THE ENLIGHTENMENT

THE METS had had only the greatest expectations of him. They'd wanted to hold a big press conference in Dodger Stadium to announce his signing. Billy asked them not to. He had a claustrophobic unease with ceremony of any kind, and a press conference was nothing but a ceremonial event. It'd make him feel trapped. Plus he didn't want to make a big deal about becoming a pro baseball player. It was less a decision to celebrate than a vaguely uncomfortable fact to get his mind around. The Mets failed to consider the cause or implications of his reticence. In the belief that Billy was more ready for pro ball than Darryl Strawberry, they sent Strawberry to the low-level rookie team with the other high school kids and Billy to the high-level rookie team, in Little Falls, New York, with the college players. Little Falls, New York, could not have felt farther from San Diego, California. His teammates might as well have been a different species than the high school kids he was used to playing with. They had hair on their backs and fat on their stomachs. They smoked before games and drank after them. A few had wives. And all of the pitchers had sliders.

The Mets were betting that Billy was better equipped than Strawberry to deal with the pressures, and inevitable frustrations, that went with playing against much older players. Roger Jongewaard, the Mets' head scout, fully expected Billy to rocket through the minors and into the big leagues well ahead of Strawberry. The Mets scouting department had badly misjudged Billy's nature. They had set him up to fail. If there was one thing Billy was not equipped for, it was failure. He didn't even begin to know what to make of a stat sheet at the end of his first short season in high-level rookie ball that showed him hitting .210. He didn't know how to think of himself if he couldn't think of himself as a success. When the season ended he returned home, enrolled in classes at the University of California at San Diego, and forgot that he played baseball for a living. He didn't so much as pick up a bat or a glove until spring training the following March. That in itself should have been an ominous sign, but no one was looking for ominous signs.

The next year went well enough for him—he was, after all, Billy Beane—and by the summer of 1982 he had been promoted to the Mets' Double-A team in Jackson, Mississippi. He played left, Strawberry played right, and the whole team played the field. For a lot of the players it was their first exposure to the Southern female—the most flagrant cheater in the mutual disarmament pact known as feminism. Lipstick! Hairdos! Submissiveness! Baseball was a game but chasing women was a business, in which Billy Beane was designed to succeed without even trying. Billy had the rap. Billy, said his old teammate J. P. Ricciardi, "could talk a dog off a meat wagon." Billy was forever having to explain to another teammate of his, Steve Springer, that when you'd just met some girl, what you didn't do was tell her you played pro ball. It wasn't fair to her; you had to give the girl a chance to turn you down. Billy's way of giving her a chance was to tell her that what he did for a living was collect roadkill off local highways. Springer didn't have Billy's awesome God-given ability with women; he thought he needed the Mets to stand a chance; and this need of his led to one of those great little moments that make even the most dismal minor league baseball careers worth remembering. They were leaving one of the local burger joints when two pretty girls called after them, in their fetching drawls: "You boys Yankees?" Springer turned around and said, "No, we're the Mets."

Off the field Billy was Billy; on the field Billy was crumbling. The only thing worse than an ambivalent minor league baseball player was an ambivalent minor league baseball player with a terror of failure, forced to compare himself every afternoon to Darryl Strawberry. "People would look at Billy and Darryl and think about the untapped potential that might be brought out of them," recalls Jeff Bittiger, who was the ace of the staff on the same team. "They weren't just supposed to be big leaguers. They were supposed to be big league all-stars." That year Strawberry would be named the most valuable player in the Texas League. Billy would hit only .220. Often they'd hit third and fourth in the lineup, and so Billy spent a lot of hours in the outfield dwelling on Strawberry's heroics and his own failure. "That was the first year I really questioned if I'd made the right decision to sign," Billy said.

Darryl Strawberry presented one kind of problem for Billy; Lenny Dykstra presented another, perhaps even more serious one. Billy and Lenny lived together and played side by side in minor league outfields for nearly two years, beginning in 1984. In the spring of that year both

were invited to the Mets' big league spring training camp. With Strawberry now a fixture in the Mets' right field, the talk in the minors was that Billy was being groomed to replace George Foster in left, and Lenny was supposed to replace Mookie Wilson in center. Lenny thought of himself and Billy as two buddies racing together down the same track, but Billy sensed fundamental differences between himself and Lenny. Physically, Lenny didn't belong in the same league with him. He was half Billy's size, and had a fraction of Billy's promise—which is why the Mets hadn't drafted him until the thirteenth round. Mentally, Lenny was superior, which was odd considering Lenny wasn't what you'd call a student of the game. Billy remembers sitting with Lenny in a Mets dugout watching the opposing pitcher warm up. "Lenny says, 'So who's that big dumb ass out there on the hill?' And I say, 'Lenny, you're kidding me, right? That's Steve Carlton. He's maybe the greatest left-hander in the history of the game.' Lenny says, 'Oh yeah! I knew that!' He sits there for a minute and says, "So, what's he got?' And I say, 'Lenny, come on. *Steve Carlton.* He's got heat and also maybe the nastiest slider ever.' And Lenny sits there for a while longer as if he's taking that in. Finally he just says, 'Shit, I'll stick him.' I'm sitting there thinking, that's a *magazine cover* out there on the hill and all Lenny can think is that he'll stick him."

The point about Lenny, at least to Billy, was clear: Lenny didn't let his mind screw him up. The physical gifts required to play pro ball were, in some ways, less extraordinary than the mental ones. Only a psychological freak could approach a 100-mph fastball aimed not all that far from his head with total confidence. "Lenny was so perfectly designed, emotionally, to play the game of baseball," said Billy. "He was able to instantly forget any failure and draw strength from every success. He had no concept of failure. And he had no idea of where he was. And I was the opposite."

Living with Lenny, Billy became even less sure that he was destined to be the star everyone told him he would be. He began, in the private casino of his mind, to hedge his bets. He told teammates he might quit baseball and go back to college and play football. He might enter politics; everyone said he'd be good at it. He took to reading some nights—a radical idea for a minor league baseball player—to compensate for the formal education he now realized he wasn't getting. Lenny would come home and find Billy curled up in a chair with a book. "He'd look at me," recalls Billy, "and say, 'Dude, you shouldn't be doing

that. That shit'll ruin your eyes.' Lenny's attitude was: I'm going to do nothing that will interfere with getting to the big leagues, including learning." Maybe more to the point, Lenny—a thirteenth-round draft pick!—hadn't the slightest doubt that he was going to make it to the big leagues and make it big. "I started to get a sense of what a baseball player was," Billy said, "and I could see it wasn't me. It was Lenny."

That thought led to another: *I'm not sure I like it here*. Before Billy was sent back to the minor leagues in the first cuts of 1984 spring training, he was confronted by the Mets' big league manager, Davey Johnson. Johnson told Billy that he didn't think he, Billy, really wanted to play baseball. "I didn't take it as a criticism," said Billy. "I took it as 'I think he's right.' I was so geared to going to college. I was sort of half in and half out."

The half that was in stayed in. He didn't quit baseball. He kept grinding his way up through the minor leagues, propelled by his private fears and other people's dreams. The difference between who he was, and who other people thought he should be, grew by the day. A lot of people who watched Billy Beane play still thought what J. P. Ricciardi thought when he played with Billy that first year in Little Falls. "He was so physically gifted that I thought he would overcome everything," said Ricciardi. "I remember coming home from that first season and telling my friends, 'I just played with this guy who you gotta see to believe. He isn't like other animals.'" Teammates would look at Billy and see the future of the New York Mets. Scouts would look at him and see what they had always seen. The hose. The wheels. The body. The Good Face.

Billy was smart enough to fake his way through his assigned role: young man of promise. "Billy *never* looked bad, even when he struggled," recalls the scout who had signed him, Roger Jongewaard. "He was the most talented player I ever played with," says Chris Pittaro, who made it to the big leagues with the Tigers and won a World Series with the Twins. "He had the ability to do things in a game that ninety-five percent of the people in the big leagues could not do in practice because they didn't have the physical ability. There aren't many plays I remember from fifteen years ago but I remember some of Billy's. We were in Albuquerque in '87 [in Triple-A ball] and Billy made this play in right field. He had to run up and down over the bullpen mound to make a catch, and then throw a tagging runner out at the plate. I remember being astonished—first of all, that he even got to the

ball. Second, that he ran up and down a pitcher's mound at full speed without breaking stride. Third, that he even thought to make that throw. Speed. Balance. Presence of mind. I think that the runner when he found the ball waiting for him was more surprised than anybody."

Billy could run and Billy could throw and Billy could catch and Billy even had presence of mind in the field. Billy was quick-witted and charming and perceptive about other people, if not about himself. He had a bravado, increasingly false, that no one in a fifty-mile radius was ever going to see through. He looked more like a superstar than any actual superstar. He was a natural leader of young men. Billy's weakness was simple: he couldn't hit.

Or, rather, he hit sometimes but not others; and when he didn't hit, he unraveled. "Billy was of the opinion that he should never make an out," said Pittaro. "Relief pitchers used to come down from the bullpen to watch Billy hit, just to see what he did when he struck out." He busted so many bats against so many walls that his teammates lost count. One time he destroyed the dugout toilet; another time, in a Triple-A game in Tacoma, he went after a fan in the stands, and proved, to everyone's satisfaction, that fans, no matter what challenges they hollered from the safety of their seats, were better off not getting into fistfights with ballplayers. From the moment Billy entered a batter's box he set about devouring himself from the inside until, fully self-consumed, he went looking around him for something else to feed his rage. "He didn't have a baseball mentality," said Jeff Bittiger. "He was more like a basketball or a football player. Emotions were always such a big part of whatever he did. A bad at bat or two and he was done for the third and fourth at bats of the game."

Yet even inside the batter's box, where he came unglued in a matter of a few seconds, Billy enjoyed sensational success. In 1983, in response to his special inconsistency against right-handed pitching, Billy played around with switch-hitting. Who tried hitting from the wrong side of the plate for the first time in his life in Double-A ball? Nobody. And yet by the middle of the Double-A season, against pitchers with big league stuff, Billy was hitting .300 left-handed. Then he slumped, and lost his nerve. He went back to hitting exclusively right-handed.

In late 1984, Billy and Lenny both came up for a few weeks at the end of the season. Billy got his first big league hit off Jerry Koosman—who immediately picked him off first base. It was funny; it was also sad. Just as the game seemed willing to bend to his talent, it snapped back,

and took whatever it had just given him away. In late 1985, Lenny was brought up for good to the big league team—for which Darryl Strawberry already had hit more than seventy home runs. Lenny played center, Strawberry played right, Billy played the guy who never made it out to left field. The next year Lenny hit critical home runs in the NLCS and the World Series, and wrote a book about them, in which he mentioned that it should have been Billy Beane, not he, who became the big league star. (Lenny didn't read books; he wrote them.)

