

ONWARD AND UPWARD WITH THE ARTS

STRUTS AND FRETS

Building a better guitar.

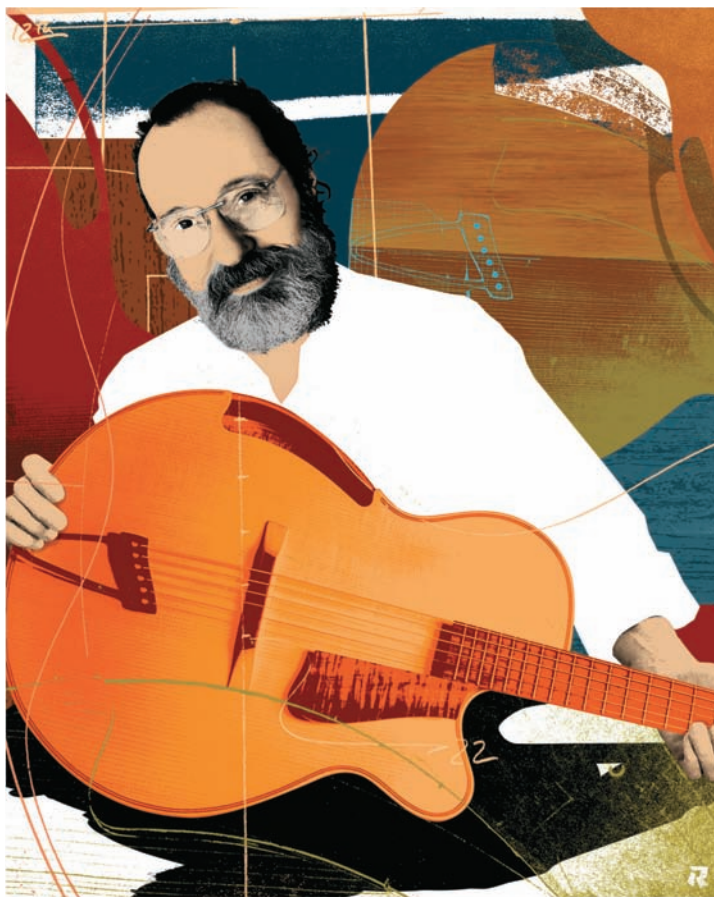
BY BURKHARD BILGER

Ken Parker's workshop lies an hour north of New York City, on a winding forest road that skirts the highlands of the Hudson River. It's a trapezoidal structure of concrete and glass, set into a steep slope like a piece of quartz, and serves Parker as a kind of Fortress of Solitude. "I'm in hiding," he told me. "I had a company for thirteen years that made thirty thousand guitars, and at least two thousand of their owners want to ask me a question." Parker's work tends to attract obsessives. He has spent his career not just building guitars but reinventing them from first principles, and his clients have included Pete Townshend, Paul Simon, Lou Reed, Eddie Van Halen, Joni Mitchell, and The Edge. On the Internet, his fans sometimes sound like Eric Clapton's of forty years ago: "Ken Parker is a god."

Parker is fifty-four. He stands more than six feet tall, with broad, ropy shoulders and thickly calloused hands—a body shaped by labor more than exercise. His forehead is a high domed outcropping; a scraggly gray beard juts from his chin. He walks with his spine stiff, his chest thrust out, a fat braid swinging behind him, like an old sailor with a tender back, and speaks in a boomy baritone that sometimes rises to a high, sweet giggle. His manner is more than genial, though it can't disguise his impatience with fools.

Guitars are often foolish devices, Parker says. Their bodies are ungainly, their necks easily warped, their intonation unreliable. The great majority are factory

products, designed for assembly lines in Fullerton or Nazareth or Kalamazoo, staffed by "ladies with cat's-eye glasses and hairnets, listening to cowboy radio," as Parker puts it. In 1949, a former radio repairman named Leo Fender took a slab of ash, bolted on a neck, and screwed in some magnetic pickups to amplify the sound. Half a century later, Fender Tele-



Ken Parker says, "A good guitar is in agreement with itself."

casters are still made the same way. Acoustic guitars with steel strings have been around longer—they were developed in the early nineteen-hundreds and refined by the Martin company in the nineteen-thirties—and have changed even less. "Some pretty obvious things have not been tried," Parker says. "You pick up a violin and it weighs sixteen

ounces. You pick up a guitar and it weighs seven pounds. Hasn't anyone wondered what a four-pound guitar sounds like?"

