Martinez quite clearly hit a wall around the seventh inning and 105 pitches, and Little, who met with Epstein before Game Seven to go over bullpen strategy, was made aware of this. Confident his manager understood Martinez's limitations, Epstein watched the game from his Yankee Stadium seat. What he witnessed went completely according to plan: Martinez mounted a 4–1 lead after six innings. In the seventh he appeared somewhat shaky, giving up a Jason Giambi home run and two singles. But after the Sox added a run in the top of the eighth to keep Boston's lead at three runs, Little stayed with Martinez, who was up to 100 pitches at that time. Martinez opened the eighth by getting Nick Johnson to pop to shortstop. Then all hell broke loose.

Derek Jeter worked a deep count before doubling to deep right field on pitch number 110. Bernie Williams singled him home on pitch number 115 to make the score 5–3. Little walked to the mound to check on Martinez, with almost everyone in the baseball world assuming he would remove him. But he didn't. Rather than go by the STATS Inc. report, which clearly suggested Martinez was through, Little gambled and kept him in. On pitch number 118, Hideki Matsui doubled to right, and then Jorge Posada doubled to center field, scoring Williams and Matsui to tie the game at 5–5. Boston's lead was gone. It was only then that Little emerged again and finally removed Martinez.

The Red Sox never led again. They lost the game in extra innings on an Aaron Boone home run that shattered New England's plans for a World Series. The irony was not that the Sox had lost again in horrifying fashion. (That was actually quite predictable.) It wasn't that they finished second to the despised Yankees yet again. It was that the most statistically prepared organization in baseball had been undermined by something so apparent in the stat sheets. A month later, Epstein saw Martinez's meltdown as a clog in the information pipeline the club had so carefully constructed. "It was just a failure of me to do my job well," he said. "I did not get through [to Little] what the front office wanted in clear enough terms on an issue that was obviously so important. I failed."

Epstein might have failed, but Little lost his job. The following week, the Red Sox announced that Little would not return as manager for 2004. They ultimately replaced him with Terry Francona, a younger, more tractable manager who expressed an openness to following the statistics—to having that information pipeline remain unclogged by something so flimsy and ephemeral as a manager's hunch. As Lucchino described it, the club wanted Francona to be more "synchronous" with

the front office's trust in sabermetrics. He added, "We seek one unified organizational philosophy."

Soon after he uttered those words, though, the marketer in Lucchino pulled back. "This is not going to be a stat geek organization," he vowed. Such a label, of course, is the mortal fear of the modern front office. Respecting the numbers is fine. Explaining their importance to neophytes is fine. (It feeds the ego.) But being *identified* with statistics—courting any likeness to the oddball, laptop-toting propellerheads who populate SABR—is too great an indignity for a major league insider to risk. Lucchino isn't alone. Billy Beane, the patron saint of statistic-respecting general managers, was once asked if he might actually attend a SABR gathering, so that some of his biggest fans might get to meet him. Beane bristled at the idea. "That," he said, "would be like Captain Kirk going to a Star Trek convention."

In some ways, Beane wasn't that far off. Had he actually dropped by the 2003 SABR convention at the Denver Marriott, his image of the jamboree probably would have been confirmed. Particularly had he sat in on the meeting of SABR's Statistical Analysis Committee. The room attracted the nation's most passionate numbers buffs, a motley crew of fans downright pickled in their love of statistics. There were lots of beards, and even more thick, plastic glasses. Almost everyone wore some sort of baseball-logoed T-shirt, cap, or jacket, many with all three. An odd number of men spoke with a lisp, while another bore an eerie resemblance to, and sounded alarmingly like, the nerdy scientist from The Simpsons. But the annual convention affords these folks some safety in numbers—it is their one chance during the year to gather among themselves and talk about their new sabermetric theories. "I love developing new baseball statistics," confided one woman, in real life a University of Minnesota law professor. "But I can't talk about it with other faculty until I get tenure." Soon she broke off, rejoining her conversation with several men about optimal batting orders, clutch hitting, and other eternal questions.

When their hour was up, most members of the Statistical Analysis Committee remained in the room for the meeting that followed. Because any sabermetricians who want to look deep into baseball's past and determine what Babe Ruth batted with runners in scoring position, or figure out which all-time batter had the best leadoff on-base percentage, had better get to know the folks at Retrosheet.

R etrosheet is the brainchild of a University of Delaware biology professor (yes, he's tenured) who fell hopelessly in love with baseball in

July 1958, when he attended his first major league game. Ten-year-old Dave Smith sat way up in the stands down the Los Angeles Coliseum left-field line with his father, who, under the glow of the lights, taught him how to score. Dave was hooked and became a lifelong fan, through college and a successful biology career, keeping that scorebook forever to remind him of the night it all began.

Many of his baseball-fan friends were jealous. They wished they could look at a scorecard from their first game, to let the memories wash over them anew. But nowhere—not at Major League Baseball, not in the Baseball Encyclopedia file archives up in Cooperstown, not even at the Elias Sports Bureau—did full accounts of games before 1975 exist. Distillations in the form of box scores, yes, but not the narratives that play-by-play provided. "This was a travesty," Smith recalled.