Rather than make Billy a big leaguer, the Mets traded him to the Minnesota Twins. The Twins in 1986 had a new manager, Ray Miller, who announced that Billy Beane would be his starting left fielder. Billy immediately went out and hurt himself in spring training, but when he came back he was, for the first time in his big league career, sent out to left field as a regular rather than a substitute. That day the Twins were in Yankee Stadium facing Ron Guidry. Billy went five for five off Guidry, with a home run. Then he went hitless the next two nights and found himself written out of the Twins' starting lineup—for good, as it turned out. Billy understood, or said he did. The team was losing and Ray Miller was new, and feeling pressure to play veterans.

For the next three and a half seasons Billy was up and down between Triple-A and the big leagues, with the Twins, the Detroit Tigers, and, finally, the Oakland A's. Inside the batter's box he struggled to adapt, but every change he made was aimed more at preventing embarrassment than at achieving success. To reduce his strikeouts, he shortened his swing, and traded the possibility of hitting a home run for a greater likelihood of simply putting the ball in play. He crouched and hunched in an attempt to hit like a smaller man. He might have struck out less than he otherwise would have done, but at the cost of crippling his natural powers. Eight years into his professional baseball career he was, in some ways, a weaker hitter than when he was seventeen years old.

At least, when it counted. When it didn't count—when he didn't think about it—anything could happen. One afternoon during Billy's one-month stint with the Detroit Tigers, he was asked by the general manager, Bill Lajoie, to come out to Tiger Stadium on an off-day. Lajoie called in a few scrubs to help with the rehabilitation of a pitcher named Walt Terrell. Terrell, who had been injured, was about to reenter the Tigers' starting rotation. Before that happened the pitching coach

wanted Terrell to throw a simulated game. Billy was expected to stand in the box, as a foil.

Once they'd taken the field there was just one thought on everyone's mind: *was Terrell his old self?* Billy sat and watched Terrell dispatch a couple of hitters. He was indeed his old self. When Billy's turn came to hit, nobody was paying him any attention. All eyes were on Terrell. Nobody much cared whether Billy Beane struck out or hooted at the moon. He couldn't fail. He became, for a moment, a boy playing a game. While the coaches and the GM scrutinized their precious pitcher, Billy took the first pitch he liked and launched a major league fastball into the upper deck of Tiger Stadium.

There was a new thought on everyone's mind: *who the fuck did that?*

Billy was no longer ignorable. The GM, Lajoie, came over to him. *Billy, you looked like a different guy*. *The stance, the attitude—everything was different. Why don't you do that all the time?* By now everyone knew that Billy was the guy destined for the Hall of Fame who never panned out. "He was still at an age where he might have developed further as a player," said Lajoie. The GM thought there was hope; the GM really didn't understand. Nobody understood. Inside a batter's box, during a baseball game, Billy was no longer able to be himself. Billy was built to move: inside a batter's box he had to be perfectly still. Inside a batter's box he experienced a kind of claustrophobia. The batter's box was a cage designed to crush his spirit.

In his last three and a half years of pro ball Billy watched a lot more baseball than he played, and demonstrated an odd knack for being near the center of other people's action. "The Forrest Gump of baseball," he later called himself. He was on the bench when the Twins won the 1987 World Series and also when the A's won the 1989 World Series. He was forever finding himself next to people who were about to become stars. He'd played outfield with Lenny Dykstra and Darryl Strawberry. He'd subbed for Mark McGwire and Jose Canseco. He'd lockered beside Rickey Henderson. In his slivers of five years in the big leagues he played for four famous managers: Sparky Andersen, Tom Kelly, Davey Johnson, and Tony La Russa. But by the end of 1989 his career stat line (301 at bats, .219 batting average, .246 on-base percentage, .296 slugging percentage, and 11 walks against 80 strikeouts) told an eloquent tale of suffering. You didn't need to know

Billy Beane at all—you only needed to read his stats—to sense that he left every on-deck circle in trouble. That he had developed neither discipline nor composure. That he had never learned to lay off a bad pitch. That he was easily fooled. That, fooled so often, he came to expect that he would be fooled. That he hit with fear. That his fear masqueraded as aggression. That the aggression enabled him to exit the batter's box as quickly as possible. One season in the big leagues he came to the plate seventy-nine times and failed to draw a single walk. Not many players do that.

Billy's failure was less interesting than the many attempts to explain it. His teammate and friend, Chris Pittaro, said, "Billy was as competitive and intense as anyone I ever played with. He never let his talent dictate. He fought himself too hard." Billy's high school coach, Sam Blalock, said that "he would have made it if he'd had the intangibles—if he would have had a better self-image. I think he would have been a big star in the big leagues. No. I *know*. He was amazing. If he'd wanted to, he could even have made it as a pitcher." The scouts who had been so high on Billy when he was seventeen years old still spoke of him in odd tones when he was twenty-five, as if he'd become exactly what they all said he would be and it was only by some piece of sorcery that he didn't have the numbers to prove it. Paul Weaver: "The guy had it all. But some guys just never figure it out. Whatever it is that allows you to perform day in, day out, and to make adjustments, he didn't have it. The game is that way." Roger Jongewaard: "He had the talent to be a superstar. A Mike Schmidt–type player. His problem was makeup. I thought Billy had makeup on his side. But he tried too hard. He tried to force it. He couldn't stay loose."

Inside baseball, among the older men, that was the general consensus: Billy Beane's failure was not physical but mental. His mind had shoved his talent to one side. He hadn't allowed nature to take its course. It was hardly surprising that it occurred to the older men that what Billy really needed was a shrink.

That, briefly, is what he got. The whole idea of a baseball shrink had been reinvented by the Oakland A's in the early 1980s.*

The first of the new breed was a charismatic former prep school teacher with some academic training in psychology named Harvey Dorfman. The A's minor league coordinator Karl Kuehl, with whom Dorfman wrote the seminal book, *The Mental Game of Baseball*, had actually put Dorfman in uniform and let him sit in the dugout during

games, so he could deal with the players' assorted brain screams in real time. Kuehl had no time for a player's loss of composure during a game. "If you were throwing equipment or whatever, you were going to spend time with Harvey, whether you wanted to or not," said Kuehl. One of the most efficient destroyers of baseball equipment his teammates had ever seen, Billy was destined to spend time with Harvey. Harvey's main impression of Billy was that Billy had played hide-and-seek with his demons, and that professional baseball had helped him to win. "Baseball organizations don't understand that with a certain kind of highly talented player who has trouble with failure, they need to suck it up and let the kid develop," Dorfman said. "You don't push him along too fast. Take it slow, so his failure is not public exposure and humiliation. Teach him perspective—that baseball matters but it doesn't matter too much. Teach him that what matters isn't whether I just struck out. What matters is that I behave impeccably when I compete. The guy believes in his talent. What he doesn't believe in is himself. He sees himself exclusively in his statistics. If his stats are bad, he has zero self-worth. He's never developed a coping mechanism because he's never had anything to cope with."

Billy's view of himself was radically different. Baseball hadn't yielded itself to his character. He thought it was just bullshit to say that his character—or more exactly, his emotional predisposition—might be changed. "You know what?" he said. "If it doesn't happen, it never was going to happen. If you never did it, it wasn't there to begin with." All these attempts to manipulate his psyche he regarded as so much crap. "Sports psychologists are a crutch," he said. "An excuse for why you are not doing it rather than a solution. If somebody needs them, there is a weakness in them that will prevent them from succeeding. It's not a character flaw; it's just a character flaw when it comes to baseball." He was who he was. Baseball was what it was. And they were a bad match. "It wasn't anyone's fault," he said. "I just didn't have it in me."

During spring training of 1990 he finally capitulated to this realization. He no longer was a boy. He was a man. He had married his high school girlfriend and she was seven months pregnant with their first child. He had responsibilities and no real future to cover them. He had gone from promising to disappointing without ever quite figuring out how or why: but he wasn't blind. All he had to do was look around to see that something had changed. "The luster and the shine came off because there was a whole new crop of guys coming in," he said. "I

was twenty-seven years old and by and large you are what you are when you're twenty-seven." He had blossomed into the physical specimen the scouts had dreamed he would become. And yet, somehow, the game had shrunk him.

The game had also rendered him unfit for anything but itself. The people on the big club assumed that Billy would break camp in 1990 with them, and spend another season shuttling between the bench and Triple-A. Billy did something else instead. He walked out of the Oakland A's dugout and into their front office, and said he wanted a job as an advance scout. An advance scout traveled ahead of the big league team and analyzed the strengths and weaknesses of future opponents. Billy was entering what was meant to be his prime as a baseball player, and he'd decided he'd rather watch than play. "I always say that I loved playing the game but I'm not sure that I really did," he said. "I never felt comfortable."

When their fifth outfielder turned up looking for a desk job, the A's front office didn't know what to make of it. It was as unlikely as some successful politician quitting a campaign and saying he wanted to be a staffer, or a movie actor walking off the set and taking a job as key grip. None of the staff had played big league baseball and all of them wished they had. Most would have given their glove hands, or at least a few fingers, for a year in a big league uniform. The A's general manager Sandy Alderson was maybe the most perplexed of all. "Nobody does that," he said. "Nobody says, 'I quit as a player. I want to be an advance scout.'" He hired Billy anyway. "I didn't think there was much risk in making him an advance scout," Alderson said, "because I didn't think an advance scout did anything." Chris Pittaro had gone into scouting after an injury ended his playing career. When Billy called to tell him what he'd done, Pittaro was incredulous. "When you're in the game you always think something is going to break for you. *No one* gives up on that. I didn't. I was forced to retire. Billy chose to retire. And that was something I couldn't imagine." In the end Billy Beane proved what he had been trying to say at least since he was seventeen years old: he didn't want to play ball.

With that, he concluded his fruitless argument with his talent. He decided that his talent was beside the point: how could you call it talent if it didn't lead to success? Baseball was a skill, or maybe it was a trick: whatever it was he hadn't played it very well. In his own mind he ceased to be a guy who should have made it and became a guy upon

whom had been heaped a lot of irrational hopes and dreams. He had reason to feel some distaste for baseball's mystical nature. He would soon be handed a weapon to destroy it.