In the late eighties, Parker decided to take the electric guitar in hand. Together with the mechanical engineer Larry Fishman, he designed an ingenious instrument called "the Fly." Coated in fibreglass and carbon graphite, the Fly was lightweight, beautifully resonant, and nearly maintenance-free. It was awarded eleven patents, paraded on the covers of guitar magazines, and exhibited at the Smithsonian. Yet the Fly's sales fell far short of expectations. (Fender makes as many guitars in a week, Parker says, as he made in thirteen years.) Some loved its thin, twisted shape. "It looks like something you found on the beach," Joni Mitchell told Parker. The rest just thought it was strange. "Nice guitar," Keith Richards reportedly said. "But why does it have to look like a bleeding assault rifle?"

Parker sold his stake in the company in 2003, and promptly disappeared. He got a divorce, rented a cottage on Cape Ann, and thought about guitars. He fell in love with the owner of the cottage, moved into her house in the Hudson Valley, and began to build prototypes. A few months ago, some pictures of an odd new instrument showed up on his Web site. It had six strings and a slender neck, a hollow body and a high waist, but looked like no other guitar. The top was of unstained spruce, arched like the top of a violin. The neck seemed to float above the body, supported only by a golden post. The sound hole had been narrowed to a crescent and moved to the side, where it hung like a waning moon. Parker called his instrument "the Olive Branch," but as design statements go it looked more like a declaration of war. It looked like something that Picasso or Juan Gris might have painted: an old, familiar form made suddenly, startlingly modern.

The Olive Branch is an attempt to

do for acoustic guitars what the Fly tried to do for electrics, but it's in every sense an even riskier venture. It's a virtuoso's instrument for a populist music; an acoustic device for an amplified age; a radical reinvention of a design all but abandoned decades ago. When I first saw it, I asked Parker what he was thinking as he built it. Did he imagine that someday everyone would make guitars like this, or that no one else in the world could make such an instrument? He was quiet for a moment, seemingly stumped. Then he shrugged. "Both," he said.

These ought to be excellent times for guitar designers. Theirs are the most popular instruments in the world, used by country crooners, gothic rockers, and African soukous players alike. Some three million guitars were sold in the United States last year—as many as all other instruments combined—and the best vintage guitars are extraordinarily valuable. Twenty years ago, a pristine 1959 Gibson Les Paul might have sold for ten thousand dollars; today, it can fetch four hundred thousand. And yet, along the way, guitars have become deeply conservative. Most electric guitars look like Les Pauls or Stratocasters, and three-quarters of all acoustic guitars are dreadnoughts—

a fat-bottomed design from 1916. "This is rock and roll!" Parker says. "You would think that guitar players would be open and brave and experimental. And they are not. As a group, they are not. That guy with the purple Mohawk? He won't play anything made after 1960. Wait a minute, dude! *You* were made after 1960."

One afternoon this winter, I watched a man named Tom Murphy systematically beat up a brand-new Les Paul. Murphy, who is fifty-six, works for Gibson's custom, art, and historic division. He has thick forearms and ruddy features and a boyish devotion to the guitar heroes of his youth. Every week or two, the company sends ten or twenty guitars to Murphy's workshop, in Marion, Illinois, and he sends them back looking as if they'd been played for fifty years. When I visited, he began by etching some lines into the lacquer with a razor blade, to mimic the crackle of an old finish. He shaved the edges off the fingerboard, so that they looked worn by countless earsplitting solos. Then he took a bunch of keys and shook them over the surface, like a spider skittering over glass. To imitate years of belt wear, he held an old buckle against the back and whacked it a few times with a hammer. Then he flipped the guitar upside down and slowly

ground the headstock into the concrete floor.

A "Murphyized" Gibson sells for twice the cost of a regular Les Paul, and Murphy's signed Jimmy Page replicas (complete with cigarette burns) have gone for as much as eighty thousand dollars. Fender's aged guitars have been equally successful. Customers can choose from various degrees of wear, from Closet Classic ("played maybe a few times per year and then carefully put away") to Heavy Relic ("played vigorously on a nightly basis") to the Rory Gallagher Tribute Stratocaster ("worn to the wood"). When I asked Matt Umanov, whose guitar store has been a fixture in Greenwich Village for forty years, why people buy these instruments, he made an impatient noise. "Ninety per cent of this business is male-oriented," he said. "In my opinion, most purchases are governed by four words: the zipper is down."

