THE Baseball Research JOURNAL

Volume 39
Summer 2010
Number 1

Published by
the Society for American Baseball Research

THE BASEBALL RESEARCH JOURNAL, Volume 39, Number 1

Editor: Nicholas Frankovich
Production and design coordinator: Lisa Hochstein
Cover designer: Lisa Hochstein
Fact checker: Cliff Blau
Photo consultant: Mark Fimoff
Copyeditor: Eric Newman
Proofreaders: Teresa Artman, Dan Basco, Michael Davies
Front cover: Franklin Gutierrez. Courtesy of the Seattle Mariners.
Page 8: Willie Mays. National Baseball Hall of Fame Library, Cooperstown, N.Y.

Published by:
The Society for American Baseball Research, Inc.
812 Huron Road East, Suite 719
Cleveland, Ohio 44115-1165

Phone: (216) 575-0500
Fax: (216) 575-0502
E-mail: info@sabr.org
Website: www.sabr.org

ISBN 978-1-933599-17-5

Contents

Note from the Editor

Everyone understands the concept of player development. Coaches teach the player definable skills or how to improve them. When he reaches pro ball, he gets instruction and advice from many expert sources whose job it is to impart to him their accumulated knowledge about how to play the game successfully. They take him as he comes to them, in his present, incomplete state of development and try to make him a better player in the future, better than he would be if he were left to his own devices.

But that present state he comes to them in—what is it exactly? It's what scouts, coaches, and guys from the front office see when they watch him play, but they disagree on what they see. Are the plays that this young infielder makes really stellar, or is it that he only makes them look difficult? And so the one kind of baseball expert turns to the other, the expert whose expertise is in the business not of how to make the player better but rather of determining who that player already is, what his performance is now, what it has been, and what the track record of other players like him says about what his performance is likely to be in the future. The insistence on objective measurement and analysis is often felt to be a matter of a battle between young, innovative sabermetricians and a traditional baseball culture where scouting is valued over statistics.

If that's the battle, though, it's fairly ancient. And it was decided long ago, when Henry Chadwick, observing that a player's flash, or lack thereof, was not necessarily correlated to the actual value of his performance, fixed into place the modern understanding that, if you want to understand the game beyond the line score, to know who did what to influence the final outcome, you have to think about it mathematically. Not only mathematically, and not always mathematically, and not necessarily with the insight available only to someone trained in higher mathematics. But with a respect for how a mathematical view of the game is necessary, though of course never sufficient, for really understanding baseball.

In their article "Measuring Defense," Dan Basco and Jeff Zimmerman examine the mathematical enterprise of zone ratings and the like and, in their conclusion, compare it to maps. Reading maps is not the same as being in the place they represent, but when you're there on the ground you still refer to them, even if they're only vague maps in your head. The hotel is over there, and the river is that way, to the west. Mapmaking in baseball is not about imposing new ways of thinking about the game. It's about elaborating, refining, and making clear and explicit what already goes into our ability to read the game at all. Trying to follow baseball without referring to maps would be like studying the type on this page without knowing what any of the words mean. In baseball, we use words to communicate what numbers don't and maybe can't. That stellar infielder, maybe eighteen years old, does he appreciate what it means when his advocates in the organization say he reminds them of a young Ozzie Smith? The culture that all baseball people, from players to GMs to fans who buy tickets and pay their salaries—the culture we operate in is thick, and its history is long and growing, and so increasingly we rely on historians to make intelligible to us the hum and buzz of all the chatter. One dimension of what baseball is in hard reality consists of a common language, of traditions and legends that we share because baseball writers have articulated them for us.

Our respect for the contribution that baseball researchers, all of whom use words and numbers in varying proportions, make to what baseball actually is—traditionally that's been epitomized in our recognition of Chadwick as the Father of Baseball. And so the Society for American Baseball Research, to honor the most outstanding of his spiritual progeny, have established an award named for him. You can read about the inaugural class of recipients here, beginning at page 122.

The Baseball Research Journal reflects, of course, the good work of the authors published here but also of others who generously volunteer their time, expertise, or intellectual property. I hesitate to name any of them, because they're too many for me to name them all. I'll name some anyway. Phil Birnbaum, besides writing for this issue, has offered his advice and shared his sound judgment whenever I've asked for it, which is often. Dan Basco spent much of his summer helping me—and now, I hope, you—better understand advanced defensive metrics. Michael Davies has applied his keen intelligence and eagle eye to the practical work of weeding out error, substantive as well as typographical. Jim Walsh of Maple Street Press, which published Vince Gennaro's article as a chapter in *Maple Street Press Mariners Annual 2010*, gave us permission to reprint it.

Nick Frankovich

Correspondence

PARK FACTOR AND COBB'S REMARKABLE CONSISTENCY

In "Ty Cobb's Splits" (fall 2009), Trent McCotter provides career batting data for Cobb at home and on the road, by ballpark, and by opponents. To add to the information on this subject I have listed the park factors for batting average for each of Cobb's home parks over his 24-year major-league career. Park factors are based on team batting (for home team and visitors) *at* a given ballpark *and* the batting data for the road games, again, of the home team of the given ballpark and all the visiting teams there.

My method for computing batting-average park factors was to take the home-park batting average, for home team and visitors, and divide that by the road batting average of both teams. As batting average is already normalized, there is no reason to adjust for the number of games or innings played. However, both *Total Baseball* and I use the OPC (other-park correction) factor to adjust the ratio of the home-park batting average to that of the other league parks. This step is necessary, as the average league park factor is by definition 100. In practice, for park factors close to 100, this step has little impact. The only potential complication is that the opponents get more at-bats per game, and usually for the season, at the selected home ballparks, while the selected team gets more at-bats on the road. I feel that the straightforward and uncomplicated method (the home-park batting average for the home team plus opponents, divided by their road batting, and adjusted by OPC) is sufficient.

The method I used was to adjust the hits for each season and sum the total number of adjusted hits. The career total of adjusted hits at home was compared with the actual home total of Cobb's hits. This is equivalent to taking each season's park-factor batting average and weighting that by hits. The reason for weighting by hits and not at-bats is that the park effect is on hits and not directly on at-bats. One may note that, as a team gets fewer hits, they will also get fewer at-bats. However, the effect of Cobb's 20 fewer hits spread over 1,517 home games would have had very little effect on the number of his at-bats. Note also that Cobb's home–road splits that I used are from Pete Palmer and differ from those used in McCotter's article.

A note on the source data:

AL 1905–9: Box scores for Detroit and opponents

AL 1910–19: Official AL day-by-day batting sheets

AL 1920–28: Derived from Retrosheet

The city, and home park, and batting-average park factors:

Year	City	Park	Park Factor
1905	DET	Bennett	102.0
1906	DET	Bennett	104.4
1907	DET	Bennett	107.7
1908	DET	Bennett	102.0
1909	DET	Bennett	107.6
1910	DET	Bennett	102.5
1911	DET	Bennett	104.2
1912	DET	Navin Field	100.0
1913	DET	Navin Field	97.6
1914	DET	Navin Field	102.0
1915	DET	Navin Field	108.6
1916	DET	Navin Field	101.7
1917	DET	Navin Field	99.7
1918	DET	Navin Field	98.7
1919	DET	Navin Field	91.6
1920	DET	Navin Field	104.0
1921	DET	Navin Field	95.6
1922	DET	Navin Field	100.1
1923	DET	Navin Field	100.2
1924	DET	Navin Field	99.0
1925	DET	Navin Field	96.1
1926	DET	Navin Field	96.9
1927	PHL	Shibe Park	97.3
1928	PHL	Shibe Park	102.6

The weighted average (weighted by Cobb's hits) of the batting-average park factors for Ty Cobb's home parks was 101.0. This means that, for Cobb, the benefit of hitting in his home parks was 1 percent. If Cobb has played his entire career in neutral home ballparks (park factor = 100), he would have had 20 fewer hits and a career average of .3647 vs. his actual average of .36645.

Ron Selter
El Segundo, California

This letter is adapted from an exchange on SABR-L, January 22–24, 2010.

DEDUCING THE DATE OF A DODGERS SCORECARD

As a SABR member since 1975, thanks to the late Jack Kavanagh, who introduced me to it that summer while I was visiting New England from my former home in Halifax, Nova Scotia, I have always been one of the silent majority who devour SABR publications without ever taking keyboard in hand to write any research articles or even a letter to the editor.

However, the recent correspondence from Paul Hirsch (fall 2009) about the photo of Jackie Robinson entering the Dodgers' clubhouse in his Royals uniform intrigued me enough to finally attempt my own correspondence—about the exhibition game on April 10, 1947, after which, as we have learned, the photo was taken.

I recently purchased an official Dodgers program and scorecard from 1946. It contains the lineups for an exhibition game between the Dodgers and Montreal Royals. I at first thought that this was proof that there had actually been an exhibition game between the two teams at Ebbets Field sometime in 1946, contrary to what Hirsch stated.

There is no date given for the game, and the program is not scored, but I believe that major-league teams often played exhibition games against their top farm teams either in spring training or during offdays in the season. I just assumed without any research that my program was from such a game in 1946.

After reading Hirsch's letter I then took a more serious look at the program lineups and realized that Jackie Robinson is listed as the starting first baseman for the Royals and that Roy Campenella and Don Newcombe are also listed on the Montreal roster, while Duke Snider is listed on the Dodgers roster and Arky Vaughan is the starting third baseman for the Dodgers, but none of those listings, and there were several others like that, would make sense for a 1946 game.

The promotion of Robinson to the Dodgers roster on April 10, 1947, is given front-page coverage in the April 17 issue of *The Sporting News*, although possibly the greatest event in baseball history is overshadowed by the coverage of Leo Durocher's suspension, which was handed down on April 9.

Robinson played in the April 10 game after having sat out about a week, due to an injury, and despite a poor performance was promoted at exactly 3:15 P.M., when Branch Rickey announced in a press release that Robinson's contract was purchased from the Royals, according to *The Sporting News* article.

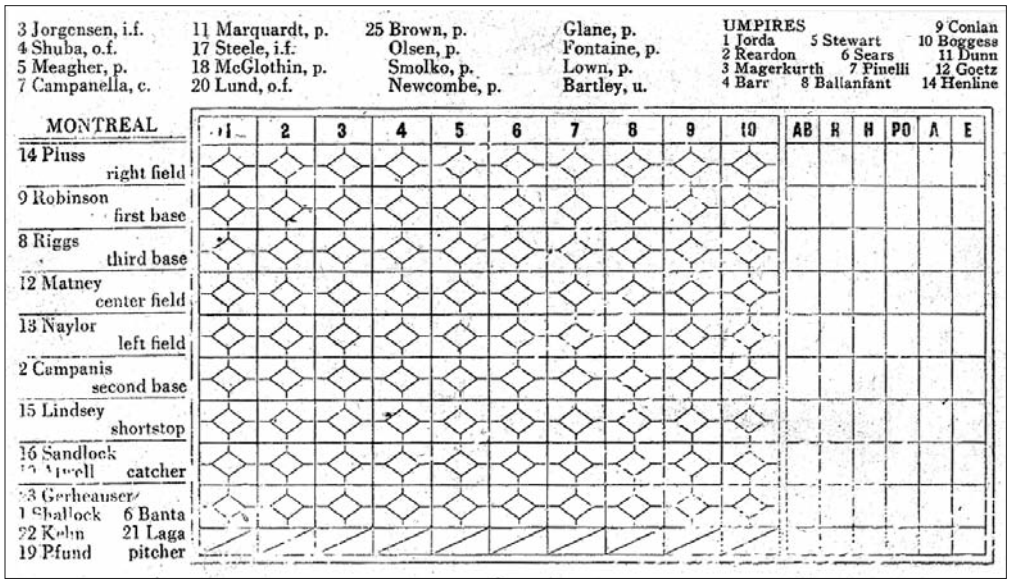
From the information provided by Hirsch, *The Sporting News* article, and the Dodgers' spring rosters (in various publications) for 1946 and 1947, I now believe that the lineup scorecards for the 1947 exhibition series at Ebbets Field were inserted into the 1946 programs either to just make us of a surplus of the old programs or to save the new ones until the opening of the 1947 regular season.

So, although I cannot ascertain if my program is from the April 10 game or one of the previous games in the series, as the lineups are preprinted and undated, I'm now confident that it is from the 1947 series—which makes it a Jackie Robinson memento of even greater historical significance than I had originally believed.

I realize that this information speaks only to my own special interest and does not add much to the historical record, but perhaps it would be of some interest to fellow Brooklyn and Robinson fans as well as program-collecting enthusiasts who might be able to shed further light on the subject.

Joe MacPhee
Neepawa, Manitoba, Canada

COURTESY OF JOE MACPHEE



The lineup for the Montreal Royals, Brooklyn's triple-A affiliate, in a Dodgers scorecard for an exhibition game between the two clubs, probably in the spring of 1947. Campanella, who played for Nashua (Class B) in 1946 and didn't move up to Montreal until 1947, is on the roster. Robinson, who did play for the Royals in 1946 but at second base, appears in the lineup—at first base. He didn't move to first until spring 1947, shortly before being promoted to the Dodgers.

Disposable Heroes

Returning World War II Veteran Al Niemiec Takes on Organized Baseball

Jeff Obermeyer

Al Niemiec looked forward to returning to baseball after his discharge from the U.S. Navy in January 1946. In the three seasons, 1940–42, before his call to duty, he played for a Seattle Rainiers team that won three consecutive Pacific Coast League championships, and he led second basemen in fielding percentage all three of those years. But things didn't feel quite right to Niemiec. During a train ride north from California these several years later, he confided in fellow veteran Tony Lupien his fears that the Rainiers planned on releasing him soon because of his age. Lupien had a similar experience on his return from duty when the Phillies sold his contract to the Hollywood Stars. Lupien initially fought the move under the provisions of the Selective Training and Services Act of 1940 that guaranteed returning vets one year of employment in their old jobs, but he dropped the case when Hollywood agreed to pay him $8,000 for the season—the same amount he would have received had he remained in Philadelphia.[1]

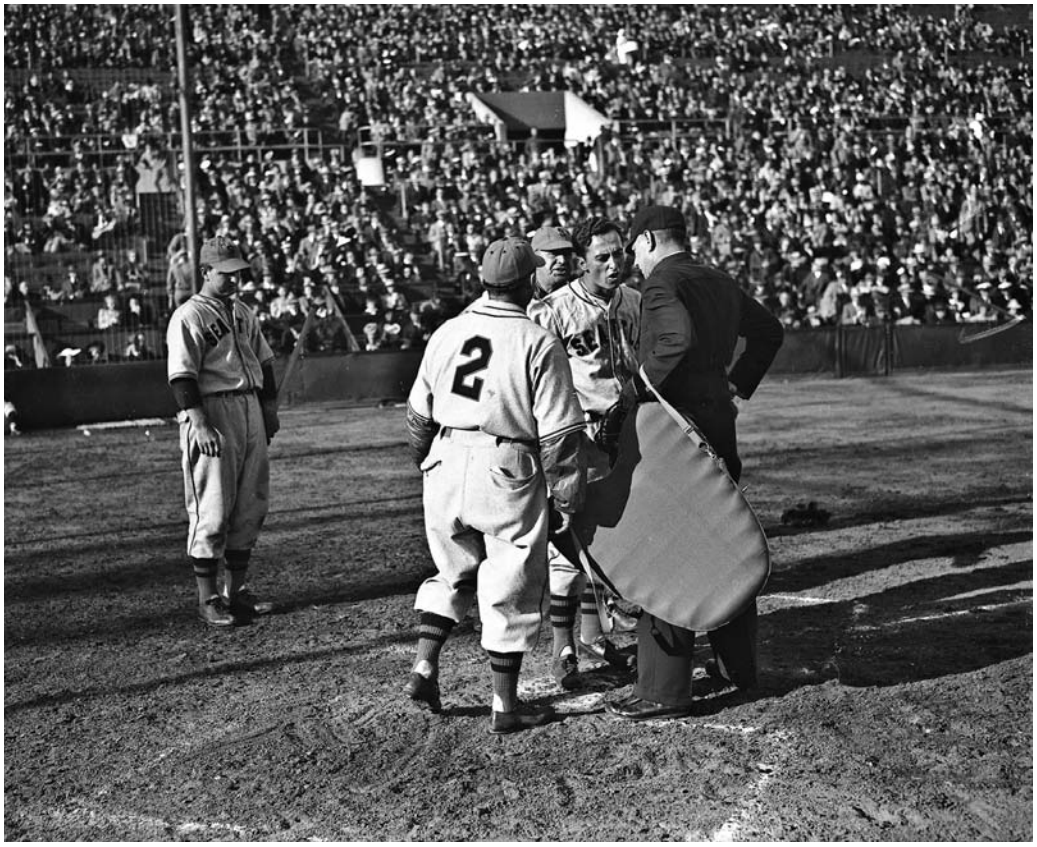
Organized Baseball developed its own rules regarding returning vets, specifically that they were entitled to their old jobs for a trial period of 15 days of regular-season play or 30 days of spring training, after which the club could terminate the contract at its discretion. The motivating factor was obviously one of money, though the potential for bad publicity should have been apparent from the start. Baseball rode a wave of patriotism as the "American game" during the Second World War and took steps to promote the game as such. By 1945 major-league attendance had rebounded from the slump it endured early in the war, jumping to approximately 10.8 million, a new record, along with record gross receipts of $22.5 million. The majors shattered this record the next year, 1946, drawing more than 18 million fans through the turnstiles and grossing $51.7 million.[2] It was a time of record popularity and profits, and not a time to take an unpopular stance with respect to veterans, who made up a significant portion of the game's fan base.

Alfred Joseph Niemiec was born in Meriden, Connecticut, on May 18, 1911. He attended and played baseball for the College of the Holy Cross from 1931 through 1933 before making his way to the minors, finishing out the 1933 season with the Reading Red Sox of the New York–Pennsylvania League. His solid infield play and .306 average won him recognition, and in 1934 he played in 137 games with Kansas City in the American Association. His efforts in Kansas City earned him a late-season call-up with the Boston Red Sox, and he made his major-league debut on September 19, picking up two hits and one RBI against the St. Louis Browns. While his fielding was perfect in nine games with Boston, his bat was weak (.219), and Niemiec found himself assigned to Syracuse for the 1935 season, where he contributed to the Chiefs' International League championship. Once again his play attracted the attention of the majors, and the Philadelphia Athletics sent Doc Cramer and Eric McNair to Boston in exchange for Niemiec, Hank Johnson, and, perhaps just as important for Connie Mack, $75,000 in cash. Niemiec spent the entire 1936 season on the Athletics' roster, appearing in 69 games and splitting time between second base and shortstop, but once again major-league pitching confounded him, and his .197 average prompted his sale to the minors in the offseason.

Following a year with Little Rock, where he won a championship with the Travelers, Niemiec made his way out west for a five-year stint in the PCL. He spent two seasons with San Diego before moving north to Seattle to play for the Rainiers in 1940. Anchoring the keystone sack for the Rainiers, Niemiec, an outstanding defender, also maintained a respectable .278 average during the Rainiers' run of three consecutive PCL titles. After the close of the 1942 season he was called up to serve in the U.S. Navy, where he rose to the rank of lieutenant before his honorable discharge on January 6, 1946.

On his discharge, Niemiec reclaimed his former job with the Rainiers, and on February 11 the club signed him to a contract at $720 per month, a fairly substantial increase from the $575 per month he earned in 1942. He appeared in 11 games at the start of the 1946 season but was beaten out for the job at second by Bob Gorbould, who played for the Rainiers in 1944 and 1945 and was seven years his junior.[3] The Rainiers cut Niemiec on April 21, and he went immediately to the local Selective Service office to register a complaint against the club, based on the job guarantees to

DAVE ESKENAZI COLLECTION



Left to right: Seattle Rainiers outfielder Frank Kelleher, coach Eddie Taylor, manager Jack Lelivet, and Al Niemiec gather at home plate as Niemiec has a word with the umpire during a game in 1940. Not one to shrug off a perceived wrong, Niemiec took legal action against the Rainiers when they cut him in 1946. He cited a law guaranteeing that World War II veterans could return to the civilian jobs they left when they entered the service.

returning veterans under the Selective Training and Services Act. He brought with him a letter of introduction provided to him by the team on his dismissal, which was signed by manager Bill Skiff and vice president Roscoe "Torchy" Torrance:

> April 20, 1946
>
> TO WHOM IT MAY CONCERN:
>
> This will introduce player Al Niemiec. Al played on the Seattle Ball Club during three championship years, 1939 [sic], 40, and 41. We won the pennant all three years. He was chosen the outstanding second baseman of the league in 1941 and is one of the most dependable ball players we have ever had the privilege of having in the organization.
>
> Al has just returned from more than three years in the United States Navy and returned to our roster this year. The surplus of talent and the fact that we have had to make room for some younger ball players has made it necessary for us to dispose of Mr. Niemiec's services. Al still has a lot of fine baseball left we are sure and is the type who would be a credit to the game in years to come as a manager of some club. The loyalty and integrity of this ball player has always been away above average and we would not hesitate a moment in recommending his services to anyone in the baseball business.[4]

The Selective Service System wasted no time in arguing Niemiec's case, sending a letter to club president Emil Sick on April 24. In the two-page letter Lt. B. V. Vercuscki outlined the facts, including the team's obligations under the Selective Training and Service Act. Vercuski wrote that Niemiec's dismissal was "without cause" and that he was still capable of playing baseball at an acceptable level: "There is nothing in the record to reflect that he does not have the ability or background to continue in his former position."[5] The severity of the situation was readily apparent to the Rainiers, and Torrance dispatched copies to the heads of the PCL (Clarence Rowland), the National Association (W. G. Bramham), and Major League Baseball (commissioner Happy Chandler). Torrance even offered a possible compromise to the situation: "Just as an after-thought don't you think it would be a good idea to let the Mexican League have about 200 ball players so that they could set up a real baseball program and take care of some of our surplus talent? It might be better to have a good league down there and

make more room for extra ball players than to continue having trouble."[6]

The Rainiers retained attorney Stephen Chadwick of the firm Chadwick, Chadwick and Mills to meet with the government officials, who on May 6 followed up with another letter from the U.S. district attorney demanding Niemiec's reinstatement. Chadwick and the Rainiers held fast to their position:

> We replied by letter dated May 9, but delivered May 13, declined to reemploy upon the ground that we had reemployed, he had been accorded the time prescribed as a reasonable minimum by National Association rules, and had demonstrated his inability to comply with the accepted standards of work performance and professional skill and proficiency required of our players and by clubs with which we were in competition, and accordingly had been given his unconditional release and had accepted transportation to his home.[7]

The Rainiers did not stand alone, having the full support of Organized Baseball. The impact of any court ruling on the Niemiec case had far-reaching consequences, and it was deemed so important that Major League Baseball and the National Association agreed to split the cost of the legal expenses involved in defending the case.

It is ironic that Stephen Chadwick represented the Rainiers and baseball against Niemiec. Chadwick too was a veteran, who served in the Russian Civil War, one of the little-known conflicts related to the First World War. While the Bolshevik rise to power in the 1917 Revolution is well known, what is often neglected by popular history is the attempt by the anti-Bolshevik "White" forces to overthrow the new communist government. A number of foreign powers participated on both sides of this conflict, and Chadwick served with U.S. forces in support of the Whites from August 1918 to May 1919. Chadwick was also heavily involved in leadership roles in various veterans'-rights organizations; he served as the National Commander of the American Legion in 1938–39. While Chadwick's firm represented Emil Sick's business ventures, both baseball and brewing, his willingness to argue against the legal rights of returning veterans is surprising given his background.

As the legal wrangling continued, Niemiec signed with Providence of the New England League on May 17 for $150 a month. Back in Seattle the two sides prepared to take the case in front of federal judge Lloyd L. Black on June 15. Further complicating matters for the Rainiers was that they fired manager Bill Skiff on June 11, though they still needed him to testify on their behalf at the hearing. Skiff toed the company line, however, and testified that Niemiec was too old and slow to play in the PCL. Niemiec's representatives pounced on the former manager, attempting both to impeach his judgment in baseball matters, by raising his recent termination, and to show that Skiff himself had still been an active player when he was older than Niemiec. Niemiec returned to Seattle from Providence to participate and testify on his own behalf.[8]

Judge Black announced his decision in favor of Niemiec on Friday, June 21, and brought the parties back to the courtroom on June 24 to elaborate on his ruling. Black specifically addressed three arguments made by the Rainiers—that baseball is "a quasi public institution not operated primarily for profit,"[9] that Niemiec's skills had eroded and he was no longer capable of playing at an acceptable level, and that by signing a contract that gave the club the right to cut him Niemiec waived his rights under the Selective Training and Service Act.

In addressing the first issue, Judge Black reviewed the articles of incorporation of the Pacific Coast League and stated that these clearly indicated the league was a for-profit enterprise. He added that the Selective Training and Service Act made no concessions for not-for-profit organizations or for any other type of employer. As for Niemiec's skill and ability to perform the job of baseball player:

> The law says [Niemiec] is entitled to his position for a year. The veteran must be qualified to perform the duties of his position. The evidence

Rainiers president Emil Sick. Sick retained attorney Stephen Chadwick to argue the case against Niemiec. Chadwick's firm represented Sick's business interests, baseball and brewing. Chadwick himself was also a World War II veteran, like Neimiec, but found himself defending against Niemiec's claim to a veterans' benefit.

DAVE ESKENAZI COLLECTION

DAVE ESKENAZI COLLECTION

Manager Bill Skiff, left, with team trainer Lewis "Doc" Richards, reading congratulatory telegrams when the Rainiers won the Pacific Coast League title in 1941. Skiff, fired in June 1946, still testified on behalf of the Rainiers, affirming their claim that Niemiec was too old to play second base effectively, although Skiff himself had been an active player when he was older than him.

> shows he was. The employer may adopt fair and reasonable standards of qualification for work performance. Under the evidence there was no qualification or standard at all. In substance the most Mr. Skiff said was that he had the idea that Mr. Niemiec would not be able to complete the season. He had no right to anticipate Mr. Niemiec's inability until it occurred. The employer may discharge at any time for cause, but that cause must be something other than prediction or [the] hunch of a manager.[10]

The contract issue was dealt with clearly as a matter of contract law. The employer in this case wrote the contract, and the employee was not allowed any input or modification—he had to take it or leave it as written. In fact, the evidence presented indicated that the management of the Rainiers, as officers of a member club of the National Association, could no more modify the contract than could Niemiec. As the employer had complete control over the wording of the contract, it had a duty to write the contract in clear and unambiguous language, which, according to Judge Black, it did not. "Any player reading this contract, I am satisfied, would believe his rights were protected. Personally, after I have read it, I think his rights are protected."[11]

Judge Black reserved his more pointed criticism for the behavior of the game as a whole toward its returning veterans.

> Baseball is an American institution. Professional baseball is a great American institution. Compared with many professional sports and entertainments it holds a very high regard of the people of the nation. I cannot escape the view, however, that the argument of the respondent analyzed completely means just this, that if the baseball player be older when he comes back from service than when he entered it, his baseball club employer is given the right in its discretion to repeal the Act of Congress.[12]

Black then took this a step further, to recognize the contributions veterans had made to protecting American society:

> I recognize the seriousness to baseball of having the judge dictate as to its players. But since it has been argued—and correctly—that baseball is the American game, certainly, then baseball ought to bear its share of any burden in being fair to service men. There are few institutions in American life which ought to feel a greater obligation. If Mr. Niemiec and all the others had failed in their job, there would be no American manager of any baseball if such should be played at the stadium this year. If the Nazis permitted baseball, it would not be an exhibition that any of us liked.[13]

SEATTLE POST INTELLIGENCER, COLLECTION OF MUSEUM OF HISTORY AND INDUSTRY, MOHAI

Judge Lloyd L. Black, third from right, ruled in Niemiec's favor, although he was clear that his ruling did not require the Rainiers to actually play him. Speculation about a possible appeal of Judge Black's ruling continued through the summer, but at the close of the PCL season the Rainiers were ready to step aside.

Though Black ruled in Niemiec's favor, he was clear that his ruling did not require the Rainiers to actually play him. In fact, so long as the Rainiers paid him a full season's salary, minus any earnings he made in any other occupation (including non-baseball occupations), the club had no other responsibilities. The ruling satisfied Niemiec, who sent word to Providence that he was not returning, and on July 1 he began a new job as a beer salesman—ironically, working for the brewery owned by Rainiers president Emil Sick. Niemiec returned to baseball briefly as general manager for the Great Falls Electrics (a Rainiers farm team) of the Pioneer League in 1948 before leaving the game for good. He later became a golf pro and instructor.

The ruling did not sit well with baseball's executives. Happy Chandler sent a telegram to the club about appealing the decision. "The Niemiec case should be appealed through the higher courts. Organized baseball will help bear the expense of the appeal."[14] Chandler attended a special meeting of the board of directors called by the PCL on July 22–23. There the parties agreed to pursue an appeal, with the expenses underwritten by the major leagues and the National Association—an agreement that applied not only to the Niemiec case but to any others that arose. Per the meeting minutes:

> Following discussion of the Al Niemiec case, Director Starr moved that the Pacific Coast League concur in the arrangement whereby the Major Leagues and the National Association will take care of half of the survey and further legal involvement in the Niemiec case as well as any other National Defense Player situation that may arise.
>
> Duly seconded, and carried unanimously.[15]

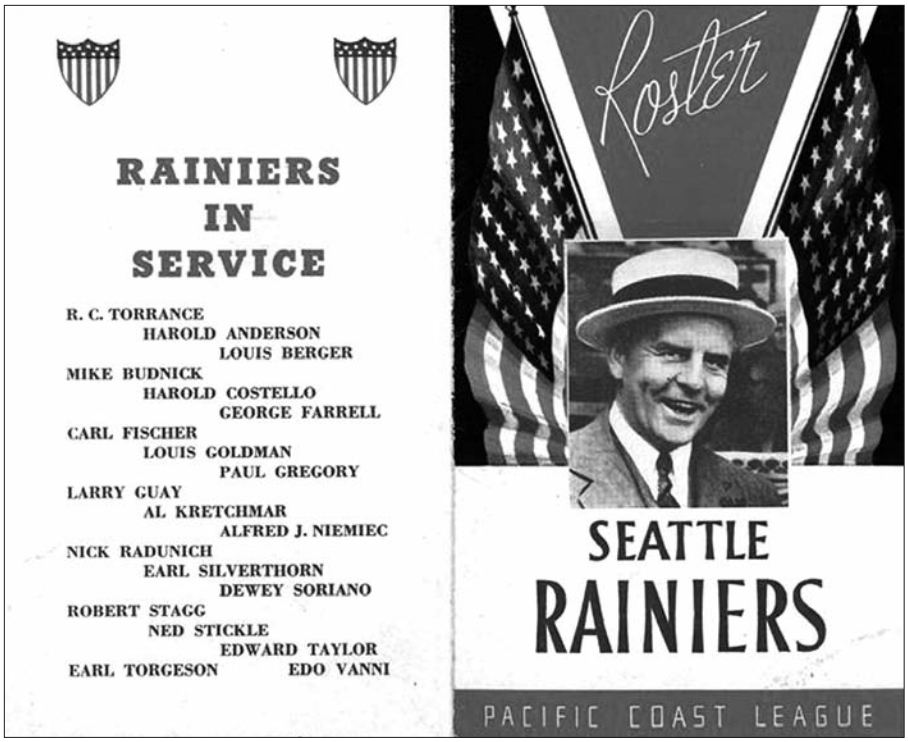
The potential ramifications were significant—*The Sporting News* estimated that the ruling might impact as many as 143 former major leaguers, plus another 900 players at the triple-A level, and even more at the lower levels. However, players had to file a complaint in order to pursue their benefits. Some decided it wasn't worth the trouble, while others encountered roadblocks; Bob Harris, for example, was pressured by his local district attorney to amicably settle his case against the Philadelphia Athletics.[16]

Discussion regarding a possible appeal of Judge Black's ruling continued through the summer, but at the close of the PCL season the Rainiers were ready to step aside. A judgment in the amount of $2,884.50 (unpaid contract value of $3,552.00, minus $75.00 Niemiec earned playing for Providence, and minus $592.50 he earned as a salesman) was entered against the Rainiers on September 18, and they were prepared to pay. By October, correspondence between the Rainiers and baseball officials was focused on determining the costs owed by each party, with no further talk of appeals. By that time the major leagues and National Association understood how profitable the 1946 season had been and were ready to put this issue behind them. The Rainiers finally satisfied the judgment on November 1 with a payment of $2,905.36 (including post-judgment interest), though the satisfaction of judgment was not filed with the court until December 21, a time specifically chosen to fall after the winter baseball meetings so as to reduce the likelihood of questions from the press.[17]

In the end, the Niemiec case cost the major leagues and the National Association $1,718.28 each in legal expenses, and the Rainiers incurred the cost of the judgment. At least two other Rainier players received similar payments as a result of Judge Black's ruling—John Yelovic ($1,000.00) and Larry Guay ($1,100.00).[18] Not all vets were as fortunate. Some, like Steve Sundra of the St. Louis Browns, lost their court cases.[19]

However, the Niemiec ruling remained pivotal and contributed to a number of veterans receiving the pay they were owed by baseball under the Selective Train-

DAVE ESKENAZI COLLECTION



The Niemiec ruling remained pivotal and contributed to a positive outcome for a number of veterans who sought the pay they were owed by baseball under the Selective Training and Services Act of 1940. The case is touched on in writings about the game's labor issues. Documentary evidence shows the direct involvement, previously unreported, of both Major League Baseball and the National Association in this dispute involving a minor leaguer.

ing and Services Act of 1940. The case is touched on in writings about baseball during the Second World War as well as in writings about the game's labor issues, but what the documentary evidence shows is the previously unreported direct involvement of both Major League Baseball and the National Association in this dispute involving a minor leaguer. The willingness of these two organizations to pay the legal costs, as well as the obvious potential for negative publicity, illuminate what an important issue this was in the eyes of baseball owners and executives, in terms of profits but perhaps even more so in maintaining complete control over the players. The players who served in the Second World War did so fighting for a democratic society, but they returned to a game in which the owners held the power and the players had no say in their own careers, a status quo that remained in place for another twenty years until the rise of the Major League Baseball Players Association. Still, the Niemiec decision was one small step forward in favor of players' rights, earned by one veteran who took on baseball and fought for what was right. ■

Notes

1. Lee Lowenfish and Tony Lupien, *The Imperfect Diamond: The Story of Baseball's Reserve System and the Men Who Fought to Change It* (New York: Stein and Day, 1980), 129–34. Niemiec filed away Lupien's story in his memory in case he needed it.
2. House Subcommittee on Study of Monopoly Power of the Committee on the Judiciary, *Organized Baseball*, 82d Cong., 2d sess., 1952, report no. 2002, 90 Stephen Chadwick, 94.
3. The SABR Encyclopedia and the Social Security Death Index give Gorbould's date of birth as 19 November 1918. However, in *The Coast League Cyclopedia: An Encyclopedia of the Old Pacific Coast League, 1903–1957,* vol. 1, *Batters A through K* (Baseball Press Books, 2003), Carlos Bauer gives his date of birth as 19 November 1920.
4. Letter to Al Niemiec 20 April 1946, Seattle Rainier Baseball Club Records Collection, Washington State Historical Society.
5. Lt. B. V. Vercuski, to Emil Sick, letter, 24 April 1946, Seattle Rainier Baseball Club Records Collection, Washington State Historical Society.
6. R. C. Torrance to A. B. "Happy" Chandler, letter, 27 April 1946, Seattle Rainier Baseball Club Records Collection, Washington State Historical Society.
7. Stephen Chadwick, to Victor Ford Collins, letter, 17 May 1946, *Seattle Rainier Baseball Club Records Collection*, Washington State Historical Society.
8. Royal Brougham, "Niemiec Hearing Closes, Judge Takes Case under Advisement," *The Sporting News*, 26 June 1946, 10.
9. *Niemiec v. Seattle Rainier Baseball Club, Inc.*, 67 F. Supp. 705 (U.S. Dist. Ct. 1946), 2.
10. Ibid., 6.
11. Ibid., 4.
12. Ibid., 2.
13. Ibid., 6.
14. Albert B. Chandler to Roscoe Torrance, Western Union telegram, 25 June 1946, Seattle Rainier Baseball Club Records Collection, Washington State Historical Society.
15. Minutes of a Special Meeting of the Board of Directors of the Pacific Coast Baseball League, July 22 and 22 [sic], 1946, *Seattle Rainier Baseball Club Records Collection*, Washington State Historical Society.
16. Lowenfish and Lupien, 137.
17. S. F. Chadwick to Joseph C. Hostetler, letter, 7 November 1946, Seattle Rainier Baseball Club Records Collection, Washington State Historical Society.
18. Notes from special meeting, board of directors, Seattle Rainier Baseball Club, Inc., November 25, 1946, Seattle Rainier Baseball Club Records Collection, Washington State Historical Society.
19. Richard Goldstein, *Spartan Seasons: How Baseball Survived the Second World War* (New York: Macmillan, 1980), 273.

Action Jackson

Watching Baseball Remotely, Before TV

Eric Zweig

With the weather turning crisp in October of 1916, sports fans across North America were looking forward to the World Series. There had been great pennant races in both leagues, and the upcoming battle between Brooklyn and the Boston Red Sox looked like a good one. Though Toronto was still more than sixty years away from joining the American League, interest there in the Series was high. The city was already a hotbed of minor-league baseball.

Like most cities, Toronto once had a great many more newspapers that it does today. Among the most prominent in 1916 were the *Star* and the *Globe*—today's lone survivors of this time period—as well as the *Telegram*, the *World*, and the *News*. All of them devoted a lot of copy to the upcoming Series. "Toronto's baseball sympathies are with the Boston Red Sox in the world's series," said the *Toronto Star* on October 6, "if for no other reason than the fact that the American League champions are under the management of Bill Carrigan, who was formerly a catcher on the staff of the Toronto club."[1]

Toronto newspapers wrote not only of the personalities, the teams, and the excitement that was building in Boston and Brooklyn. They let Torontonians know how, and where, they could follow the 1916 World Series "live."

In his book *Past Time: Baseball as History*, Jules Tygiel writes:

> As early as the 1890s communities began to translate telegraphic reports of baseball games into visual recreations. . . . After 1905, when the World Series became a permanent fixture on the national scene, scoreboard-watching became an equally entrenched annual ritual. Newspapers erected large displays in front of their offices, attracting crowds numbering in the thousands. . . . In 1906, the *Chicago Tribune* began the practice of renting armories and theaters to hold the crowds. The indoor setting allowed scoreboards in the major cities to become increasingly more elaborate.[2]

At least two elaborate American scoreboard devices made their Canadian debuts in Toronto for the World Series of 1916. According to the *Globe*, "The Nokes Electrascore Board, which will be at Massey Hall, is the only one yet invented which satisfactorily shows the actual movements of each player. . . . The board stands upright in full view of the spectators, and the moving lights can be plainly seen from any part of the hall. Mr. Nokes, the inventor of the board, has arrived in the city to set up the board, and will be here throughout the entire series of games."[3] Tickets to watch the "games" at Massey Hall could be purchased for 25 or 50 cents.

While I think we all have at least some idea of these devices, from old photographs and from scenes in movies like *Eight Men Out*, fortunately the *Toronto Star* provided a few more details on the Nokes board. "To those who are not familiar with this marvelous invention, we may state that by means of colored lights for each team the movement of every player is shown and the players are in actual movement all the time. Returns are received by special wire direct from the field the moment the plays are made."[4]

To judge from the stories that followed, a large number of Toronto baseball fans were entertained by the Nokes Electrascore Board during the World Series. Yet if I were to time-travel to Toronto in October 1916, I would not have been in attendance at Massey Hall. Instead, I would have been at the Arena Gardens. Seated inside the city's largest hockey rink, I would have watched—or, rather, followed—the World Series on the Jackson Manikin Baseball Indicator.

I had never heard of this mechanical wonder before I stumbled across the following *Toronto Star* article from October 4, 1916:

> The Jackson Manikin Baseball Indicator, which will be shown at the Arena Gardens for the first time on Saturday afternoon next, is the latest invention of its kind in the world, and so far ahead of all others showing the world's series games that it is sure to make a big hit among local fans. It is a faithful representation of the game, with diamond, grandstand, fences with advertising on them, and, lastly, umpires and players that do everything but talk. The players throw and catch the ball, run the base lines,

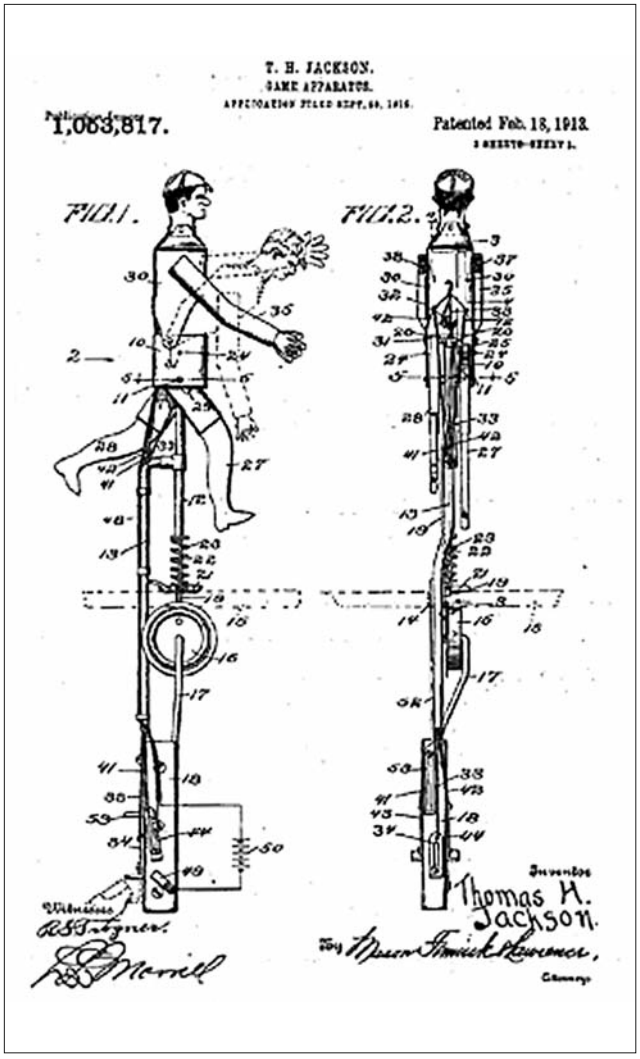
> slide, run after fly balls, hold consultations on the field and quarrel with the umpire to hide their own shortcomings. The diamond, with scenery, is fairly large, and occupies the full depth and width of the Arena. In the front are shown devices so that the spectators may keep track of the outs, balls, strikes, runs for the inning . . . and in certain plays know whether the runner is out or safe.[5]

According to an article two days later, it required ten men to keep all the figures in action—ten men, and it filled the entire floor of a professional hockey arena.[6] The Jackson Manikin Baseball Indicator must have been a giant-sized version of an old-fashioned baseball arcade game.

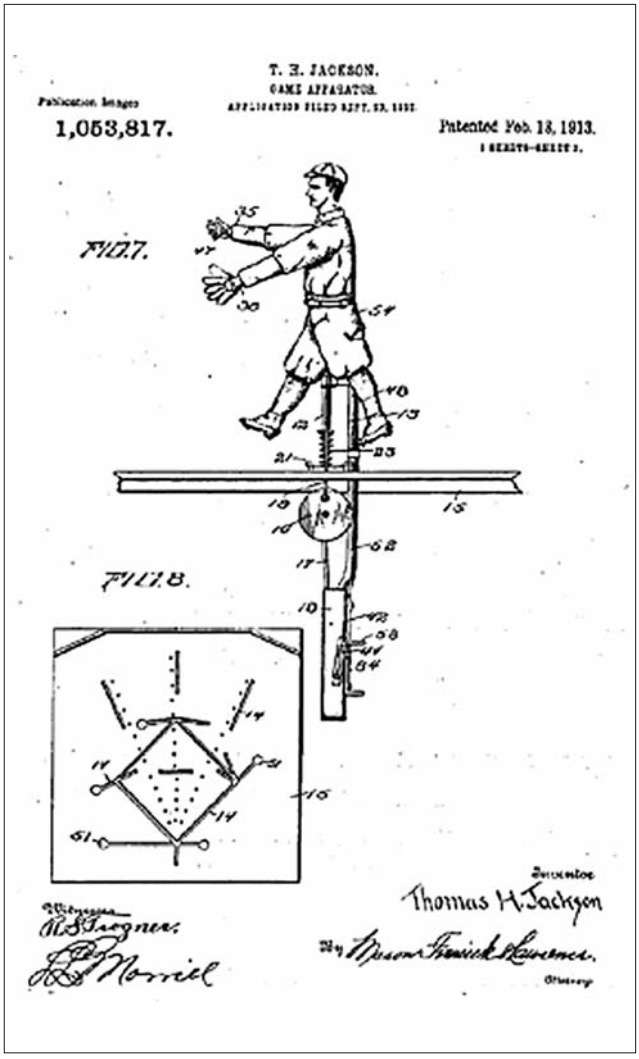
It turns out that the Jackson Manikin Baseball Indicator was invented by Thomas H. Jackson of Scranton, Pennsylvania. He received a patent for it on February 18, 1913, and began using his device to entertain fans that summer in Atlantic City; Washington, D.C.; Rochester, New York; and his own hometown.[7] In fact, the *Washington Post*, in its Sunday edition on August 17, 1913, reprinted a story that originally ran in *Scientific American*, giving a detailed report on how the invention worked and what it looked like:

> The manikins that enact the plays are themselves about a foot and a half high, but the working mechanism, which is not seen by the spectators, is just as long. . . . Through a system of levers the operator is able to raise either the right or left arm

U. S. PATENT OFFICE 1,053,817



The Jackson Manikin Baseball Indicator was invented by Thomas H. Jackson of Scranton, Pennsylvania. He received a patent for it in 1913 and that summer began entertaining fans with his device in Atlantic City; Washington, D.C.; Rochester; and his own hometown.



"The manikins that enact the plays are themselves about a foot and a half high, but the working mechanism, which is not seen by the spectators, is just as long." — *Washington Post*, August 17, 1913

U. S. PATENT OFFICE 1,053,817

or both, or cause the figure to bend over. In running bases the wheel attached to the manikin fits the base-runner groove, and in revolving causes the legs to move backward and forward. If the operator wishes to make the figure slide into a base, it is necessary only to incline the entire device in the direction desired. . . .

At the commencement of the game . . . the nine fielding players in their white suits come up through holes in the diamond and take their respective positions, and the batter in his brown suit comes up through a hole near the home plate and with bat in his hand takes up his place. A light appears in the pitcher's hand if he is right-handed, in his right hand, and if left-handed, in his left. [Note: All batters and fielders could be correctly represented as lefties or righties.] After "winding up" he delivers the ball toward the batter. The light in his hand is extinguished, and if the pitcher is inclined to be wild it is shown in the catcher's hand, the umpire raises his left arm and the announcer calls "ball one." If the batter makes a safe hit—say for two bases to left field—the progress of the ball is shown on the ground from home plate, between shortstop and third base out into left, where the fielder stoops and the light is shown in his hand. He throws to third base. . . . If, however, the batter merely hit a fly to left field, a light glows over the shortstop's head, then over the head of the left fielder and then in his hand. [Presumably, groundouts were represented by the ball appearing in, say, the shortstop's hand. He would then "throw" across the diamond, the light going out in his hand and then the light going on in the first baseman's hand before the manikin in the baserunner groove reached the bag.] When the side is out, the manikins in white go down through holes and off the field and their places are taken by manikins in brown, while the batsmen are dressed in white. If, perchance, a pitcher is being hit very hard and is taken out of the box, that fact is faithfully presented by a consultation between the captain of the team and his pitcher and the exit of the latter through a hole near his position in the center of the diamond. . . .

Great enthusiasm is aroused among the fans who witness a game on the board: for they see a miniature player representing their pitching idol strike out batter after batter, or the team's slugger hit the ball to all corners of the field with the fielders in pursuit, or maybe the speedy base-runner stealing bases and sliding beyond the reach of the baseman with all the realism of the game.[8]

Though the story says nothing about noise, I imagine a lot of rattling and clanking as the manikins pitch, hit, run and field. Perhaps not. Regardless, this was an invention worthy of a Disney theme park. It's the Hall of Presidents, only with Hall of Famers! And it comes at a time not only before radio or television but also before the widespread use of action photography or motion pictures. It certainly doesn't take much imagination to believe that the enthusiasm of baseball fans would indeed be aroused well beyond anything that a machine, with blinking lights or magnetic men, could achieve on its own.

So what became of the Jackson Manikin Baseball Indicator? While Toronto newspapers claim it "made a decided hit with local baseball fans," I have found no evidence that it was used in the city again after 1916.[9] Ads from the *New York Times* indicate that it was still used to follow the World Series until at least 1925.[10] By then, of course, radio had become a fixture of the Fall Classic. While other scoreboard re-creations were still used into the early 1930s, a giant electrical device that required ten men to operate was likely deemed too costly to be able to compete with invisible airwaves that brought the World Series into a person's living room free of charge. ■

Notes

1. "Toronto Fans Pulling for Boston in World's Series," *Toronto Daily Star*, 6 October 1916, 16.
2. Jules Tygiel, *Past Time: Baseball as History* (New York: Oxford University Press), 67.
3. "World's Series at Massey Hall, (*Toronto*) *Globe*, 5 October 1916, 9.
4. "Nokes' Electrascore Board at Massey Hall," *Toronto Daily Star*, 30 September 1916, 12.
5. *Toronto Daily Star*, 4 October 1916, 11.
6. "World's Series at Arena," *Toronto Daily Star*, 6 October 1916, 16.
7. "A New Baseball Indicator," *Washington Post*, 17 August 1913, page MS3; article reprinted from *Scientific American*. Further information specific to the patent date was obtained by e-mails to Washington patent lawyer Thomas Jackson (no relation to the inventor), the Buffalo and Erie County Public Library, and through the website of the United States Patent and Trademark Office (www.uspto.gov/patents/process/search). The patent number of the Jackson Manikin Baseball Indicator is 1,053,817.
8. "A New Baseball Indicator," *Washington Post*, 17 August 1913, page MS3; article reprinted from *Scientific American*.
9. "World's Series at Arena," *Toronto Daily Star*, 11 October 1916, 12.
10. *New York Times*, 7 October 1925, 25.

The Brooklyn Dodgers in Jersey City

John Burbridge

INTRODUCTION

The Dodgers are playing the Yankees at Yankee Stadium in Game 7 of the 1955 World Series. The Yankees are at bat in the bottom of the sixth with men on first and second and none out. Johnny Podres has pitched masterfully during the first five innings. Yogi Berra is up and lashes a line drive down the left-field line. Sandy Amoros, the Dodgers' left fielder, runs in the direction of the 301-feet sign, stretches his body, and with his right gloved hand snares the line drive off Berra's bat. Amoros, showing great presence, turns and throws the ball to Pee Wee Reese, who fires it to Gil Hodges, doubling off the runner on first. The next batter grounds to short for the third out.

This was the last real chance for the Yankees in this game. Podres finishes them off in the seventh, eighth, and ninth, and there is great joy in Brooklyn. This is next year! They have won the elusive World Series for the first time. The borough celebrates, and the future appears rosy. It turns out, however, that this is actually the beginning of the end. In two years the Dodgers will leave Brooklyn for the riches of California. In addition, this is the last great moment of glory for a Dodgers team that has been competing very successfully for pennants since the end of the Second World War. Jackie Robinson, Pee Wee Reese, Gil Hodges, Carl Furillo, Don Newcombe, Carl Erskine, and others have reached an age where their effectiveness is beginning to wane. The nucleus of this team is beginning to crumble, and it is a different cast of players who bring the World Series to Los Angeles in 1959.

For the Dodgers, 1956 and 1957 are interesting years, as Walter O'Malley, the owner, is jockeying with Robert Moses and other New York politicians about the future of baseball in Brooklyn. Even while the World Series of 1955 is being played, O'Malley is thinking of possibly moving the Dodgers.

My purpose in this article is to look at those last two years in Brooklyn and at the role Jersey City played in O'Malley's efforts. During 1956 and 1957, the Dodgers played 15 regular-season games in Jersey City. One question that never has been adequately addressed is what role Jersey City played in O'Malley's decision to stay or relocate. I will conclude with some conjecture about that role.

THE THREAT OF A DODGERS MOVE

During the early 1950s, Major League Baseball underwent major change. The structure of leagues, with eight teams in each league, had not changed since the early part of the twentieth century. In fact, between 1903 and 1953, there were no franchise relocations.

During these fifty years, New York, Philadelphia, Boston, Chicago, and St. Louis had teams in both the American and National Leagues. After the Second World War, it became clear that some of them could no longer support more than one team. In 1953, after seeing their season attendance drop to less than 300,000 fans in 1952, the Boston Braves became the Milwaukee Braves. This franchise move was quickly followed by the St. Louis Browns moving to Baltimore in 1954 and by the Philadelphia Athletics moving to Kansas City in 1955.

O'Malley followed these moves closely. He was concerned that the Milwaukee move might tip the balance in the National League and argued that Milwaukee might use the greater revenue they would generate to develop into a more formidable competitor for the National League title.[1] His concern was justified—Milwaukee did win the pennant in 1957 and 1958.

The Dodgers' home attendance was more than one million in 1955, but O'Malley had issues with their ballpark, Ebbets Field. Built in 1913, it was not aging gracefully. Its seating capacity was 32,000, less than that of County Stadium, the Braves' new home in Milwaukee. Moreover, Ebbets Field was in the middle of a congested and deteriorating neighborhood. During the decade following the Second World War, the suburbs around New York City grew significantly as city residents began flocking to them. Driving was now the preferred means of transportation to the ballpark. In the vicinity of Ebbets Field, public parking was sparse.

O'Malley was convinced that the only solution to the problem was to build a new ballpark. He envisioned it at the intersection of Atlantic and Flatbush Avenues in Brooklyn. In 1953 he sent a letter to Robert Moses, chairman of the Triborough Bridge and Tunnel Authority, requesting a meeting to discuss the possibility.[2] He also sent a more detailed letter to a friend, George V. McLaughlin, a member of the Triborough

COURTESY JERSEY CITY FREE PUBLIC LIBRARY

In 1955, Walter O'Malley, shown here with Jersey City officials, announced that, in 1956 through 1958, the Dodgers would play seven games each season in Jersey City and would have the option to continue the agreement for three years beyond that. From the opening of Roosevelt Stadium in 1937 through the late 1940s, Jersey City cultivated what would become a tradition of supporting minor-league ball, but by now it had been without professional baseball for five years already, ever since the Jersey City Giants moved to Ottawa after the 1950 season.

Bridge and Tunnel Authority Board, explaining that the new ballpark would be privately funded and all he needed was an appropriate site.[3] O'Malley proposed to finance the building of the facility provided he was given access to the land.

Robert Moses was also chairman of the mayor's Committee on Slum Clearance. For the new ballpark to be built on that site, businesses would have to be purchased and relocated using Title 1 of the 1949 Federal Housing Act as the basis for such action. Moses was charged with implementing Title 1. While not an elected official, he was arguably the most powerful figure in the City of New York. He had designed and overseen the construction of the network of roads that intersected New York City and provided access to the suburbs. He was also responsible for designing most of the public and recreational spaces throughout much of the city and parts of Long Island.

Moses was unsympathetic to O'Malley's request to use Title 1 for a new Dodgers ballpark and rejected his proposal.[4] It was not the intent of Title 1, he argued, to build a major-league park. Later, he proposed that the State of New York move forward with the project by creating a sports authority that would finance and build the facility.[5]

The year 1953 also saw the beginning of rumors about the Dodgers possibly moving to Los Angeles. On October 20, 1953, Vincent X. Flaherty wrote to O'Malley, endorsing Los Angeles as the next home for the Dodgers and asking O'Malley to meet with the Los Angeles citizens' committee for major-league baseball.[6] Possibly fueled by actual incidents like the Flaherty letter, the rumors about the Dodgers moving to California escalated over the next few years.

Apparently still committed to finding a way for the Dodgers to remain in Brooklyn, O'Malley turned for help to Frank D. Schroth, publisher of the *Brooklyn Eagle*. In late 1953 through the spring of 1954, Schroth, Moses, and O'Malley along with John Cashmore, the Brooklyn borough president, met monthly for lunch in an effort to resolve the issues surrounding construction of a new Brooklyn ballpark.[7] Throughout this period and into 1955, various sites were discussed and researched, but agreement was never reached. On May 26, 1955, O'Malley wrote noted architect R. Buckminster Fuller at Princeton University and asked him about the possibility of using some of Fuller's geodesic-dome concepts for an indoor facility in Brooklyn. Fuller's graduate students tackled the project and a prototype was developed.[8]

After a meeting on August 9, 1955, O'Malley and Moses traded letters. In Moses's response to O'Malley's note, he wrote that the alternatives proposed by Moses had been deemed unsatisfactory by

O'Malley mainly because O'Malley did not consider the public improvements that would accompany construction of the new ballpark to be important enough. Moses also seemed to indicate that O'Malley should be using his own funds not only to finance construction of the ballpark but also to acquire the land it would be built on.[9]

Soon after this exchange of letters, O'Malley announced that in 1956 and 1957 the Dodgers would play seven games at Roosevelt Stadium in Jersey City.[10] Brooklyn fans voiced their displeasure that their beloved Bums, their affectionate nickname for the Dodgers, were going to be playing some of their home games across the river.[11]

JERSEY CITY

In 1955, the population of Jersey City, just across the Hudson River from lower Manhattan, was approximately 300,000. Brooklyn's population was 2.75 million. The difference, though, was less stark when the borough was compared to all of Hudson County, which includes not only Jersey City but the cities of Bayonne, Hoboken, North Bergen, Union City, and other, smaller towns. The population of the whole county was about 650,000.

Jersey City has a rich political history. From 1917 through 1947, it was led by its colorful mayor, Frank Hague, known affectionately as Boss Hague. A Democrat, Hague was a shrewd politician, with a tight grip on the reins of power in Jersey City and also influential throughout the whole state. He was an ardent supporter of Franklin D. Roosevelt and contributed significantly to Roosevelt's winning New Jersey in the 1932 presidential election. Jersey City benefited tremendously from the many building projects, including the Jersey City Medical Center, that were financed through Roosevelt's New Deal programs.

Hague defined not only Jersey City's politics but even its mores, his own being shaped by his Roman Catholic upbringing. It was not until the 1950s, for example, that women were allowed to sit in a tavern. In 1935, when socialist leader Norman Thomas came to Jersey City to speak, Hague, a staunch anticommunist, had him escorted via ferry out of town.[12]

While perceived to be a friend of the people, Hague as mayor was in fact corrupt, taking kickbacks from citizens and anyone who did business with the city. He was able to amass a fortune and had a Park Avenue apartment and homes on the Jersey Shore and in Florida. His political machine started to crumble after

COURTESY JERSEY CITY FREE PUBLIC LIBRARY

Dodger players with students and nuns at the Academy of St. Aloysius, a Catholic girls' school in Jersey City, June 5, 1957.

the Second World War. In 1947, after more than thirty years, he finally left office.

JERSEY CITY AND PROFESSIONAL BASEBALL

Hague clearly saw the potential appeal that professional sports would have to Jersey City residents and as early as 1929 had planned to build a stadium that would host a variety of sports, including baseball. Roosevelt Stadium, financed as a New Deal program, was opened in 1937 and became the home of the Jersey City Giants in the International League, the top farm team of the New York Giants. The capacity of Roosevelt Stadium was approximately 25,000. Most years, opening-day attendance exceeded that, as Hague would arrange for many people to buy tickets even if seats were unavailable.

From 1937 until the late 1940s, Jersey City developed a rich tradition of supporting minor-league baseball. Probably the high point of baseball in Jersey City was Jackie Robinson's professional debut, with the Montreal Royals, against the Jersey City Giants in 1946. Robinson went 4-for-5 with a home run in a 14–1 Royals victory. The attendance for Robinson's game was announced as 52,000.

In 1947 the Jersey City Giants drew more than 300,000 but, with the advent of televised baseball and the rise of car ownership, making the three major-league teams in New York easily accessible to more people in the suburbs, attendance dwindled to fewer than 100,000 in 1950. The Jersey City Giants moved to Ottawa in 1951. From 1951 to 1956, no professional baseball games were played in Roosevelt Stadium, where the main fare was high-school football games and weekly stock-car races.

It should also be noted that the only public transportation to Roosevelt Stadium on the southwest side of Jersey City was by bus. Fans from New York City would have to use buses or the Hudson Tubes, a subway through tunnels under the Hudson River. New Jersey residents from outside of Jersey City would probably have to drive.

THE JERSEY CITY RESPONSE

An announcement on August 16, 1955, appeared to indicate that the Dodgers and Jersey City had a deal, but no contract was signed yet, as the financial and operating arrangements between the club and the city still needed to be negotiated. There was some resistance on the part of certain Jersey City officials as they pointed out that, given the loss of stock-car revenues, the deal could cost the city.[13] However, it does appear that, by the end of August, the intent of both the city and the club was for the Dodgers to play some home games in Jersey City during 1956 and 1957.