SANDY ALDERSON has a clear memory from earlier that spring of 1990, of Billy Beane taking batting practice. He didn't know much about Billy and wondered what kind of player he was. "He was very undisciplined at the plate," Alderson said. "Not a lot of power. I remember after I watched him very specifically asking: why is this guy even on the team?" Not that it mattered. Tony La Russa was the A's manager and, in the great tradition of big-shot baseball managers, he paid only faint attention to what the GM had to say.

That was one of the many things about baseball Alderson was determined to change. When Billy came to work inside the A's front office in 1993, he walked into the early stages of a fitful science experiment. When Alderson had been hired as the A's general manager a decade earlier, he'd been a complete outsider to baseball. This was rare. Most GMs start out as scouts and rise up through the baseball establishment. Alderson was an expensively educated San Francisco lawyer (Dartmouth College, Harvard Law School) with no experience of the game, outside of a bit of time on school playing fields. He was also a former Marine Corps officer, and his self-presentation was much closer to "former Marine Corps officer" than "fancy-pants lawyer." "Sandy didn't know shit about baseball," says Harvey Dorfman, the baseball psychologist Alderson more or less invented. "He was a neophyte. But he was a progressive thinker. And he wanted to understand how the game worked. He also had the capacity to instill fear in others."

When Alderson entered the game he wanted to get his mind around it, and he did. He concluded that everything from on-field strategies to player evaluation was better conducted by scientific investigation—hypotheses tested by analysis of historical statistical baseball data—than by reference to the collective wisdom of old baseball men. By analyzing baseball statistics you could see through a lot of baseball nonsense. For instance, when baseball managers talked about scoring runs, they tended to focus on team batting average, but if you ran the analysis you could see that the number of runs a team scored bore little

relation to that team's batting average. It correlated much more exactly with a team's on-base and slugging percentages. A lot of the offensive tactics that made baseball managers famous—the bunt, the steal, the hit and run—could be proven to have been, in most situations, either pointless or self-defeating. "I figured out that managers do all this shit because it is safe," said Alderson. "They don't get criticized for it." He wasn't particularly facile with numbers, but he could understand them well enough to use their conclusions. "I couldn't do a regressions analysis," he said, "but I knew what one was. And the results of them made sense to me."

Alderson hadn't set out to reexamine the premises of professional baseball but he wound up doing it anyway. For a long stretch, his investigations were largely academic. "You have to remember," he said, "that there wasn't any evidence that any of this shit worked. And I had credibility problems. I didn't have a baseball background." The high payroll Oakland teams managed by Tony La Russa had done well enough in the late 1980s and early 1990s that Alderson felt he should "defer to success." For more than a decade he could afford to do this. Since the late 1970s the A's had been owned by Walter A. Haas, Jr., who was, by instinct, more of a philanthropist than a businessman. Haas viewed professional baseball ownership as a kind of public trust and spent money on it accordingly. In 1991, the Oakland A's actually had the highest payroll in all of baseball. Haas was willing to lose millions to field a competitive team that would do Oakland proud, and he did. The A's had gone to the World Series three straight seasons from 1988 to 1990.

Deferring to success became an untenable strategy in 1995, when Walter Haas died. His estate sold the team to a pair of Bay Area real estate developers, Steve Schott and Ken Hofmann, who were, by instinct, more businessmen than philanthropists. Schott and Hofmann wanted Alderson to continue running the team but on a much tighter budget. "We had new owners who weren't going to spend any money," said Alderson. "They made it clear that this had to be a business. And so we suddenly were put in the position of: we can only afford a one-tool player. Which tool is it going to be?" What—and this is what the question amounted to—was the efficient way to spend money on baseball players? The first, short answer, according to a pamphlet commissioned by Alderson, was to spend it on hitters. The pamphlet was written by a former aerospace engineer turned baseball writer, Eric

Walker. Fielding, Walker wrote, was “at most five percent of the game.” The rest was pitching and offense, and while “good pitchers are usually valued properly, good batters often are not.” In Walker’s words:

> Analyzing baseball yields many numbers of interest and value. Yet far and away—far, far and away—the most critical number in all of baseball is 3: the three outs that define an inning. Until the third out, anything is possible; after it, nothing is. Anything that increases the offense’s chances of making an out is bad; anything that decreases it is good. And what is on-base percentage? Simply yet exactly put, it is the probability that the batter will not make an out. When we state it that way, it becomes, or should become, crystal clear that the most important isolated (one-dimensional) offensive statistic is the on-base percentage. It measures the probability that the batter will not be another step toward the end of the inning.

Alderson’s reference point for running an organization was the time he’d spent as an officer in the Marine Corps. He approached the A’s farm teams the way the Marine Corps approached its boot camps. The individual star was less important than the organization as a whole, and the organization as a whole functioned well only if it was uniformly disciplined. Once he decided that hitting was the most important tool and everything else was secondary, Alderson set about implementing throughout the organization, with Marine Corps rigor, a uniform approach to hitting. The approach had three rules:

1. Every batter needs to behave like a leadoff man, and adopt as his main goal getting on base.
2. Every batter should also possess the power to hit home runs, in part because home run power forced opposing pitchers to pitch more cautiously, and led to walks, and high on-base percentages.
3. To anyone with the natural gifts to become a professional baseball player, hitting was less a physical than a mental skill. Or, at any rate, the aspects of hitting that could be taught were mental.

By 1995, Alderson had created a new baseball corporate culture around a single baseball statistic: on-base percentage. Scoring runs was, in the new view, less an art or a talent than a *process.* If you made the process a routine—if you got every player doing his part on the production line—you could pay a lot less for runs than the going rate. Alderson was building a system with Marine Corps intolerance for exceptions to the rules. “Sandy produced this long paper about the pros and cons of selective hitting,” recalled Karl Kuehl, who was in charge of implementing Alderson’s rules. “He wanted to really push the kids coming up through the minor leagues. No one had ever heard of on-base percentage, but when your being called to the major leagues depends on your on-base percentage, it gets your attention.” The system’s central tenet was, in Alderson’s words, “the system was the star. The reason the system works is that everyone buys into it. If they don’t, there is a weakness in the system.” The unacceptable vice in a minor league player was a taste for bad pitches. The most praiseworthy virtue was the willingness to take a base on balls. No player was eligible for minor league awards, or was allowed to move up in the system, unless he had at least one walk in every ten bats.

The effect of Sandy Alderson’s new rules was interesting to anyone who believed the pitcher, not the hitter, was chiefly responsible for the base on balls. More or less overnight, all of the A’s minor league teams began to lead their respective leagues in walks. To ensure they never lost that lead, Alderson routinely reviewed the batting statistics of the teams, and leaned on managers whose teams were not walking. He noticed, for instance, that the Oakland Double-A affiliate was the exception in the organization: its players weren’t drawing walks at the same frantic rate as the A’s other minor league teams. “I got my reports,” he said. “I can see they aren’t taking any walks. I called the manager and said, ‘They go up or you’re fired.’ And they went up. Quickly.”

Even after the Marine Corps had come to the Oakland A’s there remained a weakness in the system: the major league team. The mere presence of a free-swinging light hitter like Billy Beane on the big club in 1990 proved that Alderson’s views were not the controlling ones. Around the big league clubhouse the GM trod more gingerly than around the minor league clubhouses. Alderson didn’t march into Tony La Russa’s office and tell him, “The walks go up or you’re fired.” No one did. There was no very good reason for this; it’s just the way it was,

because the guys who ran the front office typically had never played in the big leagues.

The need to treat the big league team as the sacrosanct province of people who *had* played in the big leagues struck Alderson, who liked the idea of order and discipline cascading unimpeded from the top, as a kind of madness. “In what other business,” he asked, “do you leave the fate of the organization to a middle manager?” But that is what the Oakland A’s, along with the rest of major league baseball, had always done. Tony La Russa was a middle manager and Tony La Russa had his own ideas about how to score runs, and those ideas guided the bats of his hitters. A player would come up through the A’s farm system being told that he needed to be patient, that he needed to take his walks; and then the moment he got to the big club, he was told to unleash his natural aggression. Even players brainwashed by Alderson’s minor league system in the new approach were susceptible to these arguments. Given the slightest opening, many of them regressed, and began hacking away. “It may have something to do with how dominant these players are as they come up,” said Alderson. “Patience and discipline at the plate has never been reinforced. They say, ‘They’re not paying me to walk.’ And so if you don’t lean on them, they don’t.”

Before it had a chance to become a proper argument, the conflict between the old and the new baseball men was resolved by the budget crisis. Tony La Russa left when the new owners renounced the old habit of bankrolling millions of dollars in losses. Alderson set out to find a manager who would understand that he wasn’t the boss, and landed upon the recently fired manager of the Houston Astros, Art Howe. “Art Howe was hired to implement the ideas of the front office, not his own,” said Alderson. “And that was new.”

BILLY WOULD SAY later that his wife left him because she was unnerved by his intensity—that she could even see it in his hands when he drove an automobile. At any rate, he soon found himself out of not only a baseball uniform but a wife as well. Baseball marriages were like that: their most vulnerable moment was immediately after a player retired, and it dawned on husband and wife that they’d actually be spending time together. “They end when the career ends,” said Billy.

“Until then you can put up with anything because you’re always leaving the next day.” His wife moved back to San Diego and took their infant daughter, christened Casey, with her. Billy spent his weeks scouting and his weekends speeding down, and then back up, the highway between Oakland and San Diego. He couldn’t afford the plane tickets.

His motor was still fueled less by desire than anxieties—and he now had two of them. One was that he wouldn’t know his own daughter. The other was that he wouldn’t cut it in the front office. “If baseball’s all you can do and you know that’s all you can do,” he said, “it breeds in you a certain creative desperation.” When he wasn’t speeding down some California highway he was jetting around the country watching games and listening to the other scouts talk about players. Whatever shred of doubt he’d had that most of them had no idea what they were talking about, he lost.

What he hadn’t lost was his ferocious need to win. He had just transferred it to a different place, from playing to making decisions about players. But this time he had guidance—from a graduate of not one but *two* Ivy League colleges—and he was willing to follow it. “What Billy figured out at some point,” said Sandy Alderson, “is that he wanted to be me more than he wanted to be Jose Canseco.” In 1993 Alderson, impressed by the creative enthusiasm with which Billy seemed to attack every task he was given, brought him into the front office, made him his assistant, and told him his job was to go out and find undervalued minor league players. And then he handed Billy the pamphlet he’d commissioned from Eric Walker.