Vintage guitars, authentic or not, are hard to judge on their own merits. Their sound comes to us as a mixture of memory and acoustics, musicianship and wish-fulfillment. Without "Purple Haze" or "Voodoo Chile," the squeal and moan of a Stratocaster might seem less appealing; without "Tangled Up in Blue," a Martin might sound merely pretty. Still, the best old instruments have a harmonic richness that transcends subjectivity. Vintage Telecasters have been hooked up to oscilloscopes and found to generate more overtones than newer guitars, and even the smallest old Martins can ring as loudly as church bells. "You could put a blindfold on and you would say, 'Oh my God, that is so beautiful,'" T. J. Thompson, a guitar-maker in Concord, Massachusetts, told me. "It sings, it's balanced, it's musical. Every chord you play sounds magical."

Thompson restores vintage acoustic guitars and makes exceptional new ones. (Parker calls him "an angelically gifted builder.") He estimates that only about one in twenty prewar Martins has that mesmerizing sound, but that those alone could drive the vintage craze. "They should come with a warning," he told me. "If I put one of those old dreadnoughts in your hand, you'll never forget it. You'll long for it, and you'll sell any holdings in real estate you have, and your marriage



"And just how do you expect to become a made man, son, without a solid liberal-arts education?"

will end, and your kids won't go to college. But you'll be happy, because you have a dreadnought."

Guitar-makers, or luthiers, as they like to be known, have tried to isolate the magic in older instruments, only to find that it lies largely in age itself. Time transforms a guitar's materials. The wood grows stiffer and more resonant. The lacquer develops hairline cracks, relaxing its straitjacket grip on the wood. The magnets in pickups weaken and rust, deepening and mellowing the tone. A new guitar is like a novice choir: a gathering of disparate parts, held together under pressure, straining to carry the same tune. The more it's played, the more it settles into its true voice. The neck and body, joints and braces, bridge and fingerboard stop fighting one another and start to sing in unison.

A good designer can duplicate some of these effects. But the sound of a vintage guitar is partly an echo of what's been lost: Brazilian rosewood, elephant ivory, old-growth spruce and mahogany—the world's best acoustic materials, now all but unavailable. "I have a piece of veneer from the twenties or thirties," Thompson told me. "I pick it up and I'm just in awe. I can hardly bend it. It has the weight of wood but it feels like ceramic. And I'm supposed to find a piece of wood in the world today that's forty-thousandths of an inch thick and that stiff? You know what? It doesn't exist."

Not long before I met Parker, my wife's uncle Ken offered to build an electric bass for my son. Ken is a retired economist in Virginia with a fully equipped wood shop in his basement. He built a lovely version of a '59 Les Paul a few years ago, and he seemed happy to have another project. My son, a vintage buff like any other, decided that the new instrument should be a copy of his teacher's bass: a hollow-bodied Gibson from the nineteen-sixties, with f-holes like a violin and a huge, echoey sound. (Its pickups are sometimes called "mudbuckers.") My job was to buy the materials and send them to Ken.

I've probably spent a couple of hundred hours in guitar stores over the years. Even a megamall can't seem to rob them of their charms: the flamboyance of the instruments, the studied

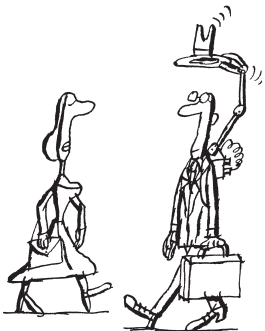
scruffiness of the staff, the eager racket of half a dozen noodling guitarists—John Cage for boneheads. I usually try to find the most expensive guitar in the shop, then I whale away on some riffs widely considered kick-ass when I was in high school. Sometimes, one of the clerks comes over and asks me to stop.

The bass project unloosed this compulsion. The longer I looked for parts, the deeper I ventured into a realm of gearheads and guitar fanatics, acoustic savants and reverse engineers. Every trick of modern science and forensic carpentry, it seemed, was being used to reproduce the sound of nineteen-fifties technology. One luthier, on an island in Puget Sound, dipped his pickups in a Crockpot full of wax and wound them with a sewing-machine motor to mimic the handiwork of the old Gibson factory. Another froze his metal pickups to three hundred degrees below zero, insisting that the molecules would realign as they do with age. Some builders blasted their instruments with giant speakers to simulate the effects of years of playing. Others swore by "timeless timber": old-growth maple and other woods, dredged from the bottoms of northern rivers and lakes.