On December 1, 1955, it was finally announced at a press conference in Brooklyn that an agreement had been reached between the Brooklyn Dodgers and Jersey City. The Dodgers would play seven regular-season games and one exhibition game in Jersey City in 1956.[14] Seven regular-season games would be played in 1957 and 1958 as well, with an option to continue the agreement for three additional years beyond that. The agreement stipulated that the Dodgers would rent Roosevelt Stadium for an annual fee of $10,000. The Dodgers also agreed to absorb the cost of making the stadium ready for major-league baseball. The Dodgers were to receive all parking revenue. In making the announcement, O'Malley added that the Dodgers would not play in Ebbets Field in 1958 and could play the entire season in Jersey City if the new stadium in Brooklyn were still under construction. Initially the Dodgers had wanted to sell each season's seven or eight games as a package but in the end agreed that fans could buy tickets to individual games.[15]

Actually, the lease allowing the Dodgers to play in Jersey City was not officially signed until January.[16] Apparently, a supplementary agreement had to be worked out concerning a split in income, between Jersey City and the Dodgers, from non-Dodger events that took place in Roosevelt Stadium but that the Dodgers promoted.

Despite the interval between the initial announcement in August and the press conference in December, and then between that and the signing of the lease in January, no major issues appeared to be deterring the Dodgers from playing in Jersey City in 1956. Part of the delay can be explained by O'Malley's involvement in the 1955 pennant race that led to the Dodgers' first World Series title, while Bernard Berry, the mayor of Jersey City, went to Europe on a six-week vacation. Excitement and civic pride at news that the Dodgers would play began to mount. When Berry returned to Jersey City after his vacation, he described the finalizing of the Dodger deal as a priority.[17]

THE DODGERS IN JERSEY CITY, 1956

The first game played in Jersey City was on April 19, 1956, when the Dodgers beat the Phillies before 12,214 very cold fans.[18] The attendance was disappointing, as initially it was thought the game would be a sellout.[19] On April 17, there was an attempt to promote the game in the local newspaper, which stressed to the fans of Jersey City that poor crowds would hurt Jersey City's chances for future opportunities.[20] After the first

game, several of the Dodgers indicated they felt that the fences at Roosevelt Stadium were not too friendly.[21] Jackie Robinson, who was jeered there, was particularly unhappy.[22]

Table 1. Dodger Games in Jersey City, 1956

Date	Opponent	Attendance	Winning Team	Score
Apr 19	Phillies	12,214	Dodgers	5–4
May 16	Cardinals	22,071	Dodgers	5–3
June 25	Cubs	20,602	Dodgers	3–2
July 25	Redlegs	23,454	Dodgers	2–1
July 31	Braves	26,141	Dodgers	3–2
Aug 7	Pirates	17,504	Dodgers	3–0
Aug 15	Giants	26,385	Giants	1–0

As can be seen in table 1, after that first game, attendance at each successive game increased, except for the August 7 contest against the Pirates. The Dodgers won all but the last game, which was against the Giants. All of the games were close, and five of them were decided by one run.

The game that proved somewhat historic was that seventh game, where the Giants beat the Dodgers 1–0. Johnny Antonelli pitched the shutout, striking out 11. Antonelli, a left-hander, was probably helped by the field dimensions at Roosevelt Stadium. The Dodgers were known to hit left-hand pitchers quite well in Ebbets Field, with its short left-field fence. The winning (and only) run in this game was a Willie Mays home run, the first fair ball ever hit out of Roosevelt Stadium.[23]

The average attendance for the Jersey City games was 21,196, about 5,400 more than for for the games played at Ebbets Field that year. And so, from all perspectives, the season in Jersey City proved successful, although it was somewhat surprising that only the games against the Braves and the Giants were sellouts.

O'Malley commented on the Jersey City experiment in August 1956. After some rumors that the Dodgers might increase the number of games they would play at Jersey City in 1957, O'Malley said, "All things considered, I think we've given Jersey City the right number of games." O'Malley added that "the way I look at it we've had about two games that attracted peak crowds while all the others were about average." Given the unresolved stadium situation in Brooklyn, O'Malley did concede that "Jersey City must be considered in the Dodgers future plans—that is, in a limited sort of way."[24] O'Malley's enthusiasm for the experiment in Jersey City appeared to be waning.

NO LONGER A THREAT

The Dodgers' move to Jersey City prompted New York City and Brooklyn to respond. Mayor Robert Wagner immediately scheduled a meeting for August 19, 1955, three days after the initial announcement about the Jersey City deal. The meeting was to include O'Malley, Cashmore, and Moses.[25] In the meeting's aftermath, $100,000 was appropriated by New York City's Board of Estimate to study the Atlantic–Flatbush site as a possible location for a new stadium. While the study was being conducted over the next few months, the Dodgers and Jersey City were finalizing their agreement for the next three seasons.

On February 6, 1956, a proposal was finally presented as a bill to the New York State legislature to establish the Brooklyn Sports Center Authority (BCSA), a public authority that was empowered to raise $30 million in bond sales to clear the area and build a new ballpark. The bill gained legislative approval on March 21 and 22, 1956, and Governor Harriman signed it into law in April.[26] But the BCSA was beset with problems and did little to move the project forward. By December 1956 the BCSA was requesting additional funds to continue their efforts.

During the 1956–57 offseason, the Dodgers sold Ebbets Field to the city.[27] While they no longer owned it, they could still lease it, although that did little to curb speculation that the Dodgers might not be playing there after the 1957 season.

While the BCSA was having its issues and as plans were being made to sell Ebbets Field, the Dodgers went to Japan on a goodwill tour following the 1956 season. Flying to Japan, the Dodgers stopped in Los Angeles first. There O'Malley met with Kenneth Hahn, the Los Angeles County supervisor. It was the Dodgers' first serious meeting with Los Angeles officials about moving the Dodgers there. According to Hahn, he had a handshake agreement with O'Malley that the Dodgers would move to Los Angeles, although exactly when that informal agreement was struck is unknown.[28]

A major deterrent to any major-league franchise moving to Los Angeles was that Philip Wrigley and his family owned the minor-league franchise and stadium in Los Angeles. O'Malley negotiated with Wrigley and they swapped minor-league franchises, O'Malley taking over in Los Angeles, and Wrigley in Fort Worth, which had been the Dodgers' double-A minor-league team. Wrigley assumed ownership of the Fort Worth Stadium as well.[29]

Clearly, O'Malley by this point had his sights set on the West Coast. Was he only posturing to pressure New York City to act, or had he made up his mind to relocate? While he continued to state that he wanted to stay in Brooklyn, his chief antagonist, Robert Moses, reiterated that there are no viable sites there. Moses

did finally meet with O'Malley early in 1957, and they discussed the possibility of a ballpark in Flushing Meadows in Queens. During the next few months, both Moses and O'Malley indicated some interest in the Flushing Meadows plan, but O'Malley raised concerns about the site.[30] A few years later it would become the site of Shea Stadium, home of the New York Mets from 1964 through 2008.

It had now become a distinct possibility that the Dodgers would be leaving Brooklyn. On May 28, 1957, the National League owners met and gave their blessing to the relocation of the Dodgers and the Giants to the West Coast.[31] It appears that the National League insisted on the relocation of both teams, not just one, travel costs being the main consideration, although Warren Giles, National League president, later denied the two-team stipulation. The National League also created an end-of-season deadline for decisions to be made about any franchise relocations. Mayor Wagner convened the various parties on May 4, 1957, in New York. As in the past, no progress was made with respect to an agreement about a new stadium.

In June 1957, the Antitrust Subcomittee (of the House Judiciary Committee), chaired by Emanuel Celler, a Democrat from Brooklyn, was convened to investigate why baseball was not covered by antitrust legislation while other sports were. In 1922, the U.S. Supreme Court, in a unanimous decision, argued that baseball was not interstate commerce, Oliver Wendell Holmes making the casethat "personal effort, not related to production, is not a subject of commerce."[32]

O'Malley testified before the subcommittee and painted himself a victim. He claimed that New York officials had stymied his efforts to stay in Brooklyn while Los Angeles officials were united in their resolve to provide the Dodgers with a ballpark. The Dodgers, Celler pointed out, were profitable. O'Malley agreed but stressed the issues with Ebbets Field. He said that he didn't know where the Dodgers would be playing the next year but that he had made no preparations to move to Los Angeles. Those words come back to haunt him, as he had already purchased the Los Angeles Angels and their stadium and had taken other steps to determine the viability of Los Angeles as a home for the Dodgers.[33]

All eyes turned to the New York Giants. Horace Stoneham, the Giants' owner, had made it clear that the Polo Grounds were no longer suitable. Attendance had fallen significantly since the Giants won the World Series in 1954. Stoneham originally had his sights on the Twin Cities, Minneapolis–St. Paul. Minneapolis was the Giants' top farm team. Neither the Giants nor the City of New York entered into any serious discussion about a new facility for the Giants. The possibility that the Giants would play games in Yankee Stadium was raised but dismissed, as it was assumed that the Yankees would not want to share their stadium.

Seizing the opportunity, San Francisco entered negotiations with Horace Stoneham. On August 7, 1957, the Giants announced that they would become the San Francisco Giants.[34] However, the Dodgers' situation had yet to be resolved, and so the Giants had to wait.

COURTESY JERSEY CITY FREE PUBLIC LIBRARY

The first game the Dodgers played in Jersey City was on April 19, 1956, when they beat the Phillies before 12,214 very cold fans. The attendance was disappointing, as initially it was thought the game would be a sellout. The only sellouts, at about 26,000, were the games against the Braves and the Giants, although for the seven games as a whole the Dodgers did average about 5,400 more in attendance than they did at Ebbets Field. The Dodgers in Jersey City in 1956 went 6–1. In their last game there that season, they lost to the Giants 1–0.

Los Angeles had proposed Chavez Ravine as the location for the new ballpark, but there was some opposition to the terms of the agreement, and negotiations continued late into the summer of 1957. Los Angeles needed to come to final terms with both the Dodgers and the local parties who were raising opposition.

MEANWHILE—JERSEY CITY IN 1957

While the future of the Dodgers was uncertain, they did play their handful of games in Roosevelt Stadium in 1957.

Table 2. Dodger Games in Jersey City, 1957

Date	Opponent	Attendance	Winning Team	Score
Apr 22	Phillies	11,629	Dodgers	5–1
May 3	Cardinals	14,470	Dodgers	6–0
June 5	Cubs	9,712	Dodgers	4–0
June 10	Braves	22,412	Braves	3–1
July 12	Redlegs	23,472	Dodgers	3–1
Augt 7	Giants	25,913	Giants	8–5
Augt 16	Pirates	9,592	Dodgers	4–1
Sept 3	Phillies	10,910	Phillies	3–2

As can be seen in table 2, the Dodgers won five of eight games in Jersey City in 1957. They played the Phillies twice, although the initial agreement called for each National League team to visit Jersey City only once. Again, the Giants were the biggest draw and, to the delight of Giants fans, once again beat the Dodgers. The average attendance, 16,014, was less than in 1956 but still higher than the average attendance at Ebbets Field.

The Jersey City games in 1957 began with both the Dodgers and the fans in a more positive frame of mind. After the April 22 game, players said nice things about the field, and the fans appeared friendly.[35] Jackie Robinson, the target of much of the hostility in 1956, was no longer with the Dodgers, having retired after being traded to the Giants following the 1956 season.

The only sellout in 1957 was for the game against the Giants. Passions ran high, as fans booed Don Newcombe for his performance and he allegedly spit at them. Newcomb later said he didn't "give a damn" if he ever pitched in Jersey City again.[36]

Attendance for the last two games in Jersey City was poor. The Dodgers continued to fall further behind in the pennant race, and moreover it grew increasingly clear that they weren't going to play in Jersey City in 1958. Attendance at the final two games was only 9,592 and 10,910. Before the final game, against the Phillies on September 3, the local newspaper offered that Jersey fans would get their final glimpse of the Dodgers that night, adding that whether they would be back in Brooklyn next year was doubtful.[37] After this final game, some of the players, sounding frustrated, said they hoped they wouldn't have to play in Jersey City the next year.[38]

THE DODGERS MAKE IT FINAL

In August and September of 1957, as Los Angeles and the Dodgers were putting the final touches on their negotiations, steps were being taken back in Brooklyn

COURTESY JERSEY CITY FREE PUBLIC LIBRARY

Mayor Bernard J. Berry throws out the first pitch at the Dodgers–Phillies game, April 19, 1956, the first of fifteen games—fourteen regular-season, one exhibition—that the Dodgers would play at Roosevelt Stadium during the 1956 and 1957 seasons. Late in the 1957 season, when the Dodgers had fallen back in the pennant race, the rumor that they would soon leave for the West Coast was mounting, and in Jersey City the expectation that they would not be playing any games at Roosevelt Stadium the next season began to settle in.

to try to stop the club from moving. A financier offered to buy the Dodgers and keep them in Brooklyn. The Dodgers declined. Nelson Rockefeller, the future governor of New York, advanced a proposal involving him both in the ownership of the club and in the building of a ballpark. In addition, a legal opinion by the Corporation Counsel of the City appeared to circumvent the stranglehold that Robert Moses had over the Atlantic–Flatbush site. All these efforts had collapsed by late September.[39]

Los Angeles officials and the Dodgers finally reached an agreement. The Dodgers would receive approximately 300 acres of land at Chavez Ravine, including site-preparation and access roads, while the city would receive Wrigley Field from the Dodgers. Los Angeles would be the new home for the Dodgers if two-thirds of the Los Angeles city council agreed to the deal. On October 7, 1957, the council voted 10–4 in favor, and Walter O'Malley announced that the Dodgers were leaving Brooklyn.[40]

CONCLUSION

In this long saga of the Dodgers, Brooklyn, and Los Angeles, what role did Jersey City play? Why did the Dodgers play some of their home games there in 1956 and 1957? What did Jersey City expect to gain from the relationship?

These are difficult questions. O'Malley's objectives for playing games in Jersey City were never clearly stated. Before Celler's subcommittee, he remarked that he had already sold Ebbets Field and that Jersey City had provided a site for home games in 1958. But it was in 1955, about a year before he sold Ebbets, that he announced his decision to schedule some games in Jersey City. For some time already, he may have had his mind set on selling Ebbets Field and so thought it helpful to test the waters in Jersey City.

Obviously, with his announcement about Jersey City, O'Malley wanted to put pressure on New York officials. Being a shrewd businessman, he also saw an opportunity to increase profit. The Dodgers received both the gate receipts in Jersey City and the parking fees. The difference between these revenue streams and what they would have been for the same games at Ebbets Field was greater than $10,000, the cost of the lease to Roosevelt Stadium.

Jersey City politicians and officials were enthusiastic about the Dodgers playing some of their home games there. Always under the shadow of New York City, Jersey City could now claim to be major-league. The presence of the Dodgers there boosted civic pride, was good for local businesses, and could, one could have speculated, also open other doors for more baseball in Jersey City.

Jersey City fans, though, never did fully warm to the Dodgers. Obviously, there was still significant support for the New York Giants in 1956 and 1957, as Jersey City was the Giants' triple-A farm team for many years. This may have been why the Dodgers sold out there only when they played the Giants.

If O'Malley's rationale for being in Jersey City was to determine if it would support the Dodgers while a new stadium was being built in Brooklyn, the attendance figures probably gave him pause. It is not inconceivable that both O'Malley and Jersey City politicians thought that sellouts for these seven games would be the norm. In his interview in August 1956, O'Malley points out that Jersey City would not see more Dodger games in 1957, as the attendance at all but two of the games in 1956 had been only average. It is fair to say that extending the seven games to a full season in Jersey City would probably have resulted in the Dodgers' season attendance taking a steep dive.

It should be reiterated that one of the reasons for attendance problems in Jersey City was that Roosevelt Stadium was hard to get to from New York City. On mass transit, you could get to Journal Square in Jersey City, the hub, fairly easily but then had to endure a long bus ride to the stadium. The drive to Roosevelt Stadium was also difficult, since you had to traverse Manhattan; the Verrazano Bridge had not yet been built. The experience of 1956 and 1957 probably convinced Dodgers' management that Jersey City was not a good option if in 1958 they needed a ballpark while a new one was being built back in Brooklyn.

The Dodgers in Jersey City was an interesting sidebar to the whole issue of the Dodgers and Giants moving to the West Coast. While cynics dispute O'Malley's intentions, I think that as late as 1956 he was resolved to keep the Dodgers in Brooklyn. But he probably never realized how difficult it would be to deal with the political issues surrounding the building of a new facility in Brooklyn. The Jersey City experiment probably illustrates this naiveté. The Dodgers playing games in Jersey City did not really create a sustainable sense of urgency among New York politicians and officials.

Jersey City received $15,000 when the Dodgers broke their lease to play games at Roosevelt Stadium in 1958. When International League president Frank Shaughnessy identified Jersey City as a likely site for an IL franchise, local citizens had hopes of seeing professional baseball return to their city in 1958.[41] But first the city had to come to terms with an existing

International League club that would agree to the relocation. The Yankees were confusing the issue, as Jersey City initially had hopes that they might play some home games there. They wouldn't, and Jersey City was without baseball in 1958. But the Havana Sugar Kings, in the middle of the 1960 season, after unrest at some games in Havana, did move to Jersey City.

While Major League Baseball has survived the Dodgers' relocation to Los Angeles, Brooklyn did suffer. The 1960s and 1970s were not kind to the borough. Civil unrest and deteriorating neighborhoods were the norm. The loss of the Dodgers contributed to the malaise. In recent years, Brooklyn has revived, as many neighborhoods have been gentrified. The Brooklyn Cyclones, a single-A team of the New York Mets, play in Coney Island. To many of the younger residents, the Dodgers are a distant memory. Jersey City had a similar experience with significant deterioration in the city's housing and infrastructure in the 1960s and 1970s. Since then, the waterfront area, Liberty State Park, and a championship golf course have been developed. Several Wall Street firms have located back offices in Jersey City. Given Jersey City's proximity to New York City, the downtown area has seen gentrification. But Ebbets Field and Roosevelt Stadium are no more, and city life is not quite the same. ■

Notes

This article is adapted from a presentation given at the Seymour Medal Conference, April 2009.

1. Lee Lowenfish, "A Tale of Many Cities: The Westward Expansion of Major League Baseball in the 1950s" *Journal of the West* 17, no. 3 (July 1978): 77.
2. Michael D'Dantonio, *Forever Blue: The True Story of Walter O'Malley, Baseball's Most Controversial Owner, and the Dodgers of Brooklyn, and Los Angeles* (New York: Riverhead Books, 2009), 175.
3. Ibid.
4. Ibid., 176
5. Ibid., 212.
6. Vincent X. Flaherty to Walter O'Malley, letter, 20 October 1953, Walteromalley.com / Historic Documents, Business Correspondence.
7. Robert L. Murphy, *After Many a Season-The Passing of the Giants and Dodgers and a Golden Age in Baseball* (New York: Sterling, 2009), 123.
8. Ibid.
9. Ibid., 123–24.
10. T. Holmes, *New York Herald Tribune*, 17 August 1955, 1.
11. R. Graf, "Dodgers Fans Cool To Jersey City Games," *New York World-Telegram and Sun*, 17 August 1955, 1.
12. New Jersey City University, www.njcu.edu/programs/jchistory/Pages/H-Pages/Hague_Frank,htm.
13. "Jersey City Wary of Dodger Offer," *New York Times*, 21 August 1955, 39; J. O. Haff, "Dodger 'Package' Irks Jersey City," New York Times, 31 August 1955, 23.
14. J. Powers, "Dodgers Agree on Jersey City; To Play 24 Games in 3 Years," *Jersey Journal and Jersey Observer*, 1 December 1955, 1.
15. J. Powers, "Dodgers Move Big Break for Fans," *Jersey Journal and Jersey Observer*, 2 December 1955, 9.
16. "Big League Here! Dodgers Sign Up," *Jersey Journal and Jersey Observer*, 24 January 1956, 1.
17. "Back at Desk, Berry Eyes Dodger Pact," *Jersey Journal and Jersey Observer*, 24 October 1955, 1.
18. Arthur Daley, "Sports of The Times: At Home on the Road," *New York Times*, 20 April 1956, 29.
19. "Sellout Looms for Dodger First Game," *Jersey Journal and Jersey Observer*, 7 February 1956, 12.
20. J. Powers, "Jersey City Can Show Up Brooklyn," *Jersey Journal and Jersey Observer*, 17 April 1956, 15.
21. J. Lang, "Dodgers Say Fence Too Far, Fans Too Rough," *Jersey Journal and Jersey Observer*, 20 April 1956, 22.
22. E. Brennan, "Jackie Robinson Blows Cork at Jersey City Fans," *Jersey Journal and Jersey Observer*, 20 April 1956, 22.
23. J. Lang, "Stumbling Giants Come to Life at Sight of Dodgers," *Jersey Journal and Jersey Observer*, 16 April 1956, 25.
24. E. Brennan, "Increase in Games Not Likely Says O'Malley," *Jersey Journal and Jersey Observer*, 8 August 1956, 18.
25. Murphy, 130.
26. Ibid., 140–43.
27. Neil J. Sullivan, *The Dodgers Move West* (New York: Oxford University Press. 1987), 77.
28. Ibid., 87.
29. Lowenfish, 78.
30. Murphy, 201.
31. J. M. Sheehan, "Dodgers, Giants Win Right to Shift if They So Desire," *New York Times*, 29 May 1957, 1.
32. David Greenberg, "Baseball's Con Game: How Did America's Pastime Get an Antitrust Exemption?" Slate, 19 July 2002 (www.slate.com/id/2068290).
33. Sullivan, 123–25.
34. B. Becker, "Giants Will Shift to San Francisco for 1958 Season," *New York Times*, 19 August 1957, 1.
35. A. Maurer, "Dodgers Happy With Field, Friendly Fans," *Jersey Journal and Jersey Observer*, 23 April 1957, 15.
36. J. Lang, "Newk As Unpopular in JC as He Is Everywhere Else," *Jersey Journal and Jersey Observer*, 8 August 1957, 24.
37. "Dodgers Play Final Tilt of Season Here Tonight," *Jersey Journal and Jersey Observer*, 3 September 1956, 16.
38. J. Lang, "Players Hope Flock Moves . . . Out of Jersey City!" *Jersey Journal and Jersey Observer*, 4 September 1957, 23.
39. P. Crowell, "Rockefeller Bid to Help Dodgers Ends in Failure," *New York Times*, 21 September 1957, 1.
40. G. Hill, "Dodgers Pact Wins Los Angeles Vote," *New York Times*, 8 October 1957, 1.
41. M. Kerzner, "Jersey City Making Pitch for Return of Baseball Next Season," *Jersey Journal and Jersey Observer*, 9 October 1957, 62.

The Green and the Blue

The Irish American Umpire, 1880–1965

David Fleitz

The Irish potato famine of the 1840s and '50s was probably the greatest human tragedy of the nineteenth century. After a nearly total failure of Ireland's potato crop in 1845, followed by successive years of poor harvests, more than a million and a half Irish—nearly 20 percent of the island's population—died of starvation from 1845 through 1851. In the nine years immediately following the onset of the famine, some 2,164,000 Irish men, women, and children emigrated to the New World, and the total number of Irish who made the passage by the end of the nineteenth century topped three and a half million.

Most Irish immigrants spoke English, which gave them an advantage over new arrivals from Germany, Italy, and Eastern Europe. Though their life was hard in the New World, they managed to add a distinctive Irish flavor to the American "melting pot," as Irish immigrants raised families, built communities, fought in the "Irish brigades" in the Civil War, and made a place for themselves in their adopted country.

Hundreds of thousands of these Irish immigrants were young men, and their arrival created a new stream of participants in America's most rapidly growing sport. Baseball provided an opportunity for the Irishman to participate in and excel at something distinctly American. While the older generation could not always understand this strange new pastime and its appeal, their young men embraced it with enthusiasm. Before long, Irish names began popping up on rosters of amateur teams, especially in Brooklyn, Philadelphia, and northern New Jersey. Irish American laborers and millworkers formed their own clubs, and their children played the game in vacant lots and pastures.

Sports and games had been an important part of Irish civilization long before the upheaval caused by the famine. Gaelic football, a cross between soccer and rugby, was known in medieval times, while hurling, a stick-and-ball game that resembles lacrosse, had been played in some form in Ireland for more than two thousand years. The Irish came to America, said historian Steven A. Riess, "with a manly athletic tradition and quickly became avid sports fans and athletes in their new country."[1]

Professional baseball, which took root in America shortly after the Civil War, was attractive to the ambitious Irishman. It matured just as a new generation of Irish Americans, the children of the famine refugees, reached adulthood, and it did not take long for the Irish to gain a foothold in the increasingly popular sport. Many of the game's early stars were either Irish-born or sons of immigrants—the Hall of Fame includes twenty-four Irish American players from the nineteenth century. By 1885, according to statistics compiled by Hall of Fame historian Lee Allen, more than 40 percent of all major-league players claimed Irish ancestry.[2]

It comes as no surprise, then, that the Irish would come to dominate the umpiring ranks as well.

Why were the Irish attracted to umpiring? Most likely, for the same reasons they were attracted to ballplaying. Baseball became a profession in the 1870s, just as thousands of Irish Americans were looking for both work and a place in American society; when umpiring became a profession during the 1880s, it became attractive to the Irish for the same reasons. In a time when too many occupations were closed to

NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

When confronted by a player or manager, Tim Hurst would offer to settle the matter with his fists, challenging the offender in his rich Irish accent. They called him "Sir Timothy" for his bearing and "Terrible Tim" for his temper.

BOSTON POST, 6 AUGUST 1897

Tom Lynch was widely admired for his honesty and integrity in an era when umpires were increasingly the target of player rowdiness and fan violence. But he could be pushed past his limits. On August 6, 1897, he got into a fistfight with Baltimore's Jack Doyle.

immigrants and their families, the Irish were looking for occupations they might be accepted in, and baseball had already proven itself welcoming to the Irish. Baseball, too, was growing; the number of teams, major and minor, increased sharply during the 1880s, creating a new demand not only for players but also for competent game officials. The Irish filled these positions with enthusiasm.

Research shows that many, indeed most, of the outstanding umpires of the period 1880–1920 were second-generation Irish. Some of these men were amateur and minor-league players who had failed to advance to major-league ball and turned to umpiring as a way to remain in the game they loved. A few—Bill Dinneen, George Moriarty, and Hank O'Day among them—had been fine major-league players themselves and sought to extend their time in the big leagues by serving as arbiters. Men such as these might umpire in the majors for thirty years or more after they played their last games.

The first great umpire, John Gaffney, was an immigrant's son from Roxbury, Massachusetts. He was a fine amateur player whose career had ended in the winter of 1880 when he hurt his arm throwing a snowball. Wanting to stay in the game, he became an umpire instead, and by 1886 his work in the National League had won him general recognition as the "King of Umpires." The American Association had its own claimant to that title, "Honest John" Kelly, a New Yorker who was also the son of immigrants. Kelly had played in the National League in 1879 but batted only .155 and was convinced he would not succeed as a player. He turned to umpiring instead.

Gaffney and Kelly set the tone for the Irish American umpires who followed. Both were former players, second-generation Irishmen, and masters of the strike zone and the rule book. Both men ruled the field with their presence and personality, though Kelly may have had another angle working in his favor. An umpire's personal popularity played a key role in his success or failure during the 1880s, when fan rowdiness increased to alarming levels, and John Kelly proved highly popular with the crowds. Perhaps Kelly gained favor and kept the peace by being something of a "homer"—researchers have found that, in 1884, the home team won more than two-thirds of the games he presided over.[3]

Gaffney used patience and tact to control a game. "With the players I try to keep as even tempered as I can," Gaffney explained, "always speaking to them gentlemanly yet firmly. I dislike to fine, and in all my experience have not inflicted more than $300 in fines, and I never found it necessary to order a player from the field. Pleasant words to players in passion will work far better than fines."[4]

Another second-generation Irishman, Tim Hurst, took a different tack. A coalminer's son from Pennsylvania, Hurst had worked in the mines himself and learned to hold his own with his fists. He carried this attitude into a career as a boxing referee and, later, as a baseball umpire. He took no abuse from anyone. When threatened by a player or manager, Hurst would offer to settle the matter with his fists, challenging the offender in his rich Irish accent. They called him "Sir Timothy" for his bearing and "Terrible Tim" for his temper, and few players elected to punch it out with him. In 1897 he took on three Pittsburgh Pirates at once and whipped them all soundly. Still, he knew the rule book and commanded instant authority, though some players found his conversation so entertaining that they purposely baited him just to hear him argue in his Irish brogue. When asked why he wore a cap with a letter B on it, Hurst replied, "Because I'm the best."

The game changed as the new century dawned, but Hurst refused to change with it. He remained the same battler he had always been, even after joining the American League staff in 1905. His career ended in 1909 when he spit in the face of Philadelphia's Eddie Collins because, as he said, "I don't like college boys." Still, Connie Mack, who managed the Pirates during the 1890s, said, "Hurst lost his head at times, and this was eventually his undoing, but he did more to stamp

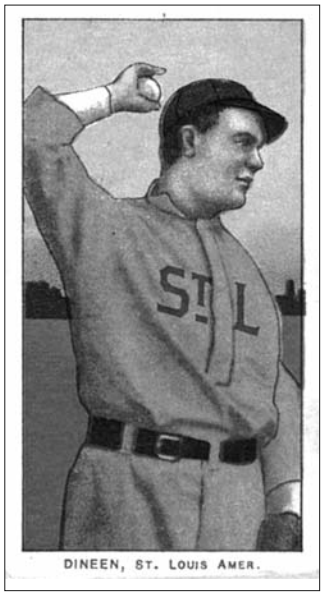
out rowdyism than any other official I have known. He was fearless and one of the gamest men who ever handled an indicator."[5]

One Irish umpire who had a rough time of it was Tom Lynch, who joined the National League staff in 1888. Lynch was widely admired for his honesty and integrity in an era when umpires were increasingly the target of player rowdiness and fan violence. He did not take abuse from anyone, and, though he was not an enthusiastic fighter like Hurst, he could be pushed past his limits. On August 6, 1897, he got into a fistfight on the field with Baltimore's Jack Doyle during a hotly contested game at Boston, an incident suggesting that among the Irish there was little ethnic solidarity on the diamond at that time. Two years later, tiring of the constant abuse and lack of backing from the league, he resigned and took a job as a theater manager in his hometown of New Britain, Connecticut.

Ten years later, the National League was looking for a man of integrity to take over as league president and offered the job to the long-retired Lynch, who served in that position for the next four years. Not surprisingly, he strongly supported his umpires, even against his bosses, the club owners.

Lynch, not a man to hold grudges, hired Jack Doyle as an umpire on the National League staff in 1911. Lynch paired Doyle with the veteran Bob Emslie, another arbiter who had often clashed with Doyle years before. Doyle was not a good umpire, lasting only half a season, but, as Christy Mathewson remarked, "Emslie and [Doyle] got along like Damon and Pythias. This business makes strange bed-fellows."[6]

The percentage of Irish players in baseball dropped as more German and Eastern Europeans entered the game, and by 1900 the Irish were no longer the largest ethnic group on the playing field. However, their presence in the umpiring ranks remained steady for several decades to come. Perhaps the reason is that umpires have longer careers than players; perhaps also the Irish American umpires in the last two decades of the nineteenth century set an example that other Irish American men sought to follow.



Bill Dinneen pitched for 12 seasons and umpired for 28 more. He is the only major leaguer in history to throw a no-hitter as a pitcher and call one as an umpire. In 1902, when he hit John McGraw with a pitch, umpire Jack Sheridan—Sheridan had tangled with McGraw when both were both in the National League—refused to let the batter take his base, claiming that he didn't try hard enough to get out of the way.

One outstanding umpire in the early years of the twentieth century was Jack Sheridan, a man so Irish in appearance and manner that people assumed he was born on the island. He was actually a native of Chicago and grew up in San Jose, California. He had been roughly treated in the National League during the 1890s, so he joined Ban Johnson's Western League later that decade. He was the best arbiter on Johnson's staff and umpired in the American League from 1900 to 1914.

Sheridan had a few idiosyncrasies. He wore no chest protector behind the plate, because he was nimble enough to jump away from foul balls. His strike-three call was totally his own. He would make an exaggerated gesture with his arms and bellow, "Strike three! San Jose, California! The garden spot of America!" Sheridan had battled a fellow Irishman, John McGraw, in the National League, and their feud continued when both men found themselves now in the American League in 1901. On May 1 of the following year, Boston pitcher Bill Dinneen hit McGraw with a pitch, but Sheridan refused to allow McGraw to take his base, claiming that McGraw hadn't tried hard enough to get out of the way.[7]

McGraw disliked Sheridan personally but respected him professionally. In 1913, McGraw and Charlie Comiskey took their teams, the Giants and White Sox, on a round-the-world exhibition tour. Wanting the two best umpires to accompany them, they chose Bill Klem and Jack Sheridan.

Two other outstanding Irish American umpires of the era were Bill Dinneen and Hank O'Day. Both of them were pitchers who extended their baseball lives through umpiring. Dinneen pitched for twelve seasons and umpired for 28 more. O'Day pitched for seven seasons and umpired for 31, his umpiring career interrupted by two seasons as a manager. Both men are answers to great trivia questions. Dinneen is the only major leaguer in history to throw a no-hitter as a pitcher and call one as an umpire. O'Day is best known as the arbiter who called Fred Merkle out at second base in the pivotal Giants–Cubs contest of September 23, 1908. He was also the only umpire who ever ejected Connie Mack from a game, which he did in 1895.

NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

Jack Sheridan, an outstanding umpire in the early years of the twentieth century, was a man so Irish in appearance and manner that people assumed he was born on the island. He wore no chest protector behind the plate, because he was nimble enough to jump away from foul balls. His strike-three call was totally his own. He would make an exaggerated gesture with his arms and, in an affectionate gesture toward his hometown, would bellow, "Strike three! San Jose, California! The garden spot of America!"

In 1946 the Baseball Hall of Fame instituted the Honor Rolls of Baseball, a secondary level of recognition, that includes 39 men—managers, umpires, executives, and sportswriters. Of the 11 umpires on the list of honorees, seven (Dinneen, Sheridan, Hurst, Kelly, Gaffney, Lynch, and Frank "Silk" O'Loughlin) were Irish Americans, while the unaccountably missing Hank O'Day certainly should have been the eighth. (Another honored umpire, Tommy Connolly, was born in England but may well have also been Irish.)

Another player-turned-umpire, George Moriarty, grew up in Chicago, where his immigrant father was a childhood friend of another Irishman, Charlie Comiskey. Moriarty reached the majors as a third baseman in 1903, having already earned a reputation as a fighter of the first rank. When he joined the Detroit Tigers in 1909, Ty Cobb challenged him to a fight. Moriarty handed Cobb a bat. "A fellow like you," said the young third baseman, "needs a bat to even things up when fighting an Irishman." Cobb wisely backed off.

In 1917, his playing career over, Moriarty joined the American League umpiring staff, remaining until 1940. *A Sporting News* poll in 1935 rated him the best umpire in the league. One day in 1932, he took a page from Tim Hurst's book when he fought four Chicago White Sox (three players and the manager) all at once after a hotly contested game in Chicago. Moriarty emerged with a broken wrist but managed to hold off all his assailants despite being nearly twice the age of the players involved.

Moriarty was so esteemed as a baseball man that he took a two-year hiatus from umpiring in 1927–28 to manage his old team, the Detroit Tigers. He was one of several Irish Americans— John Gaffney, John Kelly, Hank O'Day, and Tim Hurst—who interrupted their umpiring careers to manage major-league clubs.

The last of the great Irish American umpires was Jocko Conlan, another ex-player who turned to umpiring as a way to stay in the game. While riding the bench for the White Sox in 1935, he filled in for an umpire who had become ill in the summer heat. Conlan liked the work and shortly afterward retired as a player and gained a minor-league umpiring job. In 1941 he joined the National League staff and remained for 24 years. In contrast to many of the umpires in baseball today, Conlan was only five feet and seven inches tall and weighed about 160 pounds. He kept order on the field with his personality and his hustle and by making quick, correct decisions in an authoritative manner.

The most famous Conlan story involves Leo Durocher, who was coaching for the Dodgers in 1961 when he ran out to argue with Conlan at home plate. Durocher kicked at the dirt and accidentally hit Conlan in the shins; Conlan kicked Leo back, and the two men stood at the plate kicking each other until Durocher realized that Jocko was the home-plate umpire and was wearing shin guards and steel-toed shoes.

Conlan was elected to the Hall of Fame in 1974, the fourth umpire so honored. He was among the last of a breed. By the time he died in 1989 at age 89, the Irish American dominance of the umpiring profession had long since passed into history. ■

Notes

1. This article is adapted from a presentation the author gave on July 31, 2009, at the 39th annual SABR convention in Washington, D.C., and from his book *The Irish in Baseball: An Early History* (Jefferson, S.C.: McFarland, 2009).
   Ron Kaplan, "The Sporting Life," *Irish America*, February–March 2003.
2. Robert F. Burk, *Never Just a Game: Players, Owners, and American Baseball to 1920* (Chapel Hill: University of North Carolina Press, 1994), 131. Burk's data came from a study by Hall of Fame historian Lee Allen and is summarized in Allen's "Notebooks Containing Statistical Data on Baseball Players" in the Baseball Hall of Fame Library, Cooperstown, New York.
3. Larry Gerlach, "John O. Kelly," in *Baseball's First Stars*, ed. Frederick Ivor-Campbell, Robert L. Tiemann, and Mark Rucker (Cleveland: Society for American Baseball Research, 1996), 89.
4. *The Sporting News*, 25 April 1891.
5. Norman Macht, *Connie Mack and the Early Years of Baseball* (Lincoln: University of Nebraska Press, 2007), 450.
6. Christopher Mathewson, *Pitching in a Pinch*, reprint ed. (New York: Stein and Day, 1977), 177.
7. Charles C. Alexander, *John McGraw* (New York: Viking Penguin, 1988), 88.

More Thoughts on DiMaggio's 56-Game Hitting Streak

Edward Beltrami and Jay Mendelsohn

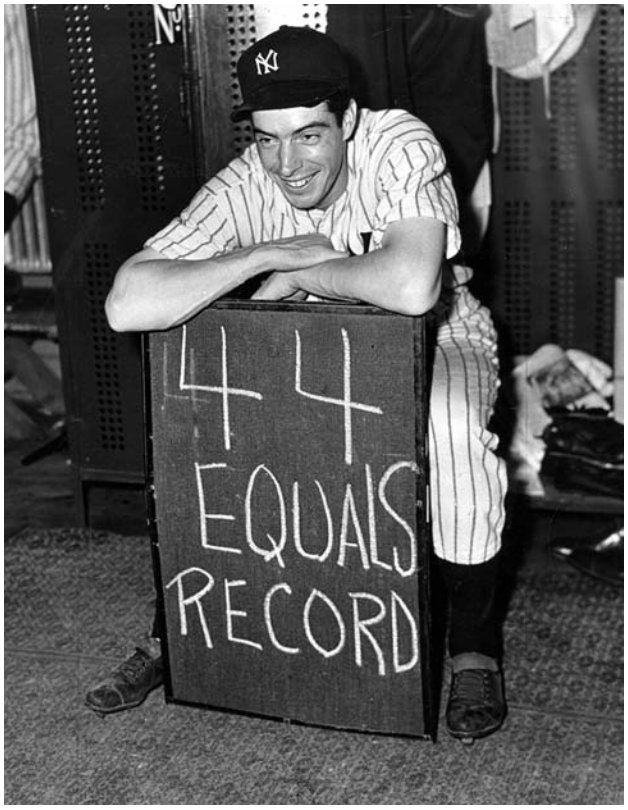
Each time a player is at bat in a game, there is a certain probability that he will get a hit or not. Probability theorists usually think about this in terms of a tossing a biased coin (that is, one whose probability of turning up heads is not equal to .5) in succession, with each toss having the same probability of being a head. A perennial question is the probability of having a run of k heads in a row in n tosses. In the parlance of baseball, the question is the likelihood of getting a streak of k games in which he gets at least one hit.

Our focus here is on a different question—namely, whether a long streak is consistent with a random coin-tossing model or if it is an exceptional event that defies the usual odds. This is a controversial topic, especially in the case of Joe DiMaggio's 56-game hitting streak in 1941. It was an unusual occurrence, but was it only a manifestation of pure chance?[1]

We want to add our voice to this discussion by being more specific about what it means for the outcome of a game to be due to chance.

A player's average performance over many games is obtained from his batting average and his average number of hits per game. From these, one extracts an estimate of his probability of getting at least one hit per game—every time he is at bat, he either gets a hit or not—and the probability of this is some constant value determined by his averages. Moreover, each at-bat is independent in outcome from all previous at-bats. This independence assumption is somewhat questionable during periods of exceptional performance (something we discuss further below), but it appears that, in the long run, over many games and many seasons, this hypothesis is not unreasonable and, as we will see, some of our results tend to support it.

We now have the components for what is known as a Poisson process (after the French mathematician S. Poisson). For a Poisson process there is a specific formula p(k) for the probability of obtaining exactly k hits: $\lambda^k e^{-\lambda}/k!$ The details of how this comes about are discussed in most texts on probability and statistics. The only point of immediate concern to us is the parameter λ, the average number of hits per game. In a season of n games in which a player gets a total of m hits, one estimates λ by m/n. In the case of DiMaggio in 1941, he played in n = 139 games and got a total of m = 193 hits, and so $\lambda = 1.39$.



NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

Joe DiMaggio's 56-game hitting streak in 1941 was an unusual occurrence, but was it only a manifestation of pure chance?

To begin the study of the phenomenon of "streak hitting," we obtained game-by-game statistics pertaining to the two major streaks in modern baseball—DiMaggio's 56-game streak in 1941 and Pete Rose's 44-game streak in 1978. In DiMaggio's case, the data had to be painstakingly culled from newspaper box scores.[2] It is possible to count how many games in the season there were either no hits, or one hit, or two hits, up to four hits (the maximum for any game, as it turned out). Whether these data are consistent with the Poisson formula is easily found by computing p(k) for k = 0, 1, 2, 3, 4 and then comparing the result to the actual number of hits. For the Pete Rose streak year, the same type of data was obtained from the Retrosheet, an invaluable source for this study and any future studies requiring daily and seasonal baseball data that are in-depth.

In order to test whether these streaks were exceptional occurrences, we made the comparison between theoretical and actual data for three sets of data in each of the streaks—the full seasons of 1941 and 1978, the streak-only data for those years, and the no-streak data. We also compared a variety of common stats such as batting average, average hits per game (this is the lambda, the one parameter of the Poisson distribution), on-base percentage, and slugging percentage. (The latter two metrics added together form OBPS.) We then were able to compare the action of the model on each of those periods and also compare the hitting statistics of the players during each of the periods, and finally we could examine two streaks for interesting similarities or difference with respect to the model fit and the players' statistics.

To test the hypothesis that the model predicted data that could be considered a reasonable representation of the actual data, we used the well known Chi Square goodness-of-fit test. If this hypothesis is rejected on the basis of the Chi Square test, then we must say that the model is not doing a good job of representing the data. Looking at the first two scenarios, we see that the Poisson assumption overestimates the number of games in which DiMaggio went hitless and underestimates the single-hit games, whereas, when the streak is removed, in the third scenario, there is actually a very good fit to the actual data (rounding to the closest integer gives a nearly perfect fit).

Using a χ^2 goodness-of-fit test, we can reject the hypothesis that the actual hit data for all games and for the streak-only games are representative of a Poisson process at the 95 percent confidence level. On the other hand, when the streak is removed, the hypothesis that the difference is entirely due to randomness (consistent, of course, with DiMaggio's skill in getting a hit, as determined by λ) cannot be rejected at the 95 percent confidence level or, in fact, at the 99 percent level. What this suggests is that the streak data and the rest of the data possibly represent two different levels of play.

This is not to say that an unusual streak cannot occur by chance alone but that the odds of this happening are minuscule (about once in 10,000 seasons)[3] and the alternate hypothesis that the streak is a sort of freak is more in keeping with the Poisson model of random behavior.

In table 2, we look at DiMaggio's batting statistics in the three periods of interest.

Comparing the in-streak data to both the full-season (obviously the streak had an effect on this) and the no-streak data, we see that, during the streak, DiMaggio's performance was far better than his lifetime averages and certainly far better than no-streak averages. Further, we see that the values for the no-streak

Table 1. DiMaggio's 56-Game Streak, 1941

	k, the number of hits				
	0	**1**	**2**	**3**	**4**
Poisson Model, Full Season (139 Games)					
Number of games, actual	24	64	31	13	7
Number of games, predicted from p(k)	34.62	48.12	33.45	15.50	5.39
Model is a poor fit to the data					
Poisson Model, Streak-Only Data (56 games)					
Number of games, actual	0	34	13	15	4
Number of games, predicted from p(k)	11.12	17.92	14.56	7.89	3.2
Model is a poor fit to the data					
Poisson Model, No-Streak Data (83 Games)					
Number of games, actual	24	30	18	8	3
Number of games, predicted from p(k)	24.26	29.84	18.35	7.52	2.31
Model provides an excellent fit to the data					

Table 2. DiMaggio's Batting Statistics, 1941

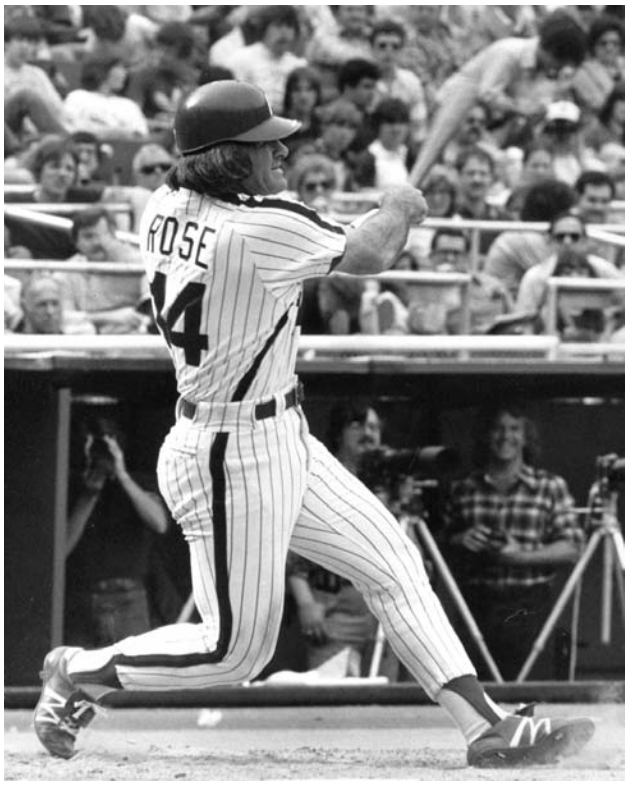
	Full Season	Streak Only	Not Including Streak	Lifetime
At-Bats	542	223	319	6,821
Hits	193	91	102	2,214
Games	139	56	83	1,736
BA	.356	.408	.320	.325
Lambda	1.39	1.63	1.23	1.28
OBP	.440	.467	.425	.398
Slugging	.643	.717	.591	.579

behavior conforms very well to the lifetime values. This adds to the suspicion that streak performance is radically different from "normal" performance, and that may be why the same model is not suitable for both levels, as we observed from table 1.

We now look at Pete Rose's 44-game hitting streak of 1978 and perform the same analysis as for the DiMaggio streak. The results are presented in tables 3 and 4.

Examining the Rose-model fits in table 3, we find that qualitatively they are much the same as DiMaggio's. That is, we have a good model fit when the streak data is eliminated, poor model fit during the streak, and, though the fit to the full season is slightly better than in the DiMaggio case, it still cannot be considered a really good fit. The same conclusions can be drawn from table 4. During the streak, Rose's performance was better than his no-streak averages and better even than his lifetime averages. Both players were exceptional in their streaks.

Finally, using Retrosheet, we looked at model fits to two more of DiMaggio's seasons, 1938 and 1940. In 1938, DiMaggio hit .328, very close to his lifetime average of .325 and to his non-streak average of .320 in 1941. The model provided a very good fit to that season's data. In 1940, DiMaggio hit .352, very close to his .356 for the full 1941 season, and the model data



NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

In 1978, when Pete Rose amassed a 44-game hitting streak, his no-streak performance fell below that of his lifetime performance. Comparison of DiMaggio's no-streak performance in 1941 to that of his lifetime performance shows similar patterns, although in DiMaggio's case the gap between no-streak and lifetime is narrower.

Table 3. Rose's 44-Game Streak, 1978

	k, the number of hits					
	0	1	2	3	4	5
Poisson Model, Full Season (159 Games)						
Number of games, actual	35	70	39	11	3	1
Number of games, predicted from p(k)	46	57	36	15	5	1
Model fit is borderline acceptable						
Poisson Model, Streak-Only Data (44 games)						
Number of games, actual	0	26	11	6	1	0
Number of games, predicted from p(k)	9	14	11	6	2	0
Model provides a poor fit to the data						
Poisson Model, No Streak Data (115 Games)						
Number of games, actual	35	44	28	5	2	1
Number of games, predicted from p(k)	37	42	23	8	2	0
Model provides an excellent fit to the data						

Table 4. Rose's Batting Statistics, 1978

	Full Season	Streak Only	Not Including Streak	Lifetime
At-Bats	655	182	473	14,053
Hits	198	70	128	4,256
Games	159	44	115	3,561
BA	.302	.385	.271	.303
Lambda	1.25	1.59	1.11	1.19
OBP	.362	.419	.339	.375
Slugging	.421	.462	.406	.429

was a poor fit to that season, 1940, just as it was to the full 1941 season. This once again points to boundary levels at which this model is no longer valid. This will be examined more fully in a future paper.

There appear to be two points of view about the nature of the DiMaggio streak. The first is that it was a binomial event of extremely low probability but one that actually happened in 1941—something like actually witnessing the occurrence of 100 straight heads in coin tossing. The second is that it is an example of a superior hitter exceeding even his own normal capabilities. The authors tend to believe the latter, and the results of this article—that is, the failure of the model to actually represent the streak data and the success of the model at representing the non-streak data—begin to support that point of view. We plan to do a much larger study involving many more batting metrics, shorter streaks (say, of thirty or more games), and comparable "hot periods" not necessarily involving consecutive-game hit streaks. Our aim is to build on and further explain the nature of streaks in baseball and perhaps to describe more completely what a "hot hitter" really is.

A final note: The goodness of fit between actual and Poisson-predicted data when the streak is ignored lends support to the idea that independence is a valid assumption for most players except during periods of exceptional performance, when the independence conjecture may indeed be questionable. ■

Notes

We would like to express our thanks to Retrosheet for making available some of the data we used in this study.

1. See, for example, "Hitting Streaks Don't Obey Your Rules," by Trent McCotter, *The Baseball Research Journal* 37 (2008): 62–70; and "A Journey to Baseball's Alternate Universe," by Samuel Arbesman and Steven Strogatz, *New York Times*, 30 March 2008.
2. For ten games, Trent McCotter kindly supplied us with box scores that otherwise would not have been available.
3. See, for example, Michael Freiman, "56-Game Hitting Streaks Revisited," *The Baseball Research Journal* 31 (2002): 11–15.

Stealing First Base

Jim Kreuz

BASEBALL BATS OUTSIDE THE BOX

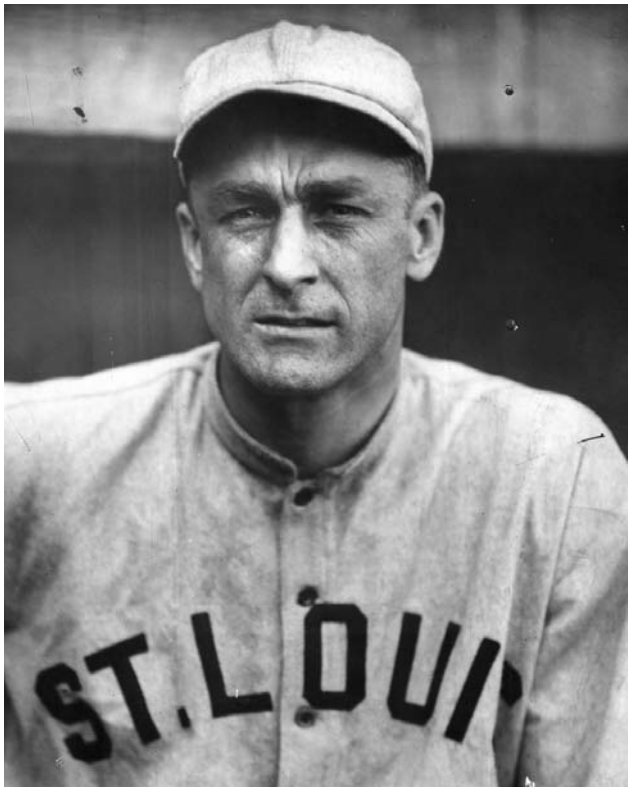
There are a number of different ways to reach first base safely, one of which is by hitting a baseball. Applying the expression "thinking outside the box" to the art of hitting, one will eventually conclude that there is a better baseball bat out there just waiting to be discovered. And there is. So, we're going to "steal first base" by using a new bat that will significantly increase the player's batting average. Adios to the white ash and maple bats of today.

Surprisingly, there have been no innovations with respect to the bat used in Major League Baseball over the past hundred years. While we admire Heinie Groh's bottle style bat of the teens and 1920s, we do not consider it to be an innovation because this clever design never really caught on. Major-league ballplayers have gone to thinner, lighter bats over the past thirty years while still clinging to the traditional wood—white ash—to increase their bat speed. Why hasn't anyone considered another type of wood?

THE ANIGRE BAT

Arvin Moehler of Hogan Hardwoods says that, while white ash and maple are the staple of their sales to bat companies, he thinks there may be better types out there. One he'd like to see tried out is walnut. He adds that, for any type of lumber to be a success in baseball, it must be durable and impact-resistant, rate high on the hardness scale, and, most of all, it must be of light weight. So I suggested anigre (pronounced *anna-grey*), a hardwood, found in Tanzania, that has all the characteristics of white ash but with a density that is almost half, meaning that a bat made of this material would weigh only 60 percent of a similarly shaped ash bat. This lighter weight should correlate to better bat control and higher bat speed, which should then produce more hits, although arguably this effect might be offset by the lower mass resulting in the batter hitting the ball with less force.

Moehler was familiar with this type of wood, anigre, and thought it might work well. I went on to suggest alder, a wood found in Oregon and Washington, with an even lower density, but Moehler said it would fracture and therefore not hold up when coming into contact with a baseball.



NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

"Baseball people, as a rule, are generally allergic to new ideas."
—Branch Rickey

MARUCCI BAT COMPANY

After I wore out Arvin Moehler with questions and ideas, he sent me to one of his favorite customers, Kurt Ainsworth, who helps run the Marucci Bat Company in Baton Rouge. They supply bats to more than 120 major-league players, including Carlos Beltran, Ryan Howard, and Andruw Jones. Kurt was a wealth of information, explaining that hickory, beech wood, and even bamboo had been tested but did not perform as well as white ash. He was very interested in our anigre bat, adding that, before it could be approved, several dozen of them would have to be tested by the people working for Roy Krasik at MLB.

I went on to suggest a different geometry of bat, one I call the Comb bat. Into the barrel of a bat being

NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

Babe Ruth began his career as a pitcher who happened to hit well. In today's game the two-way player, a pitcher who also brought a serious bat to the lineup, would be considered an innovation. In The Hardball Times a few years ago, David Gassko detailed the decline, over the history of baseball, in pitchers' batting performance compared to the league average. The pitchers' wOBA divided by the wOBA of position players went from 0.95 in the 1870s, to 0.70 in 1930, to the present-day 0.50.

turned on a lathe, narrow grooves, 1/16-inch wide, are cut close together like a comb, to lighten the barrel but not cut down on the diameter. In essence, it would look like the combination of a comb and a hair brush.

Ainsworth, while warming to the idea, did not want me to get my hopes up. He explained that MLB is extremely concerned with safety, especially when it comes to cracking down on bat pieces cracking off and flying—onto the playing field or the stands. He didn't think MLB would go for any design that involved grooves or cutting down on the integrity of the bat. I later went down swinging with my attempts to interview Roy Krasik at MLB on this topic.

So the major-league hitter using our anigre bat would in essence be stealing first base by hitting for a much higher average than his competition would. Think of the success his team would enjoy if they kept the type of wood a secret.

With this in mind, I began dreaming of the accolades I would receive from my hometown club when I posed the anigre bat to Houston Astros president Tal Smith. Instead of offering me a permanent seat in his club box, he gently set me back down to earth by explaining that if our bat was approved by MLB every other team would be given this information. In other words, it wouldn't be a secret any more. Back to the bleacher seats. Tal did like the idea, though, and wanted to be updated on any progress.

I'm not giving up on those choice seats just yet. It *could* happen that a team got approval to use the bat only late in the season and would be the only franchise capable of taking immediate advantage of it. The other teams would have to find a supplier, and there is only one in the United States (good luck finding him).

STEAL THIS GAME

You don't have to be a businessman to know that innovation is one of the keys to success. Yet, strangely enough, in baseball innovation seems to be considered taboo. For example, baseball fans are familiar with the terminology "by the book." If a baseball manager does not manage "by the book," he can be found beaten over the head with it by his critics. In Murray Polner's excellent biography of Branch Rickey, Rickey's grandson repeated what he heard his grandfather say several times: "Baseball people, as a rule, are generally allergic

to new ideas." Who is going to be the next Mahatma, willing to take a chance on a few new ideas? Mr. Rickey and I are proposing a few suggestions to help that person steal a game or two.

THE RICKEY SHIFT

The shift is a baseball tactic that involves bringing your center fielder in to play the infield when the likelihood of the batter hitting the ball out of the infield is low. Years ago when coaching my son's Little League team, I caught a lot of flak for using the shift, because it wasn't "by the book," or even "in the book." So did team president Branch Rickey when he suggested his Brooklyn Dodger managers use the shift when the opposing team was going to bunt.

Mr. Rickey's variation of the shift involved bringing in the right fielder to cover first base while the corner infielders charged the plate as the batter squared around to bunt. His intention, though, was not just to put out the player bunting. At his direction, in spring-training games in the late 1940s, his teams routinely turned double plays when employing "the Rickey shift" in bunt situations, and yet his managers were reluctant to try it during the regular season. Why? My guess is, because it wasn't in the book.

I suggested the Rickey shift to the sharpest person to manage a Major League Baseball team in the past fifty years, Larry Dierker, and he replied that, while he liked the idea, he was a bit wary of the repercussions if things didn't work out. Granted, the season was already underway and his team was winning, so he didn't need this potential advantage, but later on he did incorporate his own Shift, moving his second baseman, Craig Biggio, out to left center field whenever Mark McGwire came to bat.

THE TWO-WAY PLAYER—IN BASEBALL

Typically your top high-school or college pitcher is the best athlete on his team, and when he reaches the minor leagues he has to make a choice—either he's a pitcher or he's a hitter. One would think, given that he's working on the game eight hours a day, he could devote a few hours to hitting, assuming his primary function is as a pitcher. Not only would this improve the pitcher's performance, because it would give him a daily break from focusing only on his pitching, but it would also provide the manager with one more hitter in the lineup when the pitcher is pitching. And, it might even give him a pinch-hitter without adding a body to the roster.

It would be innovative only in today's game, not in baseball in the old days. There were many good-hitting pitchers back then. Babe Ruth, of course, was outstanding. Bucky Walters, Red Ruffing, Wes Ferrell, Bob Lemon, Don Newcombe, and Bob Gibson were not bad either. (All but Walters are in the Hall of Fame.) Of those taking the mound today, the top hitters are Mike Hampton, Dontrell Willis and Carlos Zambrano.

COURTESY OF THE HOUSTON ASTROS

Houston Astros manager Larry Dierker. The author suggested the Rickey shift to him. Dierker said he liked the idea but worried about the repercussions if it failed. He later used his own shift, moving second baseman Craig Biggio to left center field whenever Mark McGwire came to bat.

In The Hardball Times a few years ago, David Gassko penned a poignant piece, detailing the decline, over the history of baseball, in pitchers' batting performance compared to the league average.[2] The pitchers' annual wOBA (weighted on-base average) divided by the hitters' wOBA went from 0.95 in the 1870s, to 0.70 in 1930, to the present-day 0.50.

What this implies is that pitchers have become more specialized over the years, in pitching, and have become less competent at hitting. With my proposal I would attempt to reverse this trend by allowing pitchers to devote more time to work on their hitting. Would Rick Ankiel have still been pitching so far into his career if this had been applied to him years earlier?

THE PSEUDO-PITCHOUT

One more tactical innovation, adapted from a skill perfected by Houston Astros' first baseman Jeff Bagwell, involves the first baseman cutting off the pitcher's delivery to home plate, with a runner on first and the

batter about to attempt a bunt. For this to work, the first baseman must charge toward home plate just before the pitcher delivers—Bagwell was adept at this—but, instead of stopping two-thirds of the way to home, the fielder traverses slightly toward the third-base bag and faces the pitcher. He then intercepts the pitched ball and catches the baserunner leaning off first (we assume the second baseman is now covering first) for a quick putout. I call it the "pseudo-pitchout."