So in 1989, Smith founded a volunteer organization aimed to right this grievous wrong—to, very simply, gather scoresheets from every major league game, all the way back to 1871. The statistics those pages held! What did Ty Cobb hit in the clutch? Did Ted Williams hit lefties as well as he did righties? To what extent was Whitey Ford a groundball or flyball pitcher, and (like Pedro Martinez) did he fall apart late in games? These were the types of questions for which Elias had started its *Player Analysis* printouts for teams in 1975, and inspired Bill James to found Project Scoresheet in 1984. But play-by-play information from before those years did not exist, because no outfit had bothered to warehouse the records. Wanting to make up for that, Smith formed a group he called Retrosheet, banding together fans like him who wanted to gather all those old play-by-plays and romp in them like leaf piles.

Retrosheet's mission to piece together this long-discarded (and possibly irrecoverable) history into one integrated database is almost certainly unrealistic; baseball historian Paul Dickson has likened it to "trying to recreate a puff of cigar smoke from William Howard Taft's mouth." But the organization, which has grown to 100 members, has managed to gather and computer-code almost 70,000 of the 116,000 major league games that took place between 1901 and 1983, and adds new ones every day. "Grains of sand don't have an end point," said the 56-year-old Smith. "This has an end point. It's an awful lot of games, but an awful lot is not forever."

Silver-bearded and delightfully bouncy, Smith first called individual clubs and asked if he could copy their troves of scorebooks. Some, like the Indians, had everything going back to 1947. Others, like the Braves, were

laughably lacking. But Smith approached other sources as well, mainly sportswriters. The widow of legendary New York baseball writer Dick Young donated all his scorebooks back to 1945. Bob Stevens, who covered the Giants for 30 years, almost cried when Smith called and offered to give his boxes of spiral notebooks a good home. "All these years I never knew why I saved my scorebooks," Stevens said. "I guess I was saving them for you."

Dozens of volunteers have joined Retrosheet's search for as many play-by-plays as possible. Some, like the first Baseball Encyclopedia team in the late 1960s, eyeball old newspaper microfilm to piece together game action. Jim Wolenhaus, a former government employee, scours eBay every day to locate old scorecards, contacts the sellers, and offers them \$1 for a photocopy of the scoresheet page. Other people input the games into the computer. (One such volunteer has plenty of time on his hands. He lives at the South Pole-literally, he's an instrument repairman at South Pole Station—and stays connected via the Internet.) All the physical sheets wind up back in the wood-paneled basement of Smith's Newark, Delaware, home, the official Retrosheet repository. Five dusty, paint-chipped file cabinets house them all, next to a microfilm reader and the Retrosheet server, a homemade Linux computer whose LEDs blink every time someone around the world accesses data from a Retrosheet Web page. They flicker almost a thousand times a day.

The cost to fans? Absolutely nothing. Smith pays much of the expenses himself, including \$200 a month for the server's high-speed Internet connection, and refuses to charge a penny to anyone, anytime, even when they guiltily beg him to accept. Why? Because Smith remembers how money, back in 1987, tore Bill James's old Project Scoresheet apart. Smith scored many Orioles and Phillies games for Project Scoresheet, and later served as the organization's president after John Dewan's acrimonious exit for STATS Inc. PS held on for a few years after that, but the infighting over finances proved too corrosive.\* Wanting to avoid such

\*In a wild twist, the heart of Project Scoresheet is still beating. Its computer scoring system, after some changes in ownership, was eventually sold to mlb.com, which now uses the algorithms to keep the statistics that get funneled to Elias to become official. How ironic that Bill James's group of renegade outsiders, formed to break the MLB-Elias statistics monopoly, now assists in the churning out of every official statistic.

arguments, Smith decided that all of Retrosheet's information would always be free, no matter what.

One of Smith's best friends was dumbfounded at this: You're spending 50 hours a week on this stuff, and then giving it all away? This was a guy who knew a thing or two about the baseball stat business, too. It was none other than Seymour Siwoff.

Believe it or not, Smith, whose goal is to make every statistic free, is buddies with the one lambasted for keeping them proprietary. The two crossed paths in the mid-1990s—they were bound to—and Smith was so friendly, his passion for baseball statistics so pure, that Siwoff immediately took a liking to him (particularly when Smith was smart enough never to ask for any data). In early 1999, the two got together up at Elias's New York offices one Saturday—even in his eighties Siwoff still tends to the business seven days a week—and shared an afternoon just talking baseball and family. When conversation turned to Retrosheet and Smith's charging nothing for his data, Siwoff was still befuddled.

"They'll take advantage of you," he warned.

"I can't be taken advantage of, Seymour," Smith said. "I want to give it all away to everyone."

Siwoff shook his head. Then he confided something that explained so much about the old man, about all the years he shut himself off from the growing statistics community.