Some of the world's finest electric guitars, I read in a newsletter called *The ToneQuest Report*, are made in the town of Hyvinkää, in southern Finland. Their designer, a mad young Finn named Juha Ruokangas, uses flamed Arctic birch, pickups wound by a German guitar guru, and inlays as exquisite as Fabergé eggs. (One shows a scene from the Finnish national epic, the Kalevala.) The wood is thermo-treated—slowly heated, in a process patented by a Finnish university, to mimic the curing effects of time—and coated in a lacquer designed to crack and craze like a fifty-year-old finish. The crowning glory of a Ruokangas, though, is the nut—the thin strip at the top of the neck that lifts the strings above the fingerboard. In some of the best old instruments, the nut is made of elephant ivory and is said to lend an ineffable resonance to the tone. In a Ruokangas, it's made from the shinbone of a wild moose. "We skin them, chop them into pieces, and boil them in my yard on an open fire," Ruokangas told the editor of *ToneQuest*. "Moose bone is the best."

The Finn was an inspiration. My

son, I'll admit, was showing signs of waning interest, but the bass project forged ahead. I bought thick boards of African black limba—"the holy grail of tone woods," according to one builder. I ordered Dark Star pickups, hand-made to replicate a Swedish design used by the Grateful Dead. I found the original patent drawings for the Gibson bass, and a bassist in Louisiana who could wire the controls with vintage-correct components. For the nut, I did Ruokangas one better. I located a man in southern Alaska with a cache of fossilized walrus ivory, five thousand years old. When I had a chunk shipped to Ken's house, he sent me a digital picture of it—blackened with age like the tip of a charred spear. He was getting a little worried, he wrote.



I told Parker about the walrus ivory the first time I visited him. He gave me a look of mild pity, like a doctor who'd seen these symptoms before, then disappeared into the back of his workshop. When he returned, he was holding a large grayish bone. He'd done some nut experiments of his own, he said, in the early nineteen-eighties. "I thought, O.K., I'll make one out of every conceivable material, then see if I can tell the difference. I tried wood, brass, nickel silver, elephant ivory—everything." The bone in his hand was an ostrich femur, from a bird raised by a friend in California. "He thought it would make superior nut material, so I cut it up and made a couple of parts out of it," he said. "And, you know, it's just a bone. It barely makes a difference." He handed it to me. "Changing this is like a girl thinking that if she changes her nail polish she'll be beautiful."

It was late morning, and a pale winter sun had risen outside. The light came slanting through the workshop's high windows, kindling the sawdust in the air. Parker had populated the shop with his preoccupations: wood bins and tool cabinets, tube amplifiers and bass scrolls, a tandem bicycle and a wooden rowing shell suspended from the rafters. Along the walls, a battalion of cast-iron machines—band saw, table saw,

drill press, lathe—stood with clamps and blades at the ready.

One of Parker's first jobs was in a grandfather-clock factory in Rochester, and he's never lost his love for arcane machinery. He mills most of his own metal parts, and is always inventing devices to speed construction. ("His shop is like Disneyland for me," his friend

Linda Manzer, who makes guitars for Pat Metheny, told me when she visited one day.) Most luthiers wax almost mystical about wood and the hand-built qualities of their instruments. Parker compares his to speedboats and race cars—engineering challenges as much as artistic ones. "I'm a toolmaker," he says. "I make tools for musicians."

The task that morning was to carve the top of a new guitar. Parker began with a thick board of Adirondack spruce—flat on the bottom and peaked down the middle like a roof—and placed it in what he called his "duplicating machine." This consisted of an electric carver and a dummy stylus, running along the same steel beam. The carver moved back and forth over the spruce, while the stylus ran over an arched mold that Parker had made. As the stylus rose up and down the mold, the carver moved with it. Strip by strip, the board began to assume the shape of a gentle arch. "It's like mowing a lawn!" Parker shouted, over the low roar of the machinery.

A guitar isn't an especially hard instrument to build—"Try a harpsichord," Parker said—but it leaves little room for error. The mechanism is simple: six strings, stretched taut across an open chamber, vibrate when struck. This sets the top moving, amplifying the vibrations, turning the guitar into a pump that pushes sound waves out through the sound hole. The strings alone make almost no sound, so everything depends on the wood's resonance. There's no bow to keep the notes from dying, no mouthpiece or bellows to sustain them. The player makes the smallest of gestures—"You whack the string and that's it," Parker said—and hopes the guitar will turn them into music.

To resonate well, the wood has to be thin. To withstand the strings' tension,

it has to be strong. Things don't always work out. Even if the neck doesn't bend, the bridge doesn't pop off, the strings don't buzz, the guitar may respond poorly to playing. Its wood may vibrate well only at certain frequencies, so some strings sound weaker than others. It may have dead spots or "wolf tones" that sound muffled or unpleasant. In some guitars, the neck and body, top and bottom, produce sound waves that are out of phase: their peaks and troughs flatten one another when they collide. In others, the sound builds up, wave on wave. "A good guitar is in agreement with itself," Parker said.