Baseball-rules expert Rich Marazzi studied this proposal, and his interpretation unfortunately was that the first baseman is guilty of interference and that the batter should be awarded first base. On the plus side, he went on to suggest that this be used to intentionally walk a batter with only one pitch.

THE HOUDINI TAG—HE NEVER SAW IT COMING

If you are having trouble accepting my ideas so far, you are really going to struggle with this one. It's such a reach that not even Larry Dierker may like it. I will say that I've had a 100 percent success rate when applying this idea (it worked the only time we tried it) while coaching my son's Babe Ruth League team of 13-year-olds. With a runner on second base, the pitcher gives the sign for the shortstop and second baseman to move away from second and onto the fringe of the infield grass to lull the baserunner into a false sense of security, while the center fielder begins his dash toward second. Four seconds after giving the sign, the pitcher wheels around and throws right at the second base bag, where the center fielder has just arrived to accept the throw and tag the unsuspecting runner out. I call it the Houdini tag, because the baserunner in this instance was the fastest player in our league and never saw it coming. Don't feel bad, Justin. Your first- and third-base coaches didn't see it either.

Hopefully you're catching on to our model for stealing not only first base but an entire game—propose several new ideas in hopes either that one will catch on or that it will spur other ideas. (Swing the bat enough times and you'll eventually get a hit.) For this to work, you can't shoot down another's brainstorm for fear of halting the flow of innovation. (Don't criticize the empty swings.) My coworkers have witnessed many of my strikeouts. Now, who wants to be known as Baseball's Number-One Thief, or the next Branch Rickey? ■

Notes

Thanks to Lee Lowenfish, Murray Polner, and Stu Chan for contributions.

1. Murray Polner, *Branch Rickey: A Biography*, rev. ed. (Jefferson, N.C.: McFarland, 2007), 2.
2. David Gassko, "Hitting Pitchers," Hardball Times, 8 February 2007, http://www.hardballtimes.com/main/article/hitting-pitchers (accessed 21 May 2010).

Does "Game Score" Still Work in Today's High-Offense Game?

Jeff Angus

When Bill James first made his Game Score widely public in the Historical Baseball Abstract (1988), he humbly called it a "garbage stat." He did feature a three–page essay on it and sprinkled it about that book, his last Abstract. Since then, it's been broadly used, but only shallowly, as though through his description of it ("my annual fun stat, a kind of garbage stat that I present not because it helps us understand anything in particular but because it is fun to play around with") he has painted it a dull grey and buried the technique in the bottom of our cluttered toolboxes.

The real value of the Game Score tool is different from what its inventor claimed. It was an astoundingly useful measure that, while it didn't come anywhere close to describing everything you need to know about pitching, described something critical at the time and, importantly, was accessible to casual fans.

James revealed the Game Score (GS) stat using data from the 1987 season to illustrate its use. The question I can answer for you easily is "Given all the changes in the decades since then, does the stat hold up as an indicator?"

The answer, surprisingly, is "Yes. Unequivocally."

I'll show you the particulars and explain why GS seems to hold up through pitching-rule changes, mutation of the ball, and the construction of new, mostly cozier ballparks that have led to what is popularly felt to be a hitter's era.

Later in this article, I'll explain why GS is truly a significant measure that shows off the inventor's brilliance and is something we should pay more attention to.

WHAT IS GAME SCORE AND HOW DO WE USE IT?

Game Score is a measure of a starting pitcher's performance, one that synthesizes the value of both a start's quantity and its quality.

The only widely distributed competitor is Quality Start, a binary ("yes," it was a quality start; "no," it wasn't) measure. The Quality Start had a noble purpose: to free the starting pitcher from the oppression of the traditional won–lost record. And in its defense, it is simple to "measure"—a start of at least six innings where the pitcher gives up three or fewer earned runs is a Quality Start.

Its limits, though, are too constraining. The binary nature of the QS eliminates spectrum or shading. Further, the baseline for what constitutes a Quality Start should have been updated for the changed playing environment since MLB apparently juiced the ball after the 1993 season. (Since then, the average start is shorter and yields more runs on the average but still maintains an equal probability of helping the team win the game.) Game Score is more nuanced and useful.

Bill James cleverly calibrated Game Score to a scale of 0 to 100 points, with 0 points being roughly the worst start a pitcher could have, 100 being the best, and 50 being the "average".

Graph 1 shows the frequency distribution for each Game Score, from 0 to 100, for the 2007 season. The peak incidence of Game Scores is between about 42 and 65, with more below than above. James has shown this shape to be pretty normal for distributions of baseball accomplishment.

You may notice there are several Game Scores below the theoretical floor of zero. The low-end extremity for the 2007 season is a –12 delivered by Milwaukee's promising Yovani Gallardo in an August 8 start against the Rockies in Denver.

Brewers	IP	H	R	ER	BB	SO
Gallardo (L 4–2)	4.2	12	11	11	3	1

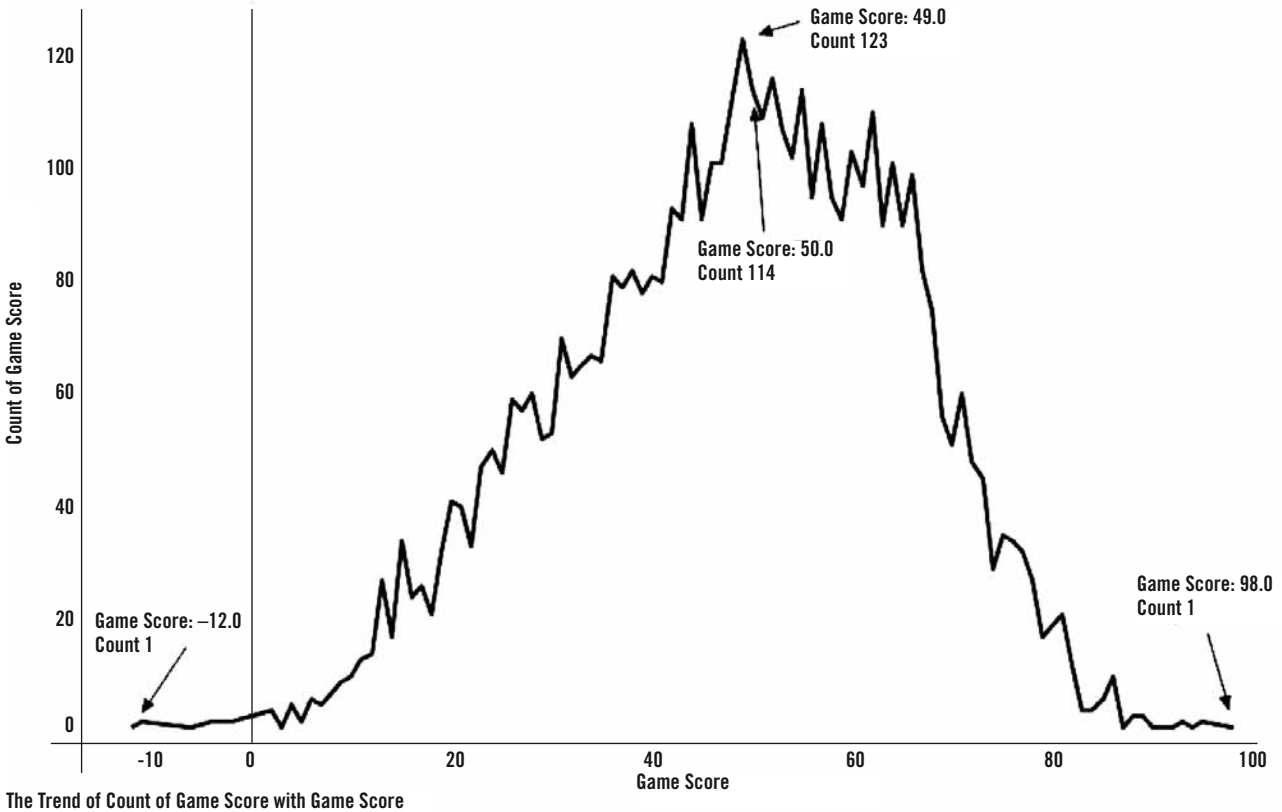
The high end was a 98 notched by Erik Bedard for Baltimore against the Rangers in Texas on July 7.

Orioles	IP	H	R	ER	BB	SO
Bedard (W 7–4)	9	3	0	0	0	15

James cleverly set up GS so that someone who had mastered sixth-grade math could compute it from a scorecard or a box score in about 15 seconds. GS is accessible because it doesn't require long division or decimal math, unlike ERA, which does. And, again, you can get all the components from a newspaper box score—such as the following pitching line (which I've truncated, leaving in only the items you'd use) for a roughly average start.

Rays	IP	H	R	ER	BB	SO
Shields (ND, 2–2)	7.0	6	4	2	1	2

Graph 1. Incidence of Game Scores, 2007



The Trend of Count of Game Score with Game Score

Analysis and chart rendered in Tableau Desktop 3.5, courtesy of Tableau Software

Here's the fastest way to compute it. Each game starts at 50 (which we'll roll in as the last piece of computation).

- +1 point for each out recorded (3 points for each full inning, 1 point for each additional third of an inning). In the example, 7 x 3 = 21 points.

- +2 points for each full inning completed *after* the fourth inning. In the example, three full innings, 3 x 2 = 6 points.

- –2 points for each hit surrendered. In the example, 6 x –2 = –12 points.

  The sum of strikeouts minus walks (usually a positive number you add, sometimes a negative number you subtract). In the example, 2 – 1 = +1 point.

- –4 points for each earned run and –2 points for each unearned run surrendered. In the example, 2 x = –4 = –8 for the earned runs, and 2 x –2 for the other, not earned, run, so –4, added up to –12.

- +50 as the baseline the pitcher starts with.

So, in the preceding Shields example: 21 + 6 equals 27 for the length of the start; minus 12 for the hits equals 15; plus 1 for the strikeouts minus walks equals 16; minus 12 for the runs earned (and not) equals 4. Add 50 for the starting threshold, and the Game Score is 54, what James designed the system to describe as a start a bit above average. This GS number, as you will see later, argues that Shields's start was above average in several ways, and the GS more closely measures the value of his start than ERA does (which, at 2.57 for the game, probably overstates his contribution), or won–lost record, which, at 0–0, screams an existential nothingness about Shields's effort.

GAME SCORE AS USED TODAY

Today, Game Score is applied too infrequently.

Unlike a lot of the other sabermetric stats that James and other researchers such as Dick Cramer and Pete Palmer invented or brought to public attention, GS hasn't been internalized into the warp and weft of fan or researcher discussions. None of the half–dozen major-league organizations I've discussed pitching with seem to use it for much. James, I discovered after I finished the research for this study, uses it consistently in his annuals, *The Bill James Gold Mine*,

though without basing a lot of significant observation on it. Researchers Mike Webber, Steve Treder, Rich Lederer, and Dan Fox have made concrete mentions. Sean Forman (who crafted a beautiful raw dataset for me to work from for this study) presents GS as part of the exhaustive game lines for pitchers on game-log pages of his incomparable Baseball Reference site. But no one I can find has made an effort to promote or headline a starting pitcher's contribution to the team by using GS as a significant (and easy to "get") starting point.

My investigation has led me to the conclusion that GS reveals enough about a pitching start that researchers should explore it further—not just for other researchers but as a tool we can broadcast to the larger, less sabermetric population.

HOW HAVE GAME SCORE'S AVERAGE RESULTS AND TAILS CHANGED WITH MLB'S OFFENSIVE EFFLORESCENCE?

Remarkably, almost not at all. The changes have been small.[1]

Year	Mean Average Game Score
1987	49.2
2007	48.3

The change over the past 20 years for the mean average GS has changed less than a single point. The *median* Game Score in MLB for the 2007 season was 49.

So it's consistent over time. But what makes it a good stat to proliferate beyond the stathead tribe? I believe there are three prerequisites for deciding which statistics are worth trying to popularize.

- The stat should mean something significant.
- The stat should retain the meaning of its numbers when you apply it in varying contexts (such as league and season).
- A stat one should try to popularize should not require the 50th-percentile fan to use a calculator.

Further, the measure shouldn't require adjustment by a pro, like Pete Palmer's very valuable (but impossible to popularize) Adjusted Batting Runs or James's own flotilla of Runs Created formulæ (about two dozen of them) that try to contextualize meaning over differing playing environments.

Game Score, contrary to being a "garbage stat," nails all three prerequisites.

HOW MUCH HAVE GAME SCORES VARIED IN THE LAST 20 SEASONS?

It's fine to show that two seasons, 20 years apart, have a similar set of averages. But the average of any serious stat is never a truth in itself; the average is not the reality, though the average may illustrate a tiny facet of the reality.

> An interesting aside of marginal relevance: For all the whining about the diminished endurance of starters, the numbers indicate that, while innings pitched per start is going down a little, the number of batters faced is essentially the same. See the chart in appendix C. It shows that plate appearances (batters faced) per start has gone down 1 per start in the past 20 years. A difference of 1 batter per start since then—when Michael Jackson was "Bad" and Twisted Sister was a hot ticket—and now.

Before we explore how much Game Scores have varied over the years, it's important to mention that the 1987 season, the one Bill James had as a backdrop for his tweaking the measure and sharing it, was an outlier itself. In 1987, there was an offensive uptick fueled by a home-run explosion. Sluggers like Kent Hrbek and Wally Joyner set their career highs in taters. So did more contact-oriented batters. Wade Boggs's 24 home runs were more than twice his second-highest seasonal output. In between, gents such as Juan Samuel, whose 28 home runs that campaign eclipsed his second-most prolific season of 19 round trips, joined the Pounder's Parade.[2]

But let me show you a chart that shows the *rough* variation of the individual components. It's "rough" because one of the factors that shapes an individual Game Score result is the number of full innings from the fifth inning on that a pitcher labors. The following chart is a composite average: all starters' stats combined, divided by the total number of starts. It is, therefore, not precise in cases where there's a wide divergence in the distribution of outs recorded.[3] We cannot derive the precise average Game Score from the average innings pitched per start because of the bonus for innings completed from the fifth on.

But the numbers are close enough to be strong indicators of change in the composite GS and in all the measures except for the fifth-inning-on bonus. The fifth-inning-on bonus presented here is the composite, and therefore only an estimate.

GS Points Difference from 1987

Year	TOTAL	Outs	IP>4	H	BB	K	ER	UER
2007	–0.3	–0.3	–0.6	0.0	0.2	0.2	0.00	0.2

Negative numbers indicate an erosion of Game Score component averages. Positive numbers have raised the average GS since 1987.

As you can see, *none of the components varies even by a full point*. The changes between the composite average in 1987 and 2007:

- Shorter average outings by starting pitching shaved about a point (.9) from composite average Game Score.
- More strikeouts per start and fewer walks per start added about half a point (.6) to composite average Game Score.
- A lower number of unearned runs added a soupçon (.2) to composite average GS.

There's a legitimate argument that an exceptional baseline year, such as 1987, is a bad foundation because comparing a baseline with extraordinarily high offense to a year such as 2007, which was normal for a big offensive era, is going to dampen larger differences. So, what about 1988 (a particularly good year for pitchers) or 1994 (powered by probably the liveliest ball since the 1950s)?

Both years were extreme within the evolving norm for Major League Baseball. And both years varied noticeably from Game Score norms since 1987. But neither varied by enough to render Game Score a stat that needs a proliferation of special variants to make GS deliver the thumbnail results it aims to produce.

More slugging appears to have led to harder swinging, which, apparently, increased strikeouts per starter inning while diminishing walks per starter inning. And while gross numbers of hits have gone up, outings by starters have also become slightly shorter, offsetting to some degree the effects of the increase in strikeouts and decrease in walks.

I also believe (but have no numbers to support) that management and coaching tend to counter the kinds of trends that have mutated the game since 1987. In an environment where homers are more prevalent—which, in turn, makes walks more costly—pitching coaches develop tactics to help their charges diminish walks. They invest more in studying ways to limit exposure to homers. And pitchers who are walk- or homer-prone are marginally less likely to be drafted or invested in once drafted. The game, in sum, is an evolving system with some gravitational fields that tend to counteract disruptive trends.

Whether you agree with that last supposition or not, you can see from the following table just how minor the changes to components of composite average Game Score have been in the past 20 seasons.

GS Points Difference from 1987

Year	TOTAL	Outs	IP>4	H	BB	K	ER	UER
1988	**2.1**	0.3	*0.6*	0.1	0.2	–0.1	1.1	0.1
1989	**1.7**	0.1	*0.2*	0.2	0.1	–0.2	1.4	0.0
1990	**1.3**	0.0	*0.0*	0.2	0.1	–0.2	1.2	0.1
1991	**1.3**	0.0	*0.0*	0.2	0.1	–0.1	1.0	0.1
1992	**1.8**	0.1	*0.2*	0.1	0.1	–0.2	1.3	0.1
1993	**0.3**	0.0	*0.1*	–0.1	0.1	–0.2	0.3	0.1
1994	**–0.4**	0.0	*0.*0	–0.2	0.0	0.1	–0.4	0.1
1995	**–0.3**	–0.2	*–0.3*	0.0	0.0	0.1	0.0	0.0
1996	**–0.9**	–0.1	*–0.2*	–0.1	0.1	0.2	–0.6	0.0
1997	**0.3**	–0.1	*–0.2*	0.0	0.1	0.3	0.0	0.1
1998	**0.0**	0.0	*0.0*	–0.1	0.1	0.4	–0.3	0.1
1999	**–1.3**	–0.2	*–0.4*	–0.1	–0.1	0.1	–0.8	0.1
2000	**–1.3**	–0.2	*–0.3*	–0.1	–0.1	0.2	–0.9	0.1
2001	**0.0**	–0.2	*–0.3*	0.0	0.2	0.3	–0.1	0.1
2002	**0.4**	–0.2	*–0.3*	0.2	0.1	0.2	0.3	0.1
2003	**0.0**	–0.2	*–0.4*	0.1	0.2	0.1	0.1	0.1
2004	**–0.3**	–0.2	*–0.4*	0.1	0.2	0.2	–0.1	0.1
2005	**0.6**	–0.1	*–0.2*	0.0	0.3	0.1	0.3	0.2
2006	**–0.5**	–0.3	*–0.5*	0.0	0.2	0.1	–0.2	0.1
2007	**–0.3**	–0.3	*–0.6*	0.0	0.2	0.2	0.0	0.2

Game Scores *were* higher in 1988, as the leagues sacrificed some hitting for pitching. But 1988 shows the biggest divergence in average Game Score from 1987 since, well, 1987: 2 points per start. After 1993, the average GS started coming down, but since 2001 it's been hovering in a narrow range, with variation affecting average GS being under a single point.

> The average Game Score for starters in a season has been stable, certainly stable enough to validate GS as a great tool to describe the performance of starting pitchers through changing contexts.

IT'S EASY TO COMPUTE AND CONSISTENT ENOUGH OVER TIME, BUT WHAT MAKES IT SIGNIFICANT ENOUGH TO PAY ATTENTION TO?

The Game Score proves to be a magnificent indicator of *the most important thing a starting pitcher can do*: Give his team a chance to win the ballgame.

Bill James knows this. (He's written about it, tangentially.) Everyone else I cited who uses GS knows this, I think. But they don't follow up and apply that knowledge broadly.

Let me make the argument for the significance of GS this way.

A starting pitcher's Game Score correlates remark-

ably well with ability of the starter's team to win. That is, if you chart the winning percentage for major-league teams at each Game Score, you see the correlation between the starter's GS and the team's likelihood of winning—the higher the GS, the greater the probability the team will win the game.

> A team win is baseball's most basic currency. Anything a player does that increases the probability of his team winning is adding value.

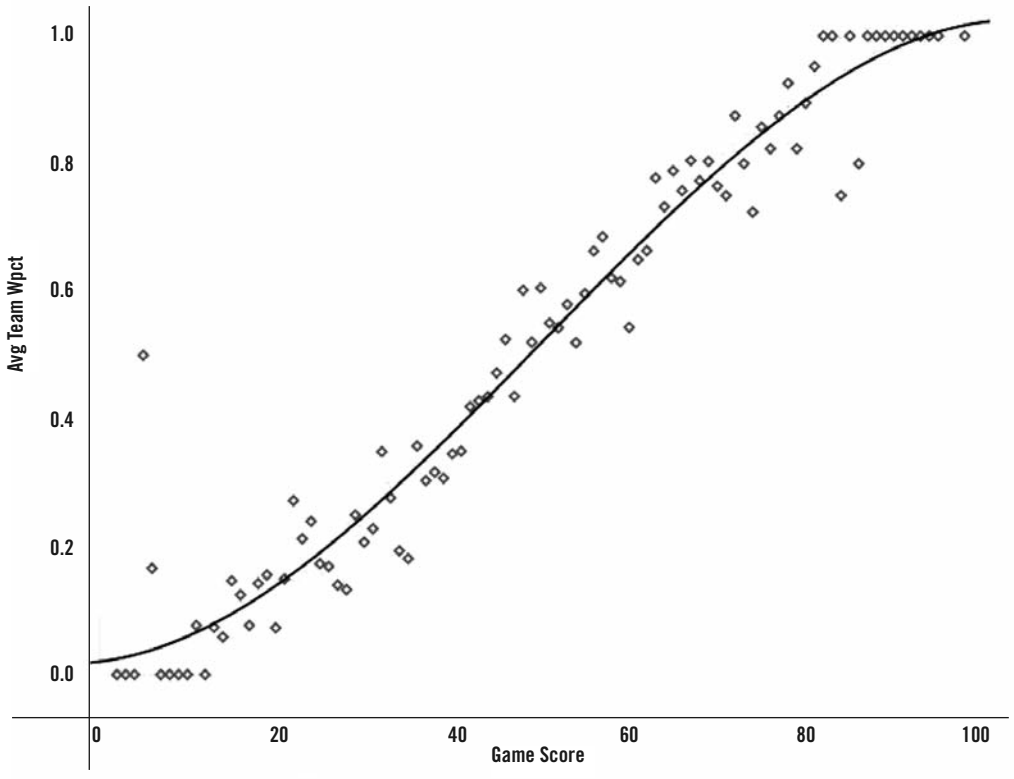
The following chart reflects this distribution, showing the winning percentage for all games pitched by a starter at each Game Score. You'll find the raw data for the chart as appendix A, at the end of the article.

When James wrote his 1988 essay, he presented a table that showed the strong correlation between the starter's Game Score and the team's winning percentage. He used 10-point ranges to chunk the information. While this is sensible as a first cut at examining the results, I find his ranges more arbitrary than what he would have crafted were he looking for deeper significance. (With ranges such as 60–69 and 50–59, a game score of 62 is batched with a 68, six points away, but not with a 59, three points away.) I followed the pattern of his table for the 2007 data to show similarities and differences using his chosen ranges; they appear in their entirety as appendix B. Note, in the subset of that chart (see below), that every 10-point range features a higher win percentage than does the range below it, with one exception (the two bottom ranges for 1987, representing a small number of cases).

The biggest difference worth noting between the 1987 and 2007 numbers is that Game Scores from 40 through 49 were 4 percent more likely to generate a win for the starter's team in 2007 than in 1987.

1987 Team Win %	Range	2007 Team Win %
93%	90–99	100%
93%	80–89	93%
84%	70–79	82%
73%	60–69	72%
58%	50–59	60%
42%	40–49	46%
26%	30–39	28%
20%	20–29	18%
10%	10–19	10%
23%	Up to 9	4%

Graph 2. Game Scores Affect Team Wins, 2007



The Plot of Average of Team Wpct with Game Score

Analysis and chart rendered in Tableau Desktop 3.5, courtesy of Tableau Software

MEANINGFUL RANGES FOR GAME SCORES

I think moving ranges are more flexible and show that, even when more finely graded, the correlation between increasing GS and increasing team wins holds up. While James shows fixed 10-point ranges, I'll show you that the relationship between GS and team wins is clear even in more graduated pieces.

The table below shows the percentage of games a team won in 2007 with a specific Game Score plus or minus 2. For example, the row that shows a game score of 49 +/–2 shows the win percentage for a team whose starter notched a GS of 51 through 47, while 50 +/–2 shows win percentage for a team that had a starter with any GS of 52 through 48.[4]

It's worth noting that, in the previous table, while James originally hoped to design a measure where a Game Score of 50 would win 50 percent of the games for the starter's team, even at 47 +/–2 a team will win a little more than that. A glance at appendix A will confirm it's not a fluke of the +/–2, but the rawer numbers show scores as low as 46 being good enough to support a team's winning more than 50 percent of the time.

SO IF IT *IS* IMPORTANT, HOW SHOULD WE USE IT?

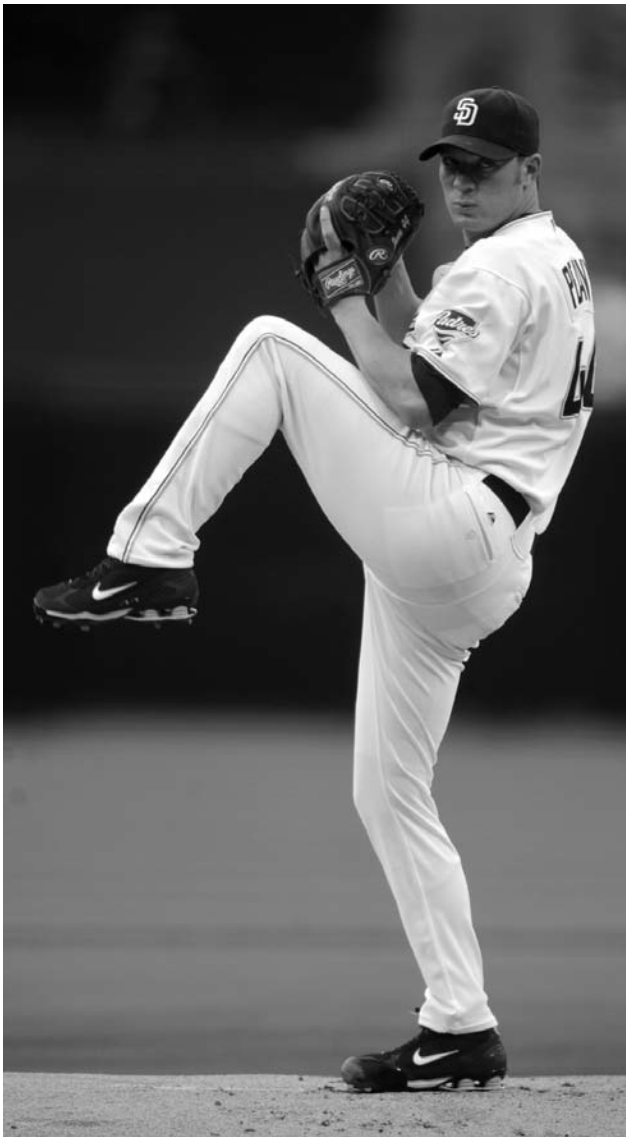
Bill James himself has suggested using the tool to adjust one's perception of a starter's seasonal won–lost record. When he first wrote about the measure—back when *Dirty Dancing* blew away the box-office numbers for *Gone with the Wind* and Buddy Biancalana celebrated his age-27 season with an OPS+ of 3—James suggested tracking two stats derivative of GS, Tough Losses and Cheap Wins. He suggested a Tough Loss was a game where a starter posted a Game Score of 50 or better but got the loss, and a Cheap Win was a start where he got the victory with a GS under 50.

Every season is stuffed with instances of starters who pitch consistently well with poor run support and have losing records (or, at the other extreme, average less than 5 innings for 20 starts while yielding 4.3 runs each start and have an 8–7 record over them).[5]

What I like about James's suggestion is its cleanliness. The break point at 50 seems logical, and it's easy to remember. And any rational proposal to fix the popular misperception that the won–lost record of an individual pitcher holds a lot of insight into his quality is a worthwhile effort.

Percentage of Games Won by Team When Starter Has Specific GS Ranges, 2007

GS range	Win %	GS range	Win %	GS range	Win %
75+	89%	55 +/– 2	61%	35 +/– 2	27%
74 +/– 2	82%	54 +/ – 2	58%	34 +/ – 2	27%
73 +/– 2	80%	53 +/ – 2	56%	33 +/ – 2	24%
72 +/– 2	79%	52 +/ – 2	56%	32 +/ – 2	25%
71 +/– 2	80%	51 +/ – 2	56%	31 +/ – 2	26%
70 +/– 2	79%	50 +/ – 2	56%	30 +/ – 2	23%
69 +/– 2	78%	49 +/ – 2	54%	29 +/ – 2	19%
68 +/– 2	78%	48 +/ – 2	54%	28 +/ – 2	18%
67 +/– 2	78%	47 +/ – 2	51%	27 +/ – 2	17%
66 +/– 2	77%	46 +/ – 2	50%	26 +/ – 2	17%
65 +/– 2	77%	45 +/ – 2	46%	25 +/ – 2	19%
64 +/– 2	74%	44 +/ – 2	46%	24 +/ – 2	21%
63 +/– 2	72%	43 +/ – 2	42%	23 +/ – 2	21%
62 +/– 2	67%	42 +/ – 2	40%	22 +/ – 2	19%
61 +/– 2	65%	41 +/ – 2	37%	21 +/ – 2	17%
60 +/– 2	62%	40 +/ – 2	35%	20 +/ – 2	16%
59 +/– 2	62%	39 +/ – 2	33%	19 +/ – 2	12%
58 +/– 2	63%	38 +/ – 2	33%	18 & less	8%
57 +/ – 2	64%	37 +/ – 2	30%		
56 +/– 2	62%	36 +/ – 2	28%		



COURTESY OF THE SAN DIEGO PADRES

In 2007, Jake Peavy of the San Diego Padres led MLB with 27 Game Score Wins, against only 7 Game Score Losses.

However, I don't propose we make use of GS by proliferating these derivatives. For one thing, James knew even then that Game Scores of 50 would yield better than .500 results (as did a GS of 49). So I believe his anchor point is misplaced. In addition, I think there's a middle band of Game Scores that should qualify for neither; a grey zone in the middle where the team's game prospects are between "should be confident of winning" and "can expect to lose."

A DRAFT PROPOSAL

I have a draft proposal for a season measure that's a derivative of Game Score.

The measure isn't as tidy-looking as James's break point at 50, and I think if I looked at the fine details of multiple years of game logs, I would probably tweak the break points. But here's a straw man we can play with that delivers a new version of won–lost record, using Game Scores, that reflects each starter's contributions to his team's record better than do the won–lost records currently tracked.

For the purpose of this proposal, I'll give this measure the working name "Game Score Won–Lost" (GSWL, pronounced "Gaz–Wall"). Let me pitch how it works.

For all starts where the pitcher earns a *GS of 55 or higher*, the pitcher earns a Game Score Win, recognizing a game where his start gave his team a clear chance to win, whether the team went on to win or not.

For all games where the pitcher earns a *GS of 43 or lower*, the pitcher earns a Game Score Loss, a game where he set his team up to lose, whether they went on to lose or not.

For the roughly one quarter of all starts that fall between (a *GS of 54 through 44*, what I'll call "Game Score Tweeners"), split them down the middle into two halves. Assign one half to Game Score Wins and one half to Game Score Losses. If the Game Score Tweeners are an odd number, round the Wins half "up" and truncate the Losses half down. This is not capricious, it's based on the fact that team winning percentage when the starter pitches a game that earns between 54 and 44 is .528, a little higher than even.

Relation of Game Score to Team Wins, 2007

Game Score Ranges	Team Win %	Team Wins	Team Losses	Number of Games	% of Games
55+	.728	1,365	511	1,876	39
54 to 44	.528	626	559	1,185	24
43–	.244	440	1,361	1,801	37

Total up the Game Score Wins and Game Score Losses and you get a season measure that looks like a traditional won–lost record, which I like because it's easy for the uninitiated to map to an existing measure they think they understand.

IS GSWL FAIR? IS IT ACCURATE?

I think Game Score Won Lost (GSWL) is fair in that a pitcher gets credit for a "win" in the cases where the team can expect to win about three quarters of the time, and he gets a "loss" in the cases where his performance puts the team in a situation where they can expect to lose about three quarters of the time.

We could just as easily ignore the Tweeners as divvy them up, but I lean toward leaving them in. For one thing, if you do, a pitcher's GSWL more accurately reflects the number of starts the pitcher has (an improvement over the traditional W–L system). Parsing the leftover Tweener games allows you to allow for the pitchers who consistently throw in the middle range (2007 Kyle Kendrick, average GS = 50, 9 Tweeners of 20 starts) and reveals some differences from those who throw a higher concentration of GS Wins and GS Losses with the same average GS (2007 Ubaldo "No, *You*–Baldo" Jímenez, Average GS = 50, 2 Tweeners of 15 starts).

So a GSWL that reflects number of starts helps a reader better ascertain quantity along with quality.

Starter	Starts 2007	Avg Game Score	GSWL w/o Tweeners	GSWL w/ Tweeners
Jímenez	15	50	8–5	9–6
Kendrick	20	50	6–5	11–9

Kendrick labored more and achieved the same season-average Game Score. With the Tweeners removed, the stat would broadcast that Jímenez worked a little more and achieved a more positive result for the season (same number of losses, a couple of more wins). With the Tweeners added in, Kendrick's bigger workload is reified and he looks almost comparable on quality. And either is more informative than Quality Starts (Kendrick 13, Jímenez 9).

Another cool side-benefit of including Tweeners is that the result delivers season won–lost counts that look more like twentieth-century baseball. There are 20-game winners using GSWL. Here are some final numbers for GSWL (with Tweeners) for the 2007 season, including all the 20-game GSWL winners.[6]

Starters, GSWL 20-Game Winners, 2007

Starter	GSW	GSL	Starter	GSW	GSL
Peavy, SD	27	7	Kazmir, TB	22	11
Santana, Minn	26	7	Escobar, LAA	21	9
Lackey, LAA	25	7	Vazquez, ChA	21	9
Haren, Oak	25	9	Lilly, ChN	21	10
Sabathia, Cle	24	9	Oswalt, Hou	21	10
Smoltz, Atl	24	8	Verlander, Det	21	10
Webb, Az	24	10	Francis, Col	21	13
Bedard, Bal	23	5	Harang, Cin	21	13
Beckett, Bos	23	7	Young, SD	21	8
Snell, Pit	22	10	Meche, KC	21	12
Penny, LAN	22	11	Zambrano, ChN	21	12
Shields, TB	22	8	Halladay, Tor	20	10
Cain, SF	22	9	R. Hill, ChN	20	12
Carmona, Cle	22	9	Maine, NYN	20	12
Hudson, Atl	22	10	Pettitte, NYA	20	14

This example shows that, while GSWL tends to confirm many preconceptions (the appearance of any of the top 9 on the previous table should be a surprise to no one who paid a lot of attention to the 2007 season), the measure allows us to find some overshadowed achievers.

How can you not love the total justice of Matt Cain (median GS = 58) getting a GSWL of 22–9, the poor bustard having pitched in the top 15 percent of starters only to be embossed with a traditional W–L mark of 7–16, below even the dreaded Boom-Boom Beck Line.

A measure is worthwhile only if it shows off accomplishment at both ends of the spectrum. The bottom of the GSWL table shows off prolific losers pretty well, I think.

Starters, GSWL, Lowest Scores, 2007

Starter	GSW	GSL	Starter	GSW	GSL
Willis, Fla	16	18	Millwood, Tx	12	18
Gaudin, Oak	15	18	Olsen, Fla	12	21
Suppan, Mil	14	19	Belisle, Cin	11	19
Jackson, TB	13	18	Davies, —	10	18
Morris, Pit	13	18	Eaton, Phi	9	20
Byrd, Cle	12	18	Perez, KC	7	19
Chico, Was	12	19			

There were only a pair of 20-game GSWL losers in 2007: the Phillies' Adam Eaton (his 10–10 traditional W–L record was enhanced by the Phils' ability to score in his starts, notching 3 or fewer runs in only 8 of his starts), and a surprising guest appearance by the Marlins' Scott Olsen. Olsen's 10–15 traditional W–L record was actually *hiding* some of the deficits in his overall game-by-game performance. Odalis "Friend of David Hasselhoff" Perez, GSWL 7–19 . . . proving, I think for all time, that, if you have really marginal stuff, "pitching to contact"[7] is Russian roulette with six bullets.

COURTESY OF THE MINNESOTA TWINS

In 2007, Johan Santana of the Minnesota Twins led the American League with 26 Game Score Wins, against only 7 Game Score Losses.

CONCLUSION

I believe I've shown compelling evidence that supports my idea that Game Score is the single most useful measure that a broad range of fans can calculate in real time to gauge the value of a starter's performance to his team in the most important measure of success: the team's ability to win a game.

- Game Score is a finer measure than Quality Start and appears to keep its relationship to winning through more contexts.
- Game Score measures beautifully a starter's ability to deliver an important goal: the likelihood of his team winning the game.
- Game Score is calculated through universally accessible components, and the calculations required are accessible to all.

Despite James's humble stance about his invention, I believe it's got some serious applications, and I'd like to see us popularize it beyond the SABR community. ■

APPENDIX A. Raw Data for 2007 Game Scores

This table presents each Game Score that a starter got during the 2007 regular season, how many starts featured that GS, and the team's wins and losses (not the starter's wins and losses) when the starter notched that GS.

GS	Games w/ That GS	Team W	Team L	GS	Games w/ That GS	Team W	Team L	GS	Games w/ That GS	Team W	Team L
98	1	1	0	62	110	73	37	28	60	8	52
95	2	2	0	61	97	63	34	27	57	8	49
94	1	1	0	60	103	56	47	26	59	10	49
93	2	2	0	59	91	56	35	25	46	8	38
92	1	1	0	58	95	59	36	24	50	12	38
91	1	1	0	57	108	74	34	23	47	10	37
90	1	1	0	56	95	63	32	22	33	9	24
89	3	3	0	55	114	68	46	21	40	6	34
88	3	3	0	54	102	53	49	20	41	3	38
87	1	1	0	53	107	62	45	19	32	5	27
86	10	8	2	52	116	63	53	18	21	3	18
85	6	6	0	51	109	60	49	17	26	2	24
84	4	3	1	50	114	69	45	16	24	3	21
83	4	4	0	49	123	64	59	15	34	5	29
82	12	12	0	48	113	68	45	14	17	1	16
81	21	20	1	47	101	44	57	13	27	2	25
80	19	17	2	46	101	53	48	12	14	0	14
79	17	14	3	45	91	43	48	11	13	1	12
78	27	25	2	44	108	47	61	10	10	0	10
77	32	28	4	43	91	39	52	9	9	0	9
76	34	28	6	42	93	39	54	8	7	0	7
75	35	30	5	41	80	28	52	7	5	0	5
74	29	21	8	40	81	28	53	6	6	1	5
73	45	36	9	39	78	24	54	5	2	1	1
72	48	42	6	38	82	26	56	4	5	0	5
71	60	45	15	37	79	24	55	3	1	0	1
70	51	39	12	36	81	29	52	2	4	0	4
69	56	45	11	35	66	12	54	–2	2	0	2
68	75	58	17	34	67	13	54	–3	2	0	2
67	82	66	16	33	65	18	47	–4	2	0	2
66	99	75	24	32	63	22	41	–6	1	0	1
65	90	71	19	31	70	16	54	–11	2	0	2
64	101	74	27	30	53	11	42	–12	1	0	1
63	90	70	20	29	52	13	39	**Total**	**4,862**	**2,431**	**2,431**

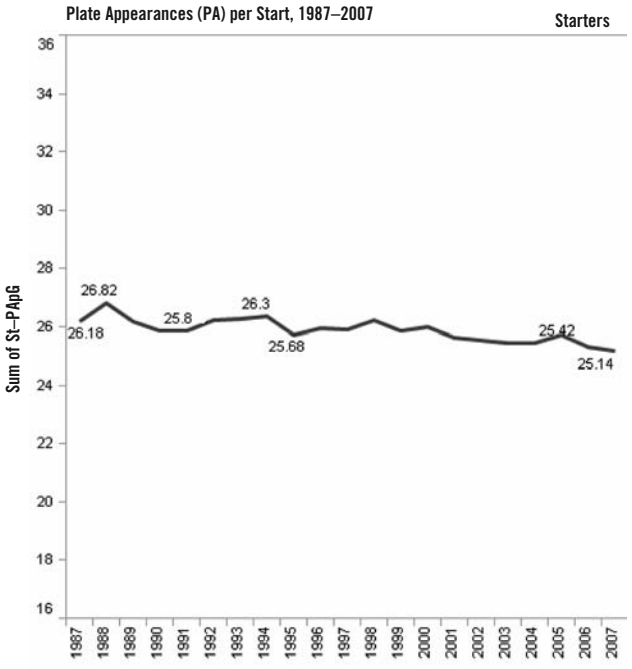
APPENDIX B. Game Scores in 1987 versus 2007

Frequency of GS in Ranges, Team Win Percentage in Each Range This table presents for ten ranges of game score results how frequently each occurred in 1987 and 2007, what percentage of MLB's starts fell into that range, and what the team win percentage was for all the starts in that range.

1987 Games	% of Games	1987 Win %	Range	2007 Win %	% of Games	2007 Games
15	0.4	.933	90–99	1.000	0.2	9
149	4	.933	80–89	.928	2	83
360	9	.839	70–79	.815	8	378
12	17	.728	60–69	.721	19	903
860	20	.580	50–59	.597	22	1051
817	19	.421	40–49	.461	20	982
697	17	.258	30–39	.277	14	704
472	11	.201	20–29	.179	10	485
115	3	.096	10–19	.101	4	218
13	0.3	.231	Up to 9	.041	1	49

APPENDIX C

Mean Number of Batters Faced by Starters per Outing, 1987–2007



The trend of sum of St–PApG for Starters. The view is filtered on Exclusions (Starters), which specifies a set.

Notes

1. I didn't compute the 1987 mean. Bill James wrote it in his Game Score essay that appeared in the 1988 Baseball Abstract.
2. And 1987 was the year the Houston Astros gave up their explosion-in-a-paint-factory unis in favor of muted, corporate-dull duds; this fact has nothing to with the offensive surge.
3. So if, for example, in 1987, starters averaged 6 1/3 innings per start but with low variation and with 12 percent lasting under 5 innings (where they would start racking up bonus points for innings completed), while in 2007 starters averaged 6 innings per start but 19 percent didn't complete the fifth innings, but more starts went deeper so as to equalize the average, these numbers would diverge from actuals, which I can't compute for 1987 because I don't have the raw data.
4. I combined all scores of 75 and above and all scores of 18 and lower because each GS in those areas is relatively scarce (each tail is 5 percent of the total) and there are many missing slots in those ranges.
5. Horacio Ramirez, Mariners, 2007.
6. Note that there were *30* starters who were GSWL 20-game winners, and there are 30 MLB teams. Coincidence, synchronicity or "Intelligent Design"? Only Carl Everett knows. Or merely thinks he does.
7. Grant Sterling said of pitching to contact, "Pitching to contact has exactly the same record of success as appeasing Hitler." There's no vital reason to cite this except it's one of my favorite recent baseball quotes, because Dr. Sterling is one of the smartest baseball minds I know, and because I suspect it's true for a lot more pitchers than pitching coaches would like to think.

DOES GAME SCORE DISCRIMINATE AGAINST STRIKEOUT PITCHERS?

One reviewer of this article asked an interesting question. "Is Game Score unfair to strikeout pitchers?"

Game Score incorporates strikeouts into the total assigned points. Strikeouts count as +1. Outs count as +1, so an out that the pitcher forged from a strikeout increases his Game Score +2. On the surface, it doesn't seem that pitchers who earn their outs through strikeouts are being discriminated *against*.

But to be sure, I ran a test, using ~16,300 pitcher starts from Scoresheet (1957–2007)—starts that had Game Scores in the most sensitive area: 54 through 49, a range where the curve of team won–lost percentage is sharpest and so where overall performance most affects outcomes.

The results are strongly suggestive that bias against strikeout pitchers is not an issue. If there was a bias, pitchers likely would average lower scores with higher Ks or higher scores with lower Ks, or both. The results:

Relation of Game Score to Strikeouts, 1957–2007

Game Score	K	Win Pct.
54	4.0	.5600
53	4.0	.5332
52	3.9	.5146
51	3.9	.4974
50	3.8	.4817
49	3.7	.4391
Total 16,377 games	3.9	.5052

None of those effects appear in this 50-year sample of mid-range games. As a Game Score advocate might point out, if GS is fair, one would expect a higher K count to deliver a higher Game Score result. And to the degree that there is a change in K count as the Game Score goes up, K count goes up slightly, and not down.

Higher Game Scores are a little more likely to be associated with higher-K games than with lower-K games. (Logically enough, since the strikeouts directly affect Game Score.) At this point I can find no indication that Game Score is biased against strikeout pitchers.

I don't believe this closes the book firmly on the issue. It's merely a very strong indication there is no bias against. Someone convinced that this effect does exist could slice and dice the data in other interesting ways to try to uncover bias.

Manager Speaker

Steve Steinberg

Tris Speaker, considered one of the greatest hitters and center fielders of all time, is rarely considered a great manager, though his rallying the Cleveland Indians to the 1920 world championship after the death of Ray Chapman is readily acknowledged. His remarkable achievement of managing the Indians in 1921—keeping them in the pennant race against all odds (until a ninth-inning rally against the Yankees on September 26 fell just short)—has been overlooked. The elements of that success were the same as those of 1920. How those teams were assembled and how Speaker ran them reveal a special managerial and leadership skill set.

Speaker, who took over as manager of the Indians on July 19, 1919, guided them to a remarkable 40–21 mark for the rest of that season. He had a superb eye for talent and a special ability to draw out the best in his men. Grantland Rice called him "an alert, hustling, magnetic leader, who can get 100 per cent out of his material."[1] That he could do. Equally important, he secured that "material" by seeing potential where others did not. In a *Cleveland Plain Dealer* article headlined "Spoke Converts Discards into Valuable Assets," Henry P. Edwards noted that Speaker should be known as the "Miracle Man."[2]

TRANSCENDENTAL GRAPHICS/THERUCKERARCHIVE.COM

Tris Speaker is remembered more for his performance on the playing field than for his results as a manager. But in 1920–21 his personnel moves, tactics, and leadership generated outstanding results for the Cleveland Indians.

Speaker acquired pitchers who had failed and been rejected elsewhere, men in whom he "saw something." First there was Ray Caldwell. Traded away by the Yankees after the 1918 season, the alcoholic pitcher was waived by the struggling Red Sox the following August and appeared to be finished. Speaker signed him later that month, shortly after taking over as Indians manager. As Franklin Lewis related in his history of the Indians, Speaker used reverse psychology in Caldwell's contract:

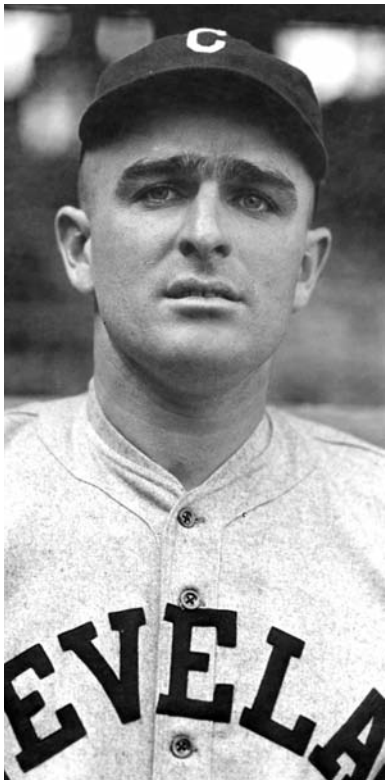
"After each game he pitches, Ray Caldwell must get drunk. He is not to report to the clubhouse the next day. The second day he is to report to Manager Speaker and run around the ball park as many times as Manager Speaker stipulates. The third day he is to pitch batting practice, and the fourth day he is to pitch in a championship game."[3]

Caldwell went 5–1 with a 1.71 earned run average for the Tribe in 1919. One of those wins was a no-hitter against his old team, the Yankees. Another was a game in which he was struck by lightning in the ninth inning; he recovered and finished the game.[4] In 1920 he continued his spectacular comeback when he fashioned a 20–10 record. Under Speaker's tutelage, Caldwell was able to keep his drinking under control.

A year after picking up Caldwell, Speaker acquired minor league pitcher Duster Mails from Sacramento of the Pacific Coast League. After pitching for the Brooklyn Robins in 1915 and 1916, Mails had spent three seasons in the minors. "I didn't deliberately try to dust them off," he explained. "I couldn't make the ball go where I wanted it to go."[5] (He had an 0–2 record with 14 walks and 16 strikeouts in 22⅓ innings with Brooklyn.)

Speaker had been following Mails's progress in the Coast League, where he won 37 games in 1919–20.

DENNIS GOLDSTEIN COLLECTION



Duster Mails returned to the major leagues in the heat of the 1920 pennant race, after three years of exile in the minors. He played a key role in the Indians' winning the AL pennant and the World Series.

"I have been trying to get Mails for a year past. . . . I have had Mails in mind for some time and he came to us when he did only after long bargaining and planning."[6] Mails joined the Indians for the late-season stretch, and he won seven games—including two shutouts—against no losses with a 1.85 earned run average. In the 1920 World Series he pitched 15⅔ scoreless innings and won one game.

Speaker picked up pitcher Allan Sothoron in the middle of the 1921 season, after he had been released by the Browns and the Red Sox, where he gave up 25 earned runs in 33⅓ innings. Speaker had noticed a flaw in Sothoron's delivery and thought he was tipping his pitches. Sothoron regained his effectiveness and proved to be a critical addition for Cleveland in 1921.[7] He had a 12–4 record with a 3.24 earned run average.

Speaker also was able to work youngsters into the lineup in the midst of fierce pennant races, where they performed very well from the start. After the death of shortstop Ray Chapman in August 1920, 21-year-old Joe Sewell was purchased from New Orleans. A recent team captain at the University of Alabama, Sewell took batting practice each morning against lefty Mails. Speaker wanted the left-handed-hitting rookie to build up his confidence.[8] Sewell hit .329 in those final weeks of the season and, in his first full season, 1921, .318 with 36 doubles.

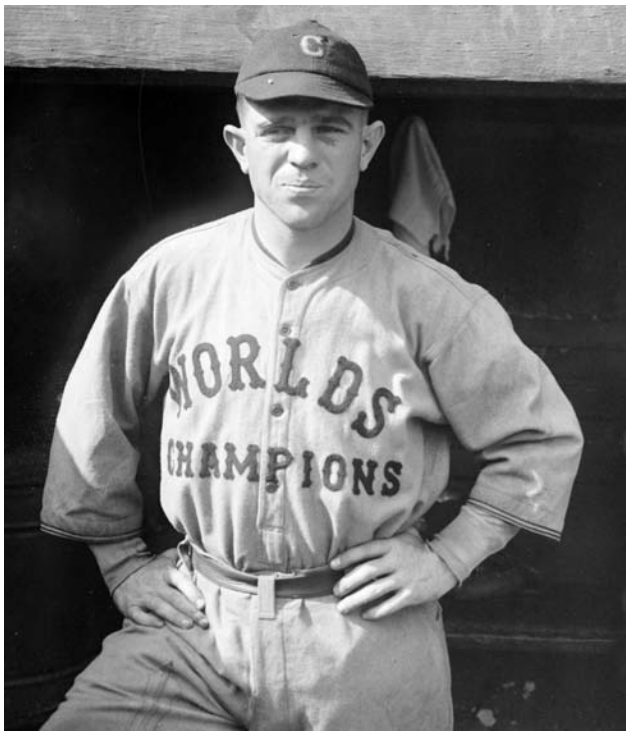
When Indians' second baseman Bill Wambsganss was injured in spring training in 1921, Speaker signed Riggs Stephenson—who had been Sewell's double-play partner in college—directly from the University of Alabama. He responded with a .330 batting average that year.

The Indians brought up another youngster in 1921, Joe Sewell's brother Luke. He appeared in only three games that first season—the first, however, of a twenty-year career in the major leagues.

Speaker reclaimed the careers of position players as well, not only pitchers. Detroit sportswriter H. G. Salsinger recognized Speaker's personnel skills. "He [Speaker] has proved himself one of the greatest base ball leaders of all time. . . . [and is noted for his] dextrous [*sic*] handling of players."[9]

Note: *The following discussion notes the offensive improvements in a number of Speaker's players in 1920 and 1921. While this was the start of the so-called Lively Ball Era, the improvement in his players is still significant. While playing under Speaker, many of his men had tremendous turnarounds that could not be explained entirely by the introduction of the lively ball.*[10]

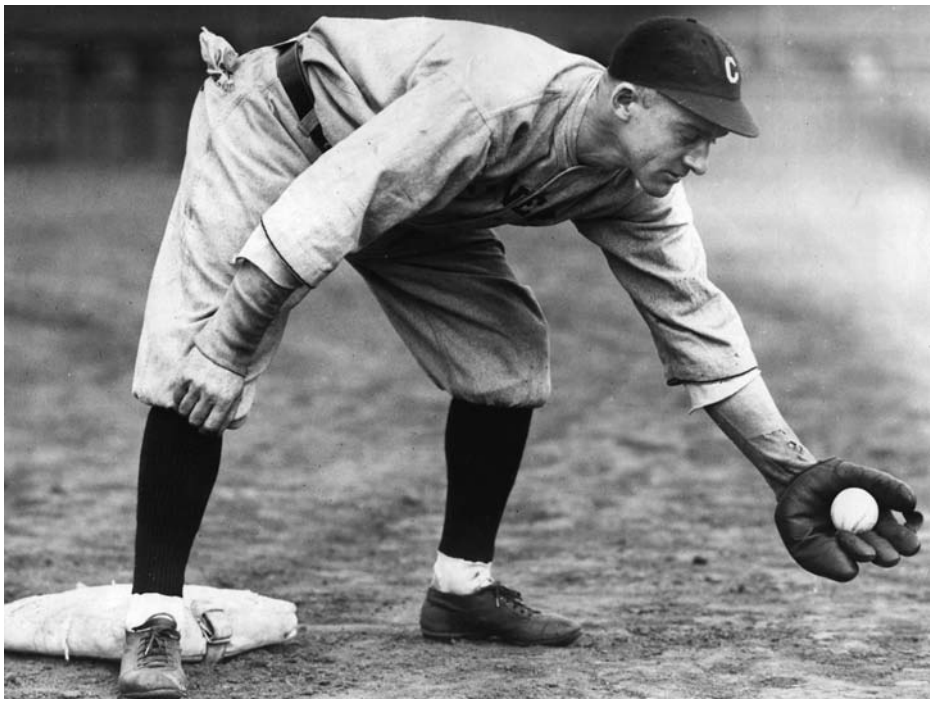
A key transaction that paved the way for the Indians' success was their trade, on March 1, 1919, of the difficult and temperamental Braggo Roth to the Phila-



GEORGE BAIN COLLECTION, LIBRARY OF CONGRESS, PRINTS & PHOTOGRAPHS DIVISION

Speaker nurtured both veterans and youngsters. Joe Sewell took over after the death of Ray Chapman and blossomed in 1921 as one of the best shortstops in the game, on the way to a Hall of Fame career.

MICHAEL MUMBY COLLECTION



Larry Gardner, Speaker's former teammate, revitalized his career after Speaker acquired him in the spring of 1919 from the Athletics, with whom he had a one-year stint between his ten years with Boston and what would become six more seasons with the Indians. In his early thirties by the time he moved to Cleveland, the third baseman responded to the trade with four outstanding seasons, 1919–22, averaging over .300. He had played some second and shortstop as well as third for the Red Sox before becoming their everyday third baseman in 1912. He was remembered in Boston for driving in the winning run, with a sacrifice fly, in the bottom of the tenth in the deciding game of the 1912 World Series.

delphia Athletics for Larry Gardner, Charlie Jamieson, and Elmer Myers. While Speaker was not the Tribe's manager quite yet, he pushed for the deal.[11] Franklin Lewis goes further and describes Speaker's presence in the trade talks.[12]

In his history of the Indians, Lewis describes Speaker's role with the Indians before he took over as the team's manager, replacing Lee Fohl. "The Fohl–Speaker combination was formed almost immediately upon the arrival of the Texan in Cleveland. Spoke was the natural field leader, and Fohl recognized his strength and adaptability promptly."[13]

Third baseman Larry Gardner had been a teammate of Tris Speaker on the Red Sox for several seasons, and a fixture in the Boston infield for a decade, before coming to the Athletics early in 1918. After joining the Indians in the spring of 1919, Gardner revitalized his career and, in his mid-thirties, averaged over .300 the next four seasons, 1919 to 1922.

Outfielder Charlie Jamieson had done little with the Nationals (1915–17) or the Athletics (1917–18). Over those four seasons he hit an aggregate .235 and never had an on-base percentage above .341. At the last minute, Speaker asked Connie Mack to include him in the Gardner trade, and Mack agreed.[14] Speaker replaced the aging Jack Graney with Jamieson during the 1920 season, and Charlie went on to have several sensational years at the plate with Cleveland, including two in which he hit above .340 and had an on-base percentage above .400.

In his eighteen-year career in the majors, Jamieson hit .303 with 1,990 hits and an on-base percentage of .378. He later called Speaker "my best friend. He was the one who helped me get traded to Cleveland."[15]

First baseman Tioga George Burns was another key Speaker acquisition. Hughie Jennings and the Detroit Tigers had given up on him after he hit .226 in 1917. Speaker bought him from Connie Mack's Athletics on May 29, 1920.[16] Historian Norman Macht noted that Mack was willing to give him up because Philadelphia fans were riding Burns mercilessly after he dropped some fly balls.[17] Speaker instilled confidence in Burns, who responded with seven straight seasons of batting above .300, starting in 1921, including four seasons above .325. In 1926 he won the award as the most valuable player in the American League, hitting .358 with 64 doubles.

Steve O'Neill was a fine defensive catcher but, before Speaker took over the helm of the Indians, a weak hitter. O'Neill had hit above .253 only once, and his on-base percentage had never reached .350, when he hit .289 in 1919. He hit between .311 and .322 the next three seasons, when his on-base percentage was above .400. Speaker gave O'Neill three specific tips to help him at bat.[18]

1. Go to the plate thinking you'll get a hit.
2. Outthink the pitcher.
3. Don't swing at bad balls.

Speaker converted third baseman Joe Evans to an outfielder. He had never played in the outfield until 1920. A .214 hitter before 1920, he hit .342 the next two seasons.

BOSTON PUBLIC LIBRARY, PRINT DEPARTMENT

After Joe Wood's stellar career as a pitcher ended in his mid-twenties, the Indians acquired him, Speaker's old Red Sox roommate. The $15,000 that Tribe ownder James Dunn paid Boston to acquire him far exceded his market value at the time. Wood responded by reinventing himself as a position player for the Indians, culminating in a .366 batting average in 1921.

On February 24, 1917, Smoky Joe Wood joined his former Red Sox roommate and pal, who was now with the Indians. "Undoubtedly," Franklin Lewis wrote, "Wood came to the Indians on Tris's recommendation."[19] Charles Alexander notes that the $15,000 James Dunn paid Boston to acquire Wood was far above his "market value" at the time.[20] With his arm "gone" and his career as a pitcher over, Wood made a terrific comeback as an everyday player. Actually, he had been a decent hitter as a pitcher. In the four years 1910 through 1913, he hit .273 (92 hits in 337 at bats), including four home runs, four triples, and 24 doubles.

First baseman Wheeler "Doc" Johnston never hit above .280 before 1919. He hit under .250 from 1909 to 1918 and then almost .300 from 1919 to 1921. The Burns and Johnston deals cost the Indians less than $10,000.[21] The Indians reacquired outfielder Elmer Smith on June 13, 1917. (They had traded him away the previous August.) In 1920 and 1921 Smith had career years, hitting .303 with 28 home runs.

Tris Speaker was also far ahead of his time in how he used his players. He was an early advocate of platooning long before the word even existed in the baseball lexicon.[22] The concept of playing left-handed hitters to face right-handed pitchers and vice versa had awkward names at the time, including "double-batting shift," "interchangeable players," "switch-around players," and "reversible outfield."[23] Speaker himself called it his "triple shift" because he employed the tactic at three positions: first base and two outfielders.[24] (The one outfielder Speaker did not platoon was himself.)

Bill James has written that Speaker instituted the "first extensive platooning" in 1920.[25] James also noted that there was little discussion about the practice at the time. Yet one person did comment on it—with harsh criticism. In 1921, John B. Sheridan, the respected columnist of *The Sporting News*, wrote.