When Billy read Walker’s pamphlet, he experienced—well, he couldn’t quite describe the excitement of it. “It was the first thing I had ever read that tried to take an objective view of baseball,” he said. “Something that was different than just a lot of people’s subjective opinions. I was still very subjective in my own thinking but it made sense to me.” It more than made sense to him: it explained him. The new, outsider’s view of baseball was all about exposing the illusions created by the insiders on the field. Billy Beane had himself been one of those illusions.

Billy wasn’t one to waste a lot of time worrying about whether he was motivated by a desire to succeed or the pursuit of truth. To his way of thinking the question was academic, since the pursuit of truth was, suddenly, the key to success. He was bright. He had a natural coruscating skepticism about baseball’s traditional wisdom. He could

see that Eric Walker's pamphlet was just the beginning of a radical, and rational, approach to the game—one that would concentrate unprecedented powers in the hands of the general manager. Where had Eric Walker come from, he wondered, and was there any more behind what he'd written? "Billy shed every one of his player-type prejudices and adapted," Alderson said. "Whereas most of the people like him would have said, 'That's not the way we did it when I played.'" In answer to Billy's question, Alderson pointed to a row of well-thumbed paperbacks by a writer named Bill James, who had opened Alderson's eyes to a new way of thinking about baseball. Alderson had collected pretty much everything Bill James had written, including four books self-published by James between 1977 and 1980 that still existed only as cheap mimeographs. Sandy Alderson had never met, or even spoken to, Bill James. He wasn't a typical baseball insider but he still recognized a distinction between people like himself, who actually *made* baseball decisions, and people like James, who just wrote about them. But he had found James's approach to the game completely persuasive, and had reshaped a professional baseball organization in James's spirit. That's why he had hired Eric Walker, in the hope of "getting some Bill James–like stuff that was proprietary to us."

For his part, Billy Beane had never heard of Bill James. "But that was the big moment," he said, "when I figured out that all the stuff Sandy was talking about was just derivative of Bill James." His mind had finally found an escape hatch. It led to a green field as far away from professional baseball as you could get and still be inside the park.

Chapter Four

FIELD OF IGNORANCE

I didn't care about the statistics in anything else. I didn't, and don't pay attention to statistics on the stock market, the weather, the crime rate, the gross national product, the circulation of magazines, the ebb and flow of literacy among football fans and how many people are going to starve to death before the year 2050 if I don't start adopting them for $3.69 a month; just baseball. Now why is that? It is because baseball statistics, unlike the statistics in any other area, have acquired the powers of language.
—Bill James, *1985 Baseball Abstract*

THERE IS A CERTAIN KIND of writer whose motives are ultimately mysterious. The writer born into a family of writers; the writer whose work is an attempt to make sense of some private trauma; the writer who from the age of four is able and willing to stay in his room and make up stories: each of these creatures is a stereotype. What he writes may be good, but why he writes isn't something you particularly want to hear more about. The interesting case is a writer like Bill James. He grew up in a not unhappy family in Mayetta, Kansas (population: 209), and the closest he came to an uprooting experience was the move from there down the Interstate Highway to Lawrence. There, at the University of Kansas, James studied economics and literature. He didn't know any literary types, had no apparent role models, and was not encouraged in any way to commit his thoughts to paper. After a shaggy dog story in the U.S. Army—he was the last man from Kansas drafted to serve in Vietnam but never was sent—and a fruitless layover in graduate school, he found a job as the night-watchman in a Stokely Van Camp pork and beans factory.

It was while guarding Stokely Van Camp's pork and beans that James stumbled seriously into putting his thoughts down on paper, in response to having things he absolutely needed to say that he was unable to convey any other way. "Every form of strength is also a form of weakness," he once wrote. "Pretty girls tend to become insufferable because, being pretty, their faults are too much tolerated. Possessions entrap men, and wealth paralyzes them. I learned to write because I am

one of those people who somehow cannot manage the common communications of smiles and gestures, but must use words to get across things that other people would never need to say."

Even more oddly, everything James needed to say was either about baseball, or could be said only in the context of a discussion of baseball. "I'd probably be a writer if there was no such thing as baseball," he said, "but because there is such a thing as baseball I can't imagine writing about anything else." He was, from time to time, aware of the absurdity of devoting an entire adult life to the search for meaning in box scores. He never seems to have resisted his instinct to do it. "Now, look," he wrote to his readers, once he'd become an established, successful author, "both of my parents died of cancer, and I fully expect that it's going to get me, too, in time. It would be very easy for me to say that cancer research is more important to me than baseball—but I must admit that I don't do anything which would be consistent with such a belief. I think about cancer research a few times a month; I think about baseball virtually every waking hour of my life."

James's first book was self-published—photocopied and stapled together by himself—and ran just sixty-eight pages (production budget: $112.73). Its formal title was: *1977 Baseball Abstract: Featuring 18 Categories of Statistical Information That You Just Can't Find Anywhere Else*. To sell it, James took out a single one-inch advertisement in *The Sporting News.* Seventy-five people found it alluring enough to buy a copy. Opening its pale blue cover, they found a short opening explanatory paragraph that failed to explain anything much, followed by sixteen pages of baseball statistics. Astonishingly short and abrupt paragraphs followed by pages and pages of numbers: that was James's quixotic early approach to getting across what he had to say. Were it not for the author's frequent assertion that it was one, there was no reason to think of the first *Baseball Abstract* as a book. ("In this next section of this book…") And there was certainly no reason to think that the writer had the capacity to lead the reader to a radical, entirely original understanding of his subject. What little James actually wrote in his first book felt stage-frightened. The questions he posed—Do some pitchers draw bigger crowds than others? How much effect does an umpire crew have on the length of a game?—could not possibly have interested anyone but the nuttiest baseball nut and, in any case, couldn't be answered confidently with the data James had, from a single baseball season.

It wasn't until the end of the *1977 Baseball Abstract* that James offered his cocktail party–sized readership a glimpse of his potential. The topic that finally gets him sufficiently worked up that he devotes several entire pages to it of nothing but words is: fielding statistics. The manner in which baseball people evaluate players' fielding performance —adding up their errors, and applauding the guy with the fewest— struck him as an outrage. "What is an error?" he asked. "It is, without exception, the only major statistic in sports which is a record of what an observer thinks *should have been accomplished.* It's a moral judgment, really, in the peculiar quasi-morality of the locker room.... Basketball scorers count mechanical errors, but those are a record of objective facts: team A has the ball, then team B has the ball.... But the fact of a baseball error is that *no* play has been made but that the scorer thinks it should have. It is, uniquely, *a record of opinions.*"

James went on to explain that the concept of an error, like many baseball concepts, was tailored to an earlier, very different game. Errors had been invented in the late 1850s, when fielders didn't wear gloves, the outfield went unmowed and the infield ungroomed, and the ball was bashed around until it was lopsided. In 1860, a simple pop fly was an adventure. Any ball hit more than a few feet from a fielder on leave from the Civil War was unplayable. Under those circumstances, James conceded, it might have made some kind of sense to judge a fielder by his ability to cope with balls hit right at him. But a century later the statistic was still being used, unaided by any other, when anyone with eyes could see that balls hit at big league players were a trivial detail in a bigger picture. A talent for avoiding obvious failure was no great trait in a big league baseball player; the easiest way not to make an error was to be too slow to reach the ball in the first place. After all, wrote James, "you have to do something *right* to get an error; even if the ball is hit right at you, then you were standing in the right place to begin with."

The statistics were not merely inadequate; they lied. And the lies they told led the people who ran major league baseball teams to misjudge their players, and mismanage their games. James later reduced his complaint to a sentence: fielding statistics made sense only as numbers, not as language. Language, not numbers, is what interested him. Words, and the meaning they were designed to convey. "When the numbers acquire the significance of language," he later wrote, "they acquire the power to do all of the things which language

can do: to become fiction and drama and poetry….And it is not just baseball that these numbers, through a fractured mirror, describe. It is character. It is psychology, it is history, it is power, it is grace, glory, consistency, sacrifice, courage, it is success and failure, it is frustration and bad luck, it is ambition, it is overreaching, it is discipline. And it is victory and defeat, which is all that the idiot sub-conscious really understands." What to most people was a dull record of ephemeral events without deep meaning or lasting value was for James a safe deposit box containing life's secrets.

Baseball was theatre. But it could not be artful unless its performances could be properly understood. The meaning of these performances depended on the clarity of the statistics that measured them; bad fielding statistics were like a fog hanging over the stage. That raised an obvious question: why would the people in charge allow professional baseball to be distorted so obviously? The answer was equally obvious: they believed they could judge a player's performance simply by watching it. In this, James argued, they were deeply mistaken.

That was James's most general point, buried beneath his outrage about fielding statistics: the naked eye was an inadequate tool for learning what you needed to know to evaluate baseball players and baseball games:

> Think about it. One absolutely cannot tell, by watching, the difference between a .300 hitter and a .275 hitter. The difference is one hit every two weeks. It might be that a reporter, seeing every game that the team plays, could sense that difference over the course of the year if no records were kept, but I doubt it. Certainly the average fan, seeing perhaps a tenth of the team's games, could never gauge two performances that accurately—in fact if you see both 15 games a year, there is a 40% chance that the .275 hitter will have more hits than the .300 hitter in the games that you see. The difference between a good hitter and an average hitter is simply not visible—it is a matter of record.
>
> *But the hitter is the center of attention.* We notice what he does, bend over the scorecard with his name in mind. If he hits a smash down the third base line and the third baseman makes a diving stop and throws the runner out, then we notice and applaud

> the third baseman. But until the smash is hit, who is watching the third baseman? If he anticipates, if he adjusts for the hitter and moves over just two steps, then the same smash is a routine backhand stop—and nobody applauds….

It was James's first sustained attack on baseball's conventional wisdom. He concluded it with a question:

> So if we can't tell who the good fielders are accurately from the record books, and we can't tell accurately from watching, how can we tell?

"By counting things," he replied. Then he went on to propose a new statistic—the "range factor," he called it. A player's range factor was simply the number of *successful* plays he made in the field per game. There were obvious problems with range factors, too—an outfielder on a team staffed by fly ball pitchers, for instance, had more opportunities to make successful plays than an outfielder on a team staffed by sinker ball pitchers—but the details of the thing didn't matter. What mattered was James's ability to light a torch in a dark chamber and throw a new light on a dusty problem. He made you think. There was something bracing about the way he did it—his passion, his humor, his intolerance of stupidity, his preference for leaving an honest mess for others to clean up rather than a tidy lie for them to admire—that inspired others to join his cause. The cause was bigger than fielding statistics. The cause was the systematic search for new baseball knowledge.

