim Sherry, a Scotsman who has been in the cleaning business since 1988, was one of the competitors. His formula was a little less complex. "We use what your granny would call hot water, or what we call in Scotland, hot water," Sherry said in a thick brogue. "You would think it's nuclear physics. It's chewing gum, for god's sake!"

As of this spring, San Francisco had yet to choose a gum removal company and activate Project Clean Patrol, but individual business owners are doing what they can to keep up with the gum around their property. Sherry's method of power washing is still one of the easiest ways to take care of gum, and the Marriott hires Sherry's Caledonian team to blast away gum along with other kinds of urban grime once a week. And this week, I was invited to be just another guy on the job, facing down one of many grayish blobs stuck to the Marriott's sidewalk

I pulled the trigger of my weapon, a custom-built power washer, unleashing a high-pressure blast of 180-degree water onto the offending blob. There was a loud hissing

sound as I was momentarily engulfed in a cloud of steam. Within seconds, the gum peeled away from the sidewalk.

Once I got used to the machine's kickback, the power washer was pretty easy to use. Each piece of gum came up a little differently, but most would immediately flatten under the pressure, in a vain attempt to retain their grip. The globs would then stretch out in long strings until they could not hold on any longer, and then, finally blow into bits.

This last part was deeply satisfying. As I moved from glob to glob, I repeated a mantra in my head: "I will settle for nothing less than complete annihilation!" Nunez stopped me periodically so I wouldn't accidentally spray the tourists and late-night stragglers leaving work. Most of them stared at me as they passed. I was soaked up to my knees, my hair was matted to my head and I was holding a giant power washer and wearing a maniacal grin. This was fun.

I spotted a small, blue cud hiding in the white rocks gussying up the base of a bare urban sapling. But when I aimed the power washer at it, the white rocks scattered through the air in all directions. Nunez smiled conspiratorially.

As my arm grew tired from holding the trigger, I kept letting it go accidentally. Much to Nunez's delight, every time the pressure suddenly stopped, I nearly face-planted into the concrete.

One of the last pieces of gum was on a thick layer of blacktop. I aimed the stream and fired. The blacktop erupted like old faithful, blowing gunk into the air. As soon as I made sure that I still had both my eyes, I realized that I'd blown a giant hole in the blacktop. I let go of the trigger and looked around to see if anyone noticed. Nunez was a block away, talking on his cell phone. I wiped the bits of blacktop off of my glasses to get rid of the evidence and decided that I'd better leave well enough alone.

When the job was done, I looked back at the long stretch of sidewalk. It shone in the streetlights, completely clean, smooth, perfect and new. It was beautiful.

I got home and went to the bathroom to wash the grime off of my hands. It was then that I caught a glimpse of my face, and the layer of blacktop glued to my cheeks.

It took a couple of days for my trigger arm to stop throbbing. With each muscle spasm, I consoled myself by thinking about how beautiful the gum-free stretch of sidewalk had looked. But who was I kidding? I knew that it was only a matter of hours before the fresh wads of gum would begin piling up. It was depressing. I was no better off than Sisyphus and his rock.

Maybe the sidewalks were the wrong place to begin a gum jihad. If people chew 300 pieces a year (that's according to Wrigley's extremely ambitious website) and there are 290 million people in the U.S., that means 87 billion pieces of gum could potentially make their way to the sidewalks (and beyond) every year. I understand that this calculation assumes that every single American, including those too old or too young to have teeth, is chewing gum. But that's exactly how it feels to me most of the time. In any case, the world doesn't have enough power washers to take on that much gum.

As it turns out, one man is passionately pursuing his dream that, in the future, chewing gum and Mother Earth will be able to peacefully coexist. Jim Balanesi believes he's come up with what may be the only viable solution to the scourge: don't fight the chewing of gum, transform it. The tanned ex marine, who was trained as an art educator at San Jose State University, has created gum characters he calls the GumToons. There's GumBilly, a blue gumball; CandyCoats, a white chiclet who wears a pink bow and pink shoes; Mr.Sticks, a Gumby-like, spearmint flavored character; and the Bubble Brothers, perpetually arguing Siamese chunks of bubble gum who like to blow themselves up.

From his converted garage in Fairfield, Balanesi, a self-professed gum addict with a gray-streaked Elvis-like pompadour, is working to bring chewing gum in harmony with the environment. From his converted garage in Fairfield, California, he has dedicated his life to raising people's consciousness about chewing gum pollution. His philosophy is "Chew responsibly and park it properly."

I wasn't surprised to see a little white cud in his mouth when we met for breakfast at a diner on University Avenue. As our waiter filled our coffee cups, Balanesi produced a small envelope.

"See, I just got this one today," he said, tearing it open.

He unfolded a piece of paper printed with the GumToons dressed like a fire rescue team and catching a falling piece of gum in a GumPal safety net. The picture had been colored by a San Diego four-year-old named Dean, one of thousands of children Balanesi says print this page his web site, color it and send it back. Every month, Balanesi randomly picks five drawings and sends each child a pack of GumPals. He says he invented these twenty years ago, after he had been at a restaurant and couldn't find a way to get rid of his gum. The GumPal is a round tissue with a special moisture seal for wrapping up and throwing away chewed gum. The tissues, which come in matchbook type dispensers, are emblazoned with a "No Gum" icon: a dress shoe-clad foot glued to a messy wad of gum and a big red line through the middle.

Balanesi sells his tissues, and he also visits schools where he dresses up as Dr. Gum – complete with a white coat and a leather doctor's bag – and encourages kids to wrap their used "GumPanions" in a GumPal and send them to "gum heaven."