"The specialist in baseball is no good and won't go very far. . . . The whole effect of the system will be to make the players affected half men. . . . It is farewell, a long farewell to all that player's chance of greatness. . . . It destroys young ball players by destroying their most precious quality— confidence in their ability to hit any pitcher, left or right, alive, dead, or waiting to be born."[26]

Three years later he was still passionate on the subject, that such substituting was "spoon-feeding baseball players. Giving them setups. Making things soft for them. Coddling them. Softening them morally. . . . Hell's Bells, the only way to make a young man worth a cent is to put him out there when things are hard for them."[27]

What little other commentary there was about Speaker's system was somewhat supportive. In December 1920, in an article about Elmer Smith, *Baseball Magazine* noted that Speaker's system of alternating

players was based on "the theory sound in principle that left-handers don't hit left-handers. Whatever may be said for the theory, Speaker has certainly obtained results which seem to justify his good judgment."[28]

Where did Speaker get the idea of platooning? Why did he use it? He was playing for the Red Sox when George Stallings, the manager of the Miracle 1914 Boston Braves, platooned his outfield. *Baseball Magazine* noted that Speaker's "unusual wealth of outfield material" let him alternate his outfielders "after the approved George Stallings plan, sending in right-handed batters against port-side pitchers and vice-versa."[29]

In 1915, Bill Carrigan, the manager of Speaker's Red Sox used the shift at both catcher, with Hick Cady (BR) and Pinch Thomas (BL), and at first base, with Del Gainer (BR) and Dick Hoblitzel (BL). Ed Bang, sports editor of the *Cleveland News* for more than fifty years, wrote that Speaker learned the concept from Carrigan.[30] Charles Alexander, author of a biography of Tris Speaker, suggests that Speaker instituted the practice first and foremost to accommodate his friend Joe Wood.[31]

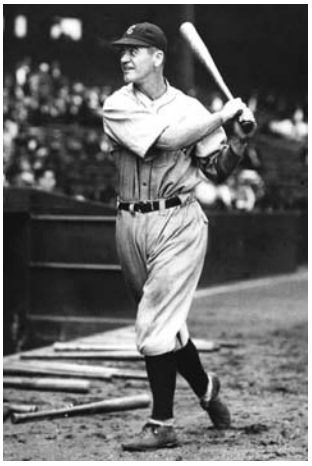
Here is a look at the dramatic results Speaker achieved at the three positions in 1920 and 1921. (The statistics listed are games played, batting average, on-base percentage, and slugging average.)

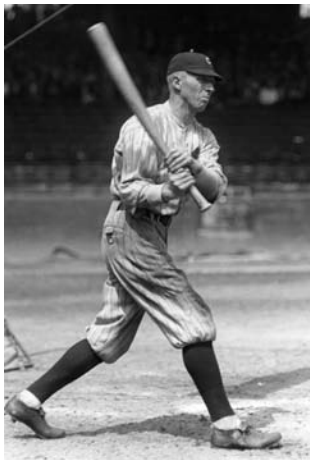
L: GEORGE BAIN COLLECTION, LIBRARY OF CONGRESS, PRINTS & PHOTOGRAPHS DIVISION
R: DENNIS GOLDSTEIN COLLECTION

Joe Evans and Charlie Jamieson platooned in left field. In 1920 and 1921, both hit well over .300.

Position	Right-handed hitter	Left-handed hitter
Left field	Evans	Jamieson
1920	56g / .349 / .404 / .506	108g / .319 / .388 / .411
1921	57g / .333 / .410 / .405	140g / .310 / .387 / .414

Speaker himself performed at a very high level on the playing field, despite the burden of managing the club. He maintained his offensive prowess while still excelling in the field. He had 24 assists in 1920 and had the league's top range for an outfielder in 1921.[33]





L: NATIONAL BASEBALL HALL OF FAME MUSEUM / R: DENNIS GOLDSTEIN COLLECTION

Tioga George Burns and Doc Johnston platooned at first base after Speaker acquired Burns from the Athletics.

Position	Right-handed hitter	Left-handed hitter
First base	Burns (purchased May 29, 1920)	Johnston
1920	44g / .268 / .339 / .375	147g / .292 / .333 / .385
1921	84g / .361 / .398 / .480	118g / .297 / .353 / .401

L: DENNIS GOLDSTEIN COLLECTION / R: DENNIS GOLDSTEIN COLLECTION

Joe Wood and Elmer Smith platooned in right field and in 1920 and 1921 generated a batting average better than .300 and an on-base percentage of almost .400.

Position	Right-handed hitter	Left-handed hitter
Right field	Wood	Smith
1920	61g / .270 / .390 / .401	129g / .316 / .391 / .520
1921[32]	66g / .366 / .438 / .562	129g / .290 / .374 / .508

Position	Left-handed hitter
Center field	Speaker (not platooned)
1920	150g / .388 / .483 / .562
1921	132g / .362 / .439 / .538

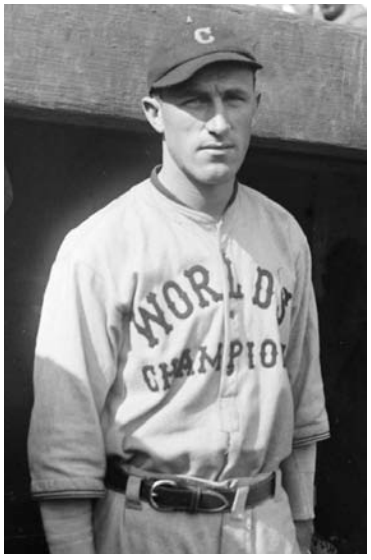
In 1921 Speaker's world-champion Indians almost repeated as American League champions. They finished 4½ games behind the Yankees but were just one game back when they dropped their final game against New York, on September 26, by the razor-thin margin of 8–7. Cleveland reporter Stuart M. Bell saluted Speaker's 1921 achievement: "The Indians most of the season had a wreck of a championship ball club. He piloted an almost pitcherless and for two months an almost catcherless ball club. . . . Nobody but Tris Speaker could have done it."[34]

The Indians held onto first place most of the season despite numerous obstacles.

- Bill Wambsganss broke his throwing arm in preseason. He missed 47 games in 1921, after missing just one in 1920.

- Steve O'Neill was hit in the hand by pitcher Howard Ehmke and broke a finger on May 30. He did not return to the lineup until July 15. He missed 48 games in 1921, after missing just five in 1920.

- Speaker himself was injured at different times during the season, the most serious being a September 11 knee injury. He missed 22 games in 1921. In the late September showdown series against the Yankees, the hobbling Speaker managed only one hit in thirteen at-bats.



GEORGE BAIN COLLECTION, LIBRARY OF CONGRESS, PRINTS & PHOTOGRAPHS DIVISION

Indians second baseman Bill Wamsbganss broke his throwing arm in preseason and would miss 47 games, becoming one of many Indians who suffered injuries during the 1921 season. Catcher Steve O'Neill broke a finger on May 30 and missed 48 games. Speaker himself was injured several times during the season, and after a knee injury in September went 1-for-13 in the Indians' late-September showdown with New York.

KRAFFERT COLLECTION, WESTERN RESERVE HISTORICAL SOCIETY

Speaker, right, shown tossing a medicine ball with Steve O'Neill, had a special ability to lead and motivate his men while playing alongside them.

- Jim Bagby won only 14 games after winning 31 in 1920. His earned run average rose almost two runs.

- Ray Caldwell won only six games in 1921 after winning 20 in 1920.

Taking all this into account, Bang offered that "Speaker really showed more managerial ability in losing the pennant last season [1921] than he displayed when the Indians won the year before."[35] Even New York reporters recognized the team he had shaped. "The Indians are as game a ball club as has come by along the pike in all the history of the national obsession," wrote the *New York Evening Telegram* late in the 1921 season.[36]

Speaker was able to get results because of his management style and leadership skills. First there was the reassurance he provided to his men. St. Louis Browns' manager Fielder Jones observed this as soon as Speaker joined the Indians in 1916, long before he became the team's manager. "His coming has given a number of other members of the team the one thing they lacked: confidence. Speaker is as necessary to the Cleveland club as a spark plug to an automobile."[37]

Then there was the example Speaker set. "He is always in the forefront in every game," wrote New York sportswriter George Daley, "working the hardest, covering the most ground, the first in attack and the last to give up."[38] Speaker did not pretend to have all the answers. "When he was on the bench," Coveleski said, "and something came up that he didn't know about, he asked for help."[39] Speaker also had a special

knack for connecting with his men. The *Washington Times* noted that "he is a manager and coacher of temperament as much as instructor of physical skill and how to apply it."[40]

"He was," wrote veteran sportswriter Gordon Cobbledick, "proving himself a warm and understanding handler of the varied temperaments, dispositions and talents under his command. . . . There was never any doubt among the players that instructions from him were orders to be obeyed, but he didn't place himself on a pedestal. While the ball game was in progress, he was the boss. When it was over, he was one of the gang."[41] At the close of the 1921 season, Heywood Broun wrote in *Vanity Fair*: "He is a leader who never gives up and never allows his team to give up in spite of the circumstances of a game. It seems to me that he is by far the finest manager in professional baseball."[42]

Postscript

Tris Speaker would manage the Indians for five more seasons, before he was forced to resign in the fallout from the Cobb–Leonard–Wood affair.[43] Though the Indians won more games than they lost over that span, they would not be a serious challenger for the American League pennant, with the exception of a spectacular late-season rush in 1926.[44] Speaker's seemingly uncanny evaluation of players deserted him after 1921, when his personnel moves had only mixed results.[45] He also backed off on platooning after that season.[46] And so his success of 1920–21 must be seen in the context of his whole managerial career, including the less impressive record he compiled toward the end of it. ■

KRAFFERT COLLECTION, WESTERN RESERVE HISTORICAL SOCIETY

As a player-manager, Speaker skillfully and successfully juggled his roles in 1920 and 1921.

Notes

1. Grantland Rice, *New York Tribune*, 6 April 1921.
2. *Cleveland Plain Dealer*, 31 July 1921.
3. Franklin Lewis, *The Cleveland Indians* (New York: G. P. Putnam's Sons, 1949), 104–5.
4. Lewis, 105.
5. Duster Mails, "The Pitcher who Clinched Cleveland's First Pennant," *Baseball Magazine*, December 1920, 353.
6. Tris Speaker, "Tris Speaker, the Star of the 1920 Baseball Season," *Baseball Magazine*. December 1920, 318. Mails cost the Indians $10,000 in players and cash to Sacramento. Lewis, 113.
7. Sothoron was 20-game winner for the Browns in 1919 and finished fifth in the league with a 2.20 earned run average. In 1918 he finished third with a 1.94 mark.
8. Charles C. Alexander, *Spoke: A Biography of Tris Speaker* (Dallas: Southern Methodist University Press, 2007), 162.
9. H. G. Salsinger, *Detroit News*, 27 August 1921.
10. From 1918 through 1921, the rise in offensive performance in the AL was significant. In 1918, bating average, on-base percentage, and slugging average were, respectively .254 / .323 / .322. In 1921, they were .292 / .356 / .408.
11. Alexander, *Spoke*, 137, and Timothy M. Gay, *Tris Speaker: The Rough-and-Tumble Life of a Baseball Legend* (Guilford, Conn: Lyons Press), 182.
12. Lewis, 98.
13. Ibid., 90.
14. Ibid., 98.
15. Charlie Jamieson file, National Baseball Hall of Fame Library, Cooperstown, N,Y, quoted by Alexander in *Spoke*, 137.
16. Alexander, 155.
17. E-mail from Norman L. Macht to the author, 29 May 2008.
18. Adam Ulrey, "Steve O'Neill," in *Deadball Stars of the American League*, ed. David Jones (Dulles, Va.: Potomac Books), 683.
19. Lewis, 91.
20. Alexander, 115.
21. Lewis, 107.
22. Paul Dickson does not have a baseball use of "platoon" until many years later. Paul Dickson, *The Dickson Baseball Dictionary*, 3d ed. (New York: Norton, 2009), 649–650.
23. Peter Morris, *A Game of Inches: The Stories Behind the Innovations That Shaped Baseball: The Game on the Field* (Chicago: Ivan R. Dee, 2006), 324 –27. Morris also cites a number of nineteenth-century examples of platooning.
24. *New York World*, 3 April 1921.
25. Bill James, *The Bill James Historical Baseball Abstract* (New York: Villard Books, 1986), 112 –23. John McGraw began platooning Casey Stengel (BL) and Bill Cunningham (BR) in 1922.
26. John B. Sheridan, *The Sporting News*, 5 May 1921.
27. John B. Sheridan, *The Sporting News*, 7 August 1924, quoted by Morris, *Game of Inches: The Game on the Field*, 327.
28. John J. Ward, "The Man who Made Record Homer," *Baseball Magazine*, December 1920, 335.
29. S. Crosby, "Charlie Jamieson of the World Champions," *Baseball Magazine*, June 1921, 294.
30. Ed Bang, *Collyer's Eye*, 3 February 1923.
31. E-mail from Charles C. Alexander to the author, 30 September 2006.
32. After Wood hit .366 in only 194 at-bats in 1921, Speaker let him play regularly in 1922, his final season. He hit a solid .297 in 505 at-bats.

Speaker had traded Elmer Smith, Wood's platoon "partner," away after the 1921 season. Speaker sent Smith and Burns (and the rights to Joe Harris) to the Red Sox for Stuffy McInnis. He did reacquire Burns two years later, in a blockbuster seven-player deal. (O'Neill and Wambsganss went to the Red Sox.). Burns then had four terrific years with the Indians (1924–27), including his MVP season of 1926, when he led the league in hits and doubles.

33. Gary Gillette and Pete Palmer, *The ESPN Baseball Encyclopedia*, 5th ed. (New York: Sterling, 2008), 932.
34. Stuart M. Bell, *Cleveland Plain Dealer*, 4 October 1921.
35. Ed Bang, *Collyer's Eye*, 26 November 1921.
36. *New York Evening Telegram*, 9 September 1921.
37. Quoted in Gay, *Tris Speaker*, 160.
38. George Daley, *New York World*, 3 April 1921. Daley wrote many of his columns, including this one, under the pseudonym "Monitor."
39. Eugene C. Murdock, *Baseball Players and Their Times: Oral Histories of the Game, 1920–1940* (Westport, Conn.: Meckler, 1991), 17.
40. *Washington Times*, September 5, 1921.
41. Gordon Cobbledick, "Tris Speaker: The Grey Eagle," in *The Baseball Chronicles: An Oral History of Baseball Through the Decades*, ed. Mike Blake (Cincinnati: Betterway Books, 1994), 84.
42. Heywood Broun, "Sweetness and Light in Baseball," *Vanity Fair*, October 1921, 64–65.
43. In late 1926, former Tigers pitcher Dutch Leonard accused Ty Cobb, Joe Wood, and Speaker of fixing a game between Detroit and Cleveland in September 1919. Commissioner Landis later exonerated the three men. But neither Cobb nor Speaker ever managed in the major leagues again.
44. After the Yankees went on a 16-game winning streak early in the 1926 season, the Indians fell to fifth place in late June, 13 games back of first. Then, after beating the Yankees four straight late in the season, the Indians climbed to within 2½ games of first on September 18. They finished in second place, three games behind the Yankees.
45. For example, Speaker traded away George Burns and Elmer Smith after the 1921 season, although he reacquired the former two years later, and Burns had four more strong seasons with the Tribe. In 1925, Speaker gave up on Riggs Stephenson, who went on to star for the Chicago Cubs for many years. He sent Stan Coveleski to Washington, for two obscure players, one of whom never appeared in another major-league game, and the other won only five games in his career, while Coveleski won 34 games for the 1924–25 Senators.
46. In 1922, Joe Wood's last season, Speaker played his friend regularly, and Wood responded with a .297 batting average in 505 at-bats. Charlie Jamieson was emerging as one of the league's top hitters from both sides of the plate, and in 1923 he led the league with 644 at-bats and 222 hits.

Earl Weaver

Strategy, Innovation, and Ninety-Four Meltdowns

Jeff Burd

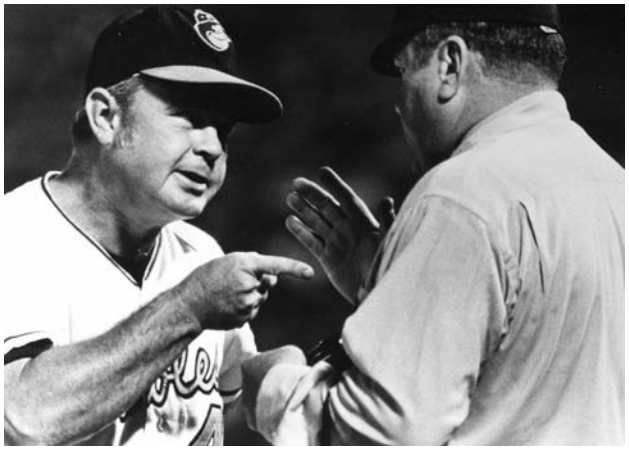
Two seasons ago, I witnessed the Florida Marlins attempt to execute a classic Earl Weaver maneuver. It was the fifth inning of a game in Milwaukee. The Marlins, down 1–0, had runners on first and third with two outs. As the pitcher was winding up for the next batter, I nudged my buddy in the seat next to me and drew his attention to the situation. I'd heard the former Baltimore manager detail the play on a radio show some years before. He'd have the guy on first get himself caught in a rundown; meanwhile, the guy on third steals home. Weaver said they practiced the play only once a year, in spring training, but everybody was expected to know it and be ready for the situation any time throughout the season.

The brief discussion may have been lost on my buddy, at least the part about Earl Weaver. He asked if that was the same guy who had been kicked out of all those games way back when; he thought he had seen a few YouTube clips that he described as "hilarious."

———

My buddy's knowledge of Weaver, who retired from managing twenty-four years ago, probably ends with the video clips. In that respect, he's probably no different from the people who have tuned in to YouTube nearly half a million times to witness the hilarity. One clip isn't a video so much as a series of still photos strung together to go along with an old recording of Weaver's radio show, *The Manager's Corner*. That particular episode might as well have been scripted by David Mamet for the way Weaver spews profanity. He tears apart the idea of having speed on the basepaths, digs at Terry Crowley and how lucky he is to be in baseball, and finally gives Alice from Norfolk some rather pointed advice about her love life when all she was looking for was some pointers about growing tomatoes.

The other clip is of an infamous fit Weaver threw on September 17, 1980, at Baltimore's Memorial Stadium. What unfolds is all too familiar regarding Weaver's on-field reputation: He storms out of the dugout and erupts in umpire Bill Haller's face: "You and your crew are here for one reason only—to fuck us!" That happens within the first 30 seconds of the three-minute clip, and it's enough for Haller to run Weaver for the fourth time. Haller was purportedly featured in a documentary being filmed at the time and so was wearing a microphone that captured nearly every word of the obscenity-soaked tirade. What had Haller done to incur Weaver's wrath? He'd called a balk on Mike Flanagan. There was one out in the top of the first inning.



NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

The 94 ejections Weaver accumulated throughout his 18-year managerial career still stands as the American League record.

———

Some would say the YouTube clips are a fitting legacy for Weaver. The audio clip, though, to accompany the montage of still photos is not to be believed. Baltimore sportswriter Rick Maese wrote about it in the *Baltimore Sun* on May 23, 2008. He found that it was a prank set up by Weaver and Orioles broadcaster Tom Marr. It was inadvertently leaked at one point and continues to fool casual Internet surfers, fueled no doubt by Weaver's reputation as, to quote Maese, an "ornery cuss." The question about gardening, that was a reference to the tomatoes Weaver and groundskeeper Pat Santarone grew beyond the outfield fences at Memorial Stadium.

The Haller clip is a different story. It is but one example of the 94 ejections Weaver accumulated throughout his 18-year managerial career. The total still stands as the American League record. (Bobby Cox holds the MLB record at 151 and counting.) The number can't be ignored in any discussion of the combative manager, especially in light of some of the circumstances under which the ejections occurred. Weaver began to earn notoriety in the mid-1960s when he was thrown out of each game in a three-game

series while managing at double-A Elmira. (That was enough for Orioles owner Jerry Hoffberger to ask, when he was considering hiring Weaver as manager, how Weaver could manage his team when he couldn't manage to stay in the dugout long enough.) In 1969, Weaver argued balls and strikes with umpire Shag Crawford and became the first manager in more than sixty years to be ejected from a World Series game. Ron Luciano ran Weaver early in game one of a doubleheader in 1975, and then ran him again during the lineup meeting prior to the start of game two. Weaver then got ejected the next day, thus giving the manager an unofficial record for the most ejections over the shortest amount of time. (Weaver scored two more ejections that year to set his personal season record of ten.)[1] Perhaps fearing that he wasn't getting enough international exposure, Weaver was once thrown out of an exhibition game in Japan.

But it wasn't just the ejections that built Weaver's reputation—many times it was the antics that followed. He kicked enough dirt to start another Dust Bowl, but that was the least of his histrionics. He once shredded a rule book on the pitcher's mound and even went as far as twice striking umpire Terry Cooney in the face in 1982. The latter action earned Weaver a one-week suspension and $2,000 fine. It was the fourth suspension of his career. Weaver referred to it as a "vacation" granted by AL president Lee MacPhail. The scope of Weaver's carryings on was so great that it's probably hard for at least one other manager not to have duplicated any one thing he did on being ejected. Some might argue that former Pirates skipper Lloyd McClendon outdid Weaver when he pulled a base out of the ground and took it with him after he was tossed from a game in 2001. Not so; Weaver did the same thing in 1963.

Given the weight the ejections and antics lend to his legacy, it's easy to forget that Weaver has humble roots—he came to baseball as a working-class boy from the streets of St. Louis. As a child in the 1930s, he worked hauling uniforms back and forth between his father's dry-cleaning business and the clubhouses of the St. Louis Browns and the Cardinals. He fell in love with the Gashouse Gang at a young age and dreamed of nothing but becoming a professional ballplayer. Weaver eventually became a standout player at Beaumont High School in St. Louis and played second base in the minor leagues for almost a decade before realizing, as he said, "I wasn't going to make the majors as a player."[2] He went on to manage at every level in the Orioles organization before finally being brought in to manage Baltimore, replacing Hank Bauer midway through the 1968 season.

Baltimoreans know all this, though, and will forget neither how hard Weaver worked to get to the Orioles dugout nor all he accomplished once he got there. They were the ones who saw Weaver as their guy, as the literal small guy sweating his way through life with an unwavering work ethic and who rarely worked with more than a one-year contract. They dubbed the diminutive dynamo The Earl of Baltimore. It was those same fans who cheered wildly and almost brought Weaver to tears when he delivered his Hall of Fame acceptance speech in August 1996. Standing behind the podium, speaking in front of his boyhood idols Enos Slaughter and Stan Musial, Weaver implored the fans, "Please don't make me cry, now. I don't want to cry."[3] The Oriole faithful knew that Weaver was right where he belonged, and it wasn't just his 1,480 wins that got him there. They knew that, over the course of his career, Weaver developed a system that not only defined Orioles baseball but had a significant impact on how the game was managed.

Weaver was one of the first managers to make extensive use of statistics; he pored over them endlessly as he tried to find anything that would give him an advantage over an opponent. Sometimes those advantages came at the cost of a player's ego, but Weaver made no apologies. An excellent example: Substituting a hitter like Chico Salmon for MVP Boog Powell when the Orioles faced Mickey Lolich. To Weaver, who described the odd substitution in his book *Weaver on Strategy*, it was a no-brainer. Salmon's .300 batting average, .349 on-base percentage, and .400 slugging percentage against Lolich towered over Powell's paltry .178/.211/.278. The same applied to slugger Lee May. When Weaver "went to the books" (as the Oriole players used to say), he saw that May hit a sickly .095 against Luis Tiant. To hear Weaver tell it, "No way he's going to be in the lineup against Tiant when I got [another] guy who hits his junk for about .420."[4] In a similar regard, Weaver would move Mark Belanger higher up in the batting order when facing Jim Kern. Belanger hit .625/.684/.625 against Kern; he was otherwise (that is, after subtracting his 10-for-16 against Kern) a .226 lifetime batter. Weaver tolerated Belanger's low average in the first place because Belanger was an outstanding defender who won eight Gold Gloves at shortstop.[5]

Weaver was also a renowned judge of baseball talent. Frank Robinson, one of six Hall of Famers Weaver managed, said in *Time* magazine article that Weaver's

talent went far beyond realizing who the best athlete was or what combinations made the best starting lineup.[6] He delved deep into the question of who was the best man to get a hit after sitting on the bench for a week, what pinch-runner could steal a base in the late innings, and who could play more than one position if there was an injury. "Nobody in baseball can put all those elements together better than Earl Weaver," Robinson concluded. "Because nobody can judge baseball talent as well as he can." Robinson may as well have said the name Terry Crowley, the same player Weaver ripped on his fake radio broadcast. Part of what Weaver said wasn't fake at all—he kept the journeyman around because he knew Crowley could sit on the bench and then break something open late in a game with his clutch hitting. But it wasn't just Crowley that cemented Weaver's reputation. He was but one of a boatload of no-names and castoffs from other teams whom Weaver used once he dug through his files to see who could do what in whatever situation. Weaver credits his ability to evaluate talent with the epiphany he experienced when he realized he would never play in the majors. In the same *Time* article, he said, "Right then I started becoming a good baseball person, because when I came to recognize, and more important, accept my own deficiencies, then I could recognize other players' inabilities and learn to accept them, not for what they can't do, but for what they can do."

Adding to this, Weaver also had a knack for exploiting loopholes he found in the rules. Whether it was a survival skill that carried over from the Depression or something that developed in his mind as he scrambled to find any way to compensate for his size on the field, Weaver's conniving became one of his best-known characteristics. In 1975, he adjusted for Mark Belanger's weak bat during late-season division races by listing Royle Stillman to hit leadoff and play shortstop on the road. Stillman, who was called up from the minors once rosters expanded, hit .500 (3-for-6) in those situations, so he usually gave the team an immediate advantage. When the Orioles took the field in the bottom of the first, Belanger would trot out to short and hit leadoff the rest of the game. The league never stopped Weaver from using that particular ploy (he did it again in 1979), but it did pull the plug on another one of his strategies. In 1980, he fell into the habit of listing Steve Stone as his designated hitter.[7] The motivation was simple: If the opposing pitcher was knocked out of the game early, Weaver wouldn't lose a position player if he wanted to change the DH to match up better with the reliever. It was perfectly legal, but the league passed a rule against it, citing that the stunt distorted hitting statistics.

Of the three books to his credit, it's *Weaver on Strategy* that has left the greatest impression on baseball minds since its publication in 1984. It's packed with insights and observations from Weaver's career, but there are also ten laws that delineate his managerial philosophy. Two of them prove his preference for big plays and big innings: The easiest way around the bases is with one swing of the bat; and, If you play for one run, that's all you'll get. He has two laws for pitching, one of which justifies his use of the four-man rotation; the other designates long relief as the best place for a rookie pitcher. He addresses defense by noting that the key step for an infielder is the first one—to the left or right, *before* the ball is hit. Weaver even has a law for dealing with his constant nemeses: The job of arguing with the umpire belongs to the manager, because it won't hurt the team if he gets thrown out of the game.

Though his laws are sound, Weaver was best known for his succinct managerial philosophy: Pitching, defense, and the three-run homer. The catch phrase was as short as the man himself and packed every bit as much punch thanks to his ability to stack the Orioles year after year with players to supplement the three-pronged attack. Weaver's pitchers won 20 games on 22 occasions (six went on to win the Cy Young Award), his fielders won 34 Gold Gloves, and his clubs were in the top five in home runs in the American League 11 times. All told, it was enough for him to pile up a .583 winning percentage, six division titles, four pennants, and the 1970 World Series championship.

If you watch the Haller clip on YouTube long enough, you'll hear the assailed umpire make a comment that cuts deep beneath Weaver's bristly façade. It comes after Weaver, once again in Haller's face, promises that it is he who will be remembered when all is said and done; it is he who will be in the Hall of Fame. Haller smugly inquires, "What are they gonna put you in the Hall for? Fuckin' up World Series'?"

Haller is most likely referring to Game 2 of the 1979 Series when Baltimore and Pittsburgh were tied 2–2 in the bottom of the eighth. The O's had runners on first and second base; John Lowenstein was at bat. If Weaver had called for a bunt, the Orioles would have been in excellent position to plate one or more runs to keep the pressure on the Pirates. Instead, Lowenstein hit into a double play and erased both baserunners. The next batter grounded out. Pittsburgh scored a run in the top of the ninth and then held on to win 3–2 and tie the series at a game apiece. The victory gave

the Pirates a much needed toehold in the Series before they eventually overcame a 3-games-to-1 deficit to claim the championship. If ever there was a time for Weaver to stray from his "pitching, defense, and three-run homer" philosophy, it was probably then. I doubt the lesson was lost on the astute Weaver. Perhaps it was the genesis for his sixth law: Don't play for one run unless you know that run will win a ballgame.

Unfortunately for Weaver, that wasn't the only World Series gaffe to which Haller could be referring. Weaver took criticism for having Boog Powell play throughout the '71 Series despite suffering an injury that caused obvious pain every time he was at bat. Powell was a crucial part of the O's slugging attack, but he hit an anemic .111 for the Series, going 0-for-4 and striking out twice in Game 7, when Baltimore fell to Pittsburgh 2–1.

Though Haller ejected Weaver five times, the two were merely enemies. There was another umpire who was easily Weaver's archenemy: Ron Luciano. Their feud went as far back as the minor leagues. (It was Luciano who had tossed Weaver three games in a row in Elmira.) Weaver couldn't stand Luciano's flamboyant style, and at one time even threatened to fine any Oriole player who talked to Luciano during a game. Luciano once described Weaver's approach to the game as religious; his outrageous behaviors, then, were a reaction to an umpire's sacrilegious actions. Weaver never could convert Luciano. Instead, Luciano exorcised Weaver from games on seven different occasions once they both reached the major-league level. Luciano's description was neither his final word on Weaver nor his most acerbic. In a sports-themed book published shortly after his retirement in 1980, Luciano was asked to rank the five toughest managers he had to deal with.[8] He listed Weaver in the first four spots (the fifth spot was Frank Robinson, though Luciano noted that Robinson was Weaver's protégé). Later in the same book, Luciano commented that Weaver never forgets and held grudges that made him even more difficult to deal with. He cited a controversial call he made at the plate late in his career, recalling, "Earl charged out of the dugout, screaming that that was the same call I'd blown at Elmira in '66."[9]

Many players, including Robinson and Weaver's long-time staff ace Jim Palmer, insisted that Weaver never held grudges, so perhaps it was only with umpires.[10] Those same players, especially Palmer, commented that heated confrontations, blow-ups, and even the hurling of equipment were not uncommon in the Orioles dugout as Weaver and his players dealt with each other but that, once it was over, it was over. Weaver never continued to stir the pot. Weaver even claimed in *Weaver on Strategy* that he didn't believe in grudges. "They're stupid," he wrote, "and nothing good comes from them."[11]

One pitch after I had brought the Earl Weaver situation to my buddy's attention, Florida manager Fredi Gonzalez called for the play. Dan Uggla baited lefty Manny Parra, but Hanley Ramirez was too late breaking for home and was gunned down 1-3-2. Given Weaver's reputation, I had a feeling about what he might have said to Gonzalez for playing for one run, much less doing it so early in the game.

Of course, there's a chance Weaver would have said nothing. On the same radio show when he described his patented first-and-third double steal, he said he doesn't watch much baseball nowadays (and only a few innings at a time when he does) because he can't stand to see the way the game is coached and played. He finds greater satisfaction with his weekly (and highly competitive) golf game and in growing tomatoes where he has retired in south Florida. So perhaps Weaver doesn't mind so much what's on YouTube. His position in the Hall of Fame is just as permanent as the notorious clips in orbit around cyberspace, and, if nothing else, they reinforce how the man himself suggested he be remembered when his time comes—as The Sorest Loser Who Ever Lived. ■

Notes

1. For the list of his ejections in 1975, see Earl Weaver with Terry Pluto, *Weaver on Strategy* (New York: Collier Books, 1984), 135. But according to Retrosheet the number of Weaver's ejections in 1975 is nine.
2. Weaver, *Weaver on Strategy*, 176.
3. Michael Olesker, "The Earl of Baltimore Becomes King for a Day," *Baltimore Sun*, 5 August 1996.
4. "Sport: Baltimore's Soft-Shelled Crab," *Time*, 23 July 1979.
5. Earl Weaver with Terry Pluto, *Weaver on Strategy: The Classic Work on the Art of Managing a Baseball Team* (New York: Brassey's, 2002).
6. "Sport: Baltimore's Soft-Shelled Crab," *Time*, 23 July 1979.
7. See Rich Marazzi, "Baseball Rules Corner," *Baseball Digest* 58, no. 11 (November 1999): 86. Weaver in *Weaver on Strategy*, though, gives the year as 1981: "In 1981, I wrote Steve Stone into my lineup every day as the designated hitter" (56).
8. Phil Pepe and Zander Hollander, *Book of Sports Lists, No. 3* (Pinnacle Books, 1981).
9. Ibid., 45.
10. "Sport: Baltimore's Soft-Shelled Crab," *Time*, 23 July 1979.
11. Weaver, *Weaver on Strategy*, 106.

The History and Future of the Amateur Draft

John Manuel

The 2010 draft was broadcast nationally in prime time, the third year in a row that Major League Baseball had put its draft on TV. Its top talent, Las Vegas sensation Bryce Harper, was on the cover of *Sports Illustrated* when he was just sixteen. As that draft approached, the star of the 2009 draft, Stephen Strasburg, was cruising through the minor leagues less than a year after being picked first overall out of San Diego State.

The idea that the draft could generate so much attention was preposterous as recently as 1998. That was the first year that MLB even dared to release its draft list to the public the day the draft finished.

I covered my first draft for *Baseball America* in 1997, as a truly peripheral part of the magazine's coverage. I remember vividly how Allan Simpson—BA's founding editor and the man who essentially invented coverage of the baseball draft—had white boards in his office, tracking the draft round by round. He'd get calls from scouts, college coaches, agents—even sometimes from clubs—with information about what players were picked where. He wrote them, almost always in pencil, it seemed, on his white boards, three years before Tim Russert and Florida and the 2000 Election made similar but smaller white boards immortal.

We were the only complete source for this information. The next year we announced we'd be selling our draft lists and could fax them for the grand fee of $— to anyone interested. Within a week of our announcement, MLB announced it would release its list. We still made enough money off the "Draft Deluxe" offer to buy new desktop computers.

Interest in the draft doesn't always go hand in hand with knowledge about the draft. Technically the proceedings are spelled out in Rule 4 of MLB's Professional Baseball Agreement—just ahead of the section on the Rule 5 draft—but most people call it the June draft or the amateur draft. Technically, its name is the First-Year Player Draft.

That change was made in the late 1990s, to close a draft loophole and to keep amateurs from becoming free agents. The draft itself, from its inception in 1965 to the present, always has been a reaction to the way major-league clubs procure amateur talent. That's its past history, and it appears to be its future as well.

The draft was a new concept only to baseball. It came to football first (1936), and the two other major professional leagues in basketball (1947) and hockey (1963) already had followed suit by 1964, when baseball decided to act. In 1964, led by the $205,000 bonus the Angels gave to Wisconsin outfielder Rick Reichardt, major-league clubs paid more than $7 million to amateur players—more than was spent on major-league salaries.

Before the draft, procuring talent was on a first-come, first-served basis. Scouts scoured the country, going to games, getting to know players' families and competing with each other to cultivate the best relationship, make the best offer, and sell their organization as the most attractive one for an up-and-coming ballplayer. Not surprisingly, the system tended to reinforce competitive imbalance. The Cardinals, Yankees and other clubs that had extensive scouting networks for amateurs and that recognized the value of player development in their minor-league systems thrived; those clubs that didn't, such as the postwar Cubs, Indians, and Athletics, were mired in the second division in what seemed to be perpetuity.

The draft helped change that, giving the worst teams a shot at the best talent. The A's drafted Rick Monday first overall in 1965 and five rounds later took another Arizona State Sun Devil, Sal Bando. Later, with their twentieth selection, they drafted and signed Ohio prep shortstop Gene Tenace. Only a year later, drafted second overall, Reggie Jackson (yet another Sun Devil) joined the organization, and in 1967 the A's took Vida Blue, in the second round, out of a Louisiana high school. The foundations of their early-1970s dynasty were laid in those first few draft classes.

Of course MLB wasn't installing a draft out of egalitarian dreams; it wanted to cut those signing bonuses, and the way to do it was to give amateur players one club to negotiate with, instead of twenty. In that, the draft worked exceedingly well. Monday, the draft's first number-one overall pick, got a $100,000 bonus, or less than half of what Reichardt had received as a free agent in 1964. Monday's bonus record lasted until 1975 (Danny Goodwin, Angels, $125,000), and Reichardt's pre-draft record wasn't broken until 1979. That record—a $208,000 bonus for Yankees draftee Todd

COURTESY OF MITCHELL LAYTON/ WASHINGTON NATIONALS

Stephen Strasburg signed a major-league contract worth more than $15 million. It included a $7.5 million bonus, giving him both the largest contract in draft history and the largest bonus for a player who signed with the team that drafted him—in this case, the Washington Nationals.

Demeter—wasn't even publicly known until twenty-five years later. A second-round pick, Demeter hit just .173 in a 34-game trial in Double A.

Baseball kept bonuses down, no matter who the players were or how talented they were. Scouts universally lauded Darryl Strawberry as the best talent out of Los Angeles in years, and the Mets gave him a $200,000 bonus in 1980, still short of Reichardt's mark. None of the celebrated members of the 1984 Olympic baseball team broke the record—not Mark McGwire, not Will Clark.

The business of holding the line on bonuses began to lead to an influx of talent to college baseball, as players who turned down what they thought were insufficient offers out of high school found their way to NCAA play. It led to a golden era for college baseball. Roger Clemens led Texas to the 1983 national championship, two years after the Mets drafted him in the twelfth round out of San Jacinto (Texas) Junior College. Instead of signing him, the Mets faced Clemens twice in the 1986 World Series with Boston. The Giants could have had Barry Bonds out of high school, in 1982, but a difference of less than $10,000 in negotiations prompted Bonds to attend Arizona State. The Pirates got him with the sixth overall pick three years later.

On and on it went. In 1987, Ken Griffey Jr. brought obvious talent and a big-league bloodline to become one of the most celebrated number-one overall picks ever. Still, the Mariners gave him a bonus of just $160,000.

Only Bo Jackson, as Heisman Trophy winner with an NFL future, could get more money out of a major-league club, after 22 years, than Reichardt. The Royals spent a fourth-round pick on Jackson and then bought him away from football (temporarily) with a major-league contract worth $1,066,000, with $100,000 as a signing bonus.

The bonus record wasn't broken again until 1988, when the Padres signed right-hander Andy Benes for $235,000. Two high-school pitchers, Steve Avery (Braves, $211,000) and Reid Corneilius (Expos, $225,000) signed for bonuses that exceeded Reichardt's old mark.

In 1989 bonuses started to climb to the point that current-day fans have become accustomed to when the Orioles and number-one overall pick Ben McDonald of Louisiana State reached an impasse. The Orioles finally relented and signed McDonald for an $825,000 major-league deal with a $350,000 bonus, a record broken days later by John Olerud. The Blue Jays signed their third-round pick Olerud for a major-league deal with a $575,000 bonus.

That began the draft's Common Era, for teams now truly started to take signing-bonus demands into account. In 1990, Texas prep right-hander Todd Van Poppel was the consensus top talent available, and the Atlanta Braves held the first pick. The Braves at that time wanted Van Poppel but decided they couldn't meet his perceived demands or dissuade him from his commitment to the University of Texas. Instead they chose Florida prep shortstop Larry Wayne Jones of Jacksonvile, whom everyone already called Chipper.

Van Poppel, though, signed with Oakland for a $500,000 bonus and a major-league contract with value of $1.2 million overall. He wound up with a journeyman career, while Jones has an MVP Award and more than 400 home runs while helping give the Braves one of the longest runs of success in team sports history.

Van Poppel's contract set the stage for 1991, when the Yankees held the number-one overall pick for the

COURTESY OF THE MINNESOTA TWINS

The Twins, who had the number-one overall pick in the 2001 draft, passed up USC ace right-hander Mark Prior to select hometown talent Joe Mauer, an athletic catcher who had a Florida State football scholarship waiting for him. Mauer signed for $5.15 million, a bit below what was then the record. Prior, second overall in the draft, signed a $10.5-million major-league contract that included a $4-million bonus.

second time ever. They drafted North Carolina prep lefthander Brien Taylor and then shattered the bonus record by giving him a $1.55-million straight bonus. That was more than any of the big-league contracts up to that point and almost three times Olerud's bonus mark.

How much were bonuses increasing overall? In 1990, just three years after Griffey and his $160,000 bonus, every first-round pick signed for at least $175,000. Bonuses continued to climb until 1996, when all hell broke loose, at least in terms of the draft. Because of violations to Rule 4(E) of the Professional Baseball Agreement, which required that teams make a formal contract offer to every pick within fifteen days of the draft, MLB had to grant several top talents free agency.

While three of the players—pitchers Braden Looper and Eric Milton and catcher A. J. Hinch—ended up signing with the teams that drafted them while MLB mulled its options, four others were set free. The loophole free agents included San Diego State first baseman Travis Lee, completing a stint with the Olympic team, and high-school pitchers Matt White, John Patterson, and Bobby Seay. Lee had been the number-two overall pick in the draft, while White (number 7) ranked as the top high-school pitching talent. Patterson (number 5) and Seay (number 12) were consensus first-round talents as well.

The 1996 draft also was the first for the expansion Arizona Diamondbacks and Tampa Bay Devil Rays, who were eager to establish an identity and didn't even have to field major-league clubs until 1998. The confluence of free agency and new teams created the perfect storm, as Lee signed first for a $10-million contract with the Diamondbacks. White, signing with Tampa Bay, then topped him with a $10.2-million bonus, while Patterson (Diamondbacks, $6.075 million) and Seay ($3 million, Rays) followed with their own mega-deals. In comparison, the number-one overall pick that year, Kris Benson, signed for $2 million.

Only White never reached the majors, but neither Lee, Seay nor Patterson had any lasting big-league impact. White reached Triple A and hurt his shoulder while trying to make the final 2000 Olympic-team roster.

"I can't imagine what it would be like now with the media attention and the interest there is now in the draft," said White, a volunteer assistant coach at Georgia Tech in 2010 and hired in June 2010 as pitching coach at the University of Michigan. "I heard my share of criticism for how my career turned out, but I'm sure it would have been greater with the amount of attention the draft receives now."[1]

The next year, the Boras Corp. represented Florida State outfielder J. D. Drew, who put together the first (and so far only) 30-homer, 30-steals season in NCAA

Division I history. Drew wasn't going to use Benson's $2-million bonus as a benchmark; he was using the numbers the loophole free agents got. But when the Phillies took him second overall, they were using Benson's number. Acrimonious negotiations followed that never came close to bridging the near-$7 million gap between the two sides.

Drew wound up blazing a trail to the draft through independent leagues; at first, Boras hoped this would make Drew a free agent. MLB closed that loophole by renaming the proceedings the First-Year Player Draft, making independent leaguers such as Drew subject to the draft. Drew was part of the 1998 draft and was picked fifth overall this time, by the Cardinals. Eventually, he signed a $7-million big-league contract with a $3-million bonus, which was soon surpassed by that of 1998's number-one overall pick, Pat Burrell of the University of Miami. He signed with—you guessed it—the Phillies, for a $3.15-million bonus and an $8-million contract.

"Baseball has made an admission that they're not paying for talent," Boras later said. "They're paying for jurisdiction. That's where the draft is wrong."

By 1999, it was noteworthy when a first-round pick didn't receive a $1-million signing bonus. (The only such pick in 1999 was Blue Jays' first-rounder Alex Rios out of Puerto Rico.) From 1989 through 1999, the average payout for first-round picks increased from $176,000 to about $1.81 million.

Money has continued to be one of the biggest themes of the draft in the 2000s, but the money isn't what gets all the attention anymore. Now, it's the talent, as fans and baseball media have started to tune into the draft as never before. Major League Baseball's past secrecy was a major reason that media rarely gave the draft much attention—MLB didn't want any. It contended that more draft coverage drove up signing bonuses, and didn't publicize the draft list in part to keep colleges from going out and recruiting drafted players.

But toward the end of the decade, MLB began to realize that times were changing. In 1998, it actually released its draft list, and it didn't change its mind. The explosion of new media prompted more changes and openness. In 2001, Southern California ace right-hander Mark Prior brought the draft more attention with a remarkable season and awkward pre-draft negotiations with the Twins, who had the number-one overall pick. The NCAA ended up questioning him about his eligibility the night before his College World Series start and after the Twins, citing Prior's perceived bonus demands, passed over him. Instead, they went for hometown talent Joe Mauer, an athletic catcher who had a Florida State football scholarship waiting for him.

Mauer signed for $5.15 million, which by this time wasn't even a record—the White Sox had given outfielder (and Stanford quarterback) Joe Borchard $5.3 million the year before. But Prior, picked second overall by the Cubs, received more than twice that amount, signing a $10.5-million major-league contract with a $4-million bonus.

In 2002, MLB puts its draft on public display for the first time, as MLB Radio on MLB.com broadcast the proceedings. It was raw—just the conference call from New York and the thirty clubs on the phone, drafting away. (This writer and *Baseball America* colleague Will Lingo co-hosted the proceedings.)

In 2007, the draft finally left its conference-call roots behind. ESPN joined with MLB to broadcast the draft from Disney's Wide World of Sports in Orlando with a 2 P.M. broadcast. There were even three players on hand for the show, led by the third overall selection, Josh Vitters. The players followed their counterparts in other sports, posing for photos with the commissioner.

"It's a great day for us, and this is such an important day," Commissioner Bud Selig said. "This is a special event, and we want to communicate that as best as possible to all of our fans. This is really a dramatic manifestation of how the sport has improved. This will get bigger and bigger."[2]

In terms of attention and money, it certainly has. Strasburg was the draft's biggest star in 2009, as he surpassed Prior in many ways, going first overall to the beleaguered Nationals. He wound up signing a major-league contract worth more than $15 million with a $7.5-million bonus, giving him both the largest contract in draft history and the largest bonus for a player who signed with the team that drafted him.

All along, MLB has attempted to keep bonuses from spiraling out of control, even as they surge ever higher. Several times, MLB unilaterally has passed sweeping (or at times minor) changes in draft rules, only to have them struck down when challenged because the changes were not collectively bargained. While the Players Association does not represent amateurs, draft picks are tied to free-agent compensation, and the union has argued successfully that, in essence, this makes the draft its business.

Because both sides have had bigger issues to deal with, the draft has never become a focal point of negotiations for a collective bargaining agreement. Instead, MLB has moved toward its recommended

COURTESY OF THE MINNESOTA TWINS

In 1989, in the 52nd round, the Twins signed Denny Hocking as a catcher. He would become one of the lowest-drafted players ever to reach the majors.

bonus slots, first begun in 2000, when Sandy Alderson was MLB's executive vice president for baseball operations. Alderson gathered scouting directors for what MLB termed "negotiating training," and the commissioner's office began recommending signing bonuses for players chosen in the first three rounds. They also forced scouting directors to report above-slot bonus agreements to the commissioner's office, essentially submitting them for approval.

Eventually, MLB expanded the slots to the first five rounds, with the bottom slot of the fifth round extending out as a perceived slot maximum for the rest of the draft. Clubs are subject to fines only if they pay "over slot" without notifying MLB. Other efforts to rein in bonuses included the 2007 introduction of a signing deadline. Previously, players could negotiate until they attended college classes, with no uniform date. Players who had exhausted their college eligibility, or who renounced their eligibility (a new Boras Corp. strategy), could hold out all fall, winter, and spring, right up until a week before the next draft. (Jered Weaver and Stephen Drew, two of the top talents in the 2004 draft, both went that route, signing with the Angels and Diamondbacks, respectively, just before the beginning of the one-week "closed period" in 2005.)

So for 2007, MLB set August 15 as a uniform signing date. The idea was that less time to negotiate gave the teams more leverage over players and their agents. The decision also killed the draft-and-follow process, a system whereby teams could draft high-school or junior-college players, "follow" them through the next season, and then sign them (or not) before the next draft.

Despite the changes, the 2007 draft brought more giant contracts, such as the $7- million major-league contract the Tigers gave to New Jersey prep right-hander Rick Porcello. It tied Josh Beckett's 1999 deal for the highest amount ever given to a prep pitcher. The Yankees then gave out the biggest contract in draft history pre-Strasburg, to right-hander Andrew Brackman, a 6-foot-10 North Carolina State product. Brackman, who also played two seasons of ACC basketball and had NBA potential thanks to his size, signed for a $3.35-million bonus as part of a major-league contract with roster bonuses that would guarantee Brackman $13 million as long as he didn't jump to basketball.

The slotting system was still in place as the 2010 draft approached. However, during its ten-year run, MLB and the union have had two CBA negotiations pass peacefully, with no work stoppage. With the 2012 CBA negotiations fast approaching and the sport's fiscal health looking relatively strong, the draft looms as one of the more important issues of the next CBA.

Scouting directors are loath to speculate on the record about the draft's future, and they don't often agree on the changes they'd like to see. The repeated scandals in Latin American player procurement—from age changes to bonus skimming by agents and club officials—have brought calls for an international draft, or for international players to be incorporated into the current First-Year Player Draft. (It's happened before, as bonus escalation in Puerto Rico prompted MLB in 1989 to make players from the island commonwealth subject to the draft.)

Other proposals for changes to the draft include the formalization of draft slots, making them "hard," as is the case with the NBA's draft contracts; a significant reduction in rounds from the current maximum of fifty; the ability of clubs to trade draft picks; and overall caps on spending for organizations on scouting and player development together, a salary cap for everything not including major-league salary.

BEST DRAFTS EVER

By the Baseball America staff

1. DODGERS 1968
The best, and it's not really close. The Dodgers assembled an amazing collection of stars as well as solid big-leaguers, with a total of fifteen players who at least made appearances in the majors. Davey Lopes (second round) from the January secondary phase, Bill Buckner (second) from the June regular phase, and Steve Garvey (first) and Ron Cey (third) from the June secondary phase were the stars, but longtime big-leaguers like Tom Paciorek, Joe Ferguson, Doyle Alexander, Geoff Zahn, and Bobby Valentine were also part of the haul.

2. TIGERS 1976
Like the 1968 Dodgers class, the Tigers set themselves apart with quality and quantity. Alan Trammell (second round), Dan Petry (fourth), and Jack Morris (fifth) formed the heart of Detroit's 1984 World Series champions, and January first-rounder Steve Kemp also had a nice career. Even the best drafts have players who got away, though: Seventh-rounder Ozzie Smith would have been a nice addition, but he didn't sign until the next year, when the Padres took him.

3. RED SOX 1976
This draft stands apart from the two ahead of it because it features a Hall of Famer, five-time batting champion Wade Boggs. He was an all-time bargain as a seventh-rounder, but the Red Sox also found two quality left-handers in first-rounder Bruce Hurst and John Tudor, who was their third-round pick in the secondary phase of the January draft.

4. INDIANS 1989
This is one of the most interesting drafts in history because, even though it turned out as one of the best ever, it led to the firing of the scouting director (Chet Montgomery) who oversaw it. First-round pick Calvin Murray was considered unsignable, but the Indians took him anyway—and didn't sign him. That was bad, but Cleveland more than made up for it with ten big-leaguers after that, including Jim Thome in the thirteenth round and Brian Giles in the seventeenth. The Indians' scouting staff was also notable because it included at least two future scouting directors (Roy Clark, Donnie Mitchell) and a future GM in John Hart.

Adapted from "Head of the Classes" by Tracy Ringolsby, BaseballAmerica.com, 25 June 2008.

5. CUBS 1984
The Cubs found eight future big-leaguers, but the overwhelming bulk of the value in this group comes from two pitchers who, amazingly enough, are still pitching in the big leagues now. Right-hander Greg Maddux (second round) and left-hander Jamie Moyer (sixth) don't fit the prototype for draftable high-school pitchers, but they've combined for 585 major-league wins.

6. RED SOX 1968
A great draft year tends to help multiple teams, and this is one of three 1968 classes to make our top twenty. Boston found four All-Stars in the June regular phase (a feat matched only by the 1990 White Sox): Lynn McGlothen (third round), Cecil Cooper (sixth), Ben Oglivie (eleventh) and Bill Lee (twenty-second). And John Curtis, a first-rounder in the June secondary phase, pitched fifteen years in the big leagues.

7. RED SOX 1983
The third of four Red Sox classes in the top twenty, this one is built mostly on the success of Roger Clemens, who was the nineteenth overall pick in the June regular phase. But Ellis Burks, a first-rounder in the January regular phase who played eighteen major-league seasons, pushes it into the top ten.

8. PADRES 1981
First-round pick Kevin McReynolds and June secondary pick John Kruk had nice major-league careers, but the big score was a player who was better known for his basketball skills at San Diego State. Tony Gwynn turned his focus to baseball when the Padres made him a third-round pick in June, and he was in the big leagues after little more than a year in the minors.

9. YANKEES 1990
The career of first-rounder Carl Everett didn't take off until the Marlins grabbed him in the 1992 expansion draft, but the signing of two draft-and-follows the next May—Andy Pettitte and Jorge Posada—provide foundation pieces for the Yankees' success of the late 1990s.

10. TWINS 1989
One of three 1989 draft hauls in the top twenty, the Twins drafted two AL Rookies of the Year in Chuck Knoblauch (first round) and Marty Cordova (tenth) as well as two 20-game winners in Denny Neagle (third) and Scott Erickson (fourth). And 52nd-rounder Denny Hocking—drafted as a catcher—became one of the lowest-drafted players to reach the majors.

"[The draft] is an area that will be of great interest in the next round of negotiations," Rob Manfred, baseball's executive vice president for labor relations, told the *New York Times* in 2009. "I'm not going to speculate as to what our proposals are going to be the next time around, but I will say the purpose of the draft is to make sure the weakest team gets the best player."[3]

Of course, that's only one point of the draft. The other always has been to keep the amount the clubs have to pay players as low as possible.

More telling perhaps than the effort to divine future CBA negotiations are the other trends that are shaping up around the draft. MLB has started operating, on a limited basis, some of its own showcase events, tournaments, or all-star games that gather amateur players in one place for teams to scout.

Agents would resist, but eventually some of these events—USA Baseball's Tournament of Stars, perhaps—will evolve into a scouting combine, similar to the NFL's combine. MLB could use such a combine for medical evaluations (such as standard eye exams), for drug testing (currently 200 players MLB deems "top prospects" are drug-tested around the country), and of course for evaluating players' physical talent.

The overall thrust appears to be an attempt by MLB and its clubs to get more control over the draft in all phases. Every attempt in the past—to control players, to control bonuses—has had unintended consequences, because, when push comes to shove, teams need talent, and players are the ones who provide it. Because it costs so much more to pay established big-leaguers rather than less experienced ones who aren't arbitration-eligible, it still makes financial sense for a club to pay a sizable, market bonus to a player it wants and to get him under control for the early part of his career. Even if it means going above slot. ■

Notes

1. Matt White, interview with John Manuel, May 2010.
2. Quoted in "Draft 2007: First Round Review Prep Class, Lefthanders Rule the Day," by John Manuel, *Baseball America*, 7 June 2007.
3. David Waldstein, "N.B.A. Could Be Model for New Baseball Draft," *New York Times*, 18 August 2009, B10.

The Real First-Year Player Draft

Cliff Blau

The third in a series of rules passed by Major League Baseball's owners in an attempt to save themselves from paying large bonuses to amateur prospects, the First-Year Player Draft was in place from 1959 to 1964. Although it was often referred to as a bonus rule, it actually covered all first-year players, regardless of whether they had received a signing bonus. At first it had little effect, but, when the rules were strengthened, it took on some of the flaws of its predecessors and was soon replaced by the amateur draft.

Following the Second World War, MLB clubs found that the price of premium amateur talent was rapidly rising. Some were giving untried players signing bonuses that were in excess of the average major-leaguer's salary. The other clubs, many of whom couldn't afford to compete for these prospects, viewed this as a problem and demanded a solution. In response, from 1947 to 1950, and again from 1953 to 1957, Organized Baseball instituted bonus rules. These stipulated that players who had received bonuses above a certain amount had to be kept on MLB rosters after one year in the minors (in the earlier rule) or immediately (in the second rule). This hurt player development but didn't keep teams from paying large bonuses.

At the 1958 winter meetings, the owners instituted the First-Year Player Draft. The draft was held at the winter meetings beginning in 1959 in conjunction with the Major League and Minor League (Rule 5) drafts. Initially, the rule allowed teams to draft a player who was on the roster of a team at a lower level and had just completed his first season in Organized Baseball. Major-league teams could draft players from Class AAA and lower. Class AAA teams could select players from Class AA and lower, and so on. For an MLB club, the price in the First-Year Player Draft was $15,000, to be paid to the club that the player it was drafting belonged to; minor-league clubs could draft at a lower price, which depended on their level. This was signficantly lower than the Rule 5 draft price of $25,000.

Under the bonus rules of 1947 through 1957, teams were motivated to pay players under the table to avoid the restrictions of those rules. But that incentive was gone with the First-Year Player Draft, since it applied to all players, even if they didn't receive a bonus. Clubs became reluctant to invest bonus money in a player whom another club could draft at a fixed price. Moreover, the First-Year Player Draft required that teams losing a player in the draft continue to pay him any deferred bonus. The goals of this draft were to keep bonuses down and to allow less-wealthy teams to compete for talent with the freer-spending clubs.

Thirty-nine first-year players were protected on MLB rosters that winter. Only one player was chosen by an MLB team in this initial draft, pitcher Mike Lee being taken by the Cleveland Indians, along with thirteen taken by minor-league clubs. The First-Year Player Draft followed the same rules as the major-league draft other than price, which meant the Indians had to keep Lee on their roster the full season or offer him back to the Giants. And so Lee stayed with Cleveland all of 1960, pitching only nine innings. Few teams were willing to use a roster spot on such an inexperienced player, so the draft had little effect in 1959.

The number of veteran minor leaguers (those with at least four years of OB experience) being taken in the Rule 5 draft might have been expected to rise with the coming of the First-Year Player Draft, with fewer rosters spots available after the first-year players were protected, but it doesn't seem to have happened. Between 1958 and 1959 the number of picks increased only from twelve to thirteen.

The following year, the requirement for MLB teams to keep first-year draftees on their roster was dropped, and the price for selecting a player in the First-Year Player Draft was changed to a flat $12,000 for all levels. As a result, the number of players drafted by MLB teams increased to six in 1960 and fifteen in 1961. There were also sixteen players taken by minor-league teams in 1960 and eight in 1961. Of these 45 players, only one, Jim Merritt, became a star. The low price allowed teams to take long chances on players such as William Maddox, who was 0–11 with an 8.50 ERA in his first professional season, yet was picked by the Yankees in the 1961 draft. Likewise, Steve Cosgrove was taken by the Orioles from the Braves despite an 0–9, 7.35 record in Class D. Those investments rarely paid off.

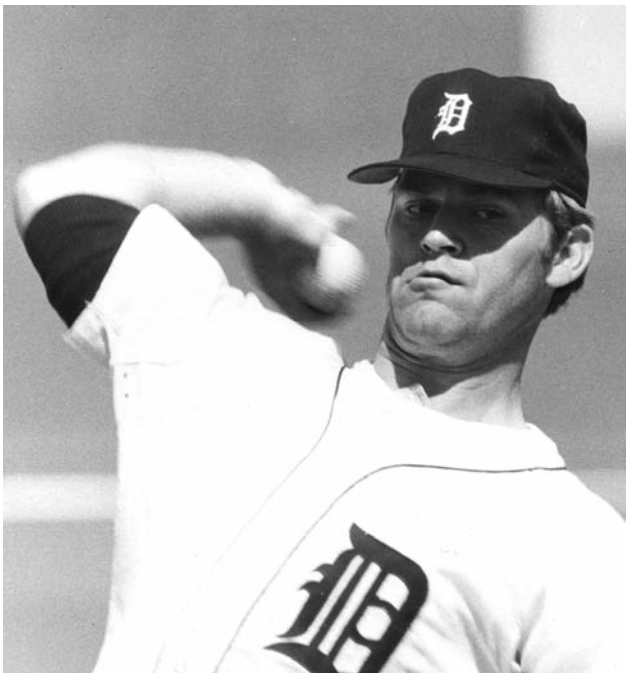
The first-year player rule was still not strong enough to fully moderate bonuses, so some teeth were

added to it in 1962. The draft price was lowered to $8,000 for all teams. More important, a new restriction was applied. With one exception per team, first-year players added to the 40-man roster to protect them from the draft could not be optioned to the minors. Furthermore, the one option teams were allowed (the designated assignment) had the effect of reducing the size of their active roster from 25 to 24 for the bulk of the season. If teams wanted to send additional first-year players to the minors, they had to obtain waivers from the other MLB clubs, who could claim each player at the same $8,000 price applicable to the draft. To further encourage drafting, teams with a full 40-man roster were allowed to select one first-year player, although they were not permitted to take anyone in the Rule 5 draft. These changes had the desired effect, at least in the most visible way. The number of first-year draftees selected by MLB teams jumped to 45 in 1962 with an additional 33 picked by minor-league clubs. Among them were such future stars as Glenn Beckert, Paul Blair, Dave May, Lou Piniella, and Jim Wynn.

In addition, MLB teams were carrying an average of five first-year players on their winter rosters, up from 2.5 per team in 1959–60. Among those who didn't make their team's 25-man roster and were lost to other clubs via waiver claim was Denny McLain. The 1963 Yankees, defending their championship, started the season with a first-year player, Curt Blefary, in the minors on a designated assignment. They decided in mid-season that they couldn't afford to use a roster spot on him and placed him on waivers. He was claimed by the Baltimore Orioles, and a couple of years later was AL Rookie of the Year, and then helped them to the 1966 world championship, along with first-year draftee Paul Blair. Meanwhile the Yankees sank to last place.