The cause wasn't original. James was hardly the first person to notice that there was still stuff to be figured out about baseball, and that the game's underlying rationalities might be discerned through statistical analysis. Going right back to the invention of the box score in 1845, and its subsequent improvement in 1859 by a British-born journalist named Henry Chadwick, there had been numerate analysts who saw that baseball, more than other sports, gave you meaningful things to count, and that by counting them you could determine the value of the people who played the game. But what got counted was often simply what was easiest to count, or what Henry Chadwick, whose reference point was cricket, had decided was important to count.

Chadwick was the critical figure in this history. To anyone who asked, “How could baseball statistics be so screwed up?,” Henry Chadwick was usually the beginning, and occasionally the end, of the answer. Chadwick’s stated goal in counting the events that occurred on a ball field was reform: he wanted players to be judged by their precise contributions to victory and defeat. He was as upset about the immorality he witnessed on the baseball diamond as he was about the drinking and gambling he found on the city streets—about which he also never tired of complaining. He longed to affix blame and credit for baseball plays, and to do it, he grossly oversimplified matters. Fielding errors were just one example of Chadwick’s moralistic mind at work. Another was his interpretation of the base on balls. In cricket there was no such thing as a walk: Chadwick had to get his mind around a new idea. The tool was ill-designed for the task: Chadwick was better at popularizing baseball statistics than he was at thinking through their meaning. He decided that walks were caused entirely by the pitcher—that the hitter had nothing to do with them. In his initial box score Chadwick recorded a walk as an error; even in the later box scores, after he had listened to, or at least heard, the obvious objections from others, Chadwick never credited the hitter. He simply removed the walk altogether from the record books. “There is but one true criterion of skill at the bat,” he wrote, “and that is the number of times bases are made on clean hits.” Enter the batting average, ever since the chief measure of a player’s offensive value.*

The more you examined these old measurement devices, the less apt they seemed. Chadwick, with help from others, had created a system of perverse incentives for anyone who trotted out onto a baseball field. The fetish made of “runs batted in” was another good example of the general madness. RBI had come to be treated by baseball people as an individual achievement—free agents were *paid* for their reputation as RBI machines when clearly they were not. Big league players routinely swung at pitches they shouldn’t to lard their RBI count. Why did they get so much credit for this? To knock runners in, runners needed to be on base when you came to bat. There was a huge element of luck in even having the opportunity, and what wasn’t luck was, partly, the achievement of others. “The problem,” wrote James, “is that baseball statistics are not pure accomplishments of men against other men, which is what we are in the habit of seeing

them as. They are accomplishments of men in combination with their circumstances."

The failure of baseball people to acknowledge that fact in their statistics led to exactly the sort of moral corruption Henry Chadwick, in creating them, had sought to eliminate. The many little injustices and misunderstandings embedded in the game's records spawned exotic inefficiencies. Baseball strategies were often wrongheaded and baseball players were systematically misunderstood. Chadwick succeeded in creating a central role for statistics in baseball, but in doing it he created the greatest accounting scandal in professional sports.

Between Chadwick and James there had been fitful efforts to rethink old prejudices. The legendary GM Branch Rickey employed a professional statistician named Allan Roth who helped to compose an article under Rickey's byline in *Life* magazine in 1954 that argued for the importance of on-base and slugging percentages over batting average. A professor of mechanical engineering at Johns Hopkins, Earnshaw Cook, wrote two pompous books, in prose crafted to alienate converts, that argued for the relevance of statistical analysis in baseball. In the early 1960s, a pair of brothers employed by IBM used the company's computers to analyze baseball strategies and players. But the desire to use statistics to make baseball efficient—to measure and value precisely the events that occur on a baseball field, to give the numbers new powers of language—only became potent when it became practical.

When Bill James published his *1977 Baseball Abstract*, two changes were about to occur that would make his questions not only more answerable but also more valuable. First came radical advances in computer technology: this dramatically reduced the cost of compiling and analyzing vast amounts of baseball data. Then came the boom in baseball players' salaries: this dramatically raised the benefits of having such knowledge. "If we're going to pay these guys $150,000 a year to do this," James concluded in his essay on fielding, "we should at least know how good they are—which means knowing how much they allowed in the field just as much as it means knowing how much they created at bat." If this sounded compelling when baseball players were paid $150,000 a year, it sounded one hundred times more so when they were paid $15 million a year.

James's first proper essay was the preview to an astonishing literary career. There was but one question he left unasked, and it vibrated between his lines: if gross miscalculations of a person's value could occur on a baseball field, before a live audience of thirty thousand, and a television audience of millions more, what did that say about the measurement of performance in other lines of work? If professional baseball players could be over-or undervalued, who couldn't? Bad as they may have been, the statistics used to evaluate baseball players were probably far more accurate than anything used to measure the value of people who didn't play baseball for a living.

Still, had he left off writing in 1977, James would have been dismissed as just another crank who didn't know when to shut up about box scores. He didn't leave off in 1977. It didn't occur to him to be disappointed by a sale of seventy-five copies; he was encouraged! No author has ever been so energized by so little. As James's wife, Susan McCarthy, later put it, "instead of one page of a stolen base study lying on top of a couple of pages of pitcher data in the dungeon of a Stokely Van Camp's cardboard box for years and years, ideas and questions about issues he had been chewing on for a long time took up residence in a climate that allowed for growth and maturation."*

In 1978, James came out with a second book, and this time, before entering his discussion, he checked his modesty at the door. The book was titled *1978 Baseball Abstract: The 2nd Annual Edition of Baseball's Most Informative and Imaginative Review*. "I would like to produce here the most complete, detailed, and comprehensive picture of the game of baseball available anywhere," he wrote, "and I would like to avoid repeating anything that has ever been written before."

Word had spread this time: 250 people bought a copy. To an author who viewed a sale of 75 copies as encouragement, the sale of 250 was a bonanza. James's pen was now an unstoppable force. Every winter for the next nine years he wrote with greater confidence; every spring his growing audience found relatively less space devoted to numbers and more to James's words. The words might run on for many pages but they were typically presented as digressions from the numbers. Wishing to convey the history of his obsession with baseball, for instance, James buried it in a discussion of the year-end stats of the Kansas City Royals. Unable to supress his distaste for the rich men who bought baseball teams and spent huge sums of money on players, he left off writing about the Atlanta Braves and picked up the subject of

their new owner. “Ted Turner,” he wrote, “seems never to have been tempted by moderation, by dignity or restraint. He is a man who plays hard at gentleman’s games and whines when he loses that the victor was not a gentleman. No matter how hard he flees, he will always be pursued by an Awful Commonness, and that is what makes him a winner.” (Yankees fans would soon learn that James was capable of greater contempt: “Turner is the man Steinbrenner dreams of being.”)

The *Baseball Abstracts* were one long, elaborate aside, and the aside raised all sorts of strange new questions: If Mike Schmidt hit against the Cubs all the time, what would he hit? Did fleet young black players, as it seemed to James, actually lose their speed later in their careers than fleet young white players? Who were the best dead hitters? Even the most obscure questions about baseball, and its history, had practical implications. To calculate what Mike Schmidt would hit if he hit only against the Chicago Cubs, you needed to understand how hitting in Wrigley Field differed from hitting in other parks. To compare white and black speedsters, you needed to find a way to measure speed on the base paths and in the field; and once you’d done that, you might begin to ask questions about the importance of foot speed. To determine the best dead hitters, you needed to build tools to evaluate them, and those tools worked just as well on the living.

That last problem preoccupied James. From his second season on, he more or less set baseball defense to one side and concentrated on baseball offense. He explained to the readers of the second *Abstract* that his book contained roughly forty thousand baseball statistics. A few of them had been easy for him to obtain, but “the bulk of them were compiled one by one, picked out of the box scores and laboriously sorted into groups of about 30 or so, groups with titles like ‘Double Plays turned in games started by Nino Espinosa,’ and ‘Triples hit by Larry Parrish in July.’” He freely admitted that collecting baseball statistics was, on the face of it, a bizarre way to spend one’s time—unless one was obsessed by the baseball offense. “I am a mechanic with numbers,” he wrote to readers of the third *Abstract*,

> tinkering with the records of baseball games to see how the machinery of the baseball offense works. I do not start with the numbers any more than a mechanic starts with a monkey wrench. I start with the game, with the things that I see there and the things

> that people say there. And I ask: Is it true? Can you validate it? Can you measure it? How does it fit with the rest of the machinery? And for those answers I go to the record books…. What is remarkable to me is that I have so little company. Baseball keeps copious records, and people talk about them and argue about them and think about them a great deal. Why doesn't anybody use them? Why doesn't anybody say, in the face of this contention or that one, "Prove it"?

For what now seem like obvious reasons the baseball offense was more interesting to James than the other two potentially big fields of research, fielding and pitching. Hitting statistics were abundant and had, for James, the powers of language. They were, in his Teutonic coinage, "imagenumbers." Literary material. When you read them, they called to mind pictures. "Let us start with the number 191 in the hit column," he wrote,

> and with the assertion that it is not possible for a flake (I would hope that no one reading this book doesn't know what a flake is) to get 191 hits in a season. It is possible for a bastard to do this. It is possible for a warthog to do this. It is possible for many people whom you would not want to marry your sister to do this. But to get 191 hits in a season demands (or seems to demand, which is as good for the drama) a consistency, a day-in, day-out devotion, a self-discipline, a willingness to play with pain and (to some degree) a predisposition to the team game which is wholly inconsistent with flakiness. It is entirely possible, on the other hand, for a flake to hit 48 homers. Hitting 48 homers is something done by large, slow men three-quarters thespian….

James was an aesthete. But he was also a pragmatist: he had happened upon something broken and wanted to fix it. But he could only fix what he had the tools to fix. The power of statistical analysis depends on sample size: the larger the pile of data the analyst has to work with, the more confidently he can draw specific conclusions about it. A right-handed hitter who has gone two for ten against left-handed pitching cannot as reliably be predicted to hit .200 against lefties as a hitter who has gone 200 for 1,000. The offensive statistics available to

James in 1978 were sufficiently comprehensive to reach specific, meaningful conclusions. Offense he could fix. He couldn't fix fielding because, as he had explained in his first *Abstract*, there wasn't the data available to make a meaningful appraisal of fielding. Pitching didn't need to be fixed. Or, at any rate, James didn't think it did.