I'd like to think that Balanesi is the future of planetary gum consciousness. He's great, kids love his GumToons, and even this gumphobe sees that he's living proof that it is

possible to chew gum and still be a thoughtful, caring human being. But he's only one guy. I've been carrying Balanesi's GumPals around, and the last time I offered one to a friend of mine, she rolled her eyes and then launched her gum out of my car window. It was a slap in the face – especially because this same friend won't eat meat because she says that killing animals, under any circumstance, is inhumane.

If my journey into the world of chewing gum has taught me one thing, it's that asking gum chewers to give up their chewing gum would be like asking NRA members to hand over their assault rifles. I can hear it now: "You can have my sparkly green blister pack of gum when you pry it out of my cold, dead hand!" It's just never going to happen.

It's hard to build a convincing moral argument against gum considering that, unlike other vile habits like smoking or mainlining heroin, chewing gum doesn't threaten your life.

Chewing gum won't give you cancer or dull your synaptic receptors. Swallowing gum won't even kill you. And as for the idea of "Big Gum," it's hard to paint an evil face on a company that doesn't plow rainforests into oblivion or use Malaysian children to stir its bubbly vats of gum goo.

But what if gum chewers of the world simply took one second to consider where the wad of gum carelessly flung from a window will end up? Maybe the problem is if they think about one blob, they might start thinking about the other millions of blobs, too. Large-scale blob denial is less painful than becoming hyper aware of gummy surroundings. It certainly means that cleanup people, like the Gum Machine and Gum Busters – with their

magic solutions and gum busting machines – will be kept busy long into the future. That is, if gum-plagued cities and businesses can afford to pay their fees.

Chewing gum manufacturers in Britain may have to start chipping in for the cost of cleaning up gum pollution – an estimated \$400 million, according to British environmental charity, Ecams. If manufacturers, including Wrigley's, don't voluntarily sign an edict stating that they will sponsor cleanup teams and provide towns with gum removal machines, Britain's Deputy Prime Minister says he'll begin fining gum-droppers \$50 for littering.

It's not as draconian as Singapore's famous decade-long ban on chewing gum (until recently the chewing of gum anywhere on the island was a criminal offense), but it might be enough to put U.S. manufacturers on alert that the days of making gum without taking responsibility for gum litter are coming to a close. The Singapore ban, incidentally, was lifted thanks to a lobbying effort on the part of U.S. manufacturers. Now doctors in Singapore may legally prescribe gum for their patients.

There are half-hearted attempts to make biodegradable or less tacky chewing gum. But manufacturers don't want to mess with the chewing gum formulas that they've perfected over the past 100 years. People are hooked on the perfectly smooth texture of lab-made gum. Anything less might not go over too well. Remember New Coke? As for the natural chicle gum sold at organic food stores, I've tasted it. Chewing on a mouthful of dirt would be more pleasurable. It's crumbly, horrid tasting stuff.

There is only one real solution: It's time for a little chewing gum reframing exercise. Rather than seeing gum as a piece of Norman Rockwell Americana, try to imagine it as something a bit more...sinister. Not only is chewing gum responsible for a handful of amusement park deaths (gum gets lodged in park-goers' throats during rides), but it may also be what I'd like to call a Gateway Litter. A person who begins littering chewing gum may move on to bigger, more dangerous kinds of litter. Do you really think people leave hulking, rusty refrigerators on the street right off the bat? No. It is a progression.

While I was researching chewing gum, an article from a March 1982 issue of the Atlantic Monthly caught my attention. In the piece, criminologists James Q. Wilson and George L. Kelling explain how seemingly small things, like overgrown weeds or fights in the street can spark a downward spiral into urban decay. They based their study on the Broken Window theory: if a window in a building is broken and is left unrepaired, all the rest of the windows will soon be broken.

It got me thinking about chewing gum. Couldn't unsightly splotches of chewing gum send a signal that an area is uncared for? Gum litter could be one of those things that, left untended, leads to more trash and graffiti and a full blown breakdown of civilization as we know it. It doesn't exactly sound like a Rockwell painting, now does it?

I called Kelling at his Rutgers University office and ran the idea by him. He was skeptical. Denial is a pervasive, powerful emotion. It allows human beings to do all kinds

of things – obnoxious, self-gratifying, environment-fouling things – and still get a good night’s sleep afterwards. I started thinking about O.J. I wondered, was he a gum chewer? I could’ve sworn that I saw him chomping away during that trial. This might be even more dangerous than I thought. It was a possibility I needed to contemplate deeply and thoroughly. This was a two-cigarette question.

This piece began as a news story about a gum cleanup competition in San Francisco and grew into an eight month-long, cross-country journey to expose the invisible problem of chewing gum pollution. Most of my information came from a few of the key illuminative books and articles on chewing gum, as well as the web. I also interviewed a slew of chewing gum-related people about their work and their feelings about the future of the chewing gum manufacturing industry in relation to the environment. A detailed list follows:

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4. Warren Clark, Vice President of Research and Development and Quality Assurance, Ford Gum & Machine Co., Akron, NY. March 28, 29, 30, 2003
5. Jim Bananesi, Entrepreneur, author, gum collector, Fairfield, CA., November 11, 2002, December 30, 2002, May 9, 2003.
6. Jim Sherry, Founder, Caledonian Business Services, San Mateo, CA., October 27, 2002, April 5, 2003.
7. Pepe Nunez, employee, Caledonian Business Services, San Mateo, CA. April 5, 2003.
8. Frank Russo, Deputy Executive Director of Programs and Services for the Downtown D.C. Business Improvement District. November 11, 2002, May 9, 2003.
9. Robert Esposito, Vice President of Operations, Times Square BID, New York, NY. March 21, 2003.
10. Brad Fields, Director, Gumbusters of New York, Long Island City, NY., March 21, 2003.
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