The biggest complaint about the rule was that it penalized clubs that did a good job of signing and developing new players. Fresco Thompson, farm director of the Dodgers, claimed that 200 fewer amateurs were signed to contracts by Organized Baseball in 1962 than the year before because of the risk of losing those recruits after one year. That was enough to stock ten minor-league teams.

The number of players taken in the 1963 draft was 52 by MLB clubs and 16 by minor-league squads. Some of the top names were Reggie Smith, Bobby Tolan, Rudy May, Dick Bosman, and Luke Walker. The most recent expansion teams, the Senators, Angels, Mets, and Astros, were hampered in their efforts to build with youth, since they were having to keep in-



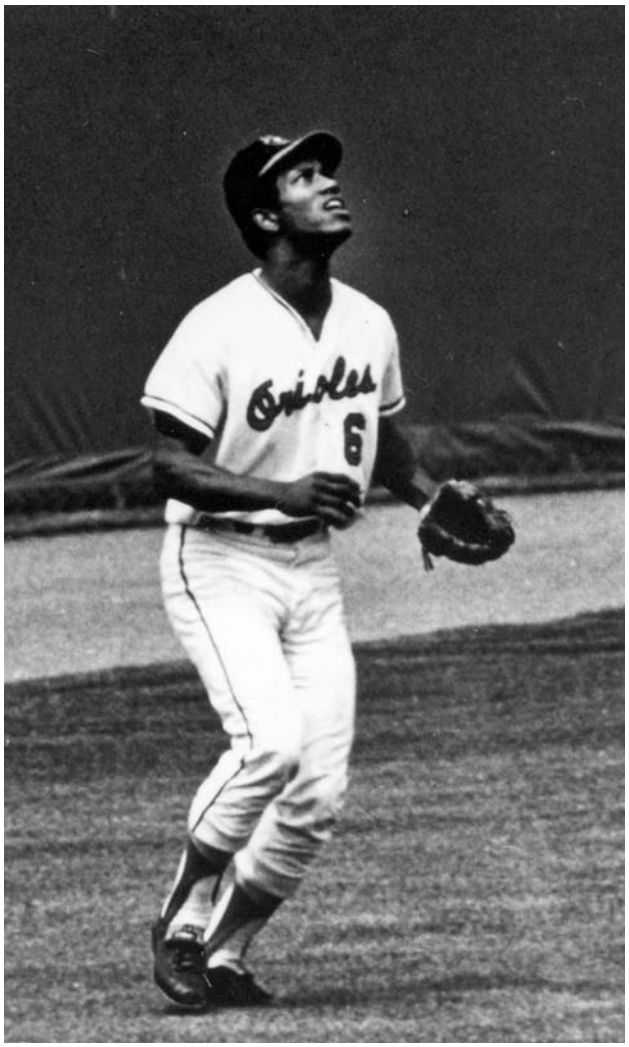
COURTESY OF THE DETROIT TIGERS

Among those who didn't make their team's 25-man roster and were lost to other clubs through waiver claims was Denny McLain. With the Tigers he went on to win the Cy Young Award twice and the MVP Award once.

experienced players on their benches rather than let them develop in the minor leagues. In recognition of this, the other teams voted in December 1963 to allow them, in addition to the one designated assignment, to option four first-year players without waivers or counting against the 25-man roster.

As for whether the rule was achieving the goal of reducing bonuses, there is evidence to suggest it succeeded. Gabe Paul, general manager of Cleveland, claimed in 1964 that annual bonuses had gone down from $7 million before the draft was instituted to about $4.5 million in 1963. Other insiders such as Ed Short and Hal Keller agreed that the rule was effective in reducing bonuses. However, the conditions that led to escalating bonuses still existed—namely, competition both from within Organized Baseball and from other sports. So, some clubs would still pay ever increasing bonuses to recruits such as Rick Reichardt and Bob Bailey. Rather than let a promising youth go to their competitors, they were willing to gamble that he would play at the major-league level in his second professional season. The rule may have led to the escalation of bonuses for the top prospects, while the run-of-the-mill amateur got less.

In 1964, the number of draft picks reached a high of 59 by MLB teams, with another twenty going to minor-league clubs. The best-known players taken were Felix Millan, Sparky Lyle, Ed Herrmann, and Ellie Rodriguez. In addition, the A's lost Joe Rudi on



NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

First-year draftee Paul Blair helped the Baltimore Orioles win the 1966 World championship.

waivers when they tried to send him to the minors. Later in the year they reacquired him by trade.

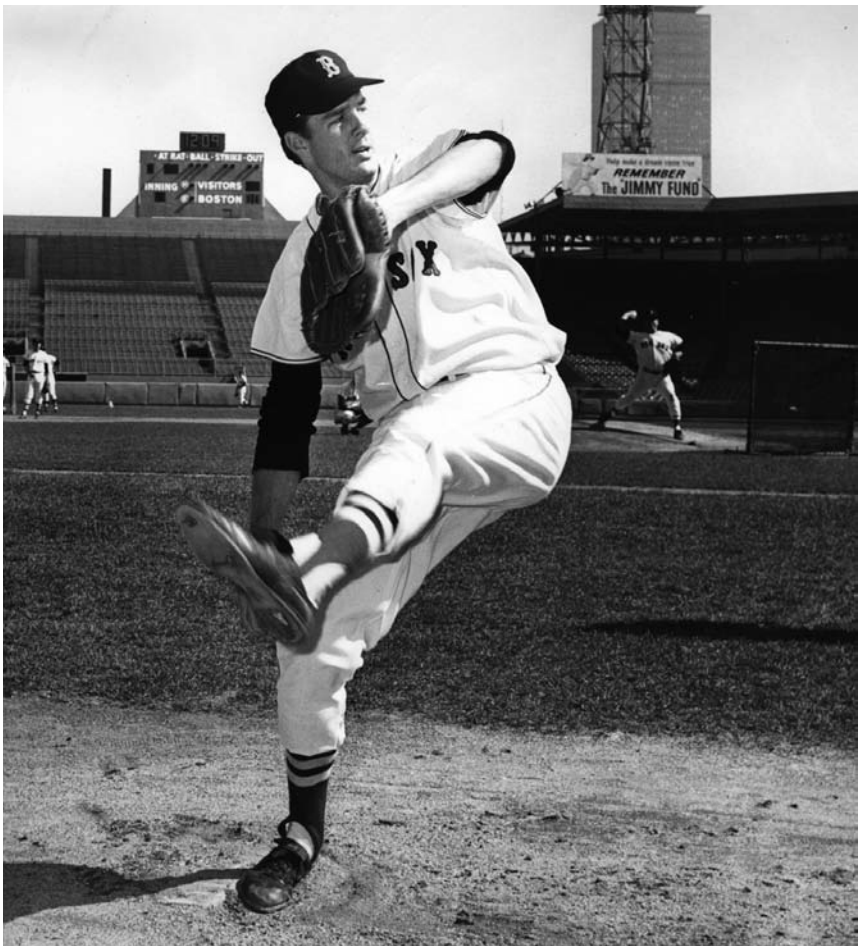
The requirement to protect first-year players from the draft negatively impacted some teams. The defending world-champion Los Angeles Dodgers in 1964 could carry only 24 players, including first-year bench warmers Jeff Torborg and Wes Parker, which left them shorthanded as they struggled to a 24–31 record in one-run games. This was one factor in their fall to sixth place. Meanwhile, the Philadelphia Phillies, who led the National League much of the season before a late-season collapse, carried little-used Johnny Briggs and Rick Wise all year. Sometimes a team could be helped by the rule inadvertently. Those same Dodgers in 1964 could not keep reliever Larry Sherry because of the roster limits and so traded him to Detroit for minor-league veteran Lou Johnson, who became their regular left fielder and a World Series star the following year.

Thanks to the tougher restrictions in place from 1962 through 1964, there was increasing dissatisfaction with the rule. Following the 1964 draft, the owners decided to do away with the first-year draft. The requirement for all but one first-year player to pass through waivers before being sent to the minors was kept in 1965, although that designated assignment would no longer reduce the 25-man roster. The draft was replaced by an amateur draft (which has lately been called the First-Year Player Draft, oddly enough). They also made all minor leaguers not on an MLB team's 40-man roster eligible for the Rule 5 draft. However, since some teams felt this would penalize those who had chosen well in the amateur draft, players who had been selected in the June draft or who signed after that would not be eligible for the Rule 5 draft until after their second season in professional ball. Interestingly, these individuals were still officially designated as "first-year players" in the rules and were still available for the special $8,000 price. After 1968 the drafting of players with one or two years' service in Organized Baseball was phased out.

Many players saw their careers affected by the First-Year Player Draft. Most obvious were those who were taken in the draft. However, other players were affected less obviously. Some got a chance to see major-league action two or three years earlier than they might have otherwise, because they were being protected from the draft. A lot of these saw limited action, such as Mike Kekich and John Sevcik. Outfielder Ross Moschitto, kept on the 1965 Yankees at the age of 20, appeared in 96 games without a single start. However, others got a fuller chance and took advantage of it, most notably 19-year-olds Tony Conigliaro and Wally Bunker in 1964. Lou Brock and Rollie Sheldon also fell into this category. Still others—Ron Hunt and Ken Hubbs, for example—were added to 40-man rosters early and so may have reached the majors sooner than they would have without the First-Year Player Draft. Of course, while youngsters were helped, there were fewer roster spots available for veterans. For example, Dale Long performed well in spring training with the Cubs in 1964, but they decided not to keep him, since they were protecting two first-year players on their 25-man roster, bringing his career to an end.

It is well known that MLB's amateur draft is a crap shoot, with many high draft picks never meeting expectations or even advancing to the majors. The difficulty of projecting young ballplayers is illustrated by the lack of success of many of the players taken in the First-Year Player Draft. Overall, there were 178 players

NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.



In 1965 the Red Sox promoted Jim Lonborg from Triple A to Boston to protect him from the draft. A year earlier they did the same with Tony Conigliaro. These two players benefited from the early look they got and were key players in 1967, when Lonborg won 22 games and had a career year. Perhaps no other team was helped more by the First-Year Player Draft than the 1967 Sox, who used it to obtain regulars Reggie Smith and Joe Foy and pitchers Bill Rohr and Sparky Lyle. After 1964, the owners had jettisoned the existing First-Year Player Draft and instituted the Rule 5 draft, which enabled a club to draft from another organization any minor leaguer who had been selected in the amateur draft, was not on the 40-man roster of an MLB club, and had played two seasons in professional ball.

chosen by MLB teams and 106 selected by minor-league clubs. Of those, only 67 and seven, respectively, ever played in MLB, and only 50 achieved either 300 plate appearances or 50 innings pitched.

Naturally, some clubs gained an advantage from the First-Year Player Draft, while others were hurt. Perhaps no team was helped more than the 1967 Boston Red Sox. Regulars Reggie Smith and Joe Foy were both obtained via the draft, along with early-season starting pitcher Bill Rohr and reliever Sparky Lyle. In addition, a couple of the team's biggest stars, Tony Conigliaro and Jim Lonborg, benefited from the early look they got as a result of Boston's desire to protect them from the draft.

The First-Year Player Draft was another unsuccessful attempt by Major League Baseball to reduce signing bonuses to amateur prospects. It was replaced by the amateur draft, which is still in place more than forty years later. While it was in effect, though, it had a big effect on the teams and players of Major League Baseball. ■

Sources

Chicago Tribune
Los Angeles Times
New York Times
The Sporting News
Washington Post
Retrosheet
Nowlin, Bill, and Dan Desrochers, eds. *The 1967 Impossible Dream Red Sox.* Burlington, Mass.: Rounder Books, 2007.
Major League Rules and Major–Minor League Rules.

Georgia's 1948 Phenoms and the Bonus Rule

Wynn Montgomery

In the summer of 1948, two of the nation's premier major-league pitching prospects were Georgia boys—Willard Nixon of Lindale and Hugh Radcliffe of Thomaston. Both were multisport stars with a special talent for baseball. Both were big, strong, right-handed pitchers who had dominated opposing batters wherever they had pitched. Both attracted the attention of almost every major-league baseball club. And as a result, each had to make a difficult, life-altering decision because of the "bonus rule" that was in effect at the time.

EVOLUTION OF THE BONUS RULE

A few players had received sizable signing bonuses during the 1930s. For example, the Yankees paid Charlie Devens $20,000 in 1932 and Tommy Henrich $25,000 in 1936.[1] Henrich, however, was not an untried player, having spent three productive years in the minor leagues. Despite such early bonuses, most baseball historians identify Dick Wakefield as the first member of the group that would be forever known as the "Bonus Babies." In 1941, the Detroit Tigers signed Wakefield out of the University of Michigan for $52,000 and a new car.

As the sportswriter (and later novelist) Paul Hemphill observed: "Once bonus fever set in, there was no stopping it."[2] Perhaps not, but the owners certainly tried. Steve Treder suggests in *The Hardball Times* that the motivation behind the bonus rule was twofold. Club owners were interested in competitive balance and sought a way to keep the richer clubs from cornering the market on top prospects. These moguls also wanted to hold down their labor costs, both for new signees and for the increasingly disgruntled established stars, who resented making less than untried "phenoms."[3]

The size of signing bonuses continued to creep upward as the Yankees (again!) paid Bobby Brown $60,000 in 1946. Earlier that year, baseball's major-league owners proposed restrictions that, according to John Drebinger of the *New York Times*, "virtually outlaw bonus payments" because the "heavy and complicated restrictions . . . make it unlikely that any Major League club will care to take the risks involved except in very rare cases."[4] The proposed restrictions on bonus payments received approval from the minor leagues (the National Association of Professional Baseball Leagues) and took effect in 1947.

This original bonus rule stipulated that any player signed by a major-league team for a salary/bonus package exceeding $6,000 had to be placed on the major-league roster before the end of the season or be declared a free agent, claimable by any other major-league (or higher-classification minor-league) team. Similar restrictions applied to minor-league clubs, with a sliding scale for the amount at which the bonus rule kicked in. This scale ranged from $4,000 for triple-A teams down to $500 for Class E teams. The rule also specified that a bonus player retained this designation throughout his career.

The new rule may have slowed the bonus bandwagon, but it certainly did not bring it to a halt. A significant new bidder did, however, hop aboard. In 1947, the Philadelphia Phillies, under new ownership, shelled out bonuses to two high-school pitchers—$15,000 to Charlie Bicknell and $65,000 to Curt Simmons. The latter bonus was by far the better of the two investments; both were sizable when compared to the average ballplayer's annual salary of approximately $11,000.[5] (The median annual family income at that time was $3,031.)[6]

The following year, the Phillies again were major investors in the bonus market. The Boston Braves paid the highest premium for a single player—$65,000 to Johnny Antonelli—but Philadelphia signed three young pitchers for a combined bonus total of $85,000. Bob Miller, out of the University of Detroit Mercy, received $20,000; Robin Roberts, from Michigan State University, pocketed $25,000; and Georgia schoolboy Hugh Radcliffe accepted the Phils' offer of $40,000.

Few believed that the bonus rule was the solution to the spending problem, and many openly criticized its intent, its effectiveness, and its impact on the young players who fell under its restrictions. It is not surprising, considering his team's heavy investment in young talent, that Philadelphia Phillies owner Bob Carpenter called the rule "the most unfair piece of legislation in baseball." Carpenter, who had opposed the

adoption of the rule and led several unsuccessful efforts to have it repealed, elaborated on his objections, saying: "It is not only unfair to the clubs who are willing and eager to improve their positions, but doubly unfair to the players themselves. There is no doubt that the necessity of keeping youngsters on the Major League roster has retarded their progress." He went so far as to label the rule more than unfair, calling it "un-American" and asking: "Have you ever heard of any business other than baseball which penalizes a club for making improvements?"[7]

Carpenter was not alone in his criticism of the bonus rule. Connie Mack, owner and manager of the Philadelphia Athletics, observed that "the bonus rule hurts the player, the club, and all baseball."[8] Baseball Commissioner "Happy" Chandler called the rule a "restrictive yoke,"[9] and American League President Will Harridge labeled it "a long-range boomerang to promising youngsters."[10] Leaders of independent minor-league teams, such as the Atlanta Crackers' Earl Mann, recognized that the rule would undermine their ability to compete for new young talent and actively campaigned against it.

The criticism was not unanimous, however. Warren Giles, Cincinnati's president and general manager, maintained that "if a player is worth a substantial bonus, he should have sufficient ability to play in the majors at the time he signs and not have to spend several years developing."[11] The varying opinions and the intensity of those feelings made the bonus rule a topic of discussion at every owners' meeting and resulted in frequent tinkering with its finer points.

In 1949, for example, the rule was modified to allow certain bonus players signed after March 31 that year to be optioned once during their first year. The "bonus" level for triple-A and double-A teams was increased to the major-league level of $6,000. This latter change was a partial response to a proposal from George M. Trautman, president of the NAPBL, that all leagues have the same limit to prevent clubs from signing players at a higher level to avoid the bonus designation and thus requiring them to face stiffer competition than they were ready for.

By late 1949, however, the handwriting was on the wall—or at least in the *New York Times*. In a column entitled "End of a Noble Experiment," Arthur Daley compared the bonus rule to Prohibition, noting that it was "as lofty in its idealistic motivations . . . and as impractical in its application." Daley added that the rule "didn't work and produced more ills than it was supposed to cure."[12] Daley and others reported that just as bootleggers had circumvented Prohibition's restrictions, owners were adept at finding ways around the bonus rule. Some of these ruses included signing prospects' fathers to scouting contracts, paying off mortgages on prospects' family homes, and treating prospects and their families to lavish entertainment.

Daley also noted that "bonus players, per se, breed discontent"[13] and cited the situation in Boston in 1948 as the most egregious example. Johnny Antonelli, the 18-year-old who received the largest signing bonus that year, had joined the Braves in midseason, but manager Billy Southworth was unwilling to use an unproven rookie in the heat of a close pennant race. Consequently, the youngster faced only 17 batters in four innings, and his resentful teammates refused to vote him a share of the team's World Series earnings. Following the season, Johnny Sain, whose 24–15 record earned him *The Sporting News*' Pitcher of the Year honors, demanded and got a raise. Clubhouse dissention, due at least in part to resentment of the Bonus Baby, continued to plague the Braves in 1949, eventually causing Southworth to step down for the final third of the season.

When the end for the controversial bonus rule finally came in December 1950, its demise was overshadowed by a more newsworthy event: Major-league owners approved its elimination at the same meeting where they voted not to retain "Happy" Chandler as commissioner. The minor leagues ratified elimination of the bonus rule in early December, and Arthur Daley penned its obituary, concluding that "the bonus rule never did achieve its purpose. It didn't halt extravagant spending. It retarded the development of kids it was supposed to help and in some instances ruined them. It destroyed team morale. It led to sharp practice and chicanery. It was a bad rule."[14]

Writing 22 years later, Paul Hemphill, in an article appropriately titled "Whatever Happened to What's-His-Name?" focused on the adverse impact the rule had on the young players. He said: "Forced to sit in big league dugouts—gaining no experience, ostracized by jealous teammates, eventually the source of humor for fans and press—they waited while their potential, assuming they ever had any, stagnated and often disappeared."[15]

Apparently, the club owners did not fully share these assessments of the failure of their initial attempt to limit bonus payments. Only two years after killing the first bonus rule, they approved an even more stringent variation on the theme. In 1952, led by Branch Rickey, the owners passed a new bonus rule (Rule 3k), which lowered the bonus threshold from $6,000 to $4,000 and required that players signed for more than

this amount be immediately placed on the signing team's major-league roster for two years. This new rule, labeled "baseball's biggest blunder" by Brent Kelly in his 1996 book of the same name, remained in effect for five seasons (1953–1957) and suffered from (and perhaps exacerbated) the shortcomings of the rule it replaced.

While this rule was in effect, every major-league team signed and carried on its roster at least one Bonus Baby. In all, 57 untried youngsters garnered this designation[16] and the financial rewards that accompanied it. Few of them gained the stardom that their signers envisioned, although the list does include three Hall of Famers—Al Kaline, Harmon Killebrew, and Sandy Koufax.

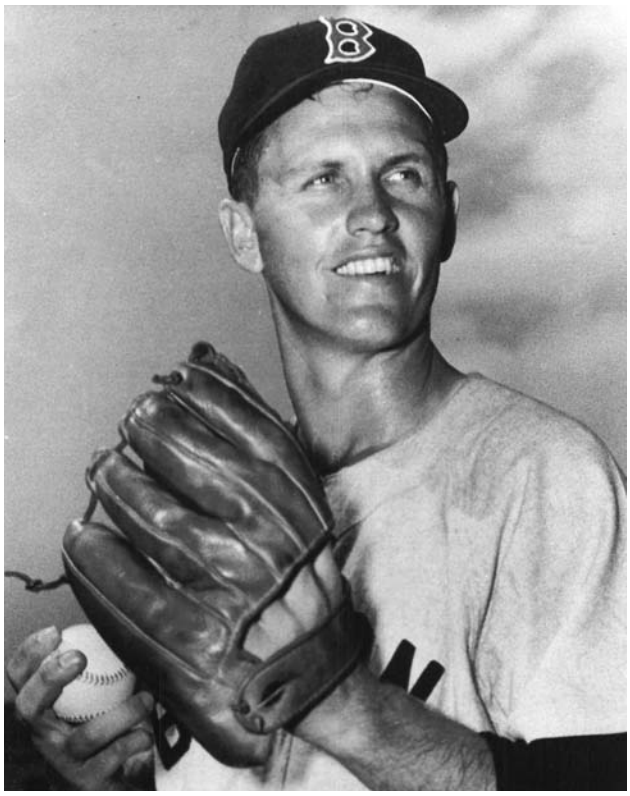
What happened after the rule was eliminated suggests that it did have some dampening effect on the amounts spent on bonuses. In 1958, the first year following rejection of the second bonus rule, major-league teams paid some $6 million dollars in bonuses, compared to approximately $5 million during the preceding decade.[17] The owners reacted by implementing an unrestricted draft of first-year players. This concept, which had been discussed for several years but always rejected, allowed teams to draft any first-year player not protected on a major-league roster for a standard draft amount. The drafting team was then required to place the drafted player on its roster for a full year.

The first year–player draft did help to reduce the number of signing bonuses, but the amounts of these bonuses continued to creep upward. The owners tweaked the details of the first-year draft and continued to discuss (and reject) an unrestricted free-agent draft—a concept which finally earned approval in 1965 and remains in place today.

The history of baseball owners' efforts to control the amounts paid to untried but highly touted young players suggests that there may be no ceiling on such payments and no viable way to create one. The two young Georgians who were courted in 1948 were among the first players who had to consider how bonus rules would affect them—both their immediate financial status and their long-term future. As we will see, they chose different paths and achieved different results.

WILLARD LEE NIXON: COLLEGE MOUND ACE

Willard Nixon was the older and more experienced of the two Peach State phenoms. He was born in Taylorsville, Georgia (near Rome), in 1928 and lived in that area all of his life. By the time he graduated from high school, where he excelled in football and basketball, he was a veteran of four seasons of textile



COURTESY OF NANCY NIXON

Willard Nixon reportedly was offered bonuses of as much as $30,000 but chose to sign a contract for less in order not to be rushed into the big leagues. "I was afraid," he said, " I might get that money and go up to the majors and flop."

ball, first as part of an informal effort to "keep baseball alive despite wartime conditions"[18] and later in the Northwest Georgia Textile League (NWGTL).

Nixon's textile-league experience was with the team representing Pepperell Mills. He played his first game in 1943 when he was only 14 and was used sparingly during that season. He pitched a two-hit, nine-inning shutout in an exhibition game early in 1944, but he fared less well against Pepperell's regular opposition and again saw limited action during the remainder of the season. In 1945, Willard became the acknowledged "ace" of the Pepperell pitching staff. He compiled a 6–1 record and earned two complete game victories when Pepperell swept a best-of-three postseason tournament. The final victory came just two days after he had intercepted a pass and returned it for a touchdown to spark McHenry High to a 19–9 win over Trion High.

He opened the 1946 NWGTL season with three shutouts and 33⅔ consecutive scoreless innings and compiled a regular-season record of 12–3. When Pepperell became league champions by winning two postseason series, Nixon was the workhorse—and the show horse—of both. He pitched in six of the ten games and played left field when he was not on the

mound. He won the deciding game of each series and batted .519 (19 for 37) for the postseason, including a game-tying solo home run in the final game.

In 1947, the Detroit Tigers offered Willard a contract following his graduation from McHenry High, but he chose instead to accept a grant-in-aid from Alabama Polytechnic Institute (now Auburn University). In his Auburn debut, Willard faced only 19 batters in five innings against Mercer University to earn his initial collegiate victory. He compiled an 8–2 season record and led Auburn to a second-place finish in the powerful Southeastern Conference.

College baseball in 1947 was a far cry from the attraction it has now become; it was then a minor sport that attracted few fans. As Nixon himself said in a 1974 interview, it "was just something students came out to watch if they didn't have anything else to do."[19] Willard had played before larger crowds—and perhaps faced better players—back home in the textile league. It was, however, a bigger stage, and his performance placed him in a brighter spotlight than ever before. Johnny Bradberry, sports editor of the *Atlanta Constitution*, reported that "folks are calling Nixon the best pitching prospect in the Southeastern Conference since Spud Chandler."[20]

When the collegiate season ended in May, Willard rejoined his Pepperell team, which had started its NWGTL season in April. He soon benefited from a record-setting performance by Pepperell third baseman "Shorty" Hall, who hit four home runs in four consecutive innings off four different pitchers. Pepperell (and Nixon) won that game 25–4, and Hall became the subject of a *Ripley's Believe It or Not* cartoon. Willard's 1947 NWGTL record was 8–1, and he again was the undisputed star of the postseason. He pitched in five of the six games, winning three, "saving" one, and losing one. He batted "only" .364, but three of his four hits were for extra bases, yielding a 1.000 slugging percentage.

Willard returned to Auburn and, in the Tigers' 1948 conference opener, struck out 20 Ole Miss batters to set a new Auburn and SEC record. In his next outing, Nixon was perhaps even better. He tossed a no-hitter against the University of Tennessee, striking out 18 batters and walking four. When he next faced the Vols, only a "scratch" eighth-inning single deprived him of a second no-hitter. In that game, Nixon contributed four hits, including a 370-foot home run, and the *Rome News Tribune* observed that "folks in Knoxville think that [Nixon] is the greatest college player of all time."[21]

Others held similar opinions. Danny Doyle, his Auburn coach, called Nixon "the greatest prospect I've ever coached," adding that "the team wouldn't have been much without him." Teammate Erskine (Erk) Russell, who later became a legendary football coach at the University of Georgia and Georgia Southern University, recalled, "I never thought about losing when Willard was pitching. He was so good that you just knew when he pitched you were going to win."[22]

Auburn won the SEC Eastern Division title, and Nixon pitched the final regular season game in front of scouts from 14 major-league teams. He finished the season with 145 strikeouts (an SEC record that would stand for 39 years) and a 10–1 record. He also led Auburn in hitting with a .448 batting average.

Every team except the Chicago White Sox and the Philadelphia Athletics bid for Nixon's services, and two days after the season ended, he signed a contract with the Boston Red Sox. Mace Brown, in the first year of his long scouting career with the BoSox, proudly declared that Willard Nixon was "the greatest college pitcher" he had seen and predicted that "he can't miss being a big leaguer."[23]

Nixon reportedly was offered bonuses of as much as $30,000, but, knowing that such a bonus would limit his time in the minor leagues, he chose to take less money. He later explained his decision, saying, "Although nobody in the world needed the money more than I did, I just didn't think I was good enough to start at the top. I was afraid I might get that money and go up to the majors and flop. Then that bonus money might be all I'd ever get out of baseball."[24]

Willard Nixon had been a successful pitcher in two different and very competitive environments, but, until he was invited to Cleveland by Lou Boudreau toward the end of his college career, he had never even seen a major-league game. He wanted to be sure that he had time to fully test his skills against other professional players before joining a major-league team. That way, he would earn his place on a major-league roster.

HUGH FRANK RADCLIFFE: SCHOOLBOY STRIKEOUT KING

Hugh Radcliffe gained national attention in April 1948, when he struck out 28 opposing batters in a nine-inning high school baseball game. Radcliffe, pitching for Robert E. Lee Institute, faced 33 Lanier High batters, who managed to make contact with only 10 of his pitches for seven foul balls, two infield grounders that his teammates booted, and the lone hit that he surrendered—another infield roller that Coach J. E. Richards said "should have been fielded, but the boys are too accustomed to watching Radcliffe play the game by himself."[25] Four times, a third strike eluded the R. E. Lee catcher. Three times he was able to throw

the batter out at first base, but the fourth batter reached first safely, giving Hugh the opportunity to record an "extra" strikeout to complete his one-hit, two-walk shutout of a team that had won a pennant the previous year.

Following this game, the opposing coach predicted, "Radcliffe has the physical equipment and pitching know-how to be a truly great pitcher."[26] One of the players who faced Hugh that day was Inman "Coot" Veal, who was destined for a six-year major-league career. He described Hugh's curveball as the best he ever saw, noting that it "broke straight down at your feet."[27] The *Atlanta Journal* waxed poetic in an editorial, gushing: "Georgia, home state of Ty Cobb and Nap Rucker, of Sherrod Smith and Carlisle Smith, of Rudy York and Johnny Mize and Spurgeon Chandler, of Luke Appling and Martin Marion and Hugh Casey, should be proud of the towering R. E. Lee Institute athlete whose feat we confidently predict will never be equaled."[28]

This record-setting game was the capstone of a youthful athletic career that had made Radcliffe a local legend in and around Thomaston, Georgia, where old-timers still call him by his dual first names—"Hugh Frank." He earned All-State honors in football, track, basketball, and (of course) baseball. His high-school coach called him "the best high school punter he ever saw," and he once booted a football 78 yards in the air. He won the district pole-vaulting championship with a record jump of 11'4" despite a sprained ankle. He was the starting guard on the R. E. Lee basketball team, and many observers believed that he had enough talent for a pro career in that sport.[29] His American Legion baseball coach said, "[Hugh] can play any position on the field well; he can even catch."[30]

This versatile athlete had first attracted the attention of professional baseball scouts in 1946, when he led Thomaston's American Legion team to the state championship and then to the regional crown before losing to New Orleans, the eventual national champion, in the sectional playoffs. These sectional games attracted as many as five thousand fans, giving Hugh and his teammates their first experience playing before such large crowds.

Radcliffe finished his senior year at R. E. Lee with 210 strikeouts in 81⅓ innings—an average of 2.6 strikeouts per inning. He tossed two seven-inning no-hitters, and in his three nine-inning games, he averaged 24+ strikeouts and threw two one-hitters. He allowed only 16 hits and three earned runs for the season while compiling a 9–0 record.[31] He accomplished all this with a pitching arsenal that included a 95 mph fastball, a "diving" sinker, and two different curve balls—a "wide-sweeping" one and the overhand "bottomless" version that Coot Veal described.[32]

Hugh led his team into the state championship tournament, where on June 2 (one day after graduating) he pitched his last high-school game. He went the full nine innings and struck out 24 batters, matching his season average, but R. E. Lee made nine errors and lost 8–6. The next day, after considering offers from 14 major-league scouts (including Branch Rickey himself and fellow Georgian Spud Chandler), Hugh Radcliffe accepted a $40,000 bonus from the Philadelphia Phillies. A rival scout reported later that Johnny Nee, the Phillie scout who won the "Radcliffe Sweepstakes," had "told everybody he had no limit. His club . . . told him to sign Radcliffe and to go as high as he had to to get him."[33]

According to the local paper in an article looking back at Radcliffe's career, the youngster "was just as eager as any teen-ager to get to the top as fast as possible, particularly on an 'earn as you learn' basis."[34] He had had no more exposure to major-league baseball than the slightly older Nixon, but with the

COURTESY OF EMMA LOU BOSS

Hugh Radcliffe, shown here in spring training in 1951, accepted a $40,000 bonus from the Phillies but never made it to the big leagues.

unbridled confidence of youth he must have been sure that he had the talent needed to succeed. He had achieved amazing things on the diamond, and a bevy of experienced baseball men were bidding for his services. Surely, their expectations were reasonable. How could he turn down that kind of money?

NIXON AND RADCLIFFE: PROFESSIONAL BASEBALL CAREERS

Immediately after signing professional contracts, the two young Georgians were sent north to join minor-league teams. Nixon went to the Scranton (Pennsylvania) Red Sox in the Class A Eastern League, and Radcliffe reported to the Wilmington (Delaware) Blue Rocks in the Class B Interstate League. He arrived the same day that fellow "Bonus Baby" Robin Roberts was promoted to the major-league club.[35]

Radcliffe left his first start in the seventh inning, trailing 5–0, but went on to compile a respectable 7–3 record. Nixon's debut, one day before his twentieth birthday, was more impressive. He struck out the first batter he faced and pitched an eight-hit shutout against the Wilkes-Barre Barons. Local sportswriter Chic Feldman exclaimed that "the door to a glittering future opened at the stadium last night and in strode Willard Nixon, blond and beautiful (both physically and baseballically)."[36] He closed the regular season with five consecutive victories to end the season with an 11–5 mark, and his final victory clinched the league championship for Scranton. His final game came in the postseason, and it was a "masterful two hitter"[37] in frigid weather.

Despite his winning record and acceptable ERA (4.12), the Phillies did not put Radcliffe on the major-league roster at the end of the season. Sportswriter Jeff Moshier speculated that the "Phillies already were overburdened with bonus men."[38] Perhaps the major-league decision makers also were concerned about Hugh's control problems; he walked 82 batters in 92 innings. Whatever the reasoning, Hugh Radcliffe was still in the minor leagues at the end of the 1948 season, making him available to be drafted by other teams. He was among "the most publicized and highest paid" of the 270 "bonus tag" players whom big-league clubs left exposed to the draft in 1948,[39] but there were no takers.

Both Nixon and Radcliffe started their sophomore seasons at the triple-A level. Nixon was assigned to the Louisville Colonels of the American Association; the Phils sent Radcliffe to the Toronto Maple Leafs in the International League. Neither of the youngsters fared well at that level. Nixon recorded three losses and a "no decision" in four games for Louisville and was demoted to the Birmingham Barons in the double-A Southern Association. Radcliffe saw limited duty in Toronto, appearing in only nine games and compiling a 1–1 record and a 1.91 WHIP in a mere 22 innings. The Phils' brass said that injuries prevented Hugh from playing more, but others accused them of using the youngster sparingly "in hopes that he would escape the draft."[40] If that were their plan, it did not work; the New York Yankees drafted Hugh Radcliffe in November.

After being reassigned to double-A ball and following a slow start at that level, Willard Nixon had an outstanding 1949 season. He lost his first three games for the Barons, making him 0–6 for the season, but he then won 14 of his final 18 decisions to finish the regular Southern Association season at 14–7, and at least two of his losses were due to poor defensive support. A local sportswriter described his pitching as "phenomenal after a shaky start."[41] He also had the highest batting average (.345) on the team.

The highlight of the 1949 season for Willard Nixon came on Monday, August 15, at Ponce de Leon Park in Atlanta. With a large contingent of fans from his home town among the 4,996 in the stands and even more watching the game on television at the American Legion clubhouse in Lindale, Willard dominated the Atlanta Crackers. The final score was 5–4, and Nixon had pitched all nine innings and driven in all five Baron runs. As Langdon B. Gammon reported: "He was the whole show, producer and star."[42]

Two years after making their decisions regarding immediate riches versus the potential for delayed gratification, the two young pitching prospects from Georgia each had experienced some success and some tribulation. Neither was yet in the major leagues, but one remained with his original suitor, while the other was facing an uncertain future with a new organization.

After facing major-league hitters during spring training, both players started the 1950 season at Triple A. Nixon went back to Louisville, and the Yankees assigned Radcliffe to the Kansas City Blues. At the time, Casey Stengel said that both he and young Eddie Ford had "excellent prospects of climbing back fast."[43]

Although both Georgia youngsters were now in the American Association, they did not face off as mound opponents. The junior Georgian pitched in only two innings in two games for the Blues, compiling a losing record (0–1) and a WHIP of 4.00. On May 6, he was reassigned to Binghamton in the Class A Eastern League, three days before Nixon faced Kansas City for the first time. Hugh prospered a bit in the lower classification, appearing in 25 games and managing a winning record

(9–8), although his ERA (4.14) and his WHIP (1.71) remained high.

While Radcliffe's triple-A performance earned him a demotion, Nixon proved that his earlier difficulties at that level were a clear case of premature promotion. This time around, he got off to a fast start, winning his first three games. On July 2, he won his sixth consecutive game, bringing his record to 11–2. On July 6, he was promoted to the parent club. His 97 strikeouts led the American Association, and he was batting .345. Just over two years after signing with the Red Sox, Willard Nixon had gotten the minor-league seasoning that he thought he needed. He joined the Big Sox in New York and received his major-league baptism immediately. On July 7, he pitched the last two innings of a 5–2 Red Sox loss to the Yankees. He allowed one run on three hits, walked three batters, and struck out none—not especially impressive, but manager Steve O'Neill was happy with the results. He noted that Nixon "fired the ball hard and had those Yankees refraining from taking toe holds."[44] By season's end, Willard had appeared in 22 games and compiled a winning (8–6) record.

Willard Nixon was in the big leagues to stay. He spent the next eight years with the Red Sox, although he never achieved the stardom that many baseball experts continued to predict for him. Early in his career, he struggled to control his pitches and his temper; later, he often pitched despite a painful shoulder. His best two years came in 1954–1955, when his overall 23–22 record was overshadowed by his mastery over the powerful New York Yankees, which earned him a spot on the cover of *The Sporting News*[45] and the nickname of "Yankee Killer." He beat the Yankees four consecutive times in 1954, yielding no more than one earned run in any game, and he won his first two games against them in 1955—a streak of six straight wins over the Bronx Bombers. Although his dominance over the Yankees did not continue and while he was not as successful against many of his lesser opponents, Willard would have finished his career with an overall winning record had he not tried to pitch through arm trouble in 1958. He compiled a woeful 1–7 record that year, dropping his career record to 69–72. He returned to the minors in 1959 with the triple-A Minneapolis Millers in an attempt to "pitch [his] way back to the majors,"[46] but after nine seasons in the majors, his big-league career was over.[47]

Hugh Radcliffe, by contrast, was destined to be a career minor leaguer. Following his winning 1950 season in Binghamton, the Yankees gave him a contract for another year, and he joined the team in Phoenix[48] for spring training. After a successful start in an intrasquad game,[49] he struggled and was farmed out to Kansas City after giving up seven runs to Cleveland in a two-inning outing that included five walks and a wild pitch. He spent only a month in Kansas City, appearing in three games and compiling a 1–0 record, before being assigned to Beaumont in the double-A Texas League, where he won six, lost eight, and amassed a 1.74 WHIP. In September, he was one of 12 minor leaguers "recalled" by the Yankees but not asked to report immediately. In January 1952, the Yankees announced his "outright release," leading the *New York Times* to say it was "the end of the trail" for "bonus baby" Hugh Radcliffe.[50]

This pronouncement proved to be premature, as Hugh signed on with Kansas City. He did not play for the Blues, however. He was assigned and reassigned three times, opening the 1952 season back in Beaumont, spending six weeks with the Tyler East Texans[51] of the Class B Big State League, and then going back to Class A Binghamton for the last month of the season. Hugh was taking the "journeyman ballplayer" appellation literally: his travels took him to three teams at three different classifications, for a combined record of 9–7 and WHIP of 1.54. Following the season, Hugh said that he had asked the Beaumont club to send him to a team where he could be part of the regular rotation. He added that he had learned more in the last half of the season than in four years of professional baseball, having "turned from a thrower to a pitcher."[52] He admitted later, however, that while with this club, he suffered the injury that effectively ended his hopes of a big-league career. He said that he had been put into a game on a chilly night without proper warmup, and his arm "went bad" and was never the same.[53] He was still the property of the Kansas City club and was eligible for the draft, but only a major-league team could claim him; none did.

Before he threw a pitch in 1953, Hugh Radcliffe had been the property of four minor-league clubs—Kansas City, Birmingham (Double A, Southern League), Syracuse (Triple A, International League), and Natchez (Class C, Cotton States League). With this last club, Hugh saw more action than in any of his other minor-league seasons. He appeared in 33 games, winning 13 and losing an equal number. His ERA was 3.74, and his WHIP was 1.51. At the end of the season, Birmingham reclaimed and reserved his rights.

Birmingham assigned Hugh to Winston-Salem (Class B, Carolina League) before the 1954 season started. He appeared in only three games, losing his only decision, before being returned to the Barons on

May 1. Four days later, the Barons released him, and his trail truly came to an end. The $40,000 bonus baby had spent seven years in the minor leagues, playing for eight different teams in eight different leagues at every minor-league classification above Class D. He had managed an overall winning record (46–42) although with only two winning seasons. He had constantly struggled with his control, averaging 6+ walks per nine innings pitched over his career.

Both these Peach State natives expressed some regrets as they looked back over their professional baseball careers. For obvious reasons, Nixon's regrets were fewer. He summed up his playing days by saying, "I didn't get the most out of my ability, but I'm happy with [my career]. Baseball's been good to me. I wouldn't have had anything if it hadn't been for baseball."[54] Radcliffe openly rued his decision regarding the bonus money. In 1955, the year after his career ended, he said: "If I had it to do over, I wouldn't be a bonus boy. They bring the bonus boys up too fast and they don't get the chance that some of the other players get. If I had had a chance to come up a little slower, and had had a little time to spend with a few pitching coaches, I think I'd be up there winning today."[55] In his later years, Hugh Frank was more philosophical; looking back in 2009, he said, "I'm kinda glad I didn't make it. I would have had to raise my family up there and wouldn't have gotten to spend as much time with them."[56]

LIFE AFTER BASEBALL

Both Willard Nixon and Hugh Frank Radcliffe had long, productive lives after their baseball days had ended. Both found careers beyond the ballpark. Both raised families. Both found pleasure in active hobbies. Both retained legendary status in their hometowns. As with their baseball careers, they took somewhat different paths, but now the results were much more similar.

The first year of professional baseball was the last year of bachelorhood for both young men, and they found lifelong partners. Willard and Nancy Nixon had been married for more than 51 years when he passed away in 2000; together they raised three children. Hugh and Marge Radcliffe have now been married for more than 60 years and have raised four children.[57]

When their baseball days ended, both players took full-time jobs with the companies where they had worked during the offseasons. Hugh worked for the telephone company that later became Alltel (and was later acquired by Verizon), starting out as a lineman and moving up to supervisor. He left them for a few years to serve as a recreation director in Cordele, Georgia, but then returned and remained until his retirement some twenty years ago. Willard spent five years as a Red Sox scout before returning to Pepperell Mills, where since his high-school days he had worked when he was not playing baseball. He left Pepperell in 1968 rather than relocate and held a variety of positions—clerk of the Floyd County Board of Com-

	WILLARD NIXON						HUGH RADCLIFFE					
Year	Team	League	G	IP	W-L	ERA	Team	League	G	IP	W-L	ERA
1948	Scranton	EL (A)	18	132.0	11–5	2.52	Wilmington	ISL (B)	16	96.0	7–3	4.12
1949	Louisville	AA (AAA)	4	23.0	0–3	5.09	Toronto	IL (AAA)	9	22.0	1–1	INA
	Birmingham	SA (AA)	22	177.0	14–7	3.41						
1950	Louisville	AA (AAA)	13	117.0	11–2	2.69	Kansas City	AA (AAA)	2	2.0	0–1	18.00
	BOSTON	AMERICAN	22	101.3	8–6	6.04	Binghamton	EL (A)	25	150.0	9–8	4.14
1951	BOSTON	AMERICAN	33	125.0	7–4	4.90	Kansas City	AA (AAA)	3	11.0	1–0	3.27
							Beaumont	TL (AA)	22	113.0	6–8	3.90
1952	BOSTON	AMERICAN	23	103.7	5–4	4.86	Beaumont	TL (AA)	10	52.0	1–3	3.63
							Tyler	BSL (B)	8	45.0	3–2	4.60
							Binghamton	EL (A)	9	56.0	5–2	3.54
1953	BOSTON	AMERICAN	23	116.7	4–8	3.93	Natchez	CSL (C)	33	183.0	13–13	3.74
1954	BOSTON	AMERICAN	31	199.7	11–12	4.06	Winston-Salem	CL (B)	3	INA	0–1	INA
1955	BOSTON	AMERICAN	31	208.0	12–10	4.07						
1956	BOSTON	AMERICAN	23	145.3	9–8	4.21						
1957	BOSTON	AMERICAN	29	191.0	12–13	3.68						
1958	BOSTON	AMERICAN	10	43.3	1–7	6.02						
1959	Minneapolis	AA (AAA)	26	98.0	6–2	3.58						
	Minor-League Totals (4)		83	547.0	42–19	3.14	Minor-League Totals (7)		140	730.0	46–42	3.85
	Major-League Totals (9)		225	1234.0	69–72	4.39	Major-League Totals (0)		0	0.0	NA	NA

League Abbreviations: AA (American Association); BSL (Big State League); CL (Carolina League); CSL (Cotton States League); EL (Eastern League); IL (International League); ISL (Interstate League); SA (Southern Association); TL (Texas League).
Statistics from Baseball-Reference.com.

missioners, County Court investigator, chief of police for Floyd County, and transportation director for the Floyd County School System—until he retired in 1989.

Even before he retired, Nixon became one of the most popular and successful amateur golfers in Northwest Georgia and maintained this status until failing health forced him off the links. Radcliffe also became an avid golfer and fisherman and retired to Florida so that he could pursue both hobbies, which he is again enjoying after recovering from a bout with cancer.[58] Hugh's decision to retire to Florida reflects another major difference in the lives of these two Georgians. Willard Nixon arranged his life so that he never lived more than 10 miles from his birthplace; Hugh Radcliffe never lived in Thomaston after he graduated from high school, although he did return often to visit family members[59] and to participate in ceremonies honoring his accomplishments.

In 2004, Hugh Frank Radcliffe was among the first 15 athletes inducted into the Thomaston–Upson County Sports Hall of Fame. Willard Nixon had received a similar honor in 1971, when the Rome–Floyd County Sports Hall of Fame inducted its inaugural class of seven. Nixon was also elected to the Georgia Sports Hall of Fame in 1993. That honor has so far eluded Radcliffe, but in 1998, the Georgia House of Representatives passed a resolution commending his athletic achievements in four sports and especially honoring "the golden day he struck out 28 batters."[60] Radcliffe's most recent honor came in 2008, when the clubhouse at Thomaston's Silvertown Ballpark (the site of his historic performance) was named in his honor.

HUGH RADCLIFFE: POSTER BOY FOR THE EVILS OF THE BONUS RULE—OR NOT?

The two heroes of this story faced similar situations, made very different decisions, and achieved very different results. The intriguing question is the degree to which their decisions to accept or reject large bonuses impacted their upward mobility.

Willard Nixon thought he needed minor-league experience before he would be ready to pitch in the majors. In two and a half years, he got that experience, moving smoothly through Classes A, AA, and AAA. His only slip during that climb came when he was promoted from Class A to Triple A before he was ready. When he faltered at the higher level, he went to Double A and pitched well.

In contrast, after the pitching-rich Phils chose not to protect their investment in Hugh Radcliffe by adding him to the big-league roster, they promoted him all the way to triple-A Toronto to ensure that only another major-league team could draft him. He had been somewhat successful in Class B, but he skipped Class A and AA and spent his entire sophomore year at the triple-A level, getting little opportunity to prove himself there.

Radcliffe's belief that he would have done better if he had rejected the bonus offer, of course, echoes the concerns voiced by opponents of the bonus rule, but can we be sure that his "bonus boy" status is what prevented him from becoming a major leaguer? In spite of a reasonably successful first season, no other major-league club saw enough potential to add him to their roster after the Phillies exposed him to the draft. If his limited use at Toronto was truly a ruse to keep other teams from noticing him, then his bonus status certainly retarded his progress. If he was kept at the triple-A level to reduce the number of teams who could draft him, his bonus status hurt him further. Radcliffe himself believes to this day that the Phillies "tried to hide me."[61] If such were not the case, there seems to be little justification for not using him more in 1949, either in Toronto or at a lower minor-league classification.

There is little doubt, therefore, that Hugh Radcliffe's development suffered because he was a bonus baby, but other factors may have kept him in the minors while his fellow Georgian advanced to the majors. Radcliffe had the disadvantage of being selected by teams that had an abundance of pitchers. The Phillies had signed a bevy of bonus-level pitchers and reaped the benefits in 1950 when the "Whiz Kids" won the National League pennant behind the starting pitching of three Bonus Babies—Curt Simmons, Robin Roberts, and Bob Miller. The Yankees of the early 1950s dominated the American League, winning five consecutive pennants between 1949 and 1953, with a pitching staff built around Vic Raschi, Allie Reynolds, Eddie Lopat, and (later) Johnny Sain and Whitey Ford.

While he got less minor-league training than Nixon, Radcliffe probably needed it more. He had pitched extremely well, but typically against players younger than he was. During the summer between his junior and senior years in high school, Hugh did pitch for Swainsboro in the semipro Ogeechee League,[62] where most of his opponents had played college ball. He also pitched "a few games" for the local textile-mill teams,[63] but he was 19 years old throughout his dominant final year in high school; most high-school seniors are a year younger than that. In contrast, Willard Nixon had pitched extensively in the textile leagues against men who were five to ten years his senior, and he had prospered against that competition.

Both players suffered from sore arms during their careers, but here again there was an important difference. Nixon hurt his arm after proving that he could pitch at the major-league level. Radcliffe's injury came while he was struggling in the minors, effectively sidetracking any hope that he could succeed in the majors.

There seems to be little doubt that the 1948 bonus rule played a role in Hugh Frank Radcliffe's failure to reach the major leagues. The Phillies certainly got little (if any) benefit from their $40,000 investment. There is some irony in the fact that the younger of the two players we have considered, the one who was perhaps most in need of minor-league seasoning, opted for the route that made such seasoning least likely. Yet he got minor-league experience anyway, although perhaps not in the proper sequence. Other factors also helped to keep the youngster in the minors, so the overarching lesson here may be that paying large sums for "can't miss" (but untried) pitchers was just as risky in 1948 as it is today—and as it will likely be in 2048. ■

NOTES

1. Brent Kelly, *Baseball's Biggest Blunder: The Bonus Rule of 1953–1957* (Lanham, Md.: Scarecrow Books, 1997).
2. Paul Hemphill, "Whatever Happened to What's-His-Name?" *True* (June 1972). Collected in Paul Hemphill, *Lost in the Lights: Sports, Dreams, and Life* (Tuscaloosa: University of Alabama Press, 2003).
3. Steve Treder, "Cash in the Cradle: The Bonus Babies," *The Hardball Times* (11 November 2004).
4. John Drebinger, *New York Times*, 3 February 1946.
5. Michael J. Haupert, "The Economic History of Major League Baseball," in *EH.Net Encyclopedia*, ed. Robert Whaples; "The Century in Dollars and Cents," *Seattle Post-Intelligencer* (2002), www.seattlepi.com/specials/moneyinsports/sportstimeline.pdf.
6. U.S. Census Bureau's Historical Income Tables-Families, www.census.gov.
7. *Salt Lake City Desert News*, 20 October 1949.
8. Frank Eck, *Massillon (Ohio) Evening Independent*, 2 July 1948.
9. *Charleston (W.V.) Daily Mail*, 4 December 1949.
10. *New York Times*, 3 April 1948.
11. *Portsmouth (Ohio) Times*, 4 June 194).
12. Arthur Daley, *New York Times*, 4 September 1949.
13. Ibid.
14. Arthur Daley, *New York Times*, 15 December 1950.
15. Hemphill, "Whatever Happened to What's-His-Name?"
16. Steve Treder, "Cash in the Cradle: The Bonus Babies," The Hardball Times, 11 November 2004.
17. Kelly, *Baseball's Biggest Blunder*.
18. Langdon B. Gannon, *Rome News Tribune*, 22 April 1943.
19. Owen Davis, *The Auburn Bulletin*, 28 August 1974.
20. This quotation comes from an undated newspaper clipping in one of the many scrapbooks (this one labeled 1947) maintained by Mrs. Nancy Nixon, Willard's widow. After graduating from the University of Georgia, Spurgeon Ferdinand "Spud" Chandler pitched for the New York Yankees for 11 years (1937–47), compiling a 109–43 record—the highest winning percentage for any pitcher in history with 100 or more games.
21. *Rome (Ga.) News Tribune*, 29 April 1948.
22. *Inside the Auburn Tigers* (a monthly magazine for Auburn fans), August 1983.
23. Undated clipping in Nancy Nixon's 1948 scrapbook.
24. Roger Birtwell, *Boston Globe*, 14 March 1949.
25. *Thomaston Times*, 23 April 1948.
26. Ibid.
27. Thomaston-Upson Sports Hall of Fame.
28. *Atlanta Journal*, 22 April 1948. Most of the names in this list will be familiar to all baseball fans. The two Smiths are the least well known; both had long but relatively undistinguished major-league careers. Carlisle, who was better known as "Red," was not born in Georgia, nor was Martin (Marty) Marion, who was a prep star at Atlanta's Tech High. The *Journal*'s choice of players with whom to compare Radcliffe was less insightful than the prediction that the record would not fall; no one has yet matched or topped that standard.
29. Ibid.
30. *Florence (S.C.) Morning News*, 17 August 1946.
31. *Hagerstown (Md.) Daily Mail*, 4 June 1948.
32. Thomaston-Upson Sports Hall of Fame.
33. Wayne Minshew, "Scouting Big League Talent Has Changed with the Years" *Baseball Digest*, July 1976.
34. *Thomaston Times*, 17 June 1955.
35. Doug Gelbert, *The Great Delaware Sports Book* (Montchanin, Del.: Manatee Books, 1995).
36. Chic Feldman, *Scranton Tribune*, 17 June 1948.
37. Chic Feldman, *Scranton Tribune*, 22 September 1948.
38. Jeff Moshier, *Saint Petersburg Independent*, 22 November 1949.
39. *Saint Petersburg Times*, 9 November 1948.
40. Jeff Moshier, *Saint Petersburg Independent*, 22 November 1949.
41. Naylor Stone, *Birmingham Post*, 13 September 1949.
42. Langdon B. Gammon, "Lindale News," *Rome News Tribune*, 15 August 1949.
43. *New York Times*, 30 March 1950. Eddie Ford, better known as "Whitey," climbed back and began his Hall of Fame career on July 1.
44. Arthur Sampson, *Boston Traveler*, 13 July 1950.
45. *The Sporting News*, 4 May 1955.
46. Tom Briere, *Minneapolis Tribune*, 12 April 1959.
47. Thirty other American League pitchers made their major–league debut in the same year as Nixon, and only three (Lew Burdette, Whitey Ford, and Ray Herbert) pitched longer and won more games. Two fellow 1950 Red Sox rookie pitchers (Dick Littlefield and Jim McDonald) equaled his longevity, but neither matched his record. The average career for 1950's other 25 American League rookie pitchers was 3.6 years.
48. This is the only time that the Yankees have gone west for spring training. Yankees co-owner Del Webb, a resident of Phoenix, swapped training sites with the New York Giants, who came east to use the Yankees' usual site in St. Petersburg, Florida.
49. In an interview on October 21, 2009, Radcliffe recalled that he pitched the first five innings of a game that pitted the Yankees rookies against each other and gave up only one hit—a triple to Mickey Mantle, who was experiencing his first spring training.
50. *New York Times*, 31 January 1952.
51. On July 15, 1952, Hugh Radcliffe participated (as a pinch-runner) in a 20-inning Tyler loss (3–2) to the Texarkana Bears.
52. *Atlanta Journal-Constitution*, 21 November 1952.
53. *Thomaston Times*, 17 June 1955.
54. Undated article in Nancy Nixon's scrapbook.
55. Ibid.
56. Interview with Hugh Frank Radcliffe, 21 October 2009.
57. Ibid. Hugh said that he named one of his sons "Rip" after Raymond Allen (Rip) Radcliff, who had a 10-year major-league career (1934–43). He mistakenly thought they shared a common spelling of their last names.
58. Ibid.
59. Hugh came from a large family. He had ten siblings, and one of them did make it to the major leagues. His older sister, Emma Lou Radcliffe Boss (1922–2007), spent 17 years as an administrative assistant to Hank Aaron and the Atlanta Braves.

60. Georgia House of Representatives, HR 1258.
61. Ibid.
62. The Ogeechee League, which derived its name from Georgia's Ogeechee River, operated in middle and southern Georgia during the 1940s and 1950s. Teams represented small towns such as Glenville, Greenwood, Louisville, Metter, Millen, Statesboro, Swainsboro, Sylvania, Thomson, and Wrightsville. According to an article (23 April 2009) in the multititled *Louisville News and Farmer & Wadley Herald & Jefferson (County) Reporter*, the Louisville team bore the name "Mudcats" long before Columbus's Southern League team adopted that nickname and retained it even after moving to North Carolina.
63. Interview with Hugh Frank Radcliffe, October 21, 2009.

Sources

My most valuable resource for the portion of this article dealing with Willard Nixon was Mrs. Nancy Nixon, who freely shared with me her memories and her extensive collection of scrapbooks (one for almost every year he played, 1945–59) and related materials that chronicled her husband's career. Several unattributed quotations were found in unlabeled articles in those scrapbooks. Hugh Frank Radcliffe himself graciously participated in a telephone interview and shared his memories with me, as did his long-time friends Jim Fowler and Charles Gordy. Steve Densa, Minor League Baseball's media relations director, provided Radcliffe's "player record card." In addition to these resources and the specific publications cited above, the following additional sources were invaluable during the preparation of this article.

Libraries (Newspaper Archives and Staff) and Organizations

Auburn University Library (especially Joyce Hicks)
Boston Public Library
Rome/Floyd County Public Library (especially Dawn Hampton)
Upson Historical Society (specifically Penny Cliff and Patty Morgan)

Online

Baseball Reference www.baseball-reference.com
Newspaper Archive www.newspaperarchive.com
New York Times www.nytimes.com
Paper of Record www.paperofrecord.com, for back issues of *The Sporting News* (now also available through SABR)
Retrosheet www.retrosheet.org, for box scores and play-by-play descriptions
SABR research tools www.sabr.org

Measuring Defense

Entering the Zones of Fielding Statistics

Dan Basco and Jeff Zimmerman

Doug Glanville in his new baseball memoir notes that many players, "rewarded with huge contracts because of their offensive prowess, . . . have developed a kind of attention deficit disorder when it comes to defense. . . . If you put up tremendous offensive numbers year after year, the game will cut you a little slack when it comes to the glove."[1] But is that still true? Or, rather, is the converse still true—that the compensation to players whose glove is better than their bat is not commensurate with their true value?

In the past year many baseball writers have remarked that "defense is the new on-base percentage," meaning that it's an undervalued asset—as the ability merely to get on base was about a decade ago, when driving in runs was thought to be the ticket, or so said Michael Lewis in *Moneyball*. You would think that, if here and there online and now in the pages of *The Baseball Research Journal* you're reading that defense is undervalued in the market, surely it no longer is. Wouldn't the market have already corrected itself? "We were concerned several years ago that the advantage of the things that we knew could play itself out when you reach the point that everybody knew those things," Bill James told a gathering of the Boston chapter of the Baseball Writers Association of America earlier this year.[2] Haven't all the front offices caught on by now, so that there are no more bargains for them to sift through in the glovework department?

But knowing where to shop is not the same as knowing what to look for once you get there. If some position players whose good glove more than offsets their weak bat still have a market value below their actual value, how would you know how to identify them? "The reason there are still more inefficiencies on the defensive side is that defense remains hard to quantify," Jeff Kingston, assistant general manager of the Seattle Mariners, told *Sports Illustrated* earlier this year. "The metrics have come a long way in the last few years, and clubs go to great lengths to quantify defense, but they simply don't have the same confidence level as they do in quantifying offense."[3]

James agrees with Kingston that a major limitation of the effectiveness of defensive metrics is that our "confidence" in them is shaky. Referring to the quantification of defense, he comments that "we haven't been doing it all our lives. We've had pretty good methods now for five or six years. I've been doing the [offensive] stuff all my life. I know what's a normal gap between two seasons [offensively] and what isn't. I don't know the same [defensively].'' Even so, he thinks that defense "can be evaluated with the same degree of precision and the same degree of agreement among different methods as [can] offense."[4]

It's true that the business of quantifying offense has undergone profound development in the past thirty years, after decades of relative stasis. To the familiar categories of batting average, RBIs, runs scored, and so forth, baseball analysts have proposed countless new metrics, some of which—OPS+, wOBA, linear weights—have stuck. Although Major League Baseball doesn't recognize them as official statistical categories, they're computed from the actual statistics in the official record and have proven to be reasonably reliable instruments for evaluating and predicting a player's offensive performance.

Most of the effort to quantify run *prevention*, or defense, has been focused on pitching, at least since the late nineteenth century. Sabermetric scrutiny in general has been so abundant, however, that, whether or not fielding has been scrutinized less than pitching, it's still been scrutinized a lot—more than a lot of people who take a professional interest in the subject can easily keep up with.