How best to achieve that isn't clear. A cello is a cello, a sousaphone is a sousaphone, but the guitar has yet to find its platonic form. In the three centuries since Antonio Stradivari and Giuseppe Guarneri perfected the violin, the guitar has morphed from a thin-hipped little figure to a plump matron, trading double strings for single strings, in sets of four, five, six, or more. Tricked out in tortoiseshell or mother-of-pearl, it has been good enough for aristocrats and warbling ladies, strumming coyly between verses. When cheaply made, it has been an instrument of the people. "The guitar is no more than a cowbell," the Spanish Inquisitor Don Sebastián de Covarrubias Orozco complained in 1611, "so easy to play . . . that there is not a stable lad who is not a musician." That much hasn't changed.

Classical guitars with gut strings finally found their Stradivari in the mid-nineteenth century, in the Spanish luthier Antonio de Torres Jurado, whose designs are still used. But steel strings demanded a stouter structure. Sometime in the eighteen-seventies, a shoe-store clerk in Kalamazoo named Orville Gibson began to wonder why guitars weren't made more like violins. A violin's arched top is inherently stronger than a guitar's flat top. It needs less bracing, so it can vibrate more freely and give a stronger, more focussed tone. Gibson made his first archtop guitars in his spare time, then quit his job and hired staff as orders increased. In the nineteen-twenties, a brilliant luthier named Lloyd Loar refined Gibson's designs, adding f-holes and other violinlike touches. By the thirties, archtops were

the most popular guitars in the country. They were larger and louder than flattops, yet more articulate—perfect for fleet-fingered jazz solos that could cut through a blare of horns. They gave chords a ringing punch and bass runs a penetrating snap: Maybelle Carter played an archtop on early country tunes like “Wildwood Flower.”

To a luthier in the thirties, archtops must have seemed like the capstone of guitar development. Then magnetic pickups came along and the instruments changed again. An amplified guitar can't be too resonant or it will squeal with feedback. Fender solved this problem by giving electric guitars solid bodies; Martin kept most of its flattops purely acoustic; Gibson's archtops fell somewhere in between. Some were made with dull, laminated tops; others had holes cut in them for pickups, or solid blocks of maple running down the center to dampen the sound. “If you had a Martin, a good one, and then picked up a Gibson Super 400, you wouldn't have the slightest idea why anyone would play that,” Parker says. “It's gigantic, but it doesn't sound gigantic. Where is the fun in that?” Parker's new guitar was partly an attempt to reclaim that history—to see what archtops might have become if the electric guitar had never been invented. “They sort of became dinosaurs,” he says. “They were labelled as the least versatile of all guitars. But in my opinion an archtop properly built is a chameleon. It can do anything.”

When Parker had finished with the duplicating machine, the spruce board was a rough arch about a quarter inch thick. He grabbed it with both hands—his fingers were a good knuckle longer than mine—and flexed it like a pizza pan. Guitar tops are made from soft woods, like spruce and cedar, that vibrate easily; their backs and sides are made from hardwoods, like rosewood and maple, that are good at reflecting sound. Parker held the board up to his ear and tapped it with his forefinger. It gave a dull ring. “Hear that?” he said. “It's a minor second.” He hummed the two notes of the interval below his breath. Then he picked up a hand plane and went to work, shaving thin curls from the inner surface. “You want it to get excited about playing every note,” he said. “At a

ON TIME

Time can be told in the opening of a flower,
Trumpet of dawn, flugelhorn of the sun
Sinking down. Noiseless explosions
Greet an attentive eye. And the ear

Is a flower, too, a welcome home for echoes,
Kisses, and cackles. Cauldron of starlight,
Tincture and blaring cry, whatever brushes
Your senses unlatches a doorway

Scoured by salt, vanishing as you plunder
The coffers of sleep. So you will know
What it means to be utterly free, floating

Without a hope, floating in hope, a medium
Fit for the being you have become, given
The bed you have made, the race you won.

—Phyllis Levin

quarter inch, it won't get excited about playing one.”

Over the next two weeks, Parker would plane off another eighth of an inch or more, till the top rang at the faintest touch. It was a perilous process. The thinner the wood, the fuller the sound—Parker's tops are less than half as thick as some luthiers'—but a shaving too many could destroy the top or suddenly dampen it. “The real question is, when do you stop?” he said. Stradivari seems to have carved his violins so the tops and bottoms rang with the same note when tapped—an F below middle C. But Parker had given up on easy prescriptions. “Everyone has a secret recipe,” he said. “Everyone is trying to do scratch-for-scratch reproductions of ancient instruments. If you had any guts, you'd make a nice new instrument and let the world beat it up for three hundred years.” He lifted the board again, flexed, and tapped. “You don't get there by secrets,” he said. “You get there by doing *everything* better.”