In 1979, in the third, now annual, *Baseball Abstract*, James wrote, "a hitter should be measured by his success in that which he is trying to do, and that which he is trying to do is create runs. It is startling, when you think about it, how much confusion there is about this. I find it remarkable that, in listing offenses, the league will list first—meaning best—not the team which scored the most runs, but the team with the highest batting average. It should be obvious that the purpose of an offense is not to compile a high batting average." Because it was not obvious, at least to the people who ran baseball, James smelled a huge opportunity. How *did* runs score? "We can't directly see how many runs each player creates," he wrote, "but we can see how many runs each team creates."

He set out to build a model to predict how many runs a team would score, given its number of walks, hits, stolen bases, etc. He'd dig out the numbers for, say, the 1975 Red Sox. (Walks by individual players were still hard to find in 1975, thanks to Henry Chadwick, but team totals were available.) He could also find out how many runs the 1975 Red Sox scored. What he needed to determine was the relative importance to the team's scoring of the various things Red Sox players did at the plate and on the base paths—that is, assign weights to outs, walks, steals, singles, doubles, etc. There was nothing elegant or principled in the way he went about solving the problem. He simply tried out various equations on the right side of the equals sign until he found one that gave him the team run totals on the left side. The first version of what James called his "Runs Created" formula looked like this:

Runs Created = (Hits Walks) Total Bases/(At Bats Walks)

Crude as it was, the equation could fairly be described as a scientific hypothesis: a model that would predict the number of runs a team would score given its walks, steals, singles, doubles, etc. You

could plug actual numbers from past seasons into the right side and see if they gave you the runs the team scored that season. James was, in a sense, trying to predict the past. If the actual number of runs scored by the 1975 Boston Red Sox differed dramatically from the predicted number, his model was clearly false. If they were identical, James was probably onto something. As it turned out, James was onto something. His model came far closer, year in and year out, to describing the run totals of every big league baseball team than anything the teams themselves had come up with.

That, in turn, implied that professional baseball people had a false view of their offenses. It implied, specifically, that they didn't place enough value on walks and extra base hits, which featured prominently in the "Runs Created" model, and placed too much value on batting average and stolen bases, which James didn't even bother to include. It implied that sacrifices of any sort were aptly named, as they made no contribution whatsoever. That is: outs were more precious than baseball people believed, or seemed to believe. Not all baseball people, of course. The Jamesean analysis was consistent with an approach to the game championed most vocally by the former manager of the Baltimore Orioles, Earl Weaver. Weaver designed his offenses to maximize the chances of a three-run homer. He didn't bunt, and he had a special taste for guys who got on base and guys who hit home runs. Big ball, as opposed to small ball.

But once again, the details of James's equation didn't matter all that much. He was creating opportunities for scientists as much as doing science himself. Other, more technically adroit people would soon generate closer approximations of reality. What mattered was (a) it was a rational, testable hypothesis; and (b) James made it so clear and interesting that it provoked a lot of intelligent people to join the conversation. "The fact that the formulas work with the accuracy that they do is a way of saying there are essentially stable relationships between batting average, home runs, walks, other offensive elements—and runs," wrote James.

This kind of talk was catnip to people whose lives were devoted to discovering stable relationships in a seemingly unstable world: physicists, biologists, economists. There was a young statistician at the RAND Corporation, a future chair of the Harvard statistics department, named Carl Morris. "I'd been thinking about advanced ideas in baseball analysis," said Morris, "and was impressed that someone else

was, too, who wrote about it in a very interesting way." Morris counted the days until the next *Baseball Abstract* appeared. James pointed the way to big questions that Morris could address more rigorously than even James could.

There was also a bright young government economist with the Office of Management and Budget named Eddie Epstein. He stumbled across the *Abstract* and decided he was in the wrong line of work. "I read the *Abstract*," he said, "and the light bulb went off: I can do this! The way Bill laid out very clearly what could be gleaned from these mountains of baseball data. In the past an awful lot was thought to be unknowable." Epstein began to pester Edward Bennett Williams, the owner of the Baltimore Orioles, for a job.

Then there were the few hobbyists who had been active before James began writing his *Abstracts*. Dick Cramer was a research scientist for the pharmaceutical company then called SmithKline French (now GlaxoSmithKline), and so had access to a computer. By day he used the SmithKline computers to discover new drugs and by night he used them to test his own theories about baseball. For instance, Cramer had a hypothesis about clutch hitting: it didn't exist. No matter what the announcers said, and what the coaches believed, major league baseball players did not perform particularly well—or particularly badly—in critical situations. On the one hand, it made a funny kind of sense: no one who behaved differently under pressure would ever make it to the big leagues. On the other hand, it contradicted the sacred, received wisdom in baseball. The sheer counterintuitiveness of his notion delighted Cramer. "It violates everyone's personal experience of pressure, and how they cope with it," he said. And yet it was true, or impossible to disprove. Cramer had tested it and found no evidence that players hit differently in one situation than any other—with a pair of exceptions. Some left-handed hitters fared worse against lefties than righties, and some right-handed hitters fared worse against righties than lefties.

Cramer's work has subsequently withstood intense, repeated critical scrutiny, but until Bill James came along no one paid it any attention. "Until Bill came along," Cramer says, "it was just three or four of us writing letters to each other. Even my own family would say, 'This is a crazy way to spend your time.'"

Cramer, like James, understood that the search for baseball knowledge was constrained by the raw statistics, and began to think

seriously about starting a company to collect better data about Major League Baseball games than did Major League Baseball. One of the men to whom Cramer wrote letters on the subject was Pete Palmer. Palmer worked as an engineer at Raytheon, on the software that supported the radar station in the Aleutian Islands that monitored Russian test missiles. At least that's what he did for money; for love he sat down with his charts and slide rule and analyzed baseball strategies. Both Palmer and Cramer had separately created their own models of the baseball offense that differed trivially from James's. (Together, they later dreamed up the stat now widely used to capture the primary importance to offense of slugging and on-base percentages: OPS, an acronym for on base plus slugging.) Palmer really was a gifted statistical mind, and he had done a lot of work, just for the hell of it, that demonstrated the foolishness of many conventional baseball strategies. Bunts, stolen bases, hit and runs—they all were mostly self-defeating and all had a common theme: fear of public humiliation.

"Managers tend to pick a strategy that is least likely to fail rather than pick a strategy that is most efficient," said Palmer. "The pain of looking bad is worse than the gain of making the best move." Palmer had written a book back in the 1960s revealing all this. The manuscript was still gathering dust on his desk when Bill James came along and created a market for it. In 1984, in the wake of Bill James's success, he was able to publish it: *The Hidden Game of Baseball*. "Bill proved there were buyers for this kind of thing," Palmer says. "I'm not sure the book would have seen the light of day otherwise."

James's literary powers combined with his willingness to answer his mail to create a movement. Research scientists at big companies, university professors of physics and economics and life sciences, professional statisticians, Wall Street analysts, bored lawyers, math wizards unable to hold down regular jobs—all these people were soon mailing James their ideas, criticisms, models, and questions. His readership must have been one of the strangest group of people ever assembled under one idea. Before he found a publisher, James had four readers he considered "celebrities." They were:

Norman Mailer
Baseball writer Dan Okrent

William Goldman, the screenwriter (*Butch Cassidy and the Sundance Kid*)
The guy who played "Squiggy" on the TV sitcom *Laverne & Shirley*

James's readers were hard to classify because he was hard to classify. The sheer quantity of brain power that hurled itself voluntarily and quixotically into the search for new baseball knowledge was either exhilarating or depressing, depending on how you felt about baseball. The same intellectual resources might have cured the common cold, or put a man on Pluto; instead, it was used to divine the logic hidden inside a baseball game, and create whole new ways of second-guessing the manager.

Four years into his experiment James was still self-publishing his *Baseball Abstract* but he was overwhelmed by reader mail. What began as an internal monologue became, first, a discussion among dozens of resourceful people, and then, finally, a series of arguments in which fools were not tolerated. (Most witheringly not by James: "Is baseball really 75% pitching? James J. Skipper attempted to answer this question in the 1980 *Baseball Research Journal*, by the ingenious method of asking everybody in sight what percentage of baseball was pitching, totaling up their answers, and dividing by the number of people in sight....") By 1981, in response to a pile of letters asking him what he thought about a new baseball offense model created by the sports journalist Thomas Boswell, James was able and willing to write that "the world needs another offensive rating system like Custer needed more Indians (or, for that matter, like the Indians needed another Custer).... What we really need is for the amateurs to clear the floor." There was now such a thing as intellectually rigorous baseball analysts. James had given the field of study its name: sabermetrics.*

The swelling crowd of disciples and correspondents made James's movement more potent in a couple of ways. One was that it now had a form of peer review: by the early 1980s all the statistical work was being vetted by people, unlike James, who had a deep interest in, and understanding of, statistical theory. Baseball studies, previously an eccentric hobby, became formalized along the lines of an academic discipline. In one way it was an even more effective instrument of progress: all these exquisitely trained, brilliantly successful scientists

and mathematicians were working for love, not money. And for a certain kind of hyperkinetic analytical, usually male mind there was no greater pleasure than searching for new truths about baseball. “Baseball is a soap opera that lends itself to probabilistic thinking,” is how Dick Cramer described the pleasure.

The other advantage was that the growing army of baseball analysts was willing and able to generate new baseball data. James was forever moaning about the paucity of the information kept by major league baseball teams. Early in one of his *Baseball Abstracts* he had explained to his readers that “the answers that I arrive at—and thus the methods I have chosen—are never wholly satisfactory, almost never wholly disappointing. The most consistent problems that I have arise from the limitations on my information sources. All I have is the box scores.” The reason he couldn’t get more than the box scores is that the company that kept the score sheets for Major League Baseball, the Elias Sports Bureau, was perfectly unhelpful when James asked it for access to them. “The problem with the Elias Bureau,” he wrote, “is that the Elias Bureau never turns loose of a statistic unless they get a dollar for it. Their overarching concern in life is to get every dollar they can from you and give you as little as possible in return for it—like a lot of other businesses, I suppose, only with a more naked display of greed than is really usual.”

James was shocked by the indifference of baseball insiders to the fans who took more than an ordinary interest. Major League Baseball had no sense of the fans as customers, and so hadn’t the first clue of what the customer wanted. The customer wanted stats and Major League Baseball did its best not to give them to him. The people inside Major League Baseball were, if anything, hostile to the people outside Major League Baseball who wished to study the game. That struck James, who by now had perfected the art of sounding like a sane man in an insane world, as mad. “The entire basis of professional sports is the public’s interest in what is going on,” he wrote. “To deny the public access to information that it cares about is the logical equivalent of locking the stadiums and playing the games in private so that no one will find out what is happening.”