The earliest baseball writers used the terms *offense* and *defense* in a precise manner that doesn't match up entirely with twenty-first-century usage. Defense for them was the entire project of preventing runs, and that includes pitching as well as fielding. In this article we use the term *defense* mostly in the twenty-first-century sense, to mean fielding as distinct from pitching.

Below we'll look at some of the new, and not so new, defensive metrics that Jeff Kingston alludes to and then at some of the major-league clubs that are mining them for information that might give them insight and an advantage over their competition. First, though, let's look back at the handful of defensive statistical categories that are familiar and traditional. A brief inquiry into their history might give us a new perspective on defense and on the report that defense is the new OBA.

EARLY FIELDING STATISTICS: REWARD RANGE OR PENALIZE ERROR?

Recent buzz about defense may strike you as a fad that will soon pass, but in some respect it reflects a return to the earliest days of organized baseball. "It's almost impossible," writes Alan Schwarz in *The Numbers Game*, "for the modern baseball fan, conditioned to focus on the battle between pitcher and batter, to appreciate how important fielding was in the early game. . . . As baseball historian John Thorn notes, 'Fielding skill was still the most highly sought after attribute of a ball player.'"[5]

Already by 1876, putouts, assists, and errors were added together to determine chances, and fielding percentage was calculated as it is now. In 1887, the practice of counting wild pitches and passed balls as errors, or "battery errors," was discontinued. Double plays by individual fielders were added as an official stat in 1922. This was among statistical categories that weren't included in official records in the early days but that nonetheless were recorded in box scores, from which later researchers have reconstructed season totals. Stolen bases against individual pitchers and catchers began to be recorded more reliably, and catchers began to be credited for "caught stealing." Otherwise the system of measuring defense remained fairly static until Bill James began to publish his groundbreaking work in the late 1970s.

COURTESY OF RAWLINGS

In 1957, Rawlings established the Gold Glove Award for the player who would be voted the best fielder at his position. The inaugural All-Star Fielding Team, as it was called, was voted on by a committee of sportswriters and was drawn from players in both leagues. Since 1958, the Gold Glove has been given to nine players in each league.

As for fielding percentage, Henry Chadwick was not alone in thinking that range was more important than sure-handedness. In his *Beadle* guide following the 1872 season, fielding statistics did not include errors.[6] In 1875, Al Wright, following a similar philosophy, took the sum of putouts and assists and divided that by games—a metric that rewarded players for how often they got to a batted ball. Errors didn't figure into it at all. This method of quantifying fielding didn't catch on—not, that is, until about a hundred years later, when James introduced Range Factor. Wright had called it "fielding average."[7]

What is the primary criterion by which the performance of a fielder ought to be evaluated? Chadwick represented the school of thought, which perhaps was more traditional, that fielders should be rewarded for range, but the opposing school of thought, that the emphasis should be on penalizing them for errors, was winning the day. The debate was captured, and the case for the reward-range doctrine nicely made, in a poem in a New York newspaper in 1917.[8]

Chances

When the fielder loves his record
    More than victory for his team
Doubtful chances miss his glances
    For his caution is extreme.
Going after every grounder
    Means a slip-up here and there,
And in terror of an error
    He will choose the chances fair.
Spotless records are enticing
    In a ball game as in life,
And the cunning pick their running
    To avoid the stony strife.
Many a mortal swaggers slowly
    Down the years in proud parade,
Boasting to the meek and lowly
    Of the slips he never made.
Well it is that wise commanders,
    When they call for sterling men,
Place the workers o'er the shirkers
    Though they err and err again.
Men who try and fall when trying
    Try again and win at last,
Never brooding, never sighing
    O'er the errors of the past.

— William F. Kirk

Kirk went on to say that managers prefer that their players go after everything even if it means they make more errors, as long as they're not mental errors.

We often hear that 90 percent of baseball is pitching. Addie Joss first said that, in 1906, according to Bill James, who adds that, when Joss was criticized for it, he tried to explain that he meant that pitching was 90 percent of defense. John McGraw divided it up this way—batting is half of baseball, pitching is one-third, and fielding is one-sixth.[9]

Hugh Fullerton, a baseball writer, came up with a different formula in 1921. He gave more weight to offense and fielding than McGraw did and less to pitching. First he divided the game into offense and defense (fielding plus pitching) and gave roughly twice as much weight to the former—his exact ratio was 64 to 36. Then he subdivided defense into each of the nine positions. Of that 36 percent of the total, it was 36 percent for the pitcher, 14 percent for the catcher, 6.5 percent for the second baseman, 6 percent for the first baseman, and less than 6 percent for each of the remaining positions.[10] All this, of course, was pure conjecture—as is the assumption that fielding counts for less now than it did back then. That assumption, however speculative, is hardly groundless, though: There are more strikeouts and home runs now and consequently fewer balls put into play.

In 1954, Allan Roth and Branch Rickey, at that time general manager of the Pittsburgh Pirates, developed an "efficiency formula" for quantifying run-creation and run-prevention performance. Unable to figure out how to measure fielding, they set their metric for it at 0—that is, they threw up their hands and just assumed that its overall effect on the game's outcome was neither positive nor negative. Rickey was resigned to the idea that "there is nothing on earth anyone can do with fielding."[11]

GOLD GLOVE AWARD

In 1957, Rawlings, the baseball-glove manufacturer, established the Gold Glove Award for the player who would be voted the best fielder at his position. The inaugural All-Star Fielding Team, as it was called, was voted on by a committee of sportswriters and was drawn from players in both leagues. Since 1958, the Gold Glove has been given to nine players in each league. From 1958 through 1964, they were voted on by players. In 1965 the vote came instead from managers and coaches (they could not vote for players on their own team), and this practice has continued to the present day.[12]

Everyone understands that the basis for selection is ultimately subjective. It depends on the judgment of voters, whose impressions will be influenced by a given player's reputation and will vary according to how much of his performance, and which moments of it, they've witnessed, either live or on TV. The dearth of familiar statistical categories that can serve as a common criterion that all voters can take into account makes the Gold Glove Award even more susceptible to being discounted by skeptics than are, for example, the Cy Young and Most Valuable Player awards.

Moreover, no minimum number of games or innings at each position is stipulated, making it possible for Rafael Palmeiro in 1999 to become the "first DH to win the Gold Glove," which he was awarded for his work at first base, where he'd played a grand total of 28 games.[13] It's true that a given Gold Glove winner is likely to have already been more high-profile than the average player—to play for a winning team, to have been selected to the All-Star Game, to have won the Gold Glove previously—and this raises the question whether voting is biased against the player who arguably was the better fielder but lacks marquee status.[14]

As a data point, then, that we can use when plotting the fielding quotient of a player who has won it, the Gold Glove Award is of limited value, but neither should it be ignored or outright dismissed. Judgment calls based on seeing, on empirical evidence, do count for something, as any scout will tell you, and when joined to statistical analysis the two modes of evaluation taken together may produce a higher confidence level than either of them taken only by themselves. Still, the usefulness of the Gold Glove Award in evaluating defensive talent across MLB would be greater if the details of the vote were made public—only the winner is announced, so we don't know by how much he won or who else was in the running.

SABERMETRIC STATISTICS

The statistical measurement of defensive performance has undergone profound development in the past forty years. Most innovations in defensive metrics during this period fall into one of two flavors—metrics that can be derived from the established statistical categories (putouts, assists, errors, total chances) and metrics that require batted ball information, including hit locations. One metric, Total Zone, incorporates the best of both approaches.

Statistics Based on Box-Score Statistics

The first proposals to reassess fielding statistics involved adjustments to the defensive statistical categories that have existed since 1876. The newer metrics—Range Factor, Relative Range Factor, Adjusted Range Factor, Defense Efficiency Record, Fielding Runs,

and Fielding Wins—are generated from calculations based on these simple box-score statistics. A big advantage of these metrics is that they can be calculated for any year from 1876 to the present.

Range Factor (RF) and Relative Range Factor (RRF). In 1976, *Baseball Digest* ran "Fielding Statistics Do Make Sense!" an article wherein the author, one Bill James, introduced Range Factor, a reincarnation of Al Wright's fielding average (putouts added to assists and divided by games). Later James acknowledged that Range Factor could not adequately capture the fielding performance of pitchers, catchers, and first basemen. Moreover, he explained, it was liable to be skewed by the following:

> The number of a player's defensive innings is not necessarily the number of games he played in multiplied by the number (in most cases, nine) of innings in that game. (James would later propose that defensive innings be recorded. They would have to be estimated for games before 1952.)
>
> A player is likely to get more opportunities if he plays on a team whose pitchers have a low strikeout rate.
>
> A pitching staff with a high ratio of groundballs to fly balls is likely to increase the number of chances for infielders and to decrease the number of chances for outfielders.
>
> A pitching staff that is more left- or right-handed than average will affect the number of fielding opportunities for the various position players, with a left-handed pitcher, for example, likely to increase the number of opportunities for the left fielder, third baseman, and shortstop and to decrease the number of opportunities for the right fielder and first and second basemen.
>
> It does not adjust for team defense. "Every team makes 27 outs," James explained in *The Fielding Bible* (2006), "whether they field like a team of Adam Everetts or a team of Jason Giambis. The overall range factor of a bad team is the same as the overall range factor of a good team."[15]

James adjusted for these wrinkles in Relative Range Factor (RRF), which he introduced in a chapter in *The Fielding Bible*, twenty years after his original article on plain Range Factor.[16] Using Defense Efficiency Record (see below), he also adjusted for team defense to compensate for the fewer opportunities that a given fielder is likely to have if he plays on a team with good defense.

An important advantage of RRF is that can it be used for seasons as far back as 1876. A practical advantage that plain Range Factor has over Relative Range Factor is that it can be generated entirely from the data in box scores (you don't consider, for example, whether the pitchers the fielders are playing behind are groundball or fly-ball pitchers), although the reliability of plain Range Factor is inferior to that of RRF.

Adjusted Range Factor. In the 1980s, Tom Tippett developed Adjusted Range Factor.[17] A variation on Range Factor, it's based on the number of balls in play (other than home runs) while each fielder is at his position. It's adjusted for the strikeout and groundball rates of the pitching staff and for the handedness of batters. It tracks only meaningful putouts and assists—for example, when a second baseman fields a groundball and throws to first to retire the runner, the assist is considered meaningful, whereas the putout executed by a first baseman catching the thrown ball is not. However, like Range Factor, Adjusted Range Factor yields an estimate, not an exact measure of the opportunities presented to a fielder. For historical data, this provides a better estimate than does plain Range Factor, although it's still an estimate.

Defense Efficiency Record (DER). James went on to develop DER (defense efficiency record), a defensive metric applicable to teams. DER is a measure of the percentage of batted balls that become outs. For example, a team that records outs on 72 of 100 balls put into play has a DER of .720. DER can be applied to historical data. Roughly, it's an inverse of batting average (roughly in that neither strikeouts nor home runs affect DER). It varies from era to era, so that it fails to measure a team's defense relative to the league average at the time, and it does not do a great job of distinguishing pitching effectiveness from fielding.[18] Still, DER is highly correlated with winning. From 2008 to 2009, for example, the Tampa Bay Rays went from worst to first in DER and from worst to first in the American League East standings.[19]

Fielding Runs and Fielding Wins. Pete Palmer in Total Baseball introduced Fielding Runs, a formula for estimating how many runs a fielder saves.[20] A player's Fielding Runs number is either positive or negative, unless it's zero; an average fielder at any position would save zero runs. For double plays, additional credit is given

beyond the putouts and assists the fielders are credited with. For first basemen, assists are counted but not putouts, which are considered to be not meaningful in most cases, resulting in the anomaly that the first baseman fielding the ball and throwing it to the pitcher covering first is rated more highly than the first baseman who fields the ball and runs to the bag himself.

James in *Win Shares* concurs that fielding statistics don't easily lend themselves to the evaluation of first basemen.[21] In his initial attempt to arrive at a single number for the defensive value of a player to his team, James used a complex formula. The match between James's Win Shares defensive values and Pete Palmer's Fielding Runs was only about 50 to 60 percent, whereas their different methods for arriving at runs created "gets essentially the same answers," according to James, about 99 percent of the time.[22]

Like Range Factor, Fielding Runs does not take into account the handedness of batters or how a pitching staff's strikeout and groundball rates affects how many opportunities a fielder gets.

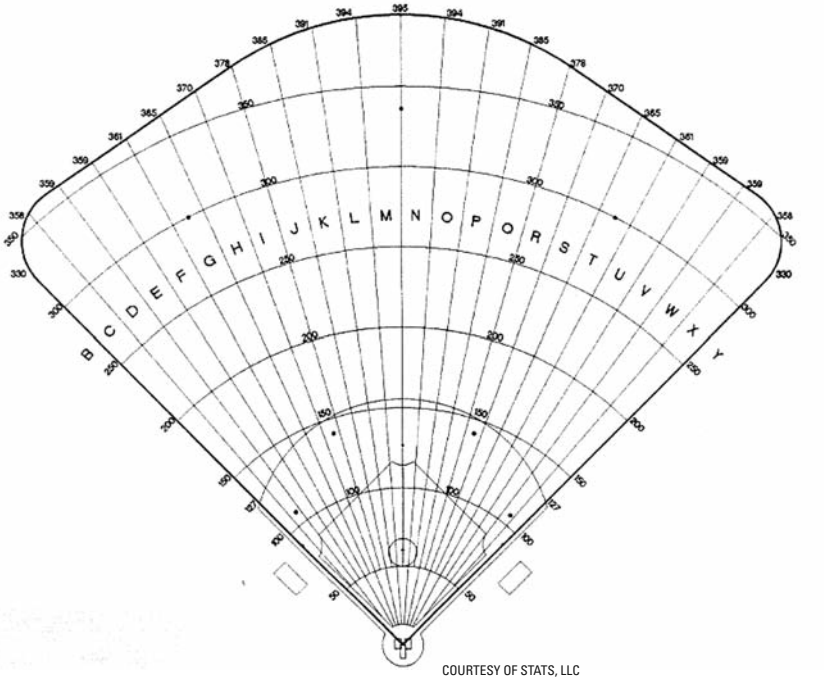
A player's Fielding Runs number is used to estimate his Fielding Wins, an estimate of the number of games a team won above or below what it would have won with an average fielder (with zero Fielding Runs) at the player's position.

Statistics That Require the Tracking of Batted Balls Metrics

In contrast to the set of newer defensive metrics discussed up to this point are defensive metrics that involve zone charts and require the tracking of batted balls to the precise points where they land on the field. These metrics are beyond the ability of the typical fan or researcher to calculate on his own; he must simply trust the work of private data-gathering services—for the most part, STATS, LLC (formerly STATS, Inc.) and Baseball Info Solutions (BIS)—and rely on the numbers they report. Another limitation of zone-based defensive metrics is that they can't be used for seasons before 1989. For the seasons for which they can be used, however, these metrics have proven to be more reliable indicators of a player's fielding ability than are the box-score-based metrics. How do we know the numbers are more reliable? The numbers correlate better year to year. Many of these metrics measure very specific observations (ability to field balls to his right, ability to handle bunts, etc.). These metrics give results that conform well to our impression. They also give us insight into abilities of players who through conventional scouting methods may have been overlooked.

Tracking by Eyeballing. In the late 1970s, James proposed that the location of every batted ball be tracked for the purpose of evaluating defensive performance. From the beginning, this project involved dividing up the field into zones. Below is an example of a STATS zone chart.

> ***Zone Rating (ZR).*** In 1989, STATS, Inc., developed Zone Rating (ZR). How is ZR calculated? They divide the field into zones. Each fielder is responsible for one or more of them. Some zones, representing "gaps," are not assigned to any defensive position. STATS "reporters" sit in the press box and, "eyeballing" the course of batted balls, record which zone every ball put into play falls into. If it falls into a zone for which the shortstop, for example, is responsible, he's credited with an opportunity. If he makes a play on the ball, he's credited with the opportunity plus the play. His zone rating is simply plays divided by opportunities; in this



A STATS zone chart. If a fielder makes a play on a ball hit to a zone he's not responsible for, he's credited, but the form of credit varies according to the system of Zone Rating, that of STATS or that of BIS.

way, zone-rating numbers are numerically similar to fielding percentage.

If a fielder makes a play on a ball in a zone he's not responsible for, he's credited, but the form of credit varies according to the system of Zone Rating, that of STATS or that of BIS. In the original Zone Rating from STATS, players get extra credit for fielding a ball out of their zone. In Revised Zone Rating (described below), no extra credit is given for them, they're merely tallied separately.[23]

Defensive Average (DA). In the 1990s, Pete DeCoursey and Sherri Nichols used play-by-play data from Project Scoresheet and The Baseball Workshop, a research company that produced baseball databases, in their development of Defensive Average. The concept is the same as that of Zone Rating. The field is divided into zones that are assigned to positions. The number of plays a given fielder makes is compared to the number of balls into the zones he's responsible for. Some baseball analysts have found DA to be useful, but it has not been adopted across the industry to the degree that the various flavors of ZR have.

Significant differences between DA and ZR mean that a given fielder may look better in ZR than in DA or vice versa. In DA, every zone is assigned to at least one fielder—no gaps in the outfield, for example, are recognized, as they are in ZR, and every ball put into play is deemed to be at least possibly fieldable. In ZR, a ball that drops in for a hit in a zone that no fielder is considered responsible for is not counted as an opportunity for anyone, whereas in DA, if the ball is hit into the gap between short and second, for example, each infielder is charged with half an opportunity. This tends to penalize a fielder who plays next to a fielder with poor range.[24]

Tracking by Pixel. "But none of these [defensive metrics]," Alan Schwarz wrote back in 2004, "have gained any real currency, because they all basically derive from the same specious input: putouts, assists, and errors. To really assess the skill of a fielder, many more factors must be considered: How hard was the ball hit? Where was the fielder stationed at the moment of contact? How quickly was he able to close the gap between his glove and the ball? Would a stronger throw have beaten the runner, and how fast was the runner moving?"[25]

The first item, at least, in Schwarz's list of questions is addressed with the help of Baseball Info Solutions and the availability of new kinds of data, which are used for Revised Zone Rating, Plus/Minus, Ultimate Zone Rating, and Probabilistic Model of Range (all described later). BIS tracks the direction, speed, type, and distance of every batted ball. Speeds of batted balls are classified as soft, medium, or hard. Types are classified as groundball, liner, fly ball, "fliner" (balls considered halfway between a fly ball and line drive), or bunt.[26] High infield pop-ups are grouped with fly balls. After this breakdown, there are two specific splits: distance (in feet) and direction (indicated by a vector).

For direction and distance, the manner in which the batted balls are tracked by BIS video scouts is entirely different from how balls are tracked by STATS for Zone Rating. BIS video scouts do not determine which zone a batted ball falls into. Rather, they plot a hit location on a field diagram for the given ballpark. BIS software enables the video scouts to simply click on the computer image of the field to plot the hit location. This displays a one-pixel-by-one-pixel hit location where a ball lands or is fielded. In contrast to the tracking method of ZR, this method does not involve the assignation of zones to specific fielders. Video scouts' opinions of the degree of difficulty are never considered; the video scouts simply watch game film and plot the data points. Each hit location is plotted by at least 2 video scouts to ensure accuracy.

Revised Zone Rating (RZR). In *The Fielding Bible*, John Dewan expands on the original Zone Rating system he developed at STATS, his former company. Revised Zone Rating (RZR) involves two major improvements over plain Zone Rating.

First, in RZR, the hit locations by pixel, described above, are used to plot batted balls; balls hit in specific directions and at specific distances are predetermined to fall in a player's zone or "out of zone." BIS video scouts plot hit locations, and then an automated code determines whether the ball landed (or was caught) in a particular RZR zone.

Second, Baseball Info Solutions, in using RZR, tallies separately the number of plays made

outside a player's zone. These are designated Plays Out of Zone, or OOZ. Revised Zone Rating is simply a percentage of the balls fielded successfully in a player's zone; it lists Out of Zone plays separately. This is slightly different from the original Zone Rating, where balls fielded out of a player's zone as well as in it counted toward a player's Zone Rating.

In RZR for outfielders, different zones are used depending on batted-ball type. For example, the zone for line drives is much smaller than that for fliners or fly balls. This is an improvement on Zone Rating in that a 6-second fly ball, for example, is treated differently from a 3-second line drive or a 4.5 second fliner.

When viewed simultaneously, Plays Out of Zone (OOZ) and percentage of plays in zone (RZR) prove to be a significant measure of a player's fielding performance, as they indicate whether a player is a standout fielder at routine plays, difficult plays, both, or neither.[27]

Plus/Minus. Plus/Minus, another metric that John Dewan developed using BIS data, is designed to answer the question "How many plays did this player make above or below what an average player at his position would make?"[28] Adam Everett, for example, had a Plus/Minus of +33 at shortstop in 2005. That is, he made 33 more plays than the average shortstop. Conversely, in 2005, Derek Jeter had a Plus/Minus of –34, despite his Gold Gloves and his reputation for making web-gem plays.[29]

Plus/Minus offers more nuance than other defensive-rating systems—the harder the play that is made, the greater the credit to the fielder. Conversely, the fielder is penalized more harshly for missing a routine play than for missing a hard one. But this begs the question: What exactly is a hard play, what is an easy play, and what are the various shades of difficulty between the two ends of the spectrum? This is determined from BIS data on the direction, speed, type, and distance of every batted ball. All plotted hit locations that match these four criteria are compared to each other.

For example, each hard fliner hit 350 feet at vector 180 (the vector representing straightaway center field) is compared only to other hard fliners hit 350 feet at vector 180. So if only two out of 25 fielders caught hard fliners hit 350 feet at vector 180, those two would be rewarded significantly; the players who missed the play would be penalized, but not much. Conversely, if 23 out of 25 fielders caught hard fliners hit 350 feet at vector 180, the 23 fielders would receive a small credit to their Plus/Minus score, and the two fielders who missed the play would be penalized harshly.

Plus/Minus values are calculated purely on the fielders' success at all exactly unique plotted hit locations. This effectively minimizes subjectivity. Credits and debits are assigned to the fielders according to the difficulty of a play made or not made.

Infielders are rated on their ability to handle balls hit straight at them and, to determine if they're weaker or stronger on one side, they're rated on their ability to handle balls hit to their right and then to their left. In *The Fielding Bible*, team defense for the thirty MLB clubs is rated in 19 different locations on the field where balls enter play.[30]

Defensive Runs Saved. In *The Fielding Bible, Volume II*, John Dewan takes the defensive metrics in the first volume and translates them into runs—into runs saved, that is, or Defensive Runs Saved.[31] They're the mirror image of Runs Created, the metric Bill James developed to estimate how many runs that are scored a hitter can be credited for.

The most important ingredient in Defensive Runs Saved is the Plus/Minus system. A fielder's Plus/Minus number reflects how often a play is made for a batted ball with a given trajectory and hit location. For the outfielders and corner infielders, it is adjusted to reflect the number of bases saved (on plays that could be or were extra base hits)—the result is an Enhanced Plus/Minus number. A constant multiplier is applied for all players at a given position, but it varies by position. At the high end are the infielders and the pitcher. Each one saves .73 to .76 runs per Plus/Minus point. At the low end are the three outfielders, whose numbers are .56 to .58. For second

DEFENSIVE MISPLAYS AND GOOD FIELDING PLAYS

The category Defensive Misplays was introduced in *The Fielding Bible, Volume II*.[1] The official scorer's decision to charge a fielder with an error is broadly based on his judgment that the play could have been made with ordinary effort, whereas the decision to charge a fielder with a Defensive Misplay is based on a long list of criteria—54 of them—that are spelled out with some specificity. Here are some examples:

- Outfielder fails to anticipate the wall when making a catch.
- Infielder makes a poor throw.
- Infielder lets the ball roll under his glove.
- Players attempt to catch a fly ball or popup and it drops between them.
- Outfielder takes a bad route to a ball.
- Outfielder misses the cutoff man, allowing the runner to advance.

Conversely, fielders are credited for plays they're not expected to make. These are appropriately named Good Fielding Plays. There are 27 criteria. Some examples:

- Outfielder steals a home run from a batter.
- Catcher picks off a runner.
- Fielder holds a runner to a single on a ball that was a likely double or a triple.
- First baseman handles a difficult throw.
- Middle infielder turns a double play despite an aggressive slide by the baserunner.

Both the Defensive Misplays and Good Fielding Plays can be tracked per Touch. A Touch is counted if a fielder touches the ball with his hand or his glove at any point during a play or if he is the first fielder to handle a ball that falls in for a hit. He can't get more than one Touch per play.[2]

Notes

1. John Dewan, *The Fielding Bible, Volume II*, (Skokie, Ill.: ACTA Sports, 2009), 27–29.
2. Ibid., 33.

basemen, shortstops, and pitchers, their positional value is multiplied by their Plus/Minus, and the result is their Plus/Minus Runs Saved. For outfielders and corner infielders, their Plus/Minus Runs Saved number is calculated by taking their positional value and multiplying that by their *Enhanced* Plus/Minus. Plus/Minus Runs Saved is the largest component of Defensive Runs Saved for all positions except catcher.

First Base and Third Base

The main ingredients in the Defensive Runs for first and third baseman are Plus/Minus Runs Saved and runs saved on bunts.[32] The Plus/Minus numbers for the infielders at the corners are adjusted to create an Enhanced Plus/Minus, which reflects the value of bases saved on balls hit down the line. (Some of those balls would have turned into doubles.)[33] From 2003 through 2008, Albert Pujols and Mark Teixeira had the best Enhanced Plus/Minus at first; Mike Jacobs and Richie Sexson had the worst. Adrian Beltre and Scott Rolen led among third basemen.[34]

Second Base and Shortstop

For middle infielders, the main ingredients are Plus/Minus Runs Saved and runs saved on double plays.[35] Double plays and double-play opportunities are tracked, as are pivots and pivot opportunities, where, for example, the second baseman would get credit for a pivot in a 6-4-3 or 5-4-3 double play.[36] At shortstop, Adam Everett is the leader in Runs Saved from 2006 through 2008 by a wide margin, 48 to Jimmy Rollins's 33; Derek Jeter has the lowest Runs Saved, –50. Chase Utley and Mark Ellis lead among second basemen for this period, and Jeff Kent ranks last.[37]

Outfielders

For outfielders, Defensive Runs involve three main metrics—Plus/Minus Runs Saved, runs saved by the outfielder's arm, and runs saved by robbing hitters of home runs. For Plus/Minus Runs Saved, the Enhanced Plus/Minus version is used, because outfielders can take a hit that would have been a double and keep it to a single. Rather than just account for the number of plays made, the Enhanced Plus/Minus number indicates the number of bases saved.[38] In *The Fielding Bible, Volume II*, separate Plus/Minus values are given for the three categories of distance (shallow, medium, deep).[39]

Also factored into the formula for Defensive Runs for outfielders is opposition baserunning. The number of bases that runners advance when an outfielder gets the ball is tracked, as it's a good measurement of how intimidated (if at all) runners are by an outfielder's arm.

Outfielders are rated on how often runners advance, stay put, or are thrown out in extra-base advancement situations. Baserunner kills are a more direct measurement of an outfielder's arm than are assists, which include relay throws to an infielder whose own throw may have had more to do with the eventual putout than did the outfielder's relay.[40]

Pitchers

Defensive Runs for pitchers is a measurement, of course, of the runs they save with their glove, not with their arm, except when they throw to a base after a ball is hit into play. Because of the location of the mound, the calculation of Plus/Minus for pitchers is similar to that of Plus/Minus for the middle infielders.

The running game does not show up in Plus/Minus Runs Saved, which is combined with Stolen Bases Runs Saved to yield his Defensive Runs. The caught-stealing percentage is tracked for pitchers as it is for catchers. The pitcher's ability to curb the running game has been shown to impact the running game more than the catcher's ability to do the same. Attempted steals, caught stealing, and pickoffs factor into a pitcher's Stolen Bases Runs Saved. Kenny Rogers led major-league pitchers in Defensive Runs in the period 2006–8, when he had 27.[41]

Catchers

Catchers do not have any Plus/Minus value; their Defensive Runs Saved consists of Stolen Bases Runs Saved and Adjusted Earned Runs Saved.We start with Stolen Bases Saved. How many does a catcher have? From his caught-stealing total, pitcher pickoffs are subtracted. Let's say the official record is that in 100 attempts the catcher has been credited with throwing out 40 runners but that in ten cases the runner was caught by the pitcher initiating the throw to one of the bases to pick the runner off. That leaves the catcher throwing out 30 runners in 90 attempts.

Each Stolen Base Saved is worth .62 Defensive Runs for Stolen Bases Runs Saved. In *The Fielding Bible, Volume II*, Dewan also calculates Adjusted Earned Runs Saved. Based on Catcher ERA, Dewan takes the ERA of each catcher with each pitcher and compares that to the ERA of other catchers who caught the same pitchers that year. After adjusting for home ballparks, Dewan applies a "credibility factor," which, in essence, regresses the total to account for the volume of noise remaining in the data.[42]

Total Runs

Total Runs is a comprehensive metric based on a variety of other metrics and used to

COURTESY OF THE HOUSTON ASTROS

Adam Everett of the Astros led MLB shortstops with a Plus/Minus of +33 in 2005. That is, he made 33 more plays than the average shortstop that year. He won the Fielding Bible Award in 2006. His performance after that declined markedly, perhaps owing in part to an injury (a fractured fibula) he sustained in a collision with left fielder Carlos Lee in 2007. His Defensive Runs Saved fell from 40 in 2006 to -4 in 2010 before he was released by the Tigers on June 15, one day after the third anniversary of his injury.

compare position players for their overall contribution in all aspects of the game. (Total Runs does not apply to pitchers.)

Total Runs consists of four components:

- Runs Created
- Baserunning Runs
- Defensive Runs Saved
- A positional adjustment that allows for comparison among different positions (more weight is given to playing the more difficult defensive positions)

Runs Created is an estimation of how many runs a player generates on offense with his bat and basestealing ability. Baserunning Runs, an estimation of how many runs a player generates through extra-base advancements on batted balls (it does not include basestealing).

What is the positional adjustment? It is well known that some positions are widely considered offensive positions or defensive positions. In *The Fielding Bible, Volume II*, Bill James assumes that 72 percent of Runs Saved are by pitchers and 28 percent by fielders (other than pitchers). He uses the average Runs Created (RC) values for 2005–7 at each of the eight positions (DHs and pitchers are excluded). First base has the highest average RC value, 99, and catcher has the lowest, 70. James also assumes that all positions contribute equally to a baseball game—that the players who contribute more offensively contribute less defensively, and vice versa. So James sets the Runs Saved value of each position equal to a value such that the sum of Runs Created and Runs Saved is equal for each position. After making some minor adjustments for the value of different outs, catchers have the highest Runs Saved component (42), with shortstops (36) and second basemen (32) not far behind. First basemen have the lowest (13), and left field (19) and right field (20) are not much higher.

To determine the weight given to each position, the Runs Saved number is then multiplied by the percentage of possible innings played at that position. For an example, consider John Dewan's discussion of Chase Utley in *The Fielding Bible, Volume II*. Dewan explains: "Chase Utley played 96.7 percent of a full season of innings at second base and 0.97 percent at first. Applying the Positional Averages, we get .967*32 + .0097*13 = 30.9 + 0.1 = 31."

In 2008, Chase Utley of the Philadelphia Phillies led MLB with 192 Total Runs, reflecting not only his good hitting but also his 34 Defensive Runs Saved and his high percentage of innings played at second base. Apparently most of the baseball writers voting on the NL MVP that year didn't recognize the strength of Utley's season—he finished only fourteenth in the voting. Utley's teammate Ryan Howard finished second to Albert Pujols (a worthy choice, as his 171 Total Runs were the highest in MLB after Utley's 192). But Howard ranked only fiftieth in the major leagues in Total Runs; in fact, three teammates, Utley, Jimmy Rollins, and Shane Victorino, all had more Total Runs than Howard did.[43]

Ultimate Zone Rating (UZR). While at STATS, Dewan began plans to improve on Zone Rating, introducing what he called Ultimate Zone Rating in *STATS 2001 Baseball Scoreboard*.[44] Soon thereafter, Dewan left STATS and eventually developed Revised Zone Rating, Plus/Minus, and Defensive Runs Saved.

Meanwhile, Mitchel Lichtman independently began efforts of his own to improve on the basic Zone Rating metric. Lichtman's creation, Ultimate Zone Rating (UZR), was introduced in 2003 in a series of primers on the Baseball Think Factory website.

Mitchel Lichtman took Zone Rating one step further, using a different approach from that in *The Fielding Bible*. UZR is a measure of the actual number of runs a player saves because of his defense. Like Defensive Runs Saved, UZR is relative to the league average for a player at a given position. And, as with Defensive Runs Saved, the data for UZR is based on video replays available from Baseball Info Solutions (BIS). And UZR is like Defensive Runs Saved in that it's based on locations of batted balls and not on an observer's judgment whether a fielder should be able to reach a ball in a given zone.

UZR enables clubs to compare, for any given player, his runs created and his runs prevented. The data collection is imperfect, as Lichtman explains:

First and third base get less than half the opportunities of second base and shortstop. But after a year, most positions get regressed somewhere around 50 percent, so we treat a +10 for a season worth of data as a +5, for example. There is no magic number for the amount of data on a player to be reliable, but after, say, three years, I consider a player's UZR to be pretty darn reliable. Of course, there are still going to be a small percentage of players that UZR gets "wrong" after three years or even after ten years for that matter. It is just that, the larger the sample, the less the percentage of plays that UZR get wrong.[45]

For example, in 2009, Franklin Gutierrez generated about four more runs (wRAA from Fangraphs.com) than did the average hitter. He ranked eighteenth among center fielders. Franklin had a UZR value of 29, indicating that, in theory, he saved 29 runs.[46] It was by far the league's best for center fielders and probably can't be sustained on an annual basis. When his offensive and defensive numbers are combined, he actually becomes the most valuable center fielder in the game last season.

Probabilistic Model of Range. David Pinto of Baseballmusings.com further expanded on Lichtman's UZR with the BIS data and developed the Probabilistic Model of Range (PMR).[47] On his website, he provides breakouts and individual graphs showing specifically where a player fields balls relative to the average player at his position. For example, the graph for second basemen would show how good a second baseman is at fielding balls relative to the second-base bag and also relative to the average major-league second baseman.

PMR adjusts for the direction of the hit, the type of hit, the speed of the batted ball, pitcher handedness, batter handedness, and park factors. All these items are taken into account to arrive at the probability that a batted ball will become an out. From that probability, a value for expected outs is obtained. What makes PMR different from the other metrics is that it builds on team DER, as an expected team DER is calculated and compared to a team's actual DER. This provides insight into to how much a team's defense is helping its pitching staff turn batted balls into outs.[48]

Total Zone

The biggest problem with both the box-score category of metrics and the zone/tracking category of metrics is that they're not useful for comparing contemporary and more-recent players to players before 1989. The box-score metrics are available back to 1876, but they're a less precise measure of defensive performance than the zone-based metrics are. The zone-based metrics are more precise, but they don't exist for seasons before 1989. Between this rock and a hard place there is, however, a defensive metric that can be used to compared the defensive performance of players across the centuries. Welcome to Total Zone.

Total Zone Total Fielding Runs. Sean Smith of BaseballProjection.com developed Total Zone Total Fielding Runs, which is "the number of runs above or below average the player was worth based on the number of plays made."[49] At Baseball-Reference.com, Total Zone Total Fielding Runs is regarded as the best all-inclusive defensive statistic for historical data and more recent data alike. Smith uses different methods to analyze defense depending on the data available.

Limited Play-by-Play Data Available. Data are generally available for determining who made an out in the field. For seasons before 2003, however, data on where balls landed does

Franklin Gutierrez in 2009 had a UZR value of 29, meaning that, in theory, he saved 29 runs. When his offensive and defensive numbers are combined, he emerges as the most valuable center fielder in the game last season. Given the large dimensions of the outfield at Safeco Field, the Mariners are able to take better advantage of his glove than were the Indians, whose outfield at Progressive Field is one of the smallest in MLB.

COURTESY OF THE SEATTLE MARINERS

not exist, and the information is roughly estimated, resulting in a fraction of each hit being assigned to each position player. Smith explains: "Without information on the hits, I have to make an estimate. I look at each batter's career rates of outs by position. For example, if 30% of a batter's outs are hit to shortstop, then every time that batter gets a hit the shortstop is charged 0.3 hits. Repeat for every position."[50]

Adjustments are made for pitcher handedness. Fractional hits, plays made, and errors are added together to get a Total Zone rating. If there are no play-by-play data (before 1956), the values are similar to an Adjusted Range Factor or a Relative Range Factor.

Extensive Play-by-Play Data Available. In 2003, Retrosheet began recording more-specific play-by-play data. As with Baseball Info Solutions data, hits are classified by batted-ball type (groundballs, flies, line drives, popups), and the fielder who made the out or attempted to make it specified. The data also reflect pitcher handedness and when a runner on first must be held.

A raw Total Zone value is park-adjusted and converted to a value, positive or negative. As with Plus/Minus, the player evaluated by Total Zone is compared to the average player at his position in his league. Since the Total Zone rating is simply a measure of fielding range, additional components must be added, depending on the position. Outfielders get a separate score for their throwing arms. Infielders are scored for their ability to turn double plays, and catchers for their success at controlling the running game and prevent passed balls and wild pitches. The sum of these values produces the Total Zone Total Fielding Runs Above Average, which is similar to Runs Saved in *The Fielding Bible*.

Some players who have won Gold Gloves and have a reputation for good defense do have high ratings in Total Zone for their career: 1B Keith Hernandez, 2B Frank White and Bill Mazeroski, SS Mark Belanger and Ozzie Smith, 3B Brooks Robinson, LF Carl Yastrzemski, CF Willie Mays, and RF Roberto Clemente. And some players with a reputation for bad defense have some of the worst Total Zone ratings at their defensive positions: 1B Mo Vaughn, 2B Juan Samuel, SS Derek Jeter, 3B Dean Palmer, LF Pat Burrell and Adam Dunn, and RF Danny Tartabull.[51]

Of all the advanced defensive metrics, only Total Zone has been consistently recorded for minor leaguers, since 2005. Sean Forman at Baseball-Reference.com has begun to update Total Zone for major leaguers daily during the season.[52]

Chase Utley of the Phillies led MLB with 192 Total Runs in 2008, reflecting not only his offensive prowess but also his sterling defense—he had 34 Defensive Runs Saved and played second base (and a bit of first) for a total of 1,409⅓ innings. Albert Pujols, who was second in MLB with 171 Total Runs, won the National League MVP Award. From 2005 through the first week of May 2010, Utley had 907 cumulative Total Runs, the best in MLB during that period.

LIMITATIONS

The data available for new players to the major leagues are limited. They come to the major leagues with a track record, in high school, college, and the minors, full of offensive data, on-base percentage and the like, but for the most part the sabermetric statistical information that a club will have on how many runs they save defensively is limited to Total Zone numbers from the minors since 2005.

Defensive Runs Saved, UZR, and Total Zone have begun to be updated regularly during the season. Their significance over a small number of games is still uncertain and may not be great. A player who gets ten hits in 25 at-bats is having a better week than the one who goes 5-for-25. But is a player who scores +5 in Plus/Minus in the course of a single week really having a better defensive week than the player who scores –5? At this point, it's hard to say. We do know that, like most statistics, Defensive Runs Saved, UZR, and Total Zone give a more accurate picture of player performance over the course of an entire season or, better, multiple consecutive seasons.[53]

Another major limitation of advanced defensive metrics is their inaccessibility to the general public, or average fan, and in some cases even to decision makers in front offices. Sitting and watching or scoring a game, any casual fan can deduce that a batter who gets 1 hit in 4 at-bats in a game is batting .250 for the game. However, the average fan attending a game can't do the equivalent with advanced fielding statistics. If the ball goes between the first baseman and second baseman for a hit, does this count as a missed opportunity for the first baseman, the second baseman, both, or neither? If it's considered a miss, how significant is the miss? A casual fan (or even the fan who understands sabermetrics, for that matter) would not be able to figure this out simply from watching a live game. After the average fan leaves the ballpark at the end of the game, he wouldn't be able to say for certain whether a player's UZR increased or decreased as he would know, for example, if the batting average of a player who got one hit in four at-bats rose or fell.

Clubs rely on their scouting and data-collection agencies to help fill voids that statistics cannot measure and to verify that the statistics are truly showing us the best fielders. One fan-generated scouting source on defensive performance is the Fan Scouting Report collected by Tom Tango. Fans who have seen players in person vote on those players' abilities.[54] It's a reasonable way to double-check a player's defensive ability as indicated by the metrics. Steve Sommers has actually gone as far as combining both UZR numbers and the Fan Scout Report to come up with a combined value.[55]

©THE PHILLIES 2010 / PHOTO BY MILES KENNEDY

"I think defensive statistics are the most unpredictable stats out there," said Charley Kerfeld, special assistant to Phillies general manager Ruben Amaro Jr. "Since I've been here, we don't have an in-house stats guy and I kind of feel we never will." Although the Phillies may not have been crunching numbers much, those who do crunch them find that the defending National League champions, whose defensive stats are outstanding, have been doing something right.

Even the statisticians and analysts who develop and work with the advanced defensive metrics are constantly referring back to the empirical evidence, what they see a fielder do, as well as to his reputation (how many Gold Gloves has he won?), to check the reliability of their statistical analysis. (See "Fielding Bible Awards: An Alternative to the Gold Glove" on page 96.)

FRONT OFFICES USE DEFENSIVE METRICS—OR DON'T USE THEM

Clubs that are using these or similar defensive metrics have good reason not to divulge the details of their search for undervalued fielding talent, but, at least around the edges of this discussion, a few are fairly forthcoming. Jack Zduriencik, the Mariners' general manager, is one of them. He was studying the defensive numbers available at Fangraphs and Hardball Times when the line for Franklin Gutierrez jumped out at him.[56] Gutierrez's exceptional range couldn't be fully leveraged at Progressive Field, which has one of the smallest outfields in MLB. Safeco Field has one of the biggest.[57] Zduriencik traded for Gutierrez after the 2008 season, as part of his larger plan to tighten Seattle's defense. The Mariners, ranked twentieth in MLB in UZR (–1) in 2008, led all of MLB in that category (+85) in 2009. Their record in 2008 was dismal—they won all of 61 games. In 2009 they won 87, scoring 31 fewer runs than the year before, but the runs they *allowed* were 119 fewer.

The Red Sox are another club not shy about admitting their attention to statistical analysis. That they've been paying special attention to defensive stats is suggested by their offseason acquisition of outfielder Mike Cameron and infielders Adrian Beltre and Marco

FIELDING BIBLE AWARDS: AN ALTERNATIVE TO THE GOLD GLOVE

Since 2006, a committee of baseball experts and close observers have been voting for the best player at each position for that season. This is the Fielding Bible Award. Voters have included Bill James, Peter Gammons, Rob Neyer, Hal Richman (of Strat-O-Matic), and fans who vote in a poll conducted by Tom Tango. Many voters have a strong statistical background; others do not. All voting is based on a combination of defensive statistics and visual observation. The ballot is similar to that of the MVP selection: Ten players receive votes; the player who gets the first-place vote gets 10 points, second place is good for 9, and so on. In contrast to the rules governing voting for the Gold Glove Award, the list of eligible players is restricted to players who played a minimum number of innings at a given position. One player at each position receives the award. There is not a separate award to the best in the AL and the best in the NL—it's only for the best in all of MLB. The three outfield positions are assessed separately. Also in contrast to the Gold Glove Awards, The Fielding Bible Awards are accompanied by publication of the results of the voting—they appear annually in *The Bill James Handbook*—and so we can see who came close (or not so close) to winning.[1] Here is a list of the winners.[2]

	2006	2007	2008	2009
C	Ivan Rodriguez	Yadier Molina	Yadier Molina	Yadier Molina
P	Greg Maddux	Johan Santana	Kenny Rogers	Mark Buehrle
1B	Albert Pujols	Albert Pujols	Albert Pujols	Albert Pujols
2B	Orlando Hudson	Aaron Hill	Brandon Phillips	Aaron Hill
3B	Adrian Beltre	Pedro Feliz	Adrian Beltre	Ryan Zimmerman
SS	Adam Everett	Troy Tulowitzki	Jimmy Rollins	Jack Wilson
LF	Carl Crawford	Eric Byrnes	Carl Crawford	Carl Crawford
CF	Carlos Beltran	Andruw Jones	Carlos Beltran	Franklin Gutierrez
RF	Ichiro Suzuki	Alex Rios	Franklin Gutierrez	Ichiro Suzuki

Notes

1. Baseball Info Solutions and Bill James, *The Bill James Handbook 2010.* (Skokie: ACTA Sports, 2006), 15–16
2. Fielding Bible, www.fieldingbible.com.

Scutaro and by the departure of Jason Bay, a defensive liability in the outfield.

"What I'm most curious about in 2010 is how much better we're going to be defensively,'' Bill James, who works as special advisor on baseball operations for the Red Sox, said earlier this year, during the offseason. "I don't think anyone questions that we're going to have a better defensive team. But are we going to be as much better defensively as we want to believe we are, and is that going to have as much impact on [the pitching staff] as we hope it does?''(For more on how good defense helps pitching, see "The Hidden Value of Glovework" by Vince Gennaro at page 98.)[58]

Mitchel Lichtman, who worked for the Cardinals for a few years, 2004 through 2006, says they used UZR back then. He guesses that, in some form or other, it's still a part of their statistical-analysis toolkit.[59] The Tigers, Rays, and Yankees have all been rumored to use defensive stats.

Other clubs let out that they value defense but not necessarily the state-of-the-art statistical instruments for measuring it. On several occasions Royals general manager Dayton Moore has indicated that, when it comes to evaluating defense, he trusts his scouts more than he trusts the numbers. "The defensive statistics," he said, "I still really don't understand how some of those statistics are evaluated, I really don't. When you watch baseball games every single day, it's very apparent who can play defensively and who can't."[60]

Cubs general manager Jim Hendry agrees. David Laurila of Baseball Prospectus asked him whether " defensive metrics [are] an important part of your evaluation process or do you rely primarily on scouting?" Hendry replied: "It's scouting for me. People scout players and they rate their defense, and that's what I go by—and the personnel that we have in our own dugout."[61]

Just as a front office's attentiveness to the statistical analysis of defense doesn't guarantee success (the Mariners, for example, have gotten off to a woeful start this year), neither does willful neglect of it necessarily mean a team is doomed to flail around near the bottom of the standings. The Phillies have won the National League pennant the past two years and, despite having great defensive statistics on a team and individual level, apparently have not crunched those numbers much. "I think defensive statistics are the most unpredictable stats out there," said Charley Kerfeld, special assistant to Phillies general manager Ruben Amaro Jr. "Since I've been here, we don't have an in-house stats guy and I kind of feel we never will."[62]

Will any of the high-end defensive metrics ever be embraced by the average fan, for whom quantification

of defense means mostly that he looks at errors and occasionally casts a skeptical glance at fielding percentage? The metrics that are available now and that we outlined above may prove useful for evaluating players in a career context or, depending on the metric, over a shorter span, one to three seasons. For the metrics to be routinely tracked and updated on a daily basis for the benefit of the general public, however, the conventions of scorekeeping would have to undergo radical revision. A hit would have to be recorded not only as a hit for the batter and against the pitcher but also as a missed opportunity for the fielder(s).

So it's unlikely that UZR and its kin will start appearing on scoreboards alongside batting average, home runs, and RBIs any time soon. As for the resistance from some front offices, are they allergic to innovation, or is it that they have a healthy aversion to busyness? About that you can be the judge. Some of us are wired such that we find maps helpful, and some of us not so much. In any case, the maps that the sabermetric effort to quantify defense gives us may never be as subtly delineated as the four-dimensional terrain they represent. The trick is to know not only how to read the maps for what they are, a set of honest if not infallible data points, but how to read them with one eye while keeping the other one on the ball in flight as Franklin Gutierrez takes off to run it down. ■

Notes

Ben Jedlovec at Baseball Info Solutions read drafts of this article and provided comment, explanation, and new information. The authors thank him for his help and support.

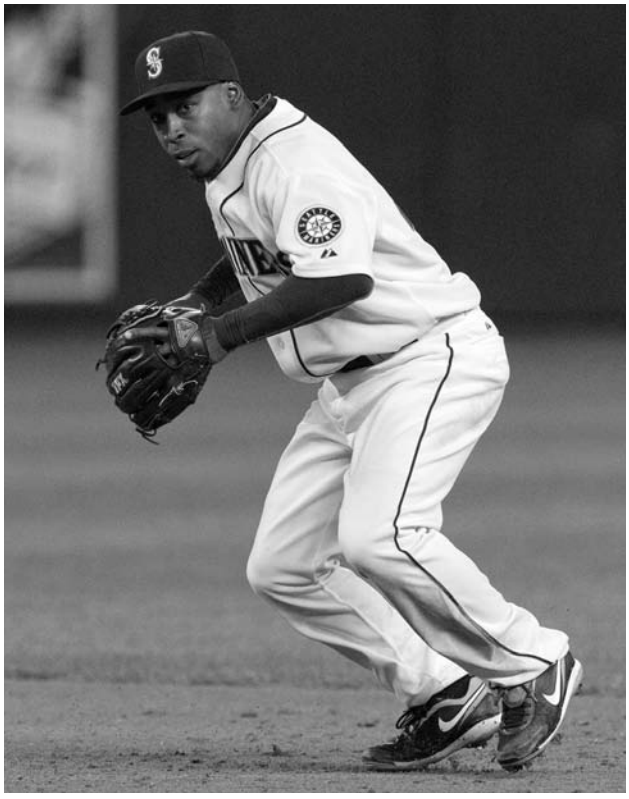
1. Doug Glanville, *The Game from Where I Stand: A Ballplayer's Inside View* (New York: Times Books, 2010), 24.
2. Peter Abraham, "Calling James's Number: Stat Guru Senses New Defensive Focus," *Boston Globe*, 15 January 2010.
3. Albert Chen, "Feel the Glove," *Sports Illustrated*, 1 March 2010.
4. Peter Abraham, "Calling James's Number: Stat Guru Senses New Defensive Focus," *Boston Globe*, 15 January 2010.
5. Alan Schwarz, *The Numbers Game: Baseball's Lifelong Fascination with Statistics* (New York: Thomas Dunne Books, 2004), 9.
6. Ibid., 10.
7. *Total Baseball: The Official Encyclopedia of Major League Baseball*, ed. John Thorn, Pete Palmer, and Michael Gershman, with Matthew Silverman, Sean Lahman, and Greg Spira, 7th ed. (Kingston: Total Sports, 2001), 519.
8. William F. Kirk, "Strolls Through Sportsville," *New York Evening Journal*. 9 March 1917.
9. Bill James, interview with C. Trent Rosecrans, "Talking with Bill James: Part 1," 19 March 2010, Cincinnati Sports Journalism, cnati.com.
10. Hugh Fullerton, "Defensive Strength Complicated," *New York Evening Mail*, 23 October 1921.
11. John Thorn, Pete Palmer, and Michael Gershman, eds., *Total Baseball*, 7th ed. (Kingston, N.Y.: Total Sports, 2001), 536.
12. Stephen Day, "Deconstructing the Midas Touch: Gold Glove Award Voting, 1965–2004," 1 January 2005, Allbusiness.com.
13. John Dewan, *The Fielding Bible* (Skokie: ACTA Sports, 2006), 149.
14. Day, "Deconstructing the Midas Touch."
15. Dewan, *The Fielding Bible*, 199.
16. Ibid., 199–209.
17. Tom Tippett, "Evaluating Defense," 5 December 2002, DiamondMind.com.
18. Scott Gray, *The Mind of Bill James: How a Complete Outsider Changed Baseball* (New York: Doubleday, 2006), 36.
19. Albert Chen, "Feel the Glove," *Sports Illustrated*, 1 March 2010
20. *Total Baseball*, 7th ed., 2494.
21. Bill James and Jim Henzler, *Win Shares* (Morton Grove: STATS Publishing, 2002). 80–85.
22. Dewan, *Fielding Bible*, 199.
23. Tom Tippett, "Evaluating Defense"; Chris Dial, "What Is Zone Rating?" 5 November 2005, Baseball Think Factory; Colin Wyers, "Introducing WAR for Hitters," 10 May 2008, Goatriders of the Apocalypse (www.goatriders.org).
24. Tom Tippett, "Evaluating Defense."
25. Alan Schwarz, *The Numbers Game: Baseball's Lifelong Fascination with Statistics* (New York: Thomas Dunne Books, 2004), 240.
26. Dewan, *Fielding Bible*, 1.
27. Ibid., 227–28.
28. Ibid., 1.
29. Ibid., 168.
30. Ibid., 39.
31. John Dewan, *The Fielding Bible, Volume II* (Skokie, Ill.: ACTA Sports, 2009), 11–4.
32. Ibid., 11–13.
33. Dewan, *Fielding Bible*, 11.
34. Dewan, *Fielding Bible, Volume II*, 86.
35. Ibid., 11–13.
36. Dewan, *Fielding Bible*, 217.
37. *Fielding Bible, Volume II*, 86.
38. Ibid., 11–13.
39. Ibid., 161–65.
40. Ibid., 375–76.
41. Ibid., 63–67.
42. Ibid., 75–82.
43. Ibid., 385–94.
44. Don Zminda, Tony Nistler, and STATS, Inc, *STATS 2001 Baseball Scoreboard.*, 10 th ed. (Morton Grove, Ill.: STATS Publishing, March 2001).
45. Mitchel Lichtman, interview with Jeff Zimmerman, 25 March 2010.
46. Major League Leaderboards, 2009, All Positions, Fielding Statistics | FanGraphs Baseball (fangraphs.com).
47. Probabilistic Model of Range Archives (last updated 9 December 2009), BaseballMusings.com.
48. Doug, Miller, "Four New Defensive Stats Explained," 11 January 2010, MLB.mlb.com.
49. Sean Smith, "Total Zone Defense on Baseball Reference," 5 May 2008, HardballTimes.com.
50. "Total Zone Data," Baseball-Reference.com / About / Total Zone.
51. Sean Smith, "Measuring Defense for Players Back to 1956," 25 March 2008, HardballTimes.com.
52. Sean Smith, "Total Zone Defense on Baseball Reference."
53. "John Dewan (and Research Assiistant) Speak!" 20 July 2009, The Book: Playing the Percentages in Baseball (www.insidethebook.com).
54. www.tangotiger.net/scout
55. Steve Somer, "Defensive Projections, Take 2," Play a Hard Nine, 21 November 1009, http://playahardnine.wordpress.com.
56. Albert Chen, "Feel the Glove," *Sports Illustrated*, 1 March 2010.
57. Personal communication with Vince Gennaro.
58. Peter Abraham, "Calling James's Number: Stat Guru Senses New Defensive Focus," *Boston Globe*, 15 January 2010.
59. Mitchel Lichtman, interview with Jeff Zimmerman, 25 March 2010.
60. Dayton Moore, interview on AM 810 WHB, Kansas City, www.royalsreview.com/2009/7/13/947719/the-defensive-statistics-i-still.
61. Jim Hendry, interview with David Laurila, Prospectus Q&A, 12 July 2009 BaseballProspectus.com.
62. Doug Miller, "New Defensive Stats Starting to Catch On," 11 January 2010, MLB.mlb.com.

The Hidden Value of Glovework

Vince Gennaro

When Jack Zduriencik replaced Bill Bavasi as the Mariners' general manager, it didn't take long for the savvy Mariner fan base to realize that changes were afoot. Zduriencik, who apprenticed under the Brewers' general manager Doug Melvin, had operated in an organization that valued data and analysis as a critical component of their decision-making process. Gone are the days when general managers can consistently make sound decisions based purely on intuition and experience. That approach went out the door—or should have—about a decade ago when the Dodgers signed Kevin Brown to a seven-year, $105-million contract. The stakes have gotten too large and the business is far too complicated for seat-of-the-pants decision making. One ill-informed decision, such as a poor, long-term free-agent contract, could send an organization into a tailspin that might cost them an entire generation of fans before they can recover.

Zduriencik had to find a way to efficiently compete with clubs with more resources, including the division-rival Los Angeles Angels, as well as the perennial American League powerhouses, the Yankees and Red Sox. The key to competing efficiently is to get the biggest bang for your payroll bucks by finding "value." One approach is to determine which player-performance attributes or skills are "discounted" in baseball's labor market. If a player attribute that translates into runs scored or runs prevented is not priced accurately—much as on-base-percentage was undervalued pre-*Moneyball*—it might lead to a cost-effective roster strategy. Another approach is to develop a roster strategy that uniquely fits a team or, more specifically, a ballpark. The Red Sox are masters of this approach, tailoring their roster to the Green Monster at Fenway Park. This means that right-handed fly-ball hitters are "worth" more to the Red Sox than to most teams, as their would-be outs at other ballparks are often doubles or home runs at Fenway. The Green Monster also allows Boston to have a near-DH patrol left field with minimal consequences. When the Red Sox gameplan their 95 to 100 targeted regular-season wins each year, their roster strategy implies that their expectation is to win 55-plus games at home and play .500 ball on the road.



COURTESY OF THE SEATTLE MARINERS

Before the 2010 season, Seattle signed Chone Figgins, a solid and versatile defender who is a statistical match for the departed Adrian Beltre at third base.

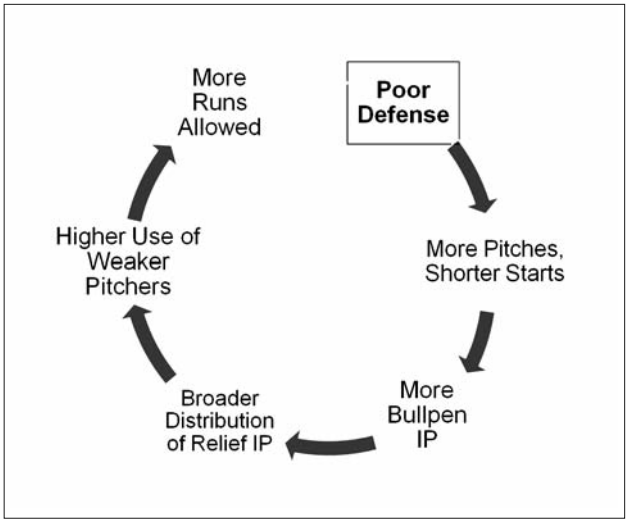
To capitalize on both of these definitions of "value," Zduriencik and his top assistant Tony Blengino focused on building a first-rate defensive ballclub. Arguably, defense has become the new on-base-percentage, the latest attribute or skill that seems to be undervalued in the market for players. I've conducted an in-depth analysis of the free-agent market—MLB's most fluid labor market—and concluded that a run prevented through stellar defensive play can be purchased at about one-third of the cost of a run generated through offensive performance. Beyond the way MLB teams value defense, the distinctiveness of Safeco Field, with its expansive outfield, lends itself to a ballpark-based roster strategy. By building a top defensive club, with a particular focus on outfield defense, the Mariners could have a distinct competitive advantage for 90 of their 162 games, including games played at spacious McAfee Coliseum in Oakland.

In recent years, the development of defensive metrics such as Ultimate Zone Rating (UZR) by Mitchel Lichtman and the Plus/Minus Ratings developed by John Dewan have become widely discussed and frequently used among MLB teams. The primary intent of these statistics is to shine a light on the defensive side of individual players, providing teams and fans with a comparative scale on which to measure defensive performance. The data are focused on the primary, or direct, effect of defense—which is the impact of good or bad defensive plays on baserunners allowed and on baserunners advanced and, ultimately, the translation of those defensive plays into a team's runs allowed. For example, UZR data say that the starting outfield of the 2008 Mariners performed slightly above average, saving about 10 runs above average, contributing the equivalent of approximately one additional win of the Mariners 2008 total of 61 wins. By contrast, the 2009 version of the Mariners' outfield, anchored by defensive standout Franklin Gutierrez, saved about 50 runs above average, making their outfield defense responsible for approximately 5 of the 85 Seattle wins.

While the defensive metrics allow us to quantify a player's impact on his team's runs allowed and, ultimately, wins, the measures stop short of quantifying the secondary, or indirect, effect of defense on pitching and pitching usage. Most baseball insiders and analysts would agree that the impact of defense is not limited to the baserunners allowed and the likelihood the baserunners will score. For example, another consequence of a defensive misplay—a play that should have turned a batted ball into an out—is the additional number of pitches required to secure the out. For poor defensive teams the additional pitches can add up and alter how a team deploys its pitchers, often placing an inferior pitcher on the mound in a crucial situation. For stellar defensive teams the opposite may be true—their best pitchers may garner a higher share of innings pitched, raising the overall effectiveness of the team's pitching staff. One example of a major-league manager's belief in this "secondary effect" is embedded in a statement made by Mets' manager Jerry Manuel at a pregame press conference on May 6, 2009. "An error by Luis Castillo last night caused J. J. Putz to throw more pitches, making him unavailable for tonight's game," Manuel observed, drawing a connection between defensive misplays and a pitcher's workload.[1]

To test this hypothesis, I attempted to measure the secondary effects of defense on pitching usage. (See figure 1.) Looking at the issue from the negative side—poor defense—illustrates the point. The logic chain says that poor defense leads to missed opportunities to convert batted balls into outs, which leads to shorter outings by starting pitchers, which by definition leads to additional bullpen innings. More specifically, I tested to find whom these additional bullpen innings were allocated to, my suspicion being that they fell into the hands of the lowest-quality relievers. If this were true, the net result would be additional runs allowed by a poor defensive team because of an inefficient allocation of pitching—a secondary, indirect effect of poor defense. We would also expect the reverse to be true of top defensive teams.