Parker came of age in the nineteen-seventies, when guitars were sorely in need of a little idealism. He grew up in Islip, on the South Shore of Long Island, the eldest son of a Methodist minister notably more progressive than his congregation. The Parkers joined the March on Washington, in 1963, and received

death threats for taking on a black student pastor. “On the spectrum from Bible thumper to social helper, my father is way on the social-helper side,” Parker told me. “No thumping at all.” His mother had a master's in religion and education from Columbia and was, if anything, more of an activist. Until she died, two years ago, she had a gold Plymouth plastered with bumper stickers—“My Job Is to Comfort the Disturbed and Disturb the Comfortable”—that Parker now drives. He took me to lunch in it one day. “I wonder if President Bush misses the letters he used to get from Grace K. Parker, Methodist Woman,” he said.

After graduating from high school, in 1970, Parker spent the better part of a year at Goddard, an alternative college in northern Vermont. He took a class in furniture-building and made a fretless bass for his brother Alan. But the school's long-haired heyday had passed (“It was after the nude class picture”), and Parker found better furniture-makers elsewhere. Rochester, then as now, was a city full of musicians and craftsmen—the Eastman School of Music and the Rochester Institute of Technology were there. Parker worked at the grandfather-clock factory for two years, then tried his hand at making five-string banjos and kinetic furniture. He took some group guitar lessons, but was never more than a ser-

viceable player, with a strong but sloppy touch. Still, his teacher's guitar entranced him. It was a Gibson archtop from the nineteen-forties.

For a while after that, Parker did nothing but build archtops. He moved back to Long Island and shared a workshop with a lutemaker named Robert Meadow. When he'd finished his first guitar, he brought it by Matt Umanov's store, in Greenwich Village. Umanov told him that it looked like something a hippie had made. So Parker showed it to Jimmy D'Aquisto, the last of the great archtop builders. D'Aquisto lived in a neighboring town on Long Island. A high-school dropout from Brooklyn with the dashing looks of a young Dion, he had apprenticed under John D'Angelico, the other giant of postwar archtop design. (Both men died young, at the age of fifty-nine, D'Angelico of heart failure, in 1964; D'Aquisto of an epileptic seizure, in 1995.) When Parker showed up at his shop, D'Aquisto was used to visits from acolytes. He told Parker that he didn't need an apprentice. Then he told him that his archtop was the best first guitar he'd ever heard. "You're crazy if you stop building," he said.

Parker was twenty-four. He felt as if he'd been knighted, he told me, but he had no clients, no college degree, no market for the archtops he wanted to build. "I couldn't get arrested," he said. What he could do was fix other people's instruments.

In 1979, Parker took a job as a guitar repairman at Stuyvesant Music, on West Forty-eighth Street in Manhattan. The shop was a crossroads for astonishing players of every style—Robert Fripp, Andy Summers, John McLaughlin, Joe Pass—and their guitars needed help. Fender and Gibson had been sold to cost-cutting conglomerates; many of Martin's best builders had died or retired; and standards had fallen across the industry. (The ladies in cat's-eye glasses hadn't done such bad work, after all.) Players would come in with brand-new guitars that were almost unplayable: necks bent, frets uneven, intonation awry. "The Seventies were the Dark Ages," Parker says. "I don't know of any analogue in American manufacturing where quality went so low and people still consumed the product."

The lapse left an opening for a gener-

ation of gifted luthiers who were convinced they could do better. Bill Collings in Austin, Jean Larrivé in British Columbia, and others began to dissect old instruments and build new ones by hand, modelling their work on prewar Martins or classical guitars. Parker had other ideas. After four years at Stuyvesant, he quit and moved into his grandfather's house in Seymour, Connecticut. He had few expenses there, a well-equipped workshop, and a steady flow of design and repair jobs. So, for the next eight years, he quietly played guitar scientist. "That was my Bell Labs," he says.

Parker tried to start from scratch—to go back "not quite to the hollow-log era, but almost." He spent days in museums, studying zithers, citterns, and other ancient instruments. He read manuals on making and faking fine violins. ("It is not enough to simply apply a poor finish," one book from the eighteen-hundreds counselled. "First you must apply an excellent finish and then spoil it.") But mostly he thought about lutes.