"I'm terrified of you," he said.

In mith's generosity has indeed helped Retrosheet become the preferred resource for baseball researchers, and not just the stat fiends. For more than a century, ballplayers' rambling remembrances of so-and-so's seven straight strikeouts and a batter's 5-for-5 afternoon have been pure fiction, with no way to confirm them. Now there is. Following interviews for her recent biography of Sandy Koufax, Jane Leavy checked with Retrosheet 40 different anecdotes that old Dodgers players had told her, and found almost every one of them either off or entirely wrong. Billy Crystal's office called to confirm a scoreboard shot for the Mickey Mantle–Roger Maris movie 61\*, while Spike Lee personally phoned Smith while researching a movie about Jackie Robinson.

Not surprisingly, Retrosheet's growing archives have unearthed more than a thousand mistakes in MLB's official statistics. Most are piddling little curiosities (even the most ardent SABRites don't lose sleep over the fact that in 1983 Cliff Johnson grounded into 11 double plays, not 10) but others are more serious. Smith is convinced beyond a doubt that Maris, in the 1961 season in which he broke the home run record, was assigned one RBI too many by the old Howe Baseball Bureau, and no one ever caught it. No huge deal, perhaps, but removing that RBI from Maris also takes away his outright RBI title and puts him into a tie with Jim Gentile at 141. A Retrosheet volunteer actually tracked down Gentile in Oklahoma to inform the 65-year-old of this development. "Who the hell is this?" Gentile barked, before getting increasingly intrigued. "Goddamn it, I had a \$5,000 clause if I led the league in RBIs! You think I can get those bastards to give it to me?"

Retrosheet's Web site now houses full play-by-play of almost every single major league game dating back to 1967, and the complete seasons keep creeping backward. This allows sabermetricians to attack questions that until now had remained unanswerable. A perfect example came in 2001, when writers and fans were debating Jack Morris's candidacy for the Hall of Fame. Morris, an outstanding right-hander with three World Series rings (1984 Tigers, 1991 Twins, and 1992 Blue Jays), had a surprisingly high 3.90 career ERA, making some wonder if his 254 career wins derived as much from his teammates as his talent. A common response among Morris's defenders was that the pitcher bore down in close games, when it counted, but gave up meaningless runs in blowouts. (He "pitched to the score," in baseball parlance.) This alibi was impossible to examine until the play-by-play of every Morris start was available-in other words, until Retrosheet came along. Baseball Prospectus writer Joe Sheehan dove into the data, painstakingly measured the pitcher's performance in every score situation (up by one, tied, down by five, and so on) and discovered that, in fact, Morris was no more stingy in tight games than otherwise. It didn't matter what the pitcher, his teammates or baseball writers said; the statistics proved that this "pitching to the score" business was almost certainly hogwash.

In the end, Retrosheet has become a celebration of baseball built by fans for fans. Their sense of community and love for their favorite sport pulse through every Web page. Going through all the play-by-plays has allowed one researcher to gather the 190 known times a runner has fallen for the dreaded hidden-ball trick. Another list has all sorts of bizarre plays that time would otherwise forget, the crazy rundowns and other scoring oddities. (One day in 1970, a strikeout actually went down 7-6-7, with the left fielder throwing to the shortstop, who then threw back to the left fielder for the putout. Don't ask.) But at Retrosheet, the statistics are the

stars. More than a hundred million digits are housed on the Web site, giving fans almost anything they could ever want—Hank Aaron's monthly splits to Bob Gibson's clutch pitching—all absolutely free. Back in Smith's basement, every blink of his computer lights testifies that someone, somewhere, is looking at Retrosheet's statistics, whether to relive their first game, to conduct some sabermetric study, or just to splash around.

Somewhere, Henry Chadwick is getting wired for broadband.

mith doesn't spend as much time down in his cellar as he used to. Retrosheet has gathered enough momentum for him to step back a bit, and use his extra time to play catch outside with his 6-year-old, Graham.

Like so many others, father and son have devised a makeshift, backyard baseball game. Pop pitches while Graham, a brown-haired little kid about as skinny as his bat, tries to hit the ball toward the brick wall in front of a neighbor's garage. The post on the jungle gym is first base. The slide is second base. The two of them spend hour after hour out there in the yard, playing ball. Graham adores it even more than his father.

One afternoon, Graham took his place in the batter's box, hoisted his plastic bat above his shoulder, and awaited Pop's pitch. But just before play got under way, he stopped, dropped his bat and ran inside. Something was dreadfully wrong. His father ran after him.

Little did Smith know, but his son had inherited the same basic instinct that runs back through every generation of baseball fans, from John Dewan and Bill James, to George Lindsey and Allan Roth, all the way to Ernie Lanigan and Henry Chadwick, and the millions of others from which Graham's nascent love for baseball had descended. It was very simple: No ballgame could be complete without statistics, could it?

Smith opened the back door to find little Graham sitting happily at the kitchen table, pencil and paper in hand. He was scribbling out a scorecard.