Figure 1. Not So Virtuous Cycle



I analyzed five years, 2004 through 2008, of team-level defense and pitching data to test for the secondary effect of defense on pitching. (For more details on the methodology of the analysis, see "Secondary Effects of Defense on Pitching" on page 102.) There are several key conclusions of the study that have implications for the Mariners' strategy of building a strong defensive team. First, analyzing the top-quartile and bottom-quartile defensive teams shows clear support for the connection between the quality of a team's defense and its pitching usage. Top defensive teams average approximately one-half inning per game more out of their starting pitcher. While that may not sound like a lot, taking away or adding one-half inning to a bullpen that averages three innings per game is a 17 percent change in the bullpen's workload. For the typical team, that translates into about an 80-inning swing, over the regular season, between starting pitchers or the bullpen, just on the basis of the quality of the defense. (See figure 2.)

Figure 2. Distribution of IP for Top and Bottom Quartile

	Starting Pitcher IP per Game	Bullpen IP per Game*
Top-Quartile Defensive Teams	6.0	3.0
Bottom-Quartile Defensive Teams	5.5	3.5

→ +80 Bullpen Innings

* Adjusted for total IP

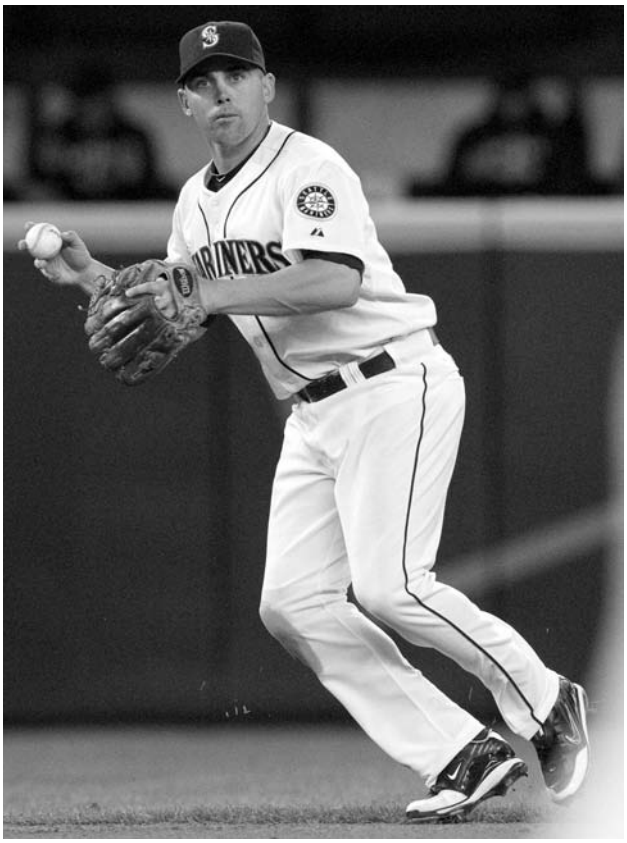
It's not just that innings get moved from starters to the bullpen. It's also important to understand which relievers tend to pitch the innings resulting from shorter starts. Needless to say, if the starter gets pulled in the fifth or sixth inning, teams are typically not calling the closer or setup man—arguably a team's best relief pitchers—to work those innings. These innings are often logged by the very end of the bullpen bench, even though it may be a critical, high-leverage situation, with runners on base in a close game. If we divide a pitching staff into three groups—starting pitchers, the top four relievers, and all other relievers—we can illustrate the point. While the worst defensive teams tend to move about 80 innings from starting pitchers to the bullpen, the innings are redistributed *within* the bullpen, with the weakest relievers getting more work. (See figure 3.)

Figure 3. Distribution of IP for Best and Worst Defense

Total Innings	Starting Pitchers	Top 4 Relievers	"Other" Relievers
Best Defense	970	275	195
Worst Defense	890	240	310
WORST	**-80**	**-35**	**+115**

The distribution of a team's pitching quality can have a large impact on the secondary effect. While poor defensive teams tend to redistribute innings to relievers at the bottom of the bullpen depth chart, a team can, if it has excellent bullpen depth, mitigate the negative secondary effect of poor defense. The 2008 Yankees are a prime example. While they were among baseball's worst defensive teams, their outstanding bullpen depth meant the innings that got shoved deep into the bullpen were still adequately handled by no-name but effective relievers.

Finally, the analysis uncovered a clear synergy between the quality of a team's defense and the quality of their starting pitching. If we match top-quartile defense with top-quartile starting pitching we see the same tendencies—longer outings by starters and a more favorable allocation of bullpen innings—but to a much greater degree than those measures for *all* top-quartile defensive teams. The converse is true for teams with the poorest defense and worst starting pitching.



COURTESY OF THE SEATTLE MARINERS

On the eve of the trade deadline in July 2009, the Mariners acquired shortstop Jack Wilson, a defensive standout, from the Pittsburgh Pirates. Defensive improvements soon showed on the field and on the stat sheets.

THE MARINERS' TRANSITION TO A TOP DEFENSIVE TEAM

The Mariners' transition from a mediocre to a top defensive team began shortly after Zduriencik stepped in as general manager. In a three-team trade in December 2008, he landed the Indians' Franklin Gutierrez and the Mets' Endy Chavez—two fly-catchers who are regarded as being among the best in all of baseball. A second key trade occurred on the eve of the trading deadline in late July 2009 as the Mariners picked up shortstop Jack Wilson, a defensive standout, from the Pittsburgh Pirates. Defensive improvements quickly showed on the field and on the stat sheets. According to UZR, the Mariners' defense went from 21 runs (relative to the MLB average defense) in 2008 to +86 runs in 2009. The improvement of 107 runs saved, due to defense, vaulted the Mariners from the twentieth-best defensive team to the best defensive team in baseball, in just one year. This glovework implies an additional 10 wins in 2009 from defense alone.

Often a roster strategy is most effective when it's combined with another complementary strategy. In the

Re-signing Jack Wilson

Wilson arrived in the last year of his contract but had an $8.4-million option for the 2010 season. Recognizing that this price tag was significantly above market, the Mariners and Wilson reached agreement on a deal of $5 million per year for 2010 and 2011. Some will argue that the deal is pricey for a light-hitting, oft injured aging shortstop who could have been cut loose from the Mariners for a mere $600,000 buyout. But those who have a deep appreciation for the true value of defense are more likely to see the virtue of this deal. I've developed a model of the behavior of the free-agent market and its "pricing" of free-agent contracts. The model incorporates about 800 transactions over the past six years and includes the player's age, position, past performance, and even his track record of durability. By plugging each of these factors into the model, we are able to estimate how the free-agent market is likely to "value" any player. Evaluating Wilson at face value—taking his historical performance stats literally—the model prices the shortstop at about $3 million per year. This valuation reflects the reality that teams price a player's defensive contribution at about only one-third the value of a player's offensive contribution. However, if we re-price Wilson's primary contribution—his defense, or runs saved—at the same rate as a player's offensive contribution, or runs created, his value soars to approximately the $5 million per year doled out by Seattle. For Jack Wilson as well as for a front office that seems to place equal value on offensive and defensive contributions, the Wilson signing may prove to be a winning deal. Wilson's injuries and missed playing time limited his first-half 2010 contribution, but a two-year deal cannot be judged at the mid-point of year one.

case of the Mariners, it was their transition to being a team of fly-ball pitchers, after being a more groundball-fly-ball-balanced club in 2008. While their 2008 groundball-fly-ball ratio was 1.25—near the league average—the 2009 pitching staff had the third *lowest* groundball-fly-ball ratio. What better way to leverage a great corps of fly-chasers in a big ballpark than to load up on fly-ball pitchers. No doubt the two strategies worked in concert. Despite turnover on the pitching staff, including the loss of Jarrod Washburn and Brandon Morrow, the first half of the 2010 season saw a continuation of this strategy as only the San Francsisco Giants registered a lower groundball–fly-ball ratio.

Now let's look beyond the direct runs-allowed (or runs-prevented) value from the baserunners and into the secondary effect of defense—how it affects pitching usage and its translation into runs allowed. The 2009 Mariners saw a pronounced shift in innings through our three pitcher groupings—starting pitchers, top four relievers, and the remainder of the bullpen. Compared to 2008, thirty-nine innings were shifted from starting pitchers to the bullpen. Perhaps more significant were the sixty-four innings that were shifted from depths of the bullpen to the premier arms in the bullpen. (See figure 4.) The top four bullpen arms in 2009 (defined by relief innings pitched)—David Aardsma, Mark Lowe, Miguel Batista, and Sean White—pitched more than 58 percent of Seattle's relief innings, versus 49 percent by their counterparts in 2008.

Figure 4. Distribution of IP, Mariners, 2008 and 2009

Total Innings	Starting Pitchers	Top 4 Relievers	"Other" Relievers
2009 Mariners	961	287	205
2008 Mariners	905	260	270
2009 Mariners*	**+56**	**+27**	**-65**

* Mariners pitchers had 17 more innings pitched in 2009 than in 2008.

As we discussed earlier, in order for the secondary effect of improved defense to be maximized, several key ingredients need to be present. The ideal formula is high-quality starting pitchers and top relievers combined with a *lack of depth* in the bullpen. This scenario makes the shift of innings, resulting from improved defense, from the dregs of the bullpen to top relievers and starters even more impactful. Also, the secondary effect tends to be greatest when the improvement in defense is at positions that have the greatest impact on outs—namely, the infield. In the infield, the difference between a great play or a bad play is almost always the difference between an out and a baserunner. In the outfield, great defense will convert some batted balls into outs but will also limit the damage of others, by turning doubles into singles or triples into doubles. As a result, great outfield defense can have a great impact directly on runs allowed but tends to have a proportionately smaller secondary effect. Since a solid portion of the Mariners' improved defense came in the form of outfield play, and because the difference in quality between Seattle's best pitchers and least effective pitchers tends to be modest, the secondary effect of their 2009 defensive improvement was worth only about eight runs, or one additional win.

TAKING THE NEXT STEP IN 2010

No doubt the Mariners' front office would like to see the team's transformation into a standout defensive ballclub continue in 2010. The free-agent signing of Chone Figgins provides a solid and versatile defender, who can play second or third base. A full year of Jack Wilson will be a welcome sight for Mariners pitchers in 2010, as his attention-grabbing, highlight-film plays

Secondary Effects of Defense on Pitching

I analyzed five years, 2004 through 2008, of team-level defense and pitching data to test for the secondary effect of defense on pitching. (I did not use the more commonly referred-to "run value" of defenders, but instead I analyzed the impact of defensive plays on outs, since the hypothesis is predicated on converting batted balls into outs. The "out value" is geared to capturing, for example, a shortstop's misplay of a groundball that allows a baserunner to reach first, or an outfielder's catch of a line drive that would have dropped in for a hit, rather than an outfielder's misplay that turns a would-be double into a triple.) Since the premise is "defense affects pitching usage," I also analyzed pitching performance as measured by fielding-independent pitching (FIP), looking for contrasts between the best and worst defensive teams. More specifically, I divided pitchers for each team into three categories—starting pitchers, top four relievers, and the remaining relievers. I looked at the innings distribution across the three groups of pitchers within a team, for good and bad defensive teams. Finally, I examined the quality differential of a team's starters, top four relievers, and remaining relievers, in order to measure how the shift in innings resulting from good or bad defense impacted runs allowed.

It's not as simple as translating the quality of a team's defense into the average number of innings pitched by its starting pitchers. Beyond stellar defense, another reason for depth in starting pitching could be that the quality of the starting pitching is high. In order to isolate the impact of defense, I normalized the average innings per starter for the quality of the starting pitching. While the measure is by no means perfect, I was able to home in on the impact of defense on pitching usage. I also had to analyze NL and AL teams separately, since they operate in environments far different from each other. Without a designated hitter, National League teams may abort the benefits of great defense and its conservation of pitch counts because they were trailing in the game and needed a pinch-hitter. This situation is specific to the NL and distorts any interleague comparison of innings per starting pitcher. Curiously, even though defense stands to have a greater impact on pitching usage in the AL than in the NL, it's in the NL that the best defensive teams are clustered. From 2004 through 2008, 71 percent of the top-quartile defensive teams are in the NL, and 76 percent of the bottom-quartile teams are in the AL.

not only generate outs but also conserve pitches, potentially allowing starters to go deeper into games. (For an assessment of the Wilson deal, see "Re-signing Jack Wilson" on page 101.)

Another way for Seattle to gain more bang for their defensive prowess is to fortify their pitching staff. Teams with strong fielding and strong pitching garner significantly more of the secondary benefits of defense than those with strong defense and mediocre pitching. A good example of this in recent times was the 2005 World Series teams, the Houston Astros and the Chicago White Sox. Both clubs were outstanding defensively and had stellar starting pitching. As a result, they had an astonishingly low amount of relief innings—414 and 401, respectively. The low bullpen usage allowed them to give the ball to their top four relievers often, as they represented a staggering 68 percent and 64 percent of all bullpen innings worked for their teams that year. The acquisition of Cliff Lee prior to the 2010 season was an attempt to bolster their pitching staff. Lee emerged as not only a top pitcher but also one who goes deep into games. With both Lee and Felix Hernandez at the top of the Mariners' rotation in 2010, they had two pitchers in MLB's top ten in innings pitched per start. In the case of Lee, he has a good chance of increasing his ranking because of the defense playing behind him.

Entering the 2010 season, the prospects of the Mariners stealing a few extra wins by maximizing the secondary effects of defense was promising. The addition of Cliff Lee to the rotation, along with a full season of Jack Wilson and Chone Figgins, would be expected to shift additional innings to starting pitchers, allowing the reduced bullpen innings to be even more efficiently allocated among the top relief pitchers. The Mariners' combination of great defense and improved starting pitching should allow their top relievers to work a higher percentage of "meaningful innings"—innings when the game is on the line. It was reasonable to expect the net result of the secondary effect of defense to be worth an additional three wins to the 2010 Mariners. The team's poor start to the season and the trading of Cliff Lee before the midseason trade deadline may change things in the short run but should not alter the sound, long-term strategy of general manager Jack Zduriencik. ■

Notes

This article is adapted from "The Hidden Value of Glovework," by Vince Gennaro, in *Maple Street Press Mariners Annual 2010*, ed. Dave Cameron (Hanover, Mass.: Maple Street Press, 2010), 55–60, and from a presentation given at the SABR national convention, July 2009.

1. SNY.tv, 6 May 2009.
2. From 2004 to 2008 the MLB average is a 53 percent share of relief innings for a team's top four relief pitchers, measured by innings pitched.

Larry Doby's "The Catch"

Ken Saulter

Arguably the greatest catch in the history of baseball was the basket catch Willie Mays made of a long fly ball in center field in the Polo Grounds in Game 1 of the 1954 World Series, on September 29, 1954. The score was tied 2–2 in the top of the eighth. With runners on first and second, Vic Wertz hit a fly ball, 450 to 480 feet, deep into the unusually deep center field of the Polo Grounds. Mays caught up with the ball and caught it, his back to home plate, with his glove hand held palm-up. He fired a bullet back to the infield, holding the Indians' Al Rosen to first, although Larry Doby (remember that name) was able to advance to third. Had the ball not been caught, the Indians would have broken the game open and it would not have gone into extra innings. The Giants won that game and went on to sweep the mighty 1954 Indians. Mays's catch is often considered to have set the tone for the Series.

Lost to the memory of all but a few, and perhaps overshadowed by Mays's feat in the World Series only two months later, is a catch the Indians' own center fielder, Larry Doby, made at Municipal Stadium in a game against the Washington Senators. It was a day game on July 30, 1954, the first of a four-game series. The Indians, in the heat of a pennant race with the Yankees, were leading 5–3 in the top of the third. Art Hottleman was on the mound for the Indians. With one out and a runner on first, Tom Umphlett hit a long fly ball to center-left. That, it appeared, would tie the game.

Doby, playing fairly deep, as was his practice, took off for the ball and, as he approached the fence, looked like he was going to crash into it. Instead, he leaped over the top of it, snatched the ball backhanded, and seemed to remain suspended in air for a moment. Finally, obeying the law of gravity, he came down onto the awning above the bullpen. He bounced off that and came down hard on the playing field, the ball still in his glove. Joe Flaherty, the second-base umpire, ruled it caught, and the crowd erupted.

COURTESY OF KEN SAULTER

Larry Doby at Municipal Stadium, Cleveland, July 30, 1954.

Left fielder Al Smith, who had sprinted to where Doby lay, retrieved the ball and threw it to the infield to keep the runner from advancing.[1] Doby was motionless. Cleveland players ran from the dugout. As they gathered around him, all eyes were on the huddle. After a few moments, Doby's partially bald head emerged. The crowd gave him a standing ovation when Doby, still surrounded by his teammates, began making his way toward the Indians dugout.

About halfway there, he stopped and exchanged words with Indians manager Al Lopez. Doby stopped, put on his hat and glove, shook his head OK, and began walking back to his position in center field. The crowd erupted again. The whole episode took several minutes.

"I just went for the ball," Doby said after the game, "same as I did for Jackie Jensen's home run a couple of days ago, the one I missed. The fellows in our bullpen told me my right hand went through the awning before I bounced off. If it did I didn't notice. I didn't get hurt much. Knocked the wind out of me and my left shoulder gave me a jolt, where I hurt it before. Maybe it hurt a nerve."[2]

"If this wasn't the greatest catch of the century," Frank Gibbons, sportswriter for the *Cleveland Press*, wrote the next day, "it must be at least a match for any other."[3] "I've seen them all," Dizzy Dean said. "Moore, DiMaggio, and this here fellow named Mays. But I never saw a catch as good as this one and the pitcher ought to pay that Doby a month's salary."[4] ■

Notes

The author, 13 years old at the time and selling scorecards at Municipal Stadium, saw the catch. This account, based on his recollection, is corroborated by newspaper accounts and by Joseph Thomas Moore in *Pride against Prejudice: The Biography of Larry Doby* (Westport, Conn.: Greenwood Press, 1988), 102–3.

1. Moore, *Pride against Prejudice: The Biography of Larry Doby*, 102–3.
2. *Cleveland Press*, sports sect., 31 July 1954.
3. Frank Gibbons, *Cleveland Press*, sports sect., 31 July 1954.
4. *Cleveland Press*, sports sect., 31 July 1954.

The Evolution of Catcher's Equipment

Chuck Rosciam

We used no mattress on our hands,
No cage upon our face;
We stood right up and caught the ball,
With courage and with grace.

— Harry Ellard, "The Reds of Sixty-Nine" (1880s)

The field position denoted on your scorecard as *2* has never been an easy job. Errant balls, foul tips, and flying bats are all a source of pain for catchers. Collisions at the plate occur with regularity, some more painful than others. The backstops from baseball's first fifty years endured daily physical punishment, all without the luxury of today's protective equipment. Virtues such as strength, stamina, and courage in collisions were in high demand.

No protection short of a bunker could have spared twenty-three-year-old Ray Fosse the career-impacting injury he sustained in the 1970 All-Star Game. Catcher-turned-announcer Tim McCarver says he still suffers from nerve damage in his neck caused by back-to-back plate collisions a quarter of a century ago. Today, catchers often put their bodies literally on the line, most often the one on the third-base side.

Catchers are expected to take their lumps without grumbling. But the early efforts of catchers to protect themselves met with a lot of flak. A typical reaction came from the crowd at the Polo Grounds when the New York Giants opened the 1907 season against the Philadelphia Phillies. As the Giants took the field, star catcher and Hall of Famer Roger Bresnahan looked more like a goaltender than a backstop when he squatted behind the plate in a pair of thickly upholstered shin guards.

It was the first time a catcher had dared to don the protective gear in open view, and the crowd's reaction came as quickly as a foul tip and just as nasty. "Spectators howled with delight when a foul tip in the fifth inning rapped the protectors sharply," reported the *New York Times*. Bresnahan, more concerned about his livelihood than remarks about his manliness, ignored the insults from fans and foes.

Bresnahan's shin guards were the final pieces of the catcher's major armor, following the glove, mask, and chest protector.

This armor kit was lovingly dubbed "the tools of ignorance" by Herold "Muddy" Ruel, a backstop and a lawyer who caught for greats like Walter Johnson with the Washington Nationals in the 1920s. Ruel probably would have stayed a lawyer if he'd caught in the late 1860s when catchers had no equipment.

New York Mutuals catcher Nat Hicks was the first backstop to start creeping closer to batters, in the 1870s. Before Hicks, catchers stood far behind the hitters, fielding pitches on the bounce. Hicks paid for his

LEFT: NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.
RIGHT: PERSONAL COLLECTION OF CHUCK ROSCIAM

Two warriors dressed for survival at the game's toughest position: left, Hall of Famer Roger Bresnahan (1907), and right, Ivan "Pudge" Rodriguez (1999). On Opening Day at the Polo Grounds against the Phillies in 1907, Bresnahan became the first catcher to wear the full suit of armor, or "tools of ignorance"—glove, mask, chest protector, and shin guards—in a regular-season appearance. The crowd reacted with derision. Bresnahan ignored them.

fearlessness with repeated and sometimes severe damage to his face and a near-loss of his right eye in 1873.

Most backstops began crowding the plate in the early 1880s, especially when a rules change dictated that the final strike, including foul tips, had to be caught on a fly for a putout. Pitchers had begun throwing overhand by 1884, when, after a rule change in the National League, all restrictions on the pitcher's delivery were removed and he could throw underhand, sidearm, or completely overhand, as he wished. Also, the consensus is that the mound was created in 1893 or shortly thereafter. Up until that year the pitcher's position was known as the pitcher's box. In 1893 the pitcher's rear foot was moved farther from home plate to its current distance of 60 feet, 6 inches. Moving closer to the batter enabled catchers to better frame the pitches, field bunts, and throw out base-stealers.

In 1901 the National League instituted a regulation that a "catcher must stand within the lines of his position whenever the pitcher delivers the ball and within ten feet of the home base." The American League adopted this rule the following year. Current rules state that the "catcher shall station himself directly back of the plate . . . with both feet within the lines of the catcher's box until the ball leaves the pitcher's hand" (Rule 4.03[a]). The catcher's box measures 43 inches across and 8 feet long from the plate backward.

MASKED MEN

The first piece of protection for catchers, a rubber mouth protector, dates to the 1870s, purloined perhaps from the sport of bareknuckle boxing. George Wright, brother of Red Stockings founder Harry Wright, preceded the mask with this "mouth protector." His invention was a fifty-cent rubber mouth guard, similar to the mouthpiece a boxer wears. This innovation, according to newspapers of the time, surely cut down on the talkativeness of catchers.

Masks were more obviously a protective device. Probably the first one was invented by an Ivy League man, Fred Thayer, who in 1876 adapted a fencing mask for Alexander Tyng, then with the Harvard Nine. At first, Thayer's better mouse trap was derisively called a rat trap. But the catcher's mask caught on quickly among pros and amateurs alike and was in wide use by the 1880s. Besides affording protection, it helped fielding from the very first game. Harvard's Tyng made only two errors in that April 12, 1877, match, exceptionally low even for a pro catcher in those days.

Thayer's patented mask (patent 200,358) went into the Spalding catalog for the 1878 season, and adaptations followed quickly. Its simple forehead and chin rests were embellished with padding—made from "imported dog skin," according to one Spalding catalog—to insulate the steel-mesh frame from the catcher's face.

Better visibility was always a goal in catcher's masks. Inventor George Barnard patented his "open view" mask in 1888 (patent 376,278) that afforded both protection and vision. These wire-basket cages worn by the 1890s backstops like Roger Bresnahan and Marty Bergen gave way to the greatly improved peripheral vision of the so-called Open Vision and Wide Sight masks by the 1911 season. A. J. Reach created this mask (patent 1,012,223) for the purpose of removing the vertical bar for better visibility without sacrificing structural strength.

The "platform mask," a one-piece aluminum casting with horizontal crossbars instead of soldered mesh, was patented by umpire James E. Johnstone in 1921 (patent 1,449,183). Mesh still evolved, though, getting springy, shock-absorbing action and ball-deflecting shapes in the 1920s. One such mask designed by H. Goldsmith in 1923 (patent 1,475,991) had a padded "oval surround" with two cross bars. Other mask materials have come along, but carbon-steel wire

Thayer mask, 1876

Welded-wire steel mask, 1930s

Modern mask, 1970s–90s

Hockey-style mask, 2000s

ILLUSTRATIONS BY CHUCK ROSCIAM FROM PATENT DRAWINGS

mesh remains the material of choice to this day. Catchers prefer the welded-wire guard because it has better air movement and fewer massive bars that could obstruct visibility. Carbon-steel wire is used because it's flexible but strong. The goal is to get some deformation in the mesh to reduce some of the shock but still retain structural integrity.

Sometimes one change in a piece of equipment necessitated changes in other catchers' equipment. For example, with two-handed catching, using the pillow-style mitt, the catcher's hands followed the ball into his body. In the process, the catcher was tucking in his chin so his throat wasn't exposed. Catchers today, with the hinged-mitt, one-hand the ball farther away from their bodies, and they're frequently looking up, so the throat's more exposed. This is the reason why today's catchers wear masks with throat protectors, popularized by Dodger catcher Steve Yeager. In 1976 Yeager was kneeling in the on-deck circle when a bat shattered and a sharp piece slammed into his throat. To protect him from further injury, the Dodgers came up with the *billygoat* device hanging from his mask. However, throat protectors go back as early as 1888, as demonstrated by a Spalding advertisement for the Spalding's Trade Marked Catcher's Mask No. 30 with a patented neck protection. In 1903 the Victor Sporting Goods Company offered throat protection in its model 314N with a neck extension piece. The latest-version mask has the throat protector integrated with the wire face cage.

The end of the twentieth century has seen the mask evolve into something resembling what Darth Vader wears. Its genesis sprung from hockey's goalie mask, and it was introduced by catcher Charlie O'Brien. It is made of new high-tech polycarbon, and O'Brien's mask was designed by Jerry Van Valden of Toronto-based Catch You Later Headgear. The helmet protects the top, sides, and back of the head, yet the cage-like opening in the front is bigger than that of a normal mask. It increases a catcher's peripheral vision and deflects the ball rather than hitting the catcher flush as does the previous mask. At 50 ounces, the helmet is about 10 ounces heavier than a normal mask/helmet combination. Several major-league catchers have begun wearing it, and soon it may be a standard piece of equipment.

MITTENS FOR THE HANDS

Mitts were a taken-for-granted part of catching. An early documented use of a glove by a player occurred on June 28, 1870, and that was by a catcher. A sportswriter for the *Cincinnati Commercial* cabled his office, "[Doug] Allison caught today in a pair of buckskin mittens, to protect his hands." It was printed in the next day's newspaper in a recap of the game between the Cincinnati Red Stockings and the Washington Nationals. Also, a report appeared in the *Detroit Free Press* on August 14, 1867, of a catcher named Ben Delaverage playing for the Victory Club of Troy using a catcher's glove. In the late 1870s gloves came into common use. At first players had to skulk onto the field. But star pitcher–turned–first baseman Albert Spalding made it a manly thing in 1877, boldly donning a black glove that was fingerless but padded. Ever the entrepreneur, Spalding envisioned big sales for his mail-order sporting-goods business. Catchers were among his best customers. Inventor A. C. Butts patented a fingerless glove in 1883 (patent 290,664), and G. H. Rawlings added padding in 1885 (patent 325,968).

Historians quibble over whether Harry Decker, Joe Gunson, Ted Kennedy, or Jack McCloskey first used the padded catcher's mitt in the late 1880s. By one account, the Kansas City Cowboys' Gunson dreamed up the mitt, but he was too busy catching in Al Spalding's world baseball tour to take advantage of the idea. So, ex-catcher Decker filed a patent on his mitt design in 1889 (patent 408,650). The "Decker Safety Catcher's Mitt" was a contraption that was basically a glove stitched to the back of a round pad that covered the palm of the hand. These gloves were literally flat pillows that got their pockets broken in on the job at the expense of the catcher's palm. Decker modified his

Fingerless glove, 1880s

Pillow mitt, 1920s

Pillow-pocket mitt, 1950s

Modern hinged mitt

ILLUSTRATIONS BY CHUCK ROSCIAM FROM PATENT DRAWINGS

mitt in 1891 to a more comfortable design (patent 447,233) with the addition of leather lacing on the back of the hand to hold the mitt in place.

It was not until 1895 that stipulations concerning the use of gloves were included in the rules: Those limited the size of gloves to ten ounces and fourteen inches circumference for all players except catchers and first basemen, who were permitted to use any size glove. The early gloves, lacking webbing and lacing, merely provided protection for the hands. Nineteenth-century players often wore gloves on both hands. For the throwing hand, they would simply snip the glove at the fingers for dexterity.

In 1899, J. F. Draper came up with the round, pillow-style mitt (patent 627,687) that, with several minor modifications, remained the same tool that catchers wore up until the 1920s. R. H. Young in 1920 modified this standard pillow-mitt to disperse a billow of air to form a cushion when the ball was caught (patent 1,362,280).

Mitts were pretty small, flat, and shapeless throughout the dead ball era until a Rawlings employee, Harry "Bud" Latina, who designed dozens of mitts/gloves, created a better mitt. This hand/fingers design made the mitt loose enough to permit it to be dropped quickly or thrown off but not accidentally by using finger loops (patent 1,562,176). This became the standard for more than forty years. Additionally, it had a real change in the depth of the mitt so the ball would really stick, even though the catcher still had to use two hands. The catching technique with the pillow mitt was to stop the ball with the relatively stiff mitt, then secure it with one's bare hand. This was accomplished by holding the bare hand behind the mitt and quickly moving it to the caught ball. But if the catcher had to move his mitt to catch a ball and failed to move both hands in unison, the bare hand could easily be exposed and subject to harm. Jammed and broken fingers were very common injuries during the pillow-mitt era.

Modern mitts have evolved to match today's style of baseball. Catchers now have to one-hand or backhand the ball, which means that they have to work much lower because now the pitching is lower (at or below the batter's knees). However, when a catcher is that low, he can't hold two hands out in front or even one with the fingers pointing up and parallel to the body.

In the 1950s, catcher Gus Niarhos cut an opening in the back of his mitt so he could squeeze the two sides together a little bit, like a fielder's glove. This led to catcher's mitts with breaks in them and long oval pockets. Previously, mitts had a pocket but no breaks, and the backstop caught two-handed so the ball wouldn't pop out. One-handed catching became possible with the hinged mitt, popularized by Johnny Bench and Randy Hundley in the late 1960s. With these, a spring-action hinge snaps the mitt closed on contact with the ball.

The ancestry of the flex-hinge catcher's mitt goes back to the first baseman's mitts of the 1950s. Logically, one might suppose that former first basemen (like J. C. Martin), converted to catchers in large numbers in the early 1960s, would have been the ones to introduce the mitt. But in fact, the flex-hinge catcher's mitt was introduced by Hundley in 1966 and Bench in 1968; neither of them had ever played first base.

New and sometimes quirky innovations in mitts have arisen since the 1960s. For example, in 1975, Al Campanis, former general manager of the Dodgers, introduced an orange fluorescent stripe around the perimeter of the mitt to help pitchers concentrate on their targets (patent 3,898,696). This caught on, but not every development met with acceptance. Most catchers didn't think much of another innovation in mitts, the oversized "Big Bertha" designed by Baltimore Orioles manager Paul Richards in the late 1950s. Supposedly it was to help his receivers handle the maddening knuckleball of Hoyt Wilhelm. Such baskets grew to a 45-inch circumference before being regulated to 38 inches in 1965. The surface area might help one knock down the ball, but it hindered one's view and cut down on hand mobility. One other drawback of the "Big Bertha" was that even if one caught the ball in that glove, it was hard to find it in time to catch base-stealers.

Some current catchers are keenly interested in the latest wrinkle in mitts, a "digital leather" glove made by Franklin. The innovation is already found in Franklin's current line of fielders' gloves and will make its debut in catchers' mitts soon. The facing leather is etched with a pattern of grooves and diamonds whose purpose is twofold. First, the pattern absorbs the shock of impact. Then, its contours grab the ball and stop its spinning action. Both attributes might turn some hard-hands into soft ones. Webbing, air or gel cushions, and other elements of glove design have dealt with the velocity of batted and pitched balls, but only lately have manufacturers turned their attention to the spin factor. The rotation on a baseball can be quite high, 1800 rpm or more on a curveball, for example. Franklin likens its digital leather to the road-gripping pattern of a tire. That leaves the near-spinless knuckleball to contend with, a problem sure to be compounded as more hurlers follow knuckler Tim Wakefield and other "goofy" tossers.

BODY ARMOR FOR THOSE WAYWARD 95-MPH FASTBALLS

Women got into the act of making catching a safer profession. Legend has it that the wife of Detroit Wolverines catcher Charles Bennett devised a chest pad to protect her husband during games. He wore the creation outside his jersey in 1883. While some accounts say that catchers experimented with chest protectors earlier in the decade, these image-conscious receivers tried hiding the devices beneath their uniforms to avoid razzing. Left-handed throwing catcher Jack Clements in 1884 was quoted as saying that he wore a "sheepskin," as chest protectors were first called, beneath his uniform to avoid being called a sissy.

James "Deacon" White, a nine-year catcher in the 1870s who switched to third base for nine more years, supposedly created the first chest protector in the early 1880s. His design included a canvas-covered rubber bladder pumped full of air. Padding eventually replaced the air tubes.

Today's chest protectors, although ribbed with light but shock-absorbing polyfoam, have come full circle from the original fur-stuffed sheepskin "breast protectors" worn under the uniform until 1884. Along the way, catchers and umpires got inflatable vests. "Gray's Patent Body Protector" (patent 295,543) with its rubber-bladder ribs sold for $10 in 1891, twice the price of stuffed canvas or leather. Gray's Protector didn't cover the shoulders, a prime target for foul tips. John Gamble in his 1903 design added inflatable pads that covered the shoulders (patent 745,007).

Although umpires stuck to inflatable protectors until modern times, catchers quickly went for the maneuverability that lightweight stuffing like kapok afforded. Kapok is a lightweight material used in life jackets. Today, chest protectors are filled with foam. Stuffed protectors enabled backstops to crouch and to run to back up bases. F. W. Glahe in 1963 came up with a very flexible chest protector (patent 3,076,197) that greatly improved mobility.

One of the last modifications to the chest protector was the addition of removable shoulder flaps. M. Neuhalfen in 1991 patented his design (patent 5,020,156) that guarded against those nasty foul tips flying into the upper arms. With the advent of ballistic materials, velcro, breathable cloth, and polyfoam padding, catchers today are wearing the most protection possible with the minimum weight. The 2008 version of the chest protector weighs less than half the chest protector that was available in the 1920s through the 1940s.

ANTI-SPIKE PROTECTORS: THE SHIN GUARDS

Among the tools of ignorance, the designs of masks and mitts have evolved the most, in response to the way baseball is played. By contrast, chest protectors and shin guards haven't changed as much. As early as 1890, catchers began wrapping their bare lower legs with newspapers or leather, which was then hidden beneath their uniforms. This evolved into more elaborate pads, all under their pants, but it took tough-as-nails Roger Bresnahan to have the nerve to admit publicly that his legs hurt from all of the wild pitches, foul balls, thrown bats, and piercing spikes. The curiosities that Bresnahan wore more than a century ago actually were a modified version of the leg guards worn by cricket players. Rods of light cane encased in padded fabric covered the shins, and padding protected the knees.

Over time, padded leather covered the kneecaps, insteps, and ankles. Hard, heavy fiberboard guards appeared in Rawlings ads in 1916. In the 1920s and 1930s, fiberboard supplanted cane. Various inventors played around with the fiberboard design, including D. Levinson in his 1918 idea (patent 1,253,260). William Barrett in 1927 patented the prototypical catcher's leg guards (patent 1,624,129) that uses essentially the design seen today.

The hinged shin guard was developed by the Dodgers in the late 1950s, one of three notable catcher inventions they created. (The billygoat throat protector

Canvas, 1906 | Leather, 1920s | Kapok-stuffed, 1950s | Modern polyfoam

ILLUSTRATIONS BY CHUCK ROSCIAM FROM PATENT DRAWINGS

1906 Cane shin guards, 1906

Fiberboard shin guards, 1930s

Hinged shin guards, 1950s

Modern molded-plastic shin guards

ILLUSTRATIONS BY CHUCK ROSCIAM FROM PATENT DRAWINGS

and the hinged mitt were the other two.) By the 1960s, light but tough molded plastics replaced fiber. How tough? Announcer and former catcher Tim McCarver survived two collisions in which the spikes of ex-Met Tommy Agee became embedded in the guards.

In 1995, W. F. Hunt Jr. patented leg guards with adjustable lower thigh pieces to facilitate lower crouches and increased protection (patent 5,452,475). G. J. Collins followed up with his multiple-piece thigh and knee guards in 2004 (patent 6,687,912). The next generation might well include complete, flexible, and lightweight leggings made from Kevlar and worn throughout the game and not just when the catcher is behind the plate.

Catching has never appeared to be an easy or cushy job. Even with protective accessories, the position seems to lead the league in injuries yearly. That's why safety and productivity have been the goals of a variety of catching inventions throughout the history of the game.

Baseball, though it sometimes seems the most tradition-bound of sports, has always shown that all-American penchant for tinkering and innovation. This quest for the better mouse trap has been amply applied to catchers' gear. The evolution of the equipment corresponds to actual changes in the tactics and rules of the game. The tinkering continues. Already a new "digital" catcher's mitt, designed to soften the ball's impact and reduce errors, has made its debut.

Today the well-protected warrior behind home plate has taken advantage of modern technology, especially that developed for law enforcement. Body armor, for the catcher in the twenty-first century, might well be identical to the lightweight Kevlar vests worn under police officers' shirts today. After all, if a thin, almost shirt-like vest can stop a bullet, it certainly can stop a wayward 95 mph fastball. So perhaps chest and leg protection will come full circle and the catchers of tomorrow will be wearing their armor beneath their uniforms just as the players in the 1880s did. ■

Catching then.

Catching now.

LEFT: NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.
RIGHT: PERSONAL COLLECTION OF CHUCK ROSCIAM

References

Bjarkman, Peter C. *The Baseball Scrapebook* (New York: Dorset Press, 1991).

Burns, Ken, and Geoffrey C. Ward. *Baseball: An Illustrated History* (New York: Knopf, 1994).

Gutman, Dan. *Banana Bats and Ding-Dong Balls: A Century of Unique Baseball Inventions* (New York: Macmillan, 1995).

Honig, Donald. *The Greatest Catchers of All Time* (Dubuque, Iowa: Wm. C. Brown, 1991).

Hughes, Thomas. *American Genesis: A Century of Invention & Technology* (New York: Viking Penguin, 1989).

Nemec, David, and Saul Wisnia. *100 Years of Major League Baseball* (Lincolnwood, Ill.: Publications International, 1999).

Obojski, Robert. *Baseball Memorabilia* (New York: Sterling, 1991).

Owens, Tom. *Great Catchers* (New York: Friedman/Fairfax, 1997).

Seymour, Harold. *Baseball: The Early Years* (New York: Oxford University Press, 1960).

Spalding, Albert. *Baseball: America's National Game* (orig. pub. 1911; San Francisco: Halo Books, 1991).

———. *Spalding's Official Base Ball Guides*, 1876–1913.

Trucks, Rob. *The Catcher* (Cincinnati: Emmis Books, 2005).

U.S. Patent and Trademark Office, http://uspto.gov.

PERIODICALS: *Antiques and Collecting*, *Sporting Life*, *The Sporting News*.

APPENDIX A

PATENT NUMBER	DATE	INVENTOR	ITEM	NOTE
200,358	2 Feb 1878	Fred W. Thayer	Mask	Mod fencing mask
205,093	18 June 1878	George W. Howland	Mask	Cushioned pad
287,137	23 Oct 1883	Harry C. Lee	Mask	Folding for transport and face shape adaptable
287,331	23 Oct 1883	Alexander K. Schaap	Mask	Wire cage swings open to permit increased vision
290,664	25 Dec 1883	Austin C. Butts	Mitt	Fingerless glove
295,543	25 March 1884	William Gray	Chest	Rubber bladder ribs
325,968	8 Sept 1885	George H. Rawlings	Mitt	Padding to fingerless glove
364,543	7 June 1887	Robt. Reach	Mask	Padding to wire
376,278	10 Jan 1888	George Barnard	Mask	Open view
379,655	29 March 1888	Dennis J. O'Sullivan	Mask	
385,728	10 July 1888	Joseph W. Sauer	Mitt	Glove with fingers
408,650	6 August 1889	Earle Harry Decker	Mitt	Glove stitched to round pad
432,970	29 July 1890	Barton L. Blair	Mask	
434,120	12 August 1890	Joseph W. Sauer	Mitt	
436,540	16 Sept 1890	Henry L. Naramore	Mitt	Mitten, no fingers with thumb
447,233	24 Feb 1891	Earle Harry Decker	Mitt	Mod—added comfort to Decker mitt
450,366	14 April 1891	Earle Harry Decker	Mitt	Mod—thicker pad to Decker mitt
455,007	20 June 1891	Leo J.F. Rooney	Mask	
459,441	15 Sept 1891	Jason F. Draper	Mitt	
461,819	27 Oct 1891	Jason F. Draper	Mitt	Thumb-finger leather pocket
461,847	27 Oct 1891	Henry W. Price	Mitt	Large glove affixed to thick pad
472,482	5 April 1892	Theodore A. Kennedy	Mitt	Glove to large pad
528,343	30 Oct 1894	Elroy L. Rogers	Mitt	Large thick pad
535,178	5 March 1895	Adolf Slomka	Mitt	Glove on pad with lace at back
538,572	30 April 1895	Edward L. Wilson	Mitt	Glove to flat pad, no gap between thumb and forefinger
540,514	4 June 1895	Elroy L. Rogers	Mitt	Large pillow
540,631	11 June 1895	Albert F. Burtt	Mitt	Large integrated glove pad
550,949	10 Dec 1895	Anna Burns Decker	Mitt	Large pad with layers of leather
571,437	17 Nov 1896	William Gray	Mask	
578,842	16 March 1897	Adolf Slomka	Mitt	Leather lacing around pad edge
613,945	18 Nov 1898	Benjamin F. Shibe	Mitt	Glove stitched to round pad
622,733	11 April 1899	William S. Tompkins	Mitt	Glove/pad with strap on back
627,687	27 June 1899	Jason F. Draper	Mitt	Round pillow mitt
628,724	11 July 1899	Burt T. Rogers	Mask	
677,958	9 July 1901	Charles H. Dean	Mitt	Pocket between thumb and forefinger
690,140	31 Dec 1901	John Gamble	Chest	
745,007	24 Nov 1903	John Gamble	Chest	Inflatable shoulder pads
755,209	22 March 1904	James E. Bennett	Misc	Wire box to catch balls—no mitt
761,257	31 May 1904	H. B. Schutt	Mask	Hinge face flip up

PATENT NUMBER	DATE	INVENTOR	ITEM	NOTE
789,480	9 May 1905	James E. Bennett	Mitt	Double-mitt muffler type
802,505	24 Oct 1905	E. J. Goldsmith	Mask	
814,127	6 March 1906	John Gamble	Mask	
861,170	23 July 1907	John Gamble/G. M. Smith	Mask	
875,337	31 Dec 1907	A. C. Ferry	Mask	
876,237	7 Jan 1908	G. H. Ridlon	Chest	Inflatable
881,957	17 March 1908	G. H. Ridlon	Mask	Mod
925,851	22 June 1909	W. J. Sullivan	Chest	
990,166	18 April 1911	G. K. Rix	Mask	Mod
991,859	9 May 1911	E. J. Lahan	Mask	Face flip up
1,012,223	19 Dec 1911	A. J. Reach	Mask	Open vision—wide sight
1,017,964	20 Feb 1912	W. H. Fox	Mitt	
1,196,411	29 Aug 1916	R. L. Welch	Mask	Throat protector
1,253,260	15 Jan 1918	D. Levinson	Shin	Larger, flatter stays
1,362,280	14 Dec 1920	Robert H. Young	Mitt	Billow air and ball cushion
1,449,183	20 March 1921	James E. Johnstone	Mask	Platform horiz bars
1,475,991	4 Dec 1923	Hugo Goldsmith	Mask	Mesh ball-deflecting shape
1,562,176	17 Nov 1925	Harfry B. Latina	Mitt	Hand/fingers loops standard
1,562,603	24 Nov 1925	A. J. Turner	Mitt	
1,624,129	12 April 1927	William Barrett	Shin	Heavy fiberboard standard
1,670,239	15 May 1928	S. Cline	Chest	Lightweight foldable
2,502,377	28 March 1950	Hugo Goldsmith	Mask	Bar type
2,627,602	10 Feb 1953	Hugo Goldsmith	Mask	Bar type
2,756,429	31 July 1956	Frank Malachowski	Chest	Combined body, neck, and head protector
2,839,755	24 June 1958	John L. Steriss	Mask	
2,982,968	9 May 1961	John K. Groot	Shin	Adjustable leg length
3,076,197	5 Feb 1963	Frederick W. Glahe	Chest	Flexible ribs
3,125,762	24 March 1964	Frederick W. Glahe	Chest	Lightweight, conform to body
3,135,964	9 June 1964	W. F. Pender	Shin	Multisport
3,574,861	13 April 1971	Creighton J. Hale	Chest	Combined chest and throat protector
3,608,089	28 Sept 1971	Peter A. Abbatelli	Mask	Hockey-style
3,898,696	12 August 1975	Al Campanis	Mitt	Orange fluorescent target stripe
D258322	24 Feb 1981	William J. Buhler	Throat	Throat-protecting attachment
D258695	31 March 1981	Donald L. Doyle	Throat	Throat-protecting attachment
4,272,847	16 June 1981	William J. Buhler	Chest	Apertures for increased air circulation
4,525,875	25 July 1985	Walter F. Tomczak	Chest	Rigid sternum plates
4,633,529	6 Jan 1987	Steven D. Litz	Shin	Quick release velcro
4,674,157	23 June 1987	Steven D. Litz	Shin	Quick release
4,692,946	15 Sept 1987	Stanley M. Jurga	Shin	Mod—increased movement
4,993,076	19 Feb 1991	Edward G. Dierickx	Chest	Apertures for increased air circulation
5,020,156	4 June 1991	M. Neuhalfen	Chest	Removable shoulder flaps
5,206,955	4 May 1993	Norman O. Milligan	Mask	Molded thermal plastic
5,267,353	7 Dec 1993	Norman O. Milligan	Mask	Molded thermal plastic with steel rods
5,452,475	26 Sept 1995	W. F. Hunt Jr.	Shin	Adjustable thigh pieces
5,699,556	23 Dec 1997	Shyan-Wei Chen	Mask	
5,953,761	21 Sept 1999	S. Jurga	Mask	Hockey-style
6,178,556	20 Jan 2001	Louis J. Foreman	Shin	Custom fitted
6,189,156	20 Feb 2001	J. T. Loiars	Mask	Hockey-style
6,560,781	13 May 2003	Scott M. Keene	Shin	
6,687,912	10 Feb 2004	G. J. Collins	Shin	Multiple thigh pieces
6,964,062	15 Nov 2005	Shyan-Wei Chen	Shin	Easy connection of parts
6,983,487	10 Jan 2006	J. Rickon	Mask	Hockey-style

APPENDIX B

ITEM	YEAR	PATENT NUMBER
Thayer mask	1878	200,358
Barnard wire cage mask	1888	376,278
Reach mask	1911	1,012,223
Johnstone platform mask	1921	1,449,183
Goldsmith oval mask	1923	1,475,991
Austin C. Butts fingerless glove	1883	290,664
G. H. Rawlings mitt	1885	325,968
E. H. Decker mitt	1889	408,650
E. H. Decker mitt	1891	447,233
J. F. Draper pillow mitt	1899	627,687
R. H. Young mitt	1920	1,362,280
H. B. Latina mitt	1925	1,562,176
Al Campanis target mitt	1975	3,898,696
William Gray chest protector	1884	295,543
John Gamble chest protector	1903	745,007
F. W. Glahe chest protector	1963	3,076,197
M. Neuhalfen chest protector	1995	5,020,156
D. Levinson shin/leg guards	1918	1,253,260
William Barrett shin/leg guards	1927	1,624,129
W. F. Hunt Jr. shin/leg guards	1995	5,452,475
G. J. Collins shin/leg guards	2004	6,687,912

THE ANATOMY OF A MODERN BASEBALL

The 4 ⅛-ounce sphere with an 8 ½-inch circumference, commonly known as a baseball, has gone through many changes in its 150-year history. There was the rubber cover, the string-and-rag filling, rubber center, yarn wound, double stitching, single stitching, and all sorts of horsehide cover designs. Then, in 1911, George Reach, a Spalding executive, introduced the modern cork-center baseball, which is still in use today. Spalding supplied official major-league baseballs for a hundred years (1876–1976), and then Rawlings took over. A baseball is composed of three parts: a composition a cork center, golf ball–sized, covered with black-and-red rubber; four layers of various kinds of woolen yarn; and a cover of two peanut-shaped Holstein cowhides sewn in one continuous seam and held by 108 stitches. Before 1934, the American League used red and black thread, and the National League used red- and blue-thread stitching. Then both leagues went to an all-red thread.

Sources

Dan Gutman. *Banana Bats and Ding Dong Balls: A Century of Unique Baseball Inventions.* New York: Macmillan General Reference, 1995.
U.S. Patent Office

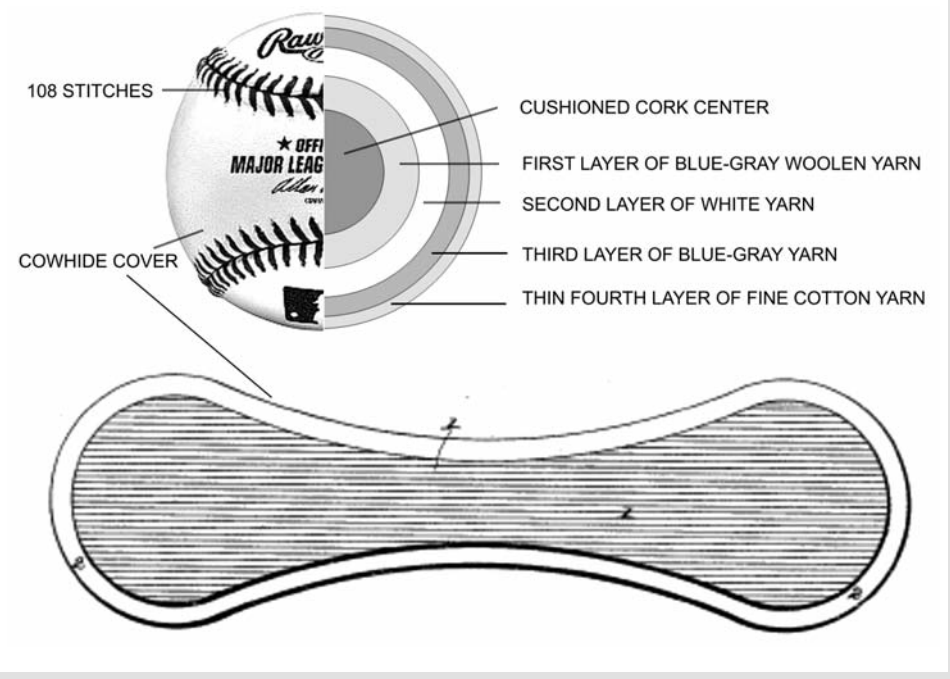


ILLUSTRATION BY CHUCK ROSCIAM

Properties of Baseball Bats

Ben Walker

In 1920 and 1927, Babe Ruth hit more home runs than every other team in the American League. On May 5, 1925, however, Ty Cobb put up power numbers that even the great Ruth couldn't muster. Frustrated with the publicity Ruth's slugging had garnered, Cobb commented to a reporter that hitting home runs was not as hard as it looked. He declared that he too would start trying to swing for the fences. With a new mindset and a hands-together grip, Cobb went 6-for-6 that day, with two singles, a double, and three home runs, giving him sixteen total bases—still an American League record (shared with several others) for a nine-inning game.[1] The next day, Cobb hit two more home runs, totaling five in two days—still a major-league record. Satisfied he had proved his point, Cobb returned to his familiar grip and style: trying to get base hits instead of hit home runs.

Ruth and Cobb are both in the Hall of Fame, but each hitter excelled in his own way. Indeed, every batter has unique psychological approaches, swing mechanics, habits, and characteristics. Even so, one thing about hitting is true for every hitter: Every time he walks up to the plate, he has only one tool to work with. Skillful use of this tool, the baseball bat, has captured the attention of fans, tried the patience of athletes, and turned men into legends.

AMBITION BEGETS EXPERIMENTATION

Baseball as played today emerged from a cauldron of other games. In the late nineteenth century, the rules changed often, contributing to a seesaw dynamic within the game. For a few years, batters would have the edge and pitchers would be disadvantaged; subsequent rule changes would turn the tables. Exploited rules (and inherent advantages) disappeared quickly, leaving rules that maintained a good balance of offense and defense. Around 1900, rules about the bat had evolved that were simultaneously simple and thorough. In the decades since, bat-specific rules have remained relatively unchanged. The bats themselves, however, are a different story.

One important rule change in the early turbulent years came about in 1887: Batters could no longer request a high or low pitch. If the pitcher's throw passed over the plate and between the shoulders and knees, it was called a strike. Thus the adversarial approach to pitching—planted by Jim Creighton in 1859—fully bloomed. Instead of trying to help the hitter, pitchers had a new objective. The goal of all pitchers became what Casey Stengel once said of Satchel Paige: "He threw the ball as far from the bat and as close to the plate as possible." Pitchers began experimenting with various deliveries and grips. The spitball became a part of nearly every pitcher's arsenal.

As pitchers experimented with the ball, hitters responded by experimenting with the bat. Indeed, as the sport evolved, the bat changed significantly—in shape, size, and material—as batters sought a competitive advantage. Examining the history and underlying science will allow us to gauge the success of these experiments.

EARLY EXPERIMENTS

During baseball's fledging years, there were no bat manufacturers. Each player made his own, often starting with an axe handle or wagon tongue and shaping it to his liking using hand tools. Through trial and error, hickory wood was found to be successful. It was hard and resilient, so players rarely needed to replace bats. But as the game became more sophisticated, so did bat making. In 1884, a boy watched the slumping local star Pete "Gladiator" Browning break his bat. After the game, the boy offered to make Browning a new one using his father's woodworking lathe; the two worked through the night on a piece of northern white ash. The next day, Browning's three hits provoked inquiries about his new bat. As the years went on, ash wood became very popular with players. So did that boy and his father. That is how Hillerich and Bradsby, the manufacturer of the popular Louisville Slugger line of baseball bats, got their start. A trend had begun. Instead of making their bats, more and more players in the 1880s began purchasing bats that were professionally lathed.

Experiments were not restricted to trying out different types of material. Briefly popular, flat bats fell into obscurity as longer bats with slight tapers and knobs at the handle became prevalent. Players continued to tweak the weight distribution and barrel and handle diameters, but, for the most part, bats used after 1900 look remarkably similar to each other. However,

NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

Heinie Groh and his "bottle bat," whose large barrel gave him a bigger stricking surface.

creativity was not totally suppressed—experiments that deviated from the norm found their way into the batter's box and the patent office.

THE "SCIENTIFIC GAME," MOMENT OF INERTIA, AND EXPERIMENTS ON SHAPE

To understand the experiments on bats, we must understand the goal of the batter. If Stengel's words best sum up the efforts of the pitcher, the objective of the hitter was best summarized by Wee Willie Keeler's "Hit 'em where they ain't." In Keeler's playing days (1892–1910), hitters followed his guiding wisdom by playing what has been called the "scientific game." The scientific game involved a heavily strategic approach to baseball. Runs were scored via bunts, hit and runs, and stolen bases. Batters choked up and slapped at the ball, placing hits between infielders or just over their heads. Slugging—swinging mightily—was a frowned-on approach.

The appeal of the tactics employed by adherents of the scientific game is understandable when you consider the game's origins. Making contact was important because, in the sport's infancy, the development of the bat far outpaced the development of gloves. Since gloves were deemed unmanly, they were often not used, and errors were common. Even if a batter did hit the ball in the proximity of a fielder, he still might reach base on an error. Also contributing to the allure of the scientific game was an English game that heavily influenced baseball: cricket. In cricket, batsmen may get only one turn to bat per match, so the ability to place hits (and avoid being put out) is important. The first baseball players took this idea of guiding their hits and brought it to the diamond. And so experimentation with bats in the early days of baseball was steered by this "small ball" approach—the goal of experiments was to help players place their hits.

Many players, most notably Ty Cobb, adopted a split-hands grip, hoping to increase their bat control. But bat manufacturers sought to improve the tool itself by making a bat that was easier to swing. Manufacturers tried unconventional shapes; many bats that hit the market looked familiar to us from the knob up but had baseball-sized chunks of wood connected below the knob. In advertisements from this era it was explained that the chunks were intended to give the bat a more even weight distribution. In other words, manufacturers were hoping to alter the moment of inertia of the bat.

Moment of inertia (MOI) is an object's resistance to rotation. It relates both to how the weight is distributed throughout the object and where the point of rotation is located. MOI is a value, just like weight is. And just as a heavier object will be harder to lift, an object with a higher MOI will be harder to swing. Two bats can have the same static weight, but if their shapes are different they may have different MOI and different swing weights. Even though bats are described in terms of length and weight, fans and players alike know that these values alone do not tell the whole story; a bat feels "heavier" when swung while holding the handle versus when held around the barrel. In reality, however, the bat's weight is remaining the same—it is the moment of inertia that is changing.

The lemon-, ball-, and mushroom-knobbed bats used in the Deadball Era were all successful in lowering the MOI when compared with similarly weighted bats shaped like those used today. So these bats felt lighter when swung and gave a player more bat control than if he used a similarly weighted bat of twenty-first-century shape. However, a decrease in MOI means a less efficient collision between the bat and ball. And so these bats, perfectly suited for the scientific game, have fallen out of favor for the same reason Ty Cobb's split-hands grip has: More bat control means less power.

While these bats succeeded in increasing bat control, other peculiar shapes were introduced to help

batters play the scientific game. Perhaps the most famous of the oddly shaped, antique baseball bats was one wielded by Heinie Groh in the 1910s and '20s. His "bottle bat" had a thick barrel that extended past the label before tapering quickly to a thin handle. Groh's manager, the crafty John McGraw, suggested such a bat, but he was not intentionally trying to lower the MOI and thus make an easier-to-swing bat for the five-foot-eight, 160-pound batter. The goal of the larger barrel was to give Groh a bigger striking surface; the thinner handle would make it easier for his small hands to grasp the bat. Groh had a fine career, but whether his bat helped is difficult to determine. Interestingly, because of the peculiar shape, if his bat were the same *length* as one used today, the MOI would be higher. However, if it were the same *weight* as one used today, the MOI would be lower. The unique geometry of Groh's bat may have given him slightly more bat control than if he had used the heavy bats that were common during the Deadball Era.[2]

Another variation on the bat's geometry was that of Napoleon Lajoie's bat, which had two knobs, the higher one being called the shoulder. The shoulder was a few inches up the handle and was for the batter's bottom hand, if he was choking up, or for his top hand, if he was swinging normally. This bat, named for Lajoie, drew a lot of attention. Many players tried it, hoping to emulate Lajoie, one of the outstanding hitters of his day (and of baseball history, for that matter).

A third oddly shaped bat was patented in 1906 by inventor Emile Kinst. His patent drawings more closely resemble a jai alai stick than a baseball bat. In his patent (US0838257), Kinst claimed his bat had two unique features. The first was the shape of the barrel: When viewed from the side, it traced not a line but an arc. He hoped that the curved barrel would allow the hitter to spray the ball to all parts of the field and that it would impart spin to the ball, making it harder to field. A player who mastered the use of this bat would be very hard to defend. The second curious trait was the series of longitudinal grooves in the front of the curved barrel. Their purpose was to aid the hitter in hitting sharp line drives, avoiding foul tips and fly balls. Both of these traits, the bat's tendency to give spin to batted balls and to induce them to take the form of line drives, fit directly with the objective of the scientific game.

A NEW OBJECTIVE

Despite how crazy (not to mention illegal) his bat may seem, Kinst incorporated one design feature into his bat that was well ahead of its time. In 1971 the idea of bending the bat resurfaced with the patent of a bent-*handled* baseball bat. As stated in the patent application, the dog-leg handle was supposed to "improve the batter's hitting power and effectiveness."[3]

Notice the goal of the dog-leg bat was to increase the *power*, not the placement of the hit. Bats invented before 1920 all tried to help the hitter play the scientific game. Whether by a change in the weight distribution, the addition of a knob, or an alteration of the shape, all were designed to give the batter more control over where he hit the baseball. This dog-leg handled bat is just one example of the many modifications that in the 1970s, '80s, and '90s were made to help the player hit the ball *hard*.