Lutes were the Stratocasters of the Renaissance—the most popular instruments of their day. They were teardrop-shaped, with fifteen strings or more and a headstock bent perpendicular to the neck. Parker had watched Meadow make them on Long Island and been shocked at how insubstantial they were. Their wood was paper-thin, their necks bolstered by ebony veneers, their bodies held together with parchment. "There was nothing to them," he told me. "But they were the result of an equation. You had a wimpy little string made of intestines, you had to fill a room with sound, and the only way to get that volume and projection was to make them light. It's like an old-fashioned sports car—another great equation that's been forgotten. You have this light little car, this tiny little engine, and it's really fun to drive." What if you made a guitar more like a lute?

One wall of Parker's workshop is lined by a sagging wooden rack, coated in sawdust and filled with guitars: his autobiography in instrument form. When I was there one afternoon, he pulled free one of the thinnest cases and blasted it clean with an air compressor. Then he lifted out a Fly guitar, gleaming black, and set it on my knee.

It looked less like a rifle or a piece of

driftwood than like a modern dancer: shoulders thrown back, thin arms contorted, every excess trimmed away. Its headstock had been whittled to the width of two fingers. Its sides were bent as if poised to leap into the air. When I'd ordered materials for my son's bass, the wood alone had weighed forty pounds uncut. If we were lucky, the finished instrument would weigh between eight and nine pounds—about as much as a Les Paul. The Fly weighed half that, yet its lightness was less startling than its balance. "Let go of a Stratocaster and the headstock hits the floor," Parker liked to say. "Let go of a Les Paul and it hits your ear." The Fly sat quietly on my knee—no hands required—and waited to be played.

Parker's guitar was made with fiberglass and carbon graphite, rather than intestines and parchment, but it followed the lutemaker's basic equation. Its strength lay in its surfaces. The carbon and glass fibres were impregnated with resin and laminated onto a core of spruce, poplar, or basswood. Parker had discovered the technique in the mid-eighties, when he visited a maker of racing sculls with Larry Fishman, the engineer who later designed the Fly's electronics. Within a week, Fishman had made a pickup out of the material and Parker had made a guitar. "It was almost like inventing a new species of wood," Parker said. "You start with the attributes of that

wood and then you add stiffness—as much as you want, in any direction you want. It's quite the paintbrush."

The composites helped solve an old luthier's conundrum. The neck of a guitar has to be thin enough to be played comfortably, yet strong enough to keep from bending. It has to resonate with every note, but not so much that its oscillations interfere with the sound waves themselves. "If changing a guitar's nut is like using pink nail polish," Parker said, "then making the neck stiffer is like losing forty-five pounds." Most guitar necks are made of a heavy hardwood—rock maple or mahogany—reinforced with a steel rod, like the spine in a human neck. The Fly was built more like an insect, with an exoskeleton. It was so light and stiff yet resonant that it could sound almost like an acoustic guitar when played with the piezoelectric pickups that Fishman designed for it. Or, when played with its magnetic pickups, it could sound like an electric guitar with exceptional sustain.

Parker and Fishman shopped their prototype around in the late eighties and got startup funding from Korg, a maker of keyboards and synthesizers. In 1990, Parker moved to Boston, set up a factory, and tried to retool his perfectionist methods for mass production. It didn't work. The Fly's innovations made it easier to play but harder to build—carbon fibre was fractious stuff—and Parker,

after decades of repairing factory guitars, couldn't compromise on quality. After thirteen years of production delays and budget deficits, personnel problems and hundred-hour weeks—"Never went out. Never took a vacation. Always a knot in my stomach over something"—the company was still in debt. "The whole equation was off," Parker said. "We were building ten-thousand-dollar guitars for twenty-five hundred. I thought that people would naturally gravitate toward them because they played really, really well. But that wasn't the case. The fact is most players don't need something special. They need something proven."

When Washburn Guitars bought the company, in 2003, it moved the factory to Illinois, added more traditional guitars to the Parker line, and had some made in Asia. The line is now modestly profitable, I was told. But the Fly is still too iconoclastic for mass appeal. "People said, 'Why does it have to look so wacky?'" Parker told me that afternoon in his shop. "And I said, 'I can't possibly design something that looks as wacky as the Telecaster and Stratocaster did in the nineteen-fifties. People were in flames about them!'" He reached up and rubbed his eyes. Just talking about those years gave him a headache, he said. Then he took the Fly from my lap and put it back in its case. "I'm still proud of this," he said. "And when I look at it I never think of that stuff. Yeah, sure, I could have made something that looked like a Strat. But, for better or worse, that's just not me. I'm not going to change something a little bit."