In 1984, James wrote to what was now a rapidly expanding crowd of baseball nuts and proposed a radical idea: Take the accumulation of baseball statistics out of the hands of baseball insiders. Build an organization of hundreds of volunteer scorekeepers who would collect

the stuff you needed to know to reduce baseball to a science. “What I propose here, so far as I know for the first time in a century, is to start over…. I am proposing to re-build the box score, not around the old one, but around the tool from which the box score is assembled: the score sheet.” He then explained that much of the data collected by professional baseball teams—say, how right-handed hitters fared against left-handed pitching—wasn’t available to the public. Worse, baseball teams didn’t have the sense to know what to collect, and so an awful lot of critical data simply went unrecorded: how batters fared in different counts and different game situations, who was pitching when a base was stolen, how different outfielders affected the audacity of runners on the base paths, where hits landed and how hard they were hit, how many pitches a pitcher threw in a game. The lack of critical data meant that “we as analysts of the game are blocked off from the basic source of information which we need to undertake an incalculable variety of investigative studies.”

The movement to take the understanding of professional baseball away from baseball professionals, dubbed by James “Project Scoresheet,” soon combined with a small, failing business created by Dick Cramer, called STATS Inc., that was designed to do much the same thing. The goal of STATS Inc. had been, in Cramer’s words, “to set down the primary events that occurred in a baseball game as completely as possible.” Back in 1980, STATS Inc. had set out to sell this sort of information to baseball teams, but the teams wanted nothing to do with it. Cramer pressed on: to big league baseball games, beginning in the spring of 1981 with an exhibition game between the Chicago Cubs and the Oakland A’s (future A’s scout Matt Keough got the win), the company sent its own scorekeepers. Along with all the usual data, these poorly paid people recorded play-by-play information about the games that had never before been systematically collected: the pitch count at the end of at bats, pitch types and locations, the direction and distance of batted balls. They broke the field down into twenty-six wedges radiating out from home plate. A fly ball’s distance was judged to be where it landed; a ground ball’s, where it was picked up. If a player singled and advanced to second on an error by the right fielder, the play was recorded as two separate events. All of this was new and, to the movement analysts, essential if you wanted to get to the guts of the game.

The people who were paid to manage professional teams failed to see the point. They hadn't even bothered to compile the information they needed to analyze their actions intelligently. Presented with new information by STATS Inc., they showed little interest in it, even when it was offered to them gratis. The CEO of STATS Inc., John Dewan, said that "You had general managers and managers who had played the game. How could someone who all they knew is computers tell them *anything* that would make them more successful? I remember calling the White Sox, almost as a matter of courtesy, and telling them 'Hey, when Frank Thomas plays first base, he hits seventy points better than when he DH's.' Nobody cared to know it." Every eighteen months STATS Inc. would hire another bright, well-educated young man who simply could not believe that major league baseball teams did not want to know things that might help them win games. He would then proceed to hurl himself into the business of selling STATS Inc. to baseball teams. He always quit, disillusioned. "The people who run baseball are surrounded by people trying to give them advice," said James. "So they've built very effective walls to keep out anything."

It wasn't as simple as the unease of jocks in the presence of nerds. Professional baseball was happy to have intellectuals hanging around the clubhouse and the commissioner's office and the GM's suite. Well, perhaps not happy, but not disturbed either, so long as the intellectuals had no practical consequences for how baseball was played, and by whom. Baseball offered a comfortable seat to the polysyllabic wonders who quoted dead authors and blathered on about the poetry of motion. These people dignified the game, like a bow tie. They were harmless. What was threatening was cold, hard intelligence.

STATS Inc. founder Dick Cramer told a story with the flavor of the deeper problem. In the early days, through fluky circumstances, Cramer had sold his data collection and analysis service to the Houston Astros. The Astros' GM, Al Rosen, wanted to know how the team would be affected if the Astrodome's fences were moved in. Would the team, as currently composed, do better or worse in a smaller, more hitter-friendly park? Cramer ran the numbers—showing the relative propensity of the Astros versus their opponents to hit long pop flies—and told Rosen, "Sorry, if you do that, you lose more games." Instead of deciding not to move the fences in, Rosen decided that the information could never be made public. "All of a sudden it is classified information," said Cramer, "It was 'We can't tell anyone! My God, we

can't let this information get out! Imagine the effect on our pitchers!'" They didn't want the information to inform the decision. They'd already made the decision. (They believed home runs sold tickets.) They wanted the information, in some sense, to avoid having to deal with its implications.

In 1985, STATS Inc. gave up trying to sell their superior data to teams and began to sell it to fans. Their timing could not have been better: the baseball fan was changing in a way that made him a natural customer of STATS Inc. A new kind of fan, with a quasi-practical interest in baseball statistics, had been invented. In 1980 a group of friends, led by *Sports Illustrated* writer Dan Okrent, met at La Rotisserie Française, a restaurant in Manhattan, and created what became known, to the confusion of a nation, as Rotisserie Baseball. Okrent can plausibly be said to have "discovered" Bill James. Okrent was one of those seventy-five people who, in 1977, ran across the one-inch ad in *The Sporting News* James took out and sent off his check to Lawrence, Kansas. Back came an unpromising mimeograph. Then he read it. "I was absolutely dumbstruck," he said. "I couldn't believe that (a) this guy existed and (b) he hadn't been discovered."

Okrent flew to Lawrence to make sure James indeed existed, then wrote a piece about him for *Sports Illustrated*. It was killed: James's arrival on the national sporting scene was delayed by a year, after the *Sports Illustrated* fact-checker spiked the piece. "She went through it line by line," recalled Okrent, "saying, 'Everyone knows this isn't true. Everyone knows that Nolan Ryan attracted a bigger crowd when he pitched, that Gene Tenace was a bad hitter, that…'" Conventional opinions about baseball players and baseball strategies had acquired the authority of fact, and the *Sports Illustrated* fact-checking department was not going to let evidence to the contrary see print. The following year, an editor who had been unable to shake Okrent's piece from his mind asked Okrent to try again. He did, and the piece was published, and Bill James was introduced to a wider audience. The year after that, 1982, a New York publisher, Ballantine Books, brought out the *Baseball Abstract*, and made it a national best-seller.

Many of James's new readers were Rotisserie Baseball fanatics. The game, which sought to simulate an actual baseball game, put the players in the role of general manager of a team of real life baseball players, which he picked himself from actual teams. Each morning he'd get up and go to the box scores in the newspaper to calculate how his

“team” had done. Over the next decade some immeasurable but vast number of Americans—millions, certainly—took to the game, many of them obsessively. That they should have developed a special interest in Bill James was strange, in a way. The fantasy games were premised on the old-fashioned statistics, the pre-Jamesean understanding of baseball. The general manager of a Rotisserie team measured his success by toting up batting averages, RBIs, stolen bases, and so on. To win one’s Rotisserie League you needed to behave pretty much like bone-headed general managers. You needed to overpay for RBIs and batting averages and stolen bases; you had no use for on-base and slugging percentages. You certainly didn’t need access to the growing corpus of new baseball knowledge. Rotisserie Baseball was, if anything, a force for encouraging the conventional view of baseball.

Nevertheless! The fans were more keenly interested in the information they needed to make intelligent baseball decisions—even if they themselves did not directly benefit from making intelligent baseball decisions—than the people who ran the real teams. They needed it, or thought they needed it, to win their fantasy games. As James later admitted, the desire to win these games had been a chief motive for his original rethinking of the game. Before the sophisticated baseball fantasy leagues there had been sophisticated table-top baseball games. “I used to be in a table-game league,” James confessed to his readers a decade later. “This was ten, twelve years ago…. It was during this period, in trying to win that league, that I became obsessed with how an offense works and why it doesn’t work sometimes…with finding what information you would need to have to simulate baseball in a more accurate way. I had thought about these things before, of course, but to win that damn [table league] I had to know.”

James knew better than just about anyone on the planet just how many people were taking to these fantasy games, and how widespread was the desire to play at being the general manager of a big league baseball team, and, therefore, how deep the interest in baseball statistics. He became an investor and creative director of the newly energized STATS Inc. The company grew rapidly—ESPN was a customer from the start and *USA Today* soon became one. It became the leading source of information to the baseball fan until it was sold in 1999 for $45 million to Fox News Corporation.

The company was a success, but of a curious kind: what should have happened didn’t happen. What should have happened is this:

real, as opposed to fantasy, general managers would engage with this new, growing body of knowledge. The Jamesean movement set the table for the geeks to rush in and take over the general management of the game. Everywhere one turned in competitive markets, technology was offering the people who understood it an edge. What was happening to capitalism should have happened to baseball: the technical man with his analytical magic should have risen to prominence in baseball management, just as he was rising to prominence on, say, Wall Street.

What the baseball professionals did do, on occasion, beginning in the early 1980s, was to hire some guy who knew how to switch on the computer. But they did this less with honest curiosity than in the spirit of a beleaguered visitor to Morocco hiring a tour guide: pay off one so that the seventy-five others will stop trying to trade you their camels for your wife. Which one you pay off is largely irrelevant. Some stat head would impress himself upon a general manager as the sort of guy who crunched numbers and the GM would find him a small office in the back.

The lack of discrimination of the few baseball GMs who went shopping for a James manqué led to what might be called *Elephant Man* moments. The *Elephant Man* moment came when the beat reporter for the local team pulled back the curtain on the front office and revealed the shriveled-up fellow with bizarre facial hair punching numbers into a Mac. The brains of the operation! The crowd invariably shrieked and recoiled. The most dramatic *Elephant Man* moment was probably when an oddity named Mike Gimbel hired by the Boston Red Sox didn't wait to be exposed but bodily hurled himself into the Boston sports pages, by claiming responsibility for the shrewd moves made by the Red Sox GM, Dan Duquette. The *Boston Globe* explained to Red Sox fans that this new intellectual force behind the team was "a Queens Community College dropout, a self-taught computer programmer and a Rotisserie League fanatic whose Brooklyn loft was raided three years ago by police because of his six pet caimans—South American alligators—that he kept in an indoor pond in his loft. The cops also confiscated his five turtles and an iguana." The New England Sports Service ran the same story with the headline: *Stats Freak Has Duquette's Ear*. "By day Gimbel lives in Brooklyn and works for the Bureau of Water Supply in New York," it began, groping for just the right combination of words and images to infuriate the Red Sox

season ticket holder. “It’s as if a computer savvy Ed Norton had become the Red Sox secret weapon. Gimbel is unorthodox in virtually every way. In 80 degree Florida weather yesterday, Gimbel appeared ready for a trip to Siberia, with long pants, a long sleeve shirt and a jacket. His approach to evaluating baseball is more out of the ordinary. He cautions against watching too many games….”