And so, while Emile Kinst's idea of a curved bat would be imitated more than half a century later, the reasons behind his design were entirely different. Clearly, between the early 1910s and the 1970s there was a change in the goal of design improvements. If the experiments in the later twentieth century were focused on a player's ability to hit the ball far and hard instead of placing it carefully between the shortstop and third baseman, something must have changed. A new objective of experiments in bats suggests a change, in the approach to hitting, from what had been around for over half a century—since the beginning of baseball no less. What could bring about so monumental a shift? It would take only 54 swings by one man to forever change the game.

Remember, Babe Ruth and Ty Cobb disagreed sharply on this very issue: Is hitting scientifically better than slugging? As it turned out, Cobb was the last of one era, Ruth the first of another. For decades, hitters had been playing the scientific game, but this low-scoring approach went out the window when the Babe was up. Setting incredibly lofty single-season home run records, he swung for the fences every time. Players, seasoned fans, and team owners familiar with the entrenched style thought Ruth's approach was an indecent way to play the game. However, in the years immediately following the First World War, the public's appetite for entertainment was renewed, which Ruth provided, appealing to a new type of fan and a broader audience. A bright spot after the disillusionment bred by the Black Sox scandal, he became one of the first national celebrities; as his popularity rose, so did attendance figures.

Rogers Hornsby, a contemporary of Ruth, remarked, "The home run became glorified with Babe Ruth. Starting with him, batters have been thinking in terms of how far they could hit the ball, not how often."

Old-school players were frustrated. As a proponent of the scientific game, Cobb had always looked down on Ruth's approach, but his style of chopping at the baseball was falling out of fashion. Ruth succeeded in changing what had been the norm for eighty years. Though still trying to "hit it where they ain't," he and his successors attempted to do this in a different way. On the whole, hitting the ball sharply gives defenders less chance to field it and, moreover, increases the odds it will fly over the fence. Hitting the ball hard became the new objective.

CONSERVATION OF MOMENTUM

If players wanted to focus their experiments on one particular variable, perhaps the best metric of a hitter's ability to hit the ball hard is batted-ball speed (BBS). The question for athletes and inventors then becomes what variables can be tweaked to help a player hit the ball hard—to increase BBS?

We can analyze which properties of the bat affect BBS. In physics terms, the momentum of the bat-ball system is conserved during the swing, so the sum of the initial momenta must be equal to the sum of the final momenta. Though simplifying the collision, examining the linear case will yield meaningful insights. The equation for the conservation of linear momentum of the bat-ball collision looks like

(1) $$(m_b v_b + m_B v_B)_{initial} = (m_b v_b + m_B v_B)_{final}$$

where m_B is the mass of the bat, v_B the velocity of the bat, m_b the mass of the ball, and v_b the velocity of the ball. Since the goal of the batter is to hit the ball hard, not to guide it anywhere in particular, $v_{b\ final}$ needs to be as large as possible. Assuming that the mass of the bat and ball stay the same throughout the collision, the equation can be rearranged using simple algebra to yield

(2) $$v_{b\ final} = v_{b\ initial} + \frac{m_B}{m_b} * (v_{B\ initial} - v_{B\ final})$$

To increase BBS, $v_{b\ initial}$ could be increased. Baseball players have long supported this conclusion: If the pitcher is throwing harder, the batter will hit it harder. However, this insight is not always helpful to the hitter—the only values under his control belong to the bat: $v_{B\ initial}$ and m_B. When we focus on these values, further analysis shows that since $v_{B\ initial} > v_{B\ final} > 0$ (the bat slows down after contact, but does not change direction) the ratio of m_B/m_b will be multiplied by a positive constant. So this ratio needs to be as large as possible, and so the numerator needs to increase. Therefore, we see that a heavier bat will hit the ball harder.

While equation 2 helps our understanding, incorrect conclusions can be drawn if we just stopped there. For instance, if $v_{b\ initial}$ were increased by any amount, it appears that $v_{b\ final}$ would be increased by an identical amount. That would be incorrect, because a harder-thrown pitch will result in a slower bat after contact. We still have $v_{B\ final}$ in our equation, and, in order to get a complete picture, we need to get rid of it. Besides, when was the last time you heard someone talk about the bat's speed *after* collision? We need a way to eliminate that variable. The answer is the coefficient of restitution (COR).

The COR deals with how elastic the collision is between two objects—in our case, the bat and ball. A higher COR means the ball bounces off the bat harder. (In the case of a baseball colliding with a bat, the COR is about 0.55, meaning the ball bounces off with just over half of its original velocity.) The correct equation (using C to designate the COR) that isolates all of the variables is this:

(3) $$v_{b\ final} = \frac{m_b v_{b\ initial} + m_B v_{B\ initial} + m_B C(v_{B\ initial} - v_{b\ initial})}{m_b + m_B}$$

If we look closely at this equation, we see that, if we increase $v_{B\ initial}$ then we will have a larger numerator, as both the second term and the third term will increase. And so a faster bat will result in a higher BBS. What is curious about the heavier-versus-faster predicament is that these traits are mutually exclusive. If we assume the bats are similarly shaped, a heavier bat is necessarily swung slower, not faster. So which is more important, weight or speed?

THE SCIENCE BEHIND THE "UNSCIENTIFIC" GAME—WHAT MATTERS MORE, WEIGHT OR SPEED?

Ideally, a player would swing the heaviest stick with the greatest speed, but the ideal is impossible, so players face a difficult tradeoff. The correlation between the bat's characteristics (weight and speed) and the player's performance (BBS) intrigues scientists and batters alike. Bat speed matters more than bat mass, according to Daniel Russell of Kettering University.[4] In one of the studies he cites, experimenters, using BBS as the guiding metric, recorded the ball velocity resulting from different swings of different bats. Bats of increasing weight were swung at a constant speed. Other factors (like ball velocity and ball mass) were kept constant. Obviously, the largest bat resulted in the highest BBS. (It had the largest initial momentum.) Then bats of the same weight were swung at increasing speeds. Again, other factors were kept constant. Again, the results proved intuitive: The faster bat resulted in

the highest BBS. The interesting thing was that a change in bat speed resulted in a higher BBS than a proportionally equal change in bat weight. So an incremental change in bat speed would give a player a higher BBS than would an incremental change in mass. In practice, though increasing the mass of the bat is not the scientifically optimal choice, it's the easier alternative. It's easy enough to grab a heavier bat but not so easy to just swing harder—players often swing as hard as they can anyway.

That bat speed matters more than bat weight was certainly not intuitive to players in Ruth's era. Players in the late 1920s and '30s actually pounded nails or needles into the barrel of their bats to make them heavier. They intuited (correctly) that a heavier bat would hit the ball farther, and they concluded (incorrectly) that the heavier, the better. And so we hear tales of 45-ounce clubs being wielded in the batter's box. Today's players seem to understand the importance of bat speed. So what—or, rather, who—was the reason for the shift from emphasis on weight to emphasis on speed? Supposedly baseball players are great experimentalists, so how did such a fact stay undiscovered for decades?

The origins of recognizing bat speed as more important than bat mass are difficult to pin down; the shift to lighter bats was gradual and not marked by any one specific event or person. However, Ted Williams reports in his book, *The Science of Hitting*, that he began using a light bat during the 1938 season. He used a 35-ounce bat in the minor leagues for a while before borrowing a teammate's lighter bat and, to his surprise, hit a home run with just a flick of his wrists. From then on Williams used a 33-ounce bat. In his book he remembered that players using smaller bats created a stir in the 1950s, but he claimed to have been using one for years.

In *Keep Your Eye on the Ball*, Robert Watts and Terry Bahill help explain both why Ruth and others were using such heavy bats (though with success) and why a lighter bat might have been better.[5] In the 1990s Watts and Bahill devised a test in which they tried to find the best bat weight for a player to use. They had a player swing bats of different weights. They measured the swing speed and calculated what the ball's exit speed, or BBS, would be. As expected, the faster swings were with lighter bats, slower swings with heavier bats. Also as expected, there was a bat weight at which an extra ounce meant the ball's exit speed would decrease.

Watts and Bahill realized that there might be a difference between an optimum bat weight and an ideal

NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

Rogers Hornsby, a contemporary of Ruth, remarked that "starting with him, batters have been thinking in terms of how far they could hit the ball, not how often."

bat weight. While an optimum bat weight would enable a hitter to create the highest BBS, a bat lighter than that would allow the hitter more time to see the pitch, would give him more bat control, and would enable him to make good contact more frequently. They suggest that the ideal weight would be one in which the player has good bat control and can wait longer before swinging. They suggest a weight that is 1 percent below the maximum BBS value. The swing speed would be much higher and therefore the frequency of well-struck balls would outweigh the slight dip in power.

Their results suggest that the difference between optimum weight and ideal weight is approximately equal to the difference in the weights of the bats used by Ruth and by Williams respectively. Focusing on the idea that more weight would help him hit the ball farther, Ruth kept traveling along the curve until he reached a fall-off point. It is likely, then, that Ruth would not necessarily be able to hit the ball any harder (or farther) by using a bat that was slightly lighter or slightly heavier. However, pitch velocities have risen since 1930, so that the importance of bat speed has increased. Over time, players have favored increased bat speeds and lighter bats even at the cost—albeit diminutive—of BBS.

NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

Before 2001, Barry Bonds's 73-home-run season, few players had ever used a maple bat, let alone on a regular basis. Seven years later, about half the bats in the major leagues were maple.

RECENT EXPERIMENTS ON THE SHAPE OF THE BAT

As bat speed has become more important, many alterations to the shape used by Ruth and Williams have been suggested, from dimpled barrels to bent and V-shaped handles. Patenting his idea in 1994 (US5284332), MIT professor Jeff DiTullio believed that adding dimples to the barrel would increase a player's bat speed by reducing drag.[6] A dimpled barrel experiences less drag because the dimples stir up the air around the bat, causing it to flow through more turbulent air, reducing the drag coefficient. DiTullio tested his dimpled bat and found that he could increase the swing speed by about 3 to 5 percent—enough to turn a fly ball caught on the warning track into a home run.[7] However, bats used in MLB games must be "smooth" (Rule 1.10a), so it's unlikely that DiTullio's idea will be applied in professional ball.

Another bat redesign intended to increase a batter's power has already been mentioned: the dog-leg-handled bat. By the 1980s, the idea of a dog-leg handle had migrated into aluminum softball bats. In 1982, Esther Moe completed her master's thesis in which she compared the ball-exit velocity off the two differently handled softball bats—one "normal"-handled bat and the other with a handle angle of 19 degrees.[8] She found that, despite the psychological appeal of a newer technology, the different handle shape did not help the performances of the players.

While these two bats are some of the many that are disallowed by MLB rules, there have been experiments on bat shapes whose permissibility is only questionable. Some players shave down the handles of their bats. Most are simply trying to change the diameter so that it feels right in their hands when they swing. In the 1980s and '90s, Don Mattingly went so far as to change the shape of his handle so that it was no longer cylindrical. He believed his bat speed would improve if he held the bat in his fingers, not his palms. He found that a rounded, triangular-type handle would help the bat sit well in his hands and keep his fingers aligned throughout his swing. Mattingly's name now appears on a line of V-handled bats promising to help players hit the ball farther.

MATERIAL EXPERIMENTS

Alongside experiments on the shape of the bat have been experiments on its material. For the last quarter century, amateur players have been able to use metal bats in games. The idea was around as early as 1924,[9] but metal bats did not come into common use until the 1970s. Originally, metal bats were used because they were more durable. However, performance quickly became the main reason for their use.

Indeed, metal bats are quite an upgrade from wooden ones. Like Daniel Russell, Alan Nathan maintains a website where he looks at, among other things, the science of baseball. Both Russell and Nathan explain many of the advantages metal has over wood.[10] They explain the efficiency of the bat-ball collision based on hoop and linear oscillatory modes, describe a few different ways to define the "sweet spot" of a bat, and show why certain safety measures need to be taken. They were involved in helping the NCAA regulate their bats, looking at both the ball-exit speed ratio (BESR) requirement and the MOI monitoring. However, while the history and science of metal bats is interesting, I will leave it for another to fully explore and explain. I will limit my examination of differences in materials to a look at different types of wood.

Even though different woods have different characteristics, the type of material used by players had remained remarkably consistent for more than a century. Ever since Pete Browning swung his in 1884, Louisville Slugger has made bats out of ash, specifically northern white ash. As recently as 2000 it was generally accepted that professional ballplayers used ash bats. Today, though, many players are using sugar (rock) maple. After ash dominated the market for so long, why the sudden change? Interestingly, it was

another single-season home-run king who was responsible for altering a convention that had prevailed among hitters for a century.

BODYBUILDERS PLAYING BASEBALL

In 1998, Sammy Sosa and Mark McGwire were locked in a home-run race to see who could break Roger Maris's 37-year-old single-season home-run record. Looking more like bodybuilders than typical baseball players, they slugged it out, drawing fans and media adulation. That year McGwire did succeed in setting a new record, but his reign on top was brief; baseball waited only three years before another single-season home-run record was established. Besides uncannily quick hands, a nearly inhuman plate discipline, and the plausible assistance of undocumented and possibly unsafe levels of chemicals coursing through his body, to what could Barry Bonds attribute his record 73 home runs in 2001? The bat of the new home-run king was a maple, and Bonds credited it with giving him "a lot of confidence."[11] Reports vary as to when maple bats were first used in an MLB regular-season game, but they all agree that, before 1996, no player had ever used one. Before Bonds's monster season, few players had ever used a maple, let alone on a regular basis. Yet only seven years after the record-setting season, about half the bats in the major leagues were maple.

Manufacturers claim maple has two advantages over ash. The first is that maple bats help a player increase his BBS. The second is that maple bats last longer. One obvious place to look for evidence that these bats help players hit balls farther would be offensive statistics. With 50 percent of players using maple, offensive statistics should have increased. Benjamin G. Rader and Kenneth J. Winkle studied the 1990s hitting barrage.[12] They discovered that hitting peaked in 2000 and that seasons that spanned 2001 to 2007 saw a "new equilibrium" of offensive statistics. They found that when maple bats started becoming more popular, the offensive numbers actually decreased.

However, they caution that maple was not an isolated variable. In fact, offensive numbers have declined over the past decade primarily because of the changing strike zone, the banning of certain substances, and the institution of drug-testing programs. It's possible that maple bats help hitters but that the positive effect has been outweighed by expansion of the strike zone and restrictions on drug use. Rader and Winkle acknowledge the effect of such institutional changes and think their findings are indicative of them, not of wood type.

Although it's difficult to determine from offensive statistics, ash and maple indeed have unique performance characteristics. Uniqueness does not imply superiority, however—one does not necessarily have an advantage over the other. After all, McGwire used an ash bat when he hit 70. If statistics will not suffice, perhaps a scientific examination of each material will aid in the understanding of the distinct characteristics of each type of wood and how each is suited for use in major-league games.

CHARACTERISTICS OF WOOD

The table below shows measures of stiffness and other important features of different types of wood.[13] I include values of hickory for historical purposes and values of yellow birch to show that other suitable woods exist that have yet to catch on.[14]

Specific gravity relates to the density of the wood. Even though hickory was used in the 1930s and earlier, it has fallen out of favor as bat speed has become important. It's possible that new drying techniques can make hickory a viable wood in the future, but its heavy weight continues to discourage its use. Also, since maple is denser than ash, the barrel and/or handle diameters of maple bats are necessarily thinner so that a maple bat will have the same length-to-weight ratio of an ash bat.[15]

Static bending relates to the stiffness of the bat and is commonly referred to as Young's modulus. Having a lower value, an ash bat will bend more on impact with a ball than a maple one will. Players notice the inherent give to an ash bat and that the connection with a maple bat feels more solid. Some hitters have commented that they like maple because they don't have to compensate for this give; others prefer the flex of an ash bat. The stiffness of the bat also determines how the bat vibrates when struck by a ball. These vibrations are what contribute to a stinging sensation when the ball is hit poorly and a solid feeling when

Tree Species	Average Specific Gravity, Oven Dry Sample (0–1.0)	Static Bending Modulus of Elasticty (10^6 psi)	Impact Bending, Height of Drop Causing Failure (inches)	Shear Parallel to Gain, Max Shear Strength (psi)
Hickories	0.71	2.06	74	2,100
Yellow Birch	0.62	2.01	55	1,880
Ash, White	0.60	1.74	43	1,910
Maple, Sugar	0.63	1.83	39	2,330

COURTESY OF THE ATLANTA BRAVES

"The pitcher has got only a ball," Hank Aaron once commented. "I've got a bat. So the percentage of weapons is in my favor and I let the fellow with the ball do the fretting."

contact is made on the bat's sweet spot, giving further credence to players' subjective evaluation of the different merits of ash and maple.

It's interesting to compare Young's modulus with the "height of drop causing failure" test. This test is exactly what it sounds like: A hammer is dropped on a wood sample from increasing heights until the wood breaks. From Young's modulus, we know that ash is more flexible; from the "height of drop causing failure" test, which is a measure of impact bending, we see that ash will also withstand a greater force from a hammer. So, compared to ash, a maple bat, which is stiffer, will, with its thinner handle and lower impact bending value, be more likely to snap at the handle.

However, an ash bat is more likely to split down the barrel, as it has lower shear strength parallel to the grain. There is an important difference in the ways these two bats tend to break: A splitting bat poses significantly less danger to spectators than does a snapped bat. A split bat usually stays in one piece, whereas one that snaps leaves the batter holding only the bottom six inches while the barrel goes flying away. In the summer of 2008, a player, a fan, and an umpire were all injured by a flying barrel. As the use of maple has risen, so have safety concerns.

MLB RESPONSE TO SAFETY CONCERNS

Prompted by the rise in broken bats, Commissioner Bud Selig assembled a team of experts to study the issue. Over a two-month period in 2008, the committee collected and examined more than 2,200 broken bats. Chief among their discoveries was that manufacturers were making bats with a poor slope of grain. Slope of grain is essentially a measure of how parallel the bat would be to the tree it came from. If a bat breaks at the handle and there is a smooth ellipse-shaped break—almost as if someone had cut through the bat with a knife—that is an example of a break due to poor slope of grain. The steeper the angle of that oval, the less strength the bat had. Bats used during the 2008 season had as much as a 14-degree angle, which means they were at only 25 percent of the possible strength. MLB now enforces regulations on this issue, but some manufacturers have simply opted to stop selling maple bats entirely.

In addition to considering rules for minimum handle thickness and proposing regulations regarding the slope of the grain, the MLB committee defied conventional wisdom and asked manufacturers to reposition the label on maple bats. From childhood, players are taught to swing with the label directly up (or down) in order to hit with the edge grain of the bat. With the label on the edge grain of a maple bat, the players still hit with the label in the same orientation, but they make contact with the face grain instead. The committee recommended this change because the face grain has a higher impact bending strength, which means it can withstand a higher hammer drop. So the bat is stronger with the face grain hitting the ball. The recommendation of the committee gives the player a tougher side of the bat to use, and so the bat will be less likely to snap when struck by a baseball.

As it turns out, maple and ash bats alike have a higher impact bending strength when struck on the face grain. Yet the label for an ash bat remains in its traditional location. So why would the label not change for ash bats as well? The answer hinges on the difference in the pore structures. Ash is a ring-porous wood, so rings of pores correspond to the growth rings. Conversely, maple is diffuse-porous—the pores are spread out evenly throughout the wood. These pores compress when ball hits bat. Maple compresses evenly, but ash bats will deteriorate very quickly when struck on the face grain. Manufacturers put the label on the face grain of ash bats to warn players which side would deteriorate fastest with use. This is why players are taught to hit with the label either directly up or down—to hit, that is, parallel with the grain—even though that means the face they hit with is the weaker one.

Diffuse-porous bats made of wood like maple don't undergo such deterioration. In fact, grain spreading in ash leads many players to discard used ash bats, but maple bats tend to be used until they break. Bats made of maple will typically last longer, and their lack of

degradation allows players to take into the game the same one they used in batting practice that afternoon. Each player wants to succeed at the plate, and comfort with his particular tool of the trade can go a long way toward helping him achieve that aim. However, players who prefer ash may soon need to consider other bats, as the supply may be in jeopardy.

FUTURE OF WOOD BATS

For decades, Pennsylvania forests have provided ash wood for baseball bats. In 2002, the emerald ash borer, a species of beetle dangerous to ash trees and once foreign to America, was discovered in Michigan. By 2007 it had reached Pennsylvania. If it reaches certain parts of the state, the supply of ash bats could be severely diminished. While the manufacturers of bats are aware of the beetle and are taking what precautions they can, it still threatens. While birch and bamboo bats are currently being manufactured, maple may need to become the primary wood for MLB. Provided ash does need to bow out of the spotlight it has enjoyed for the past hundred years, maple would be a viable alternative. Many players already enjoy the bat. And since safety concerns already keep some players from switching over, should the MLB committee's recommendations prove to alleviate these concerns, maple may achieve the dominance enjoyed by ash until just a decade ago. It seems the future of maple bats hinges on the safety of their use.

Or we can just wait for someone to hit 80 home runs with a birch bat, which would then become all the rage.

Hitters take their bats seriously. Some believe that each bat has one hit in it and will constantly change bats. Others may keep their bat in a special case when not in use, bringing the same bat up to the plate for months on end. The experiments over the years—by players, inventors, physicists, engineers—have resulted in a refined tool for the major-league hitter to carry with him to the plate. Although the job of hitting is quite possibly one of the hardest in sports, the right tool makes it slightly less so. "The pitcher has got only a ball," Hank Aaron once commented. "I've got a bat. So the percentage of weapons is in my favor and I let the fellow with the ball do the fretting." ■

Sources

Adair, Robert K. *The Physics of Baseball*. 3d ed., rev. New York: Perennial, 2002.

Anderson, Sandy, Donald Fehr, Dan Halem, David. Kretschmann, and Ron Manfred. "MLB Winter Meetings."

ASAP Sports (www.asapsports.com/), 9 December 2008; Baseball History: 19th Century Baseball. 1 June 2009. (www.19cbaseball.com).

Ira Flatow, Brian Boltz, Lloyd Smith, Sven-Erik Spichiger. "Batter Up!" *Science Friday*. NRP, 4 July 2008.

Curran, William. *Big Sticks: The Batting Revolution of the Twenties*. New York: William Morrow, 1990.

DiTullio, Jeff C. "Reduced aerodynamic drag baseball bat." U.S. Patent 5284332, 8 February 1994.

Hernandez, Roland. WoodBat.org. January 2009.

Hibbeler, Russell C. *Engineering Mechanics—Statics and Dynamics*. 11th ed. Upper Saddle River, N.J.: Prentice Hall, 2006.

Hill, Bob. *Crack of the Bat: The Louisville Slugger Story*. Champaign, Ill.: Sports Publishing, 2000.

Kinst, Emile. "Base Ball Bat." U.S. Patent 0 838 257. 11 December 1906.

"Objectives of the Game." Official Baseball Rules. Mlb.mlb.com/ Official Information/Official Rules.

Sawicki, G. S., M. Hubbard, and W. J. Stronge. "How to Hit Home Runs: Optimum Baseball Bat Swing Parameters for Maximum Range Trajectories." *American Journal of Physics* 71, no. 11 (November 2003): 1152–62.

Thompson, Andrea. "The Science Behind Breaking Baseball Bats." Live Science (livescience.com), 15 July 2008.

"V-Grip Technology." Mattinglybaseball.com / About.

Williams, Ted. *The Science of Hitting*. New York: Fireside, 1986.

Wong, Stephen, and Susan Einstein. *Smithsonian Baseball: Inside the World's Finest Private Collections*. New York: Collins, 2005.

Notes

1. Unless otherwise noted, statistics, records, and quotes are from Baseball Almanac—The Official Baseball History Site (www.baseball-almanac.com).
2. It is difficult to unequivocally attribute Groh's success to his bottle bat. His unique batting stance and steady improvement before and after using the bat indicate that many factors contributed to his success.
3. K. M. Mann, "Baseball bat with a dog leg type handle," U.S. Patent 3 554 545, 21 January 1971.
4. Daniel A. Russell, "Physics and Acoustics of Baseball and Softball Bats," www. Kettering.edu/~drussell/bats.html.
5. Robert Watt sand Terry Bahill, *Keep Your Eye on the Ball: The Science and Folklore of Baseball* (New York: W. H. Freeman, 1990).
6. Golf balls have dimples in order to reduce the effect of drag. Drag is the force on an object when it moves through the air. It always resists the direction of motion and affects all aspects of baseball. A ball that crosses the plate at 100 mph left the pitchers hand at about 108 mph!
7. Michael Matza, "Simple Dimple—On Bat—Could Revolutionize American Pastime," Knight-Ridder Newspapers, 17 April 1994.
8. Esther L. Moe, "A Comparison of Batting Using Bent Handled and Straight Handled Bats," thesis. Washington State University, 1982.
9. William A. Shroyer, "Baseball Bat, " U.S. Patent 1 499 128, 24 June 1924.
10. Alan Nathan, The Physics of Baseball (http://webusers.npl.illinois.edu/~a-nathan/pob/).
11. Barry Bonds, "Testimonials." Sam Bat (www.sambat.com/about-us/ testimonials.aspx), January 2002.
12. Victor Wang, "A Closer Look at the OBP/SLG Ratio," *By the Numbers* 17, no. 1 (February, 2007): 10–14.
13. U.S. Forest Service, *The Encyclopedia of Wood* (Grand Rapids, Mich.: Skyhorse, 2007).
14. Being unsure what type of hickory was used in the nineteenth and early twentieth centuries, I list the average for five types of hickory (Mockernut, Pignut, Shagbark, Shellbark, Bitternut) that were prevalent in areas of the eastern United States where wood may have been harvested. The hickory values are not precise, but they are, so to speak, in the ballpark. For instance, the modulus of elasticity (column 2) has a value of 2.06, but the type of hickory actually used could have ranged from 1.7 to 2.26.
15. Also, many MLB players used metal bats in their youth and may be accustomed to thinner handles.

HENRY CHADWICK AWARD

In November 2009, SABR established the Henry Chadwick Award, intended to honor the game's great researchers—historians, statisticians, analysts, and archivists—for their invaluable contributions to making baseball the game that links America's present with its past. Apart from honoring individuals for the length and breadth of their contribution to the study and enjoyment of baseball, the Chadwick Award will educate SABR members and the greater baseball community about sometimes little-known but vastly important contributions from the game's past and thus encourage the next generation of researchers.

On March 1, 2010, SABR announced the first nine honorees to universal acclaim. With this award, SABR has established a way to honor the men and women who have best done what SABR has always done: bring the history of baseball to life. What follows are profiles of the nine honorees, along with Chadwick himself. Look for more honorees in this space next year, and for many years to come.

Henry Chadwick

Having played cricket and rounders in his native England, Chadwick (1837–1908) came to America with his family in 1837 at age 12. When in 1856 he first saw baseball played between skilled clubs, he recognized its potential to become America's national game. Chadwick began his reporting career with the *Long Island Star* in 1843. In the late 1850s, he began covering baseball games as a reporter for several newspapers, notably the *New York Clipper* and the *New York Times*; in later years he would join the staff of the *Brooklyn Eagle* and write for seemingly every publication at all concerned with sports. He developed the box score and devised a system of scoring that is little changed today (although he borrowed many aspects of the system from fellow sportswriter M. J. Kelly). In his devotion to making baseball a "scientific" game, he devised new measures of player performance, championed those invented by others (such as batting average), and created the statistical underpinnings that bind the game's present to its past while providing a roadmap for understanding how teams succeed or fail.

Indeed, it would be not too much to say that sabermetrics began with Father Chadwick. "Many a dashing general player who carries off a great deal of éclat in prominent matches, has all 'the gilt taken off the gingerbread,' as the saying is, by these matter-of-fact figures," he wrote in 1864. "And we are frequently surprised to find that the modest but efficient worker, who has played earnestly and steadily through the season, apparently unnoticed, has come in, at the close of the race, the real victor."

Chadwick continued to write and comment on baseball for more than fifty years. He originated the first guide, *Beadle's Dime Base Ball Player*, in 1860, and edited *DeWitt's Guide* through the 1870s and *Spalding's Base Ball Guide* from 1882 to 1908. His *Game of Base Ball* (1868) was the first hardcover book published on the subject.

BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

Henry Chadwick

Chadwick did not win all his battles. He opposed professionalism among players and opposed creation of the National League, writing that the latter was "a sad blunder." But he took on owners and players with equal gusto. In his most enduring squabble, he traced baseball's origins to the English game of rounders, rejecting the jingoistic notion that it sprang into life fully formed on native soil. A long-standing friendly argument with nativist Albert G. Spalding over baseball's origins prompted Spalding to form a commission to look into the matter. Its conclusion was that the game had been invented in Cooperstown by Civil War hero Abner Doubleday.

Chadwick—more the "Father of Baseball" than Doubleday and as much as any man—died from pneumonia in 1908, in the month of that published finding, in the last *Spalding Guide* he edited. Flags around the league flew at half-staff in his honor. In 1938 he was named to the Baseball Hall of Fame; he remains the only writer honored not in a separate exhibit but with his own plaque. Now he is honored further by the naming of a new award for historians, statisticians, and researchers of the game he did so much to build.

— John Thorn

Lee Allen

At the time of his death in May 1969, Lee Allen had been the historian at the Hall of Fame for ten years. Celebrated for his encyclopedic recall of baseball persons famous and obscure, and events large and small, he was a prolific writer whose books and articles marked him as the foremost baseball historian of his time.

Born in 1915 in Cincinnati, Allen saw his first Reds game while still in knee pants. In high school, he went to the ballpark nearly every day, sitting in the upper deck. Readers of Jack Ryder's newspaper column soon noticed an exact tally of the balls and strikes each pitcher had thrown. Ryder was a good reporter, but Allen supplied the data.

He went to Kenyon College and the Columbia School of Journalism. After little more than one semester, he joined the Reds as an assistant to Gabe Paul, the team's publicity director and road secretary. When the United States entered the Second World War, Allen took a civilian post with the navy in Alaska. After a year or so, he returned to Cincinnati to replace Paul, who had been called to the service.

All the while, Allen was accumulating an outstanding collection of baseball books, manuscripts, and notes. He began to build a career as a researcher, putting in stints for two Cincinnati newspapers, appearing on radio and television and working for *The Sporting News*.

Breaking into print for profit requires not only talent but luck. While working for the Reds, he saw that G. P. Putnam's Sons had begun publishing its series of club histories. He wrote to them cold, and Putnam told him to take a stab at the Reds book.

That book, *The Cincinnati Reds* (1948), led in turn to *100 Years of Baseball and The Hot Stove League* (1955), a collection of unusual research and anecdotes, many of which have been anthologized. These books established Allen as an expert.

In early 1959, the Hall of Fame announced that Allen would replace retiring Ernest J. Lanigan as historian. Allen brought to Cooperstown not only his knowledge and research skills but also a vast baseball library, weighing 5,000 pounds. His workdays soon stretched to twelve hours, seven days a week. Allen's major effort was collecting biographical data on the 11,000 men he estimated had played in the major leagues. This task grew into the first edition of *The Baseball Encyclopedia* (1969).

COURTESY OF ROXANN LEE

Lee Allen, historian at the Hall of Fame for the last ten years of his life and the foremost baseball historian of his time, knew and loved the game from early childhood.

Allen did not sit on his research. He turned it into a long list of articles, speeches to dozens of groups, and a series of renowned books, including *The National League Story, The Official History* (1961) and its companion, *The American League Story* (1962). He also wrote "Cooperstown Corner," a column in *The Sporting News* from April 1962 to May 1969.

To help professional baseball celebrate its centennial, he journeyed back to his hometown in May to honor Cincinnati's players. Driving back to Cooperstown, he stopped in Syracuse, complaining of chest pains. Two hours later he was dead of a massive heart attack.

—Steve Gietschier

This piece is adapted from the author's introduction to *Cooperstown Corner: Columns from The Sporting News, 1962–1969* (University of Nebraska Press, 1990). The original is available online at the Baseball Biography Project.

Bob Davids

Bob Davids (1926–2002), a career federal-government employee, never played professional baseball. His impact on the game, however, has been deep and lasting, as in 1971 he founded the Society for American Baseball Research. SABR has exerted a powerful influence over how baseball is quantified and discussed, and its existence is a logical extension of Davids's love for baseball as well as of his chosen career path.

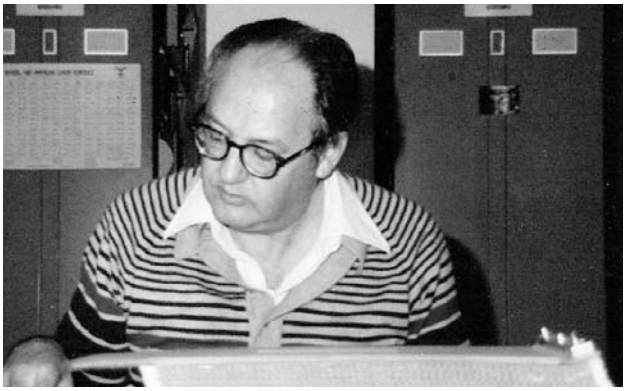
Leonard Davids was born in Iowa in 1926. He acquired the nickname "Bob" early in life and later used the name "L. Robert Davids." He was a star pitcher on his high-school baseball team and began studying baseball history in 1939. Davids moved to San Diego in 1943, where he attended prep school and worked in an aircraft factory. He enlisted in the U.S. Army Air Force in 1944 and flew as a gunner in the same aircraft type he had helped build. During his two years overseas he took two baseball publications with him, including the 1945 *Baseball Register*.

After leaving the military, Davids enrolled at the University of Missouri, where he earned a bachelor's degree in journalism and a master's degree in history. Later, he earned a PhD in international relations from Georgetown University.

Davids began his thirty-year federal civilian career in Washington with the Department of Defense in 1951, transferring to the Atomic Energy Commission in 1958. In 1968, he received a Congressional Fellowship and spent the next year working with Congress. He traveled as part of a delegation in 1969 for ceremonies commemorating the hundredth anniversary of the first professional baseball team. After his fellowship ended, he worked for various agencies that grew from the AEC. Davids, 55, retired from federal service in 1981.

Roll Call, the Capitol Hill newspaper, published under David's byline many articles on Congressional history, between 1960 and 1975, on Congressional history. Around the same time, he wrote many baseball articles for *The Sporting News* (between 1951 and 1965), including a number of full-page features. In the mid-1960s, *The Sporting News* reduced its coverage of baseball in order to expand its coverage of other sports, and Davids lost his outlet for historical articles. This led him to create his own publication, *Baseball Briefs,* a monthly newsletter he started in 1971.

On Davids's forty-fifth birthday, March 19, 1971, he mailed approximately thirty-five invitations to a meeting in Cooperstown. The addressees included persons interested in baseball history and statistical research. Davids called them "statistorians." On August 10, 1971,



NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

Bob Davids, founder of SABR

sixteen people established SABR at a meeting at the Hall of Fame Library. Davids was elected the first president, an office he held three separate times. In addition, he served as a member of SABR's board of directors in two separate terms.

Davids's expectation for SABR was that it would be "a cozy research group with its own publications." He ran the organization from his home in northwest Washington, D.C., for ten years. He invited articles for SABR's publications and welcomed presentations on a wide range of topics.

For many years, Davids spent hours at a time doing research at the Library of Congress. He also took semi-annual research trips to the Hall of Fame Library. At SABR meetings, Davids was famous for his "warm-up quizzes," which took unusual and humorous looks at the game. The epitome of the baseball researcher, Davids was also a member of the Professional Football Researchers Association and the International Boxing Research Organization.

In 1985, the SABR board of directors established the Bob Davids Award, which is considered the society's highest honor. Davids died in 2002 and is buried at Arlington National Cemetery.

"Renaissance man" is a term that has gone out of vogue. Bob Davids was a Renaissance man, interested in baseball, boxing, football, politics, Congress, the presidency, longevity, and coin and stamp collecting. He often tied these topics together in his articles.

He was a kind person and generous with his time and knowledge to everyone he came in contact with. SABR has enriched the lives of many people through the friendships made, the events attended, and the lessons learned. Bob Davids's legacy lives on in the organization he founded and in the many people whose lives he enhanced.

— David Vincent

Bill James

In 1977, the year Bill James (b. 1949) launched his first book, the *Baseball Abstract*, what we now call "analytical baseball stats" were a hidden world, the data the private province of a few team employees like Allan Roth and the guys from the Elias Sports Bureau. Hardcore fans were aware that Steve Carlton was tough on left-handed hitters and that playing at Fenway Park gave a boost to Jim Rice's stats, but *what did the numbers say*? None of us really knew.

Bill James changed all that. The first *Abstracts* were self-published and fairly simple in scope, listing things like player performance by month and stolen bases allowed in pitchers' starts—things that James could get by poring through box scores. There wasn't much written analysis, either. But the numbers were eye-opening nonetheless, and they quickly became more sophisticated. The 1979 *Abstract* featured a two-part article analyzing whether Rice or Ron Guidry deserved the 1978 American League Most Valuable Player Award, utilizing James's new runs-created formula. This was revolutionary stuff, and fans were beginning to notice. By 1982 the *Abstract* had a national publisher and a boatload of analytical tools like Offensive Won–Lost Performance, Defensive Efficiency Record, and The Favorite Toy. It had a growing cult of followers as well.

James was just getting warmed up. In 1984, frustrated that the teams and Elias wouldn't provide situational stats like left–right splits and batting with runners in scoring position, he created Project Scoresheet, a network of volunteers dedicated to collecting play-by-play data for every major-league game. Project Scoresheet became the prototype for other numbers-gathering networks like STATS, Inc., The Baseball Workshop, Baseball Information Systems, Retrosheet, and many others. The growth of these networks paralleled the growth of the personal computer, the perfect tool for parsing large amounts of baseball data. And while the men who ran major-league franchises laughed at the amateurs at first, anyone who was paying attention soon began to realize that a lot of these numbers crunchers had important things to say.

COURTESY OF THE BOSTON RED SOX

Bill James

No one had more to say than Bill James, and few people said it better. The beauty of his work was he was never just a "numbers guy"—he was a brilliant writer whose work was a joy to read. He loved the game and its history; along with rating the best players in history with his usual insight, the massive *Bill James Historical Abstract* delved into such areas as ugliest players and guys with the strangest batting stances. This wasn't just numbers; this was *fun*. He wasn't afraid to ruffle a few feathers, either. Consider the 1991 edition of *The Baseball Book* (the successor to James's *Abstracts*), in which—in the course of a few pages—James took on a renowned historian, David Halberstam, in an article entitled "Summer of '49 . . . or Was That '50?" and, in "Jerome Holtzman Has a Cow," a legendary baseball scribe. Not exactly Mr. Tact, but what James had to say invariably made sense.

As for the "baseball insiders" who dismissed James and the work he termed "sabermetrics," they slowly moved on, and often their replacements were numbers-oriented people who were influenced by Bill James. And in the final, most delicious irony, James himself in November 2002 accepted a position, as special advisor for baseball operations, with the Boston Red Sox. Two years later, the Sox were winning their first World Series since 1918.

Sabermetrics—and Bill James—had helped kill The Curse.

— Don Zminda

Peter Morris

Peter Morris was born in 1962 in Birmingham, England, and grew up in Toronto, Canada. Both of his parents, who earned doctorates in sociology, are prolific authors. Morris graduated from the University of Toronto with a degree in English. He mastered the game of Scrabble and was world Scrabble champion in 1989. He enrolled in graduate school at Michigan State University and went on to earn a master's degree in English. With this sort of pedigree, it was only natural that Morris would become a writer.

In the mid-1980s, Morris joined the Society for American Baseball Research, and his fascination with the history of early baseball grew. He was especially interested in how it evolved from the primitive game of the mid-nineteenth century to what it is today. His interest in Michigan baseball in particular led to research in Michigan baseball during the era 1840–75. This effort led to his first book, *Baseball Fever: Early Baseball in Michigan* (2003), which in 2004 won the Seymour Medal for the best book on baseball history.

Baseball Fever's success spurred an even more ambitious project, the two-volume work *A Game of Inches: The Stories Behind the Innovations That Shaped Baseball* (2006). Virtually every question any fan would have about the development of the game is answered in this book. Meticulously researched and wonderfully written, *A Game of Inches* answers questions about the origins of, for example, the hidden-ball trick, the rally cap, turnstiles, and every trick pitch that has ever been tried in a major-league game. Winner of the Seymour Medal as well as the Casey Award for the best baseball book of 2006, A Game of Inches was groundbreaking.

Morris's next undertaking, *Level Playing Fields: How the Groundskeeping Murphy Brothers Shaped Baseball* (2007), is an engrossing book about two baseball-playing brothers of the 1880s who became major-league groundskeepers, one in Baltimore, the other in New York. These two men were pioneers—forgotten pioneers, until Morris's book—in the business

COURTESY OF PETER MORRIS

Peter Morris

of preparing the field according to standards that are now common. *But Didn't We Have Fun? An Informal History of Baseball's Pioneer Era, 1843–1870* (2008) is essentially an oral history. Morris researched scores of interviews of the men who actually played in the mid-nineteenth century. In his most recent book, *Catcher: How the Man Behind the Plate Became an American Folk Hero* (2009), he traces the history of the men who wore the tools of ignorance from the 1840s to the present day. Another groundbreaking work, it is a close look at a defensive position sometimes neglected by baseball historians.

Morris is an expert at tracking missing ballplayers of the past. He has managed to find Eddie Kolb, a pitcher who gave up 19 runs in his only major-league appearance; Ed Clark, who fought in the Spanish–American War and is buried in Arlington National Cemetery; George Bristow, whose real name was not Bristow but Howlett; and Harvey Watkins, manager of the New York Giants in 1895, who later became manager of the Barnum and Bailey Circus.

His five monumental works have firmly established Peter Morris as one of the giants among baseball historians.

— Bill Carle

David S. Neft

It might be difficult for the twenty-first-century SABR member to imagine the baseball-research world before David Neft (1915–69) came along. By the mid-1960s, Neft had earned three degrees (including a PhD in statistics) from Columbia and was working as a statistician for the polling company Louis Harris and Associates. In 1965 he interviewed for a job with Information Concepts Incorporated, a company looking for suitable data-processing applications for its computers. Neft, who as a child in New York City had invented a realistic baseball game using 100 playing cards, sold ICI on his dream application—a comprehensive baseball database and reference work covering the game since the formation of the National League in 1876.

The best previous attempt at such a thing, Hy Turkin and S. C. Thompson's *Official Encyclopedia of Baseball,* first published in 1951, listed only a few statistics per player. Others could be gathered painstakingly from year-end guides, but these were rife with error, particularly before 1920. Runs batted in were only occasionally tabulated before 1920, and earned runs were not formalized until 1912. Most alarmingly, the available guides left out or misidentified many players. Lee Allen had nearly single-handedly created complete biographical data on about half of the 10,000 major league players, but the work was painfully slow. Neft's solution to this enormous set of problems: to send his team of researchers, eventually numbering twenty, across the country to city libraries and country graveyards. Using multiple newspaper accounts for every game, Neft's team reconstructed baseball's history from 1876 through 1920—game by game, player by player—while working to resolve hundreds of errors in later years. His team also worked with Allen to speed up the biographical work. All of this information was duly entered onto computer punch cards, which were fed into an IBM 360 mainframe computer.

The result, in 1969, was Macmillan's *Baseball Encyclopedia* (or, affectionately, "Big Mac"), which numbered 2,337 pages and weighed six and a half pounds. One *New York Times* reviewer called it "the book I'd take with me to prison." It flew through its first printing of 50,000 copies and ultimately sold more than 100,000, launching a new era of fanaticism for baseball statistics and history. It is not a coincidence that SABR was formed a mere two years after its first printing. Neft's book caused some controversy when it "changed" many well-known statistics of famous players, but he and his team were led only by a quest for truth. Debates over the propriety of modifying baseball records as new information came forth continued for decades, but the truth seekers seem to have won out, thanks in large part to the efforts of David Neft.

COURTESY OF DAVID S. NEFT

David S. Neft

Neft left ICI in 1970 and teamed up with Richard M. Cohen and others to produce, in 1974, *The Sports Encyclopedia: Baseball*. A large, soft-bound, easy-to-handle book organized by season and team, it became an annual favorite for many baseball fans, and similar efforts followed for football and basketball. The baseball version was printed annually for thirty years. In the mid-1970s he returned to Harris, which was eventually bought by Gannett.

David Neft's legacy was secured by his work on the "Big Mac." It can be said without hyperbole that everything that followed—the creation of SABR, the widespread interest in baseball analysis, fantasy baseball, the popular statistical websites of today—owes a large debt to the work of David Neft and his team for what they did in the 1960s.

— Mark Armour

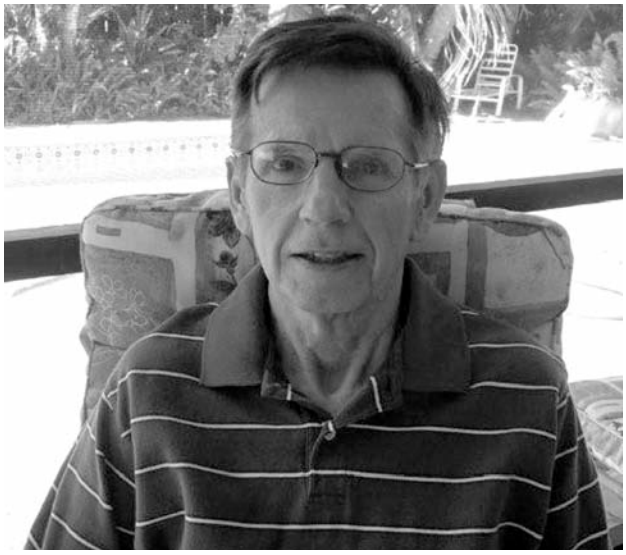
Pete Palmer

Pete Palmer (b. 1938) began compiling baseball statistics on his mother's manual typewriter in the 1950s. Gathering data from multiple sources, Palmer created the first comprehensive database (although it was not referred to that way at the time) of annual and career totals for major-league players, going well beyond previous efforts. This work took many years and was accomplished in Palmer's spare time as he held down a day job with Raytheon Corporation, working as a computer programmer and radar-systems engineer.

Palmer first gained national prominence in 1982 when he noticed an error in Ty Cobb's 1910 batting data as compiled by the American League office. When corrected, the AL records for that season show Nap Lajoie of the Indians actually had the highest batting average that season. Because this correction reduced Cobb's lifetime hit total and batting average, it was not well received by Major League Baseball or by many fans and writers who had by and large accepted published statistics uncritically. Palmer, showing that this blind faith was unwarranted, opened the doors for careful analysis that subsequently revealed many problems with official records.

Palmer did much more than just compile totals, however. He was one of the first to delve deeply into situational analysis, demonstrating that the context of each player's performance was crucial to understanding his true impact on the winning or losing of a game. His Linear Weights system was the first to address the many different aspects that contribute to the scoring of runs. Many modifications and refinements have been made since then by Palmer and others. Palmer presented many of the basic principles in *The Hidden Game of Baseball*, coauthored with John Thorn in 1984. This groundbreaking publication laid out the careful reasoning behind his proposals and was the inspiration for much of the sabermetric revolution that has come since.

In the 1970s, Palmer edited Turkin and Thompson's *Official Encyclopedia of Baseball*, first published in 1951. By 1989, Palmer and Thorn collaborated to produce *Total Baseball*. This encyclopedia was thorough



COURTESY OF PETE PALMER

Pete Palmer

in its data compilations, correcting many errors that had appeared in previous works. However, this book went well beyond dry numbers and included historical articles and summaries that provided interpretation in a way never attempted before in a sports encyclopedia. This authoritative work, once endorsed by Major League Baseball as its official encyclopedia, went through eight editions. Beginning in 2004, he combined forces with Gary Gillette in the publication of *The Baseball Encyclopedia*, which has now spun off into *The Emerald Guide to Baseball*.

While his primary attention has always been on baseball, Palmer is also experienced in football statistics. In the 1970s he edited *The Football Encyclopedia* and worked for many years as part of the statistics team for the New England Patriots. In 1988 he coauthored *The Hidden Game of Football* with Thorn and Bob Carroll.

Any biography of Pete Palmer, no matter how brief, must make mention of his helpful, friendly, and generous nature. He has accomplished all of the above in good cheer while making friends at every step of the way. It is delightful when achievement and grace are combined in such a way.

— David W. Smith

Lawrence S. Ritter

From the moment of its publication in 1966, *The Glory of Their Times* by Lawrence S. Ritter (1922–2004) set the standard for baseball oral history. Reissued many times in expanded editions and also available in a four-CD set, the book has sold nearly a half million copies and deepened the appreciation of baseball fans everywhere for the players of the past.

The project had its genesis shortly after Ty Cobb died in 1961. Ritter was teaching finance at New York University and would soon author a classic economics textbook on money and markets. At the same time, he yearned for a more intimate connection with baseball. One of his NYU colleagues, historian Herman Krooss, implored him to seek out baseball old-timers before their stories were lost forever. The timing was right for Ritter, a divorced father with a baseball-loving 13-year-old son, Steve, whom he saw only on weekends. The idea of traveling to interview retired baseball players intrigued both Ritters, especially after they received encouragement from a visit to Bill Veeck, the maverick owner who had just published his irreverent autobiography, *Veeck as in Wreck* (1966).

Carrying two Tandberg tape recorders and getting two hernias for his effort, Ritter and his son traversed the country for the next few summers. Normally a shy man who did not like to use telephones, Ritter summoned up his courage to call retired players and discovered that most of them were eager, even desperate, to share their stories. "Their grandchildren ran away when they saw them coming because they were afraid of being bombarded by more bull about old-time baseball," Ritter confided to David Margolick in a *New York Times* profile in October 2002. With Steve Ritter serving as a stage manager, setting up the tape recorders for the best possible sound in the players' living rooms, players as diverse as Jimmy Austin, Hans Lobert, and Fred Snodgrass opened up to their visitors.

Every chapter in Ritter's classic revealed a vivid human personality, all of them united by a love of baseball. John Tortes Meyers, Christy Mathewson's favorite catcher on the New York Giants of the early twentieth century, expressed his sorrow at the stereotyping of players of American Indian ancestry, who were routinely given the nickname "Chief." He said he cringed at the killing of Indians in the TV westerns that inundated the airwaves. Hall of Famer Wahoo Sam Crawford from Wahoo, Nebraska, similarly did not like to watch TV, preferring to read the novels of Balzac. He didn't attend old-timers games because he wanted fans to remember him in his youth. He vividly described the poor reputations of the players of his day. "We were considered pretty crude," he told Ritter. "Couldn't get into the best hotels and all that."

COURTESY OF THE LIU–BROOKLYN SPORTS INFORMATION OFFICE / PHOTO BY SALLY MUELLER

Larry Ritter, standing, looks on as Lee Lowenfish, left, interviews Red Barber at Polk Award ceremonies, Long Island University, circa 1985. A shy man, Ritter summoned the courage to call retired players and discovered that most of them were eager to tell their stories.

Crawford's interview has a special place in my heart because it enabled me to meet Larry Ritter. In the spring of 1967, I was a graduate teaching assistant in American history at the University of Wisconsin. In discussing one day the four candidates for president in 1824—John Quincy Adams, Henry Clay, Andrew Jackson, and William Crawford—I mentioned in my typical wiseass manner that Crawford was not related to Wahoo Sam Crawford, who is featured in a wonderful new book, *The Glory of Their Times: The Story of the Early Days of Baseball Told by the Men Who Played It*. After class one of the students came up to me to tell me he had worked on that book. It was Steve Ritter. A short time later, back in New York, he introduced me to Larry, who until his death in 2004 became one of my cherished friends.

He was a generous man. He split the royalties from the book with all his interviewees, many of whom became lasting friends. Visitors to his New York apartment often were bestowed with copies of *Gl*ory or of his other valuable books, including *Lost Ballparks* (1992), *The Babe: A Life in Pictures* (1988), and *East Side West Side: Tales of New York Sporting Life, 1910–1960* (1998), the story of early-twentieth-century sporting venues in New York City. He is a worthy recipient of a Chadwick award for his pioneering effort at bringing back to life, with passion and nuance, the glory of the times of these former ballplayers.

— Lee Lowenfish

Harold Seymour and Dorothy Seymour Mills

SABR honors two individuals with one of the nine inaugural Henry Chadwick Awards because their accomplishments in baseball history were indivisible. Although plaudits were directed solely to Harold Seymour (1910–92) in his lifetime, it has since become clear that his wife, now Dorothy Jane Mills (b. 1928), did a great deal more than offer behind-the-scenes support. While his interest in the game exceeded hers, her research skills and finely honed prose style would have won for her, under other circumstances, her rightful place as coauthor of their major accomplishment, the three-volume history published by Oxford University Press.

If Dr. Harold Seymour was a stickler about referencing his doctorate when addressing him, it may have been because his was the first ever awarded in connection with a thesis on baseball history. T*he Rise of Major League Baseball to 1891* was accepted by Cornell University in 1956, but it is the Seymours' subsequent work, as published by Oxford, that won for them the gratitude and debt of the thousands of scholars who have followed in their path.

Seymour came to his calling by way of the Brooklyn Dodgers, for whom he had been a batboy, and Drew University, where he had played on the varsity nine. This common touch helped to make the monumental work lively as well as learned. As he said in the 1950s, "No historian has ever deemed the subject worthy of scholarly investigation, despite the fact that baseball is a reflection of the development of American life. Learned men are sometimes very stuffy, you know."

When Harold and Dorothy met, she was an undergraduate and he a professor at Fenn College, now Cleveland State University. There she majored in English, contributed to the literary magazine, and moonlighted as a "copy boy" at the *Cleveland News*. Her skills proved invaluable to her husband as she performed research, organized material, and structured the notes first for his dissertation and then for the first and second volumes of the work issued under his name. By the time of the third volume, Harold's health had deteriorated significantly and it was left to Dorothy to become virtually a ghostwriter, still invisible publicly except in the acknowledgments.

COURTESY OF DOROTHY SEYMOUR MILLS

Harold Seymour and Dorothy Seymour Mills

As Dorothy Z. Seymour, she had begun in the 1960s to publish books and articles under her own name—children's books, linguistics articles, education titles. In 1998, remarried and writing as Dorothy Jane Mills, she published a historical novel, *The Sceptre*.

Harold Seymour continued to write articles into the 1980s, including "Books Before Baseball" for the inaugural number of *The National Pastime* in 1982. His 1956 article for the *New-York Historical Society Quarterly*, "How Baseball Began," inspired two generations of early-baseball researchers.

But in the end the signature achievement is the Seymours' three-volume history, each bearing the title *Baseball:* first, *The Early Years* (1960); next, *The Golden Age* (1971); and finally *The People's Game* (1990). No one may call himself a student of baseball history without having read these indispensable works. In 1991, when SABR established the annual Seymour Medal for best book of baseball history or biography published in the previous year, the award was named for both Seymours.

— John Thorn

Jules Tygiel

Jules Tygiel (1949–2008) was born in Brooklyn, and part of him never left. His career as a historian began with his doctorate at UCLA, took him to Virginia and Tennessee, and ended with his untimely death from cancer in 2008 after thirty years at San Francisco State University.

Tygiel was best known for his 1983 classic on the evolution of baseball's integration, *Baseball's Great Experiment: Jackie Robinson and His Legacy*. It received a Robert F. Kennedy book award, a place among *Sports Illustrated*'s greatest sports books, and the accolades of many who considered it the defining work on African Americans in organized baseball. His interviews with ex–Negro League stars were by themselves an important contribution, combining endless research, great empathy, and eloquent storytelling.

Tygiel wrote several other baseball books, including the rich and engrossing *Past Time: Baseball as History*, which received SABR's Seymour Medal as the best baseball book of 2000. His other baseball contributions included monographs, book reviews, frequent appearances on television discussing Robinson and baseball's integration, and a significant role in promoting the fiftieth-anniversary celebration of Robinson's career. For twenty years, he co-taught, with his friend and colleague, Eric Solomon, a course at San Francisco State on baseball in history and literature.

Tygiel also was the cofounder (with me) of the West Coast's first fantasy league, the Pacific Ghost League, which he served as commissioner. We were also partners in the first fantasy-league statistical service, Ghost League Baseball, which began business in 1985.

Jules grew up in East Flatbush. He was a product of Brooklyn public schools and Brooklyn College. He was, naturally, a Dodger fan, and saw his first game at Ebbets Field. While he spent most of his life on the West Coast, anyone who ever heard him speak knew, if only from his unmistakable accent, that they had not taken the Brooklyn out of the boy.

SAN FRANSISCO STATE UNIVERSITY HISTORY DEPARTMENT

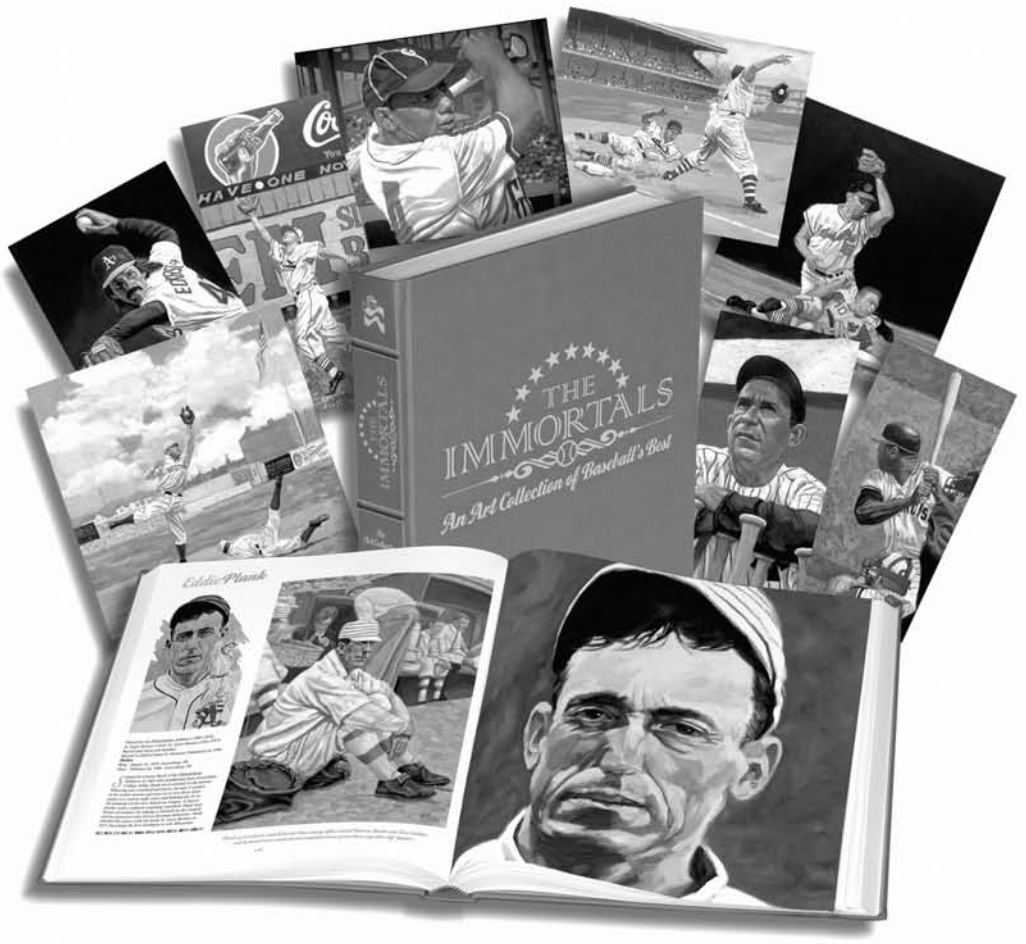
Jules Tygiel

Among his "baseball buddies"—his fellow Ghost League "owners" and friends who joined him for Giants games or annual treks to watch Class A ball in California's Central Valley—his opinions were not only respected but revered. His sense of humor was legendary. His fantasy team, the Tygiel Productos (named for the old five-cent cigar), produced piquant press releases and a team fight song, "Talkin' Productos," which he sang often and inevitably off-key, and always with a big grin.

Jules Tygiel was universally known as a gracious and giving teacher, father, husband, and friend. He was, despite his successes, down-to-earth and unassuming. While he had a healthy respect for his own opinions—he was completely comfortable in his own skin—he always maintained respect toward others and their perspectives.

He was also a man who loved his work. He ended the acknowledgments for his first and best-known book by describing his conversation with a young boy at a Mets game. When asked, Jules confirmed that he'd just been down on the field conducting interviews. The boy "looked at me, his eyes filled with admiration. 'Boy,' he exclaimed, 'you are *so* lucky.' The little boy in me smiled; he was *so* right."

— Richard Zitrin



THE IMMORTALS

An Art Collection of Baseball's Best

by Dick Perez

text by William C. Kashatus Foreword by Tom Seaver

A landmark visual history of baseball through the lives of every member in the National Baseball Hall of Fame, and the art of Dick Perez

12" x 12," 560 pages, over 1400 art works, bound in soft-bonded leather and gold-stamped

The IMMORTALS can only be obtained from Dick Perez. To learn and see more go to www.dickperezimmortals.com. Price: $199.00 plus $12.00 shipping and handling Pennsylvania residents add 6% sales tax. You may purchase online with credit card or Paypal, or send a check or money order to: Dick Perez, P.O. Box 503, Wayne, PA 19087

Golden Nuggets

Phil Birnbaum