It has been thirty years since Parker last devoted himself to archtops, and the market for them hasn't much improved. "It's flat as a fuckin' pancake," Matt Umanov told me, as we were driving along the Hudson one morning. Umanov is fifty-nine now, with grayish-white hair that hangs nearly to his shoulders and an excitable Brooklyn accent. He loves archtops, but says they have limited appeal. "You can pick up a good flattop for five thousand dollars and pretend to be a cowboy—play 'Freight Train' and impress yourself. But you can't pick up an archtop and pretend to be a jazz player. Can't be done."

None of this seems to worry Parker. His new guitar takes much longer to build



"There's gotta be an easier way to get candy from a baby."

than a flattop, requires three times as much wood, and sells for thirty thousand dollars—less than the cost of the best new violins, but a fortune compared with most guitars. To succeed, as Parker says, it will have to do everything better. It will have to outperform the best old archtops and be more versatile than the finest flattops. “If you’re really brave,” a guitarist named John Guth told him, “you’ll put the Olive Branch in a room with a D’Angelico and record them both.” So Parker went a step further. He invited the best players he knew to bring their favorite guitars to Guth’s studio, for a daylong playoff.

By the time Umanov and I arrived, an impromptu trio had formed. The jazz virtuoso Charlie Hunter was playing a blond D’Angelico from 1940; Joe Selly, of the Klezmer Mountain Boys, was on his 1947 Gibson L-5; and John Hart, a sideman for jazz greats like Clark Terry and Jack McDuff, was playing rhythm on the Olive Branch. Umanov had brought a stunning archtop that D’Aquisto had made for him in 1989, worth more than fifty thousand dollars. T. J. Thompson had even driven down from Concord in an S.U.V. full of prewar Martins and one of his new guitars. He looked around, a little stunned, eyes blinking behind wire frames. “Ken doesn’t do anything in a small way,” he said. “When I first talked to him about this, I thought it would just be three of us. Now it’s a symposium, a summit—an archtop orgy.”

The studio was a converted garage at one end of Guth’s ranch house. Guitars hung from the walls and leaned against stands, an arm’s reach from a bristling rack of preamplifiers. As more instruments came out of cases, an evolutionary lineup seemed to form: flattops on one end, bulky as Neanderthals; archtops in the middle, thinner and more finely sculpted; and then the Olive Branch. Like the Fly, it weighed about half as much as the guitars that came before it—three and a half pounds—but its refinements were more seamless, subcutaneous. The neck hid a thin layer of carbon beneath a veneer of figured koa wood; so did the pick guard and inner lining. The post, barely visible, that propped up the neck was made of a composite covered in gold leaf. There was nothing flashy about it, yet it made even the D’Aquisto look outdated.

Evolution can be overrated. A beautiful sound is a beautiful sound, whether it

comes from a hollow log or a digital keyboard. As the players passed the guitars around, some basic differences emerged. The archtops projected their voices—they threw them across the room like Broadway singers—while the flattops enveloped you in them. The throaty bark of the old Gibson archtop was perfect for a standard like “Sweet Sue.” But nothing could match Thompson’s flattop on a Civil War ballad like “Soldier’s Joy”—its ringing sustain seemed to suspend you in the air. Parker’s guitar was like a hybrid of the two. It was the loudest guitar in the room, despite being the lightest, and its solo lines sang out more clearly than any others. Depending on where it was picked, close to the fingerboard or down by the bridge, it could play chiming chords, percussive rhythms, or quick-footed arpeggios. “It’s like an endless procession of Busby Berkeley girls, disguised as notes,” Umanov said. It was an instrument that never seemed to lose its voice, that played evenly up and down the neck—a guitar in agreement with itself.

Afterward, Parker and the players stood around in Guth’s kitchen, eating whitefish and egg salad. They told stories about Duke Ellington and Django Reinhardt, Dr. John and Bobby (Blue) Bland, about Bill Monroe biting into his first bagel (“Dang! This is the worst doughnut I ever did eat!”), and about all the great players lost to addiction or indifference. Musical sophistication is no recipe for success, they knew, and most hits are written on slabs of wood. “I don’t have a love affair with a guitar,” Pete Townshend once said. “I don’t polish it after every performance. I *play* the fucking thing.”

Before he gave up his workshop on Long Island in the seventies, Parker said, he brought his last guitar to Jimmy D’Aquisto, as he had the first. D’Aquisto looked at it for a long time. He turned it around in his hands, marvelling at its ingenuities—the adjustable tailpiece, the asymmetrical top, the unorthodox bracing—then gave it back to Parker. “A use doesn’t exist for this guitar,” he told him. “A use would have to be invented for it.” Thirty years later, Parker said, he still wasn’t sure whether he should have felt encouraged or forewarned. D’Aquisto’s answer, most likely, would have been “Both.” ♦