Duquette waited until the end of the season, then let Gimbel know his contract wouldn’t be renewed—thus proving to the world just how critical he was to the Boston Red Sox.

By the early 1990s it was clear that “sabermetrics,” the search for new baseball knowledge, was an activity that would take place mainly outside of baseball. You could count on one hand the number of “sabermetricians” inside of baseball, and none of them appears to have had much effect. After a while they seemed more like fans who second-guessed the general manager than advisers who influenced decisions. They were forever waving printouts to show how foolish the GM had been not to have taken their advice. A man named Craig Wright spent many frustrating years as the sabermetrician with the Texas Rangers, and then many more consulting other big league teams. He eventually quit his profession altogether. “I needed to be a GM if I was going to see my stuff ever used,” he said. “And I never even got asked to interview for a single GM job.” Eddie Epstein—the young government economist whose interest in baseball analysis had been inflamed by James’s writing—got himself hired by the Baltimore Orioles and the San Diego Padres but he, too, wound up quitting in a huff. The Padres executive responsible for hiring him, Larry Lucchino, freely acknowledged that the small group inside baseball searching for new baseball knowledge “was a cult. The cult status of it meant it was something that could be discarded easily. There was a profusion of new knowledge and it was ignored.”

Well into the late 1990s you didn’t have to look at big league baseball very closely to see its fierce unwillingness to rethink anything. It was as if it had been inoculated against outside ideas. For instance, a new kind of rich person named John Henry bought the Florida Marlins in January 1999. Most baseball owners were either heirs, or empire builders of one sort or another, or both. Henry had made his money in the intelligent end of the financial markets. He had an instinctive feel for the way statistical analysis could turn up inefficiencies in human affairs. Inefficiencies in the financial markets had made Henry a billionaire—

and he saw some familiar idiocies in the market for baseball players. As Henry later wrote in a letter to ESPN's Rob Neyer:

> People in both fields operate with beliefs and biases. To the extent you can eliminate both and replace them with data, you gain a clear advantage. Many people think they are smarter than others in the stock market and that the market itself has no intrinsic intelligence—as if it's inert. Many people think they are smarter than others in baseball and that the game on the field is simply what they think it is through their set of images/beliefs. Actual data from the market means more than individual perception/belief. The same is true in baseball.

Henry was, unsurprisingly, a longtime Bill James reader. Even after he became the owner of a real big league baseball team, Henry continued to play in a sophisticated fantasy league in which he deployed Jamesean tools and, as he put it, "cleaned up. I won every year." But the real baseball team he owned continued to be run as if Bill James had never existed, and it didn't clean up anything but its shattered pride after ninety-eight losses.

The problem Henry faced was social and political. For a man who had never played professional baseball to impose upon even a pathetic major league franchise an entirely new way of doing things meant alienating the baseball insiders he employed: the manager, the scouts, the players. In the end, he would have been ostracized by his own organization. And what was the point of being in baseball if you weren't *in* baseball?

Right from the start Bill James assumed he had been writing for, not a mass audience, but a tiny group of people intensely interested in baseball. He wound up with a mass audience and went largely unread by the people most intensely interested in baseball: the men who ran the teams. Right through the 1980s and 1990s, James experienced only two responses to his work from baseball professionals. The first was opportunism from player agents, who wanted him to help them to demonstrate, in salary arbitration meetings with the teams, that their clients were underpaid. The other was hostility from the subcontractors who kept the stats for Major League Baseball.

When the Jamesean movement first took shape, the attitude toward baseball statistics inside the company whose job it was to keep the official statistics for Major League Baseball was an odd mixture of possessiveness and indifference. In the late 1970s, the baseball writer Dan Okrent, with two colleagues from book publishing, went to pitch an idea to the CEO of the Elias Sports Bureau, Seymour Siwoff. The idea, recalled Okrent, "was to try to persuade him to collaborate with us on a painstakingly detailed, under-the-fingernails things you never knew book about baseball stats. The image is indelible: We are sitting there with this guy who looks like a superannuated ferret, his pale skinny arms protruding from the billowing short sleeves of his white-on-white shirt, and he brushes us off with a dismissive wave of his hand. 'Boys,' he said, 'nobody gives a shit about this stuff.'"

In 1985 the Elias Bureau finally woke up and published a book, a virtual twin in outward appearance to the *1985 Baseball Abstract*, called the *1985 Elias Baseball Analyst*. (The superannuated ferret was a co-author.) Although the company finally divulged some of the statistics they had long withheld from James and other analysts, they failed to do anything much with them. The writers imitated James's prose style but, lacking anything interesting to say, they wound up sounding empty and arch. James was happy to confirm the casual reader's impression that the Elias Bureau had a whiff of Salieri about it. "When the *Baseball Abstract* hit the best-seller lists," James wrote in his final *Abstract*,

> the [Elias Bureau] launched their own competitor, the main purposes of which were to:
>
> a) make money
>
> b) steal all of my ideas
>
> c) make as many disparaging comments as possible about me
>
> So that was a lot of fun.

The effect on James of being ignored by the people who stood to benefit the most from his work was to distance himself even further from those people. In his earlier writings James often tried to explain what he was up to, in such a way that it might invite baseball professionals to pay attention. His instinct, at first, was to assume that the people who actually managed baseball teams had some good

reason for what they were doing, even when what they were doing struck him as foolish. A few years into his career, he clearly decided that baseball professionals would benefit from being smacked on the head by a two-by-four. In his commentary about the Cleveland Indians that year, for instance, he wrote that "during the winter I was told something about the Indians' front office that really shocked me. They're dumb. You know, not bright, slow." He went on to explain how he at first refused to accept stupidity as an explanation for the Indians' ineptitude because "there is so much hope invested in a ball club, there are so many people who care about the fortunes even of the Indians and who are honestly hurt, if only in passing (but we are all only passing) that it just seems inconceivable that these fortunes could be entrusted to someone who is incapable of taking care of them. Are children allowed to play catch with the family jewels?…I have a correspondent who is an avid Indians fan, a professor of math at a fine university. He understands what needs to be done. Why can't he be given the job?"

Seven years into his literary career, in the *1984 Baseball Abstract,* James formally gave up any hope that baseball insiders would be reasonable. "When I started writing I thought if I proved X was a stupid thing to do that people would stop doing X," he said. "I was wrong." He began his opening essay of 1984, ominously, by pointing out the boom in sports journalism that promised to take you "inside the game." The media had become hell-bent on giving the superficial impression of allowing the fan a glimpse of the heart of every matter. Just to glance at the titles on TV shows and magazine articles you might think that there was nothing left inside to uncover.

It was all a lie. "What has really happened," James wrote, "is that the walls between the public and the participants of sports are growing higher and higher and thicker and darker, and the media is developing a sense of desperation about the whole thing." What was true about baseball was true about other spheres of American public life and, to James, the only sensible approach was to drop the pretense and embrace one's status as an outsider. "This is *outside* baseball," he wrote. "This is a book about what baseball looks like if you step back from it and study it intensely and minutely, but from a distance." It wasn't that it was better to be an outsider; it was *necessary.* "Since we are outsiders," he wrote, "since the players are going to put up walls to

keep us out here, let us use our position as outsiders to what advantage we can."

From here until James quit writing his *Abstract* four years later he might as well have declared open season on insiders. He became somewhat slower to concede baseball professionals might have a point. One sentence serves as a fair summary of James's attitude toward the inside: "I think, really, that this is one reason that so many intelligent people drift away from baseball (when they come of age), that if you care about it at all you have to realize, as soon as you acquire a taste for independent thought, that a great portion of the sport's traditional knowledge is ridiculous hokum."

As baseball's leading analyst, James slid between two stools. Baseball insiders thought of him as some weird kind of journalist who had no real business with them. Baseball outsiders thought of him as a statistician who knew technical things about baseball. A number cruncher. A propeller head. Even after he had become known for his books—even after he changed the way many readers thought not only about baseball but about other things too—James never got himself thought of as a "writer."* That was a pity. A number cruncher is precisely what James was not. His work tested many hypotheses about baseball directly against hard data—and sometimes did violence to the laws of statistics. But it also tested, less intentionally, a hypothesis about literature: if you write well enough about a single subject, even a subject seemingly as trivial as baseball statistics, you needn't write about anything else.

The trouble was that baseball readers were not ready for what he had to say. The people who found him worth reading struck him, increasingly, as ridiculous. His skeptical detachment from the world around him helped him to become a writer but it left him ill-suited to be a best-selling one. "I hate to say it and I hope you're not one of them," he wrote in his final, *1988 Baseball Abstract*, "but I am encountering more and more of my own readers that I don't even like, nitwits who glom onto something superficial in the book and misunderstand its underlying message…. Whereas I used to write one 'Dear Jackass' letter a year, I now write maybe thirty." The growing misunderstanding between himself and his readership was, he felt, not adding to the sum total of pleasure or interest in the universe. "I am no longer certain that the effects of my doing this kind of research are in the best interests of the average baseball fan," he explained. "I would like to pretend that

the invasion of statistical gremlins crawling at random all over the telecast of damn near every baseball game is irrelevant to me, that I really had nothing to do with it…. I know better. I didn't create this mess, but I helped."

Intelligence about baseball had become equated in the public mind with the ability to recite arcane baseball stats. What James's wider audience had failed to understand was that the statistics were beside the point. The point was understanding; the point was to make life on earth just a bit more intelligible; and that point, somehow, had been lost. "I wonder," James wrote, "if we haven't become so numbed by all these numbers that we are no longer capable of truly assimilating any knowledge which might result from them."

His final essay in his final *Baseball Abstract* James entitled "Breakin' the Wand." "To most people it no doubt seemed that I was writing about statistics," he said, "but I wasn't, not ever; in the years I've been doing this book I have written no more than a couple of articles about baseball statistics. The secret of the success of this book is that I was dead in the center of the discussion. I was writing about exactly the same issues that everybody else was talking about, only in a different way."

With that, he quit. Claimed he was through being a sabermetrician. "It is a wonderful thing to know that you are right and the world is wrong," he concluded. "Would God that I might have that feeling again before I die." He never had a clue—not then, not later—that the world was not entirely wrong. No one ever called James to say that an actual big league baseball team had read him closely, understood everything he had said along with the spirit in which he had said it, and had set out to find even more new baseball knowledge with which to clobber the nitwits who never grasped what Bill James was all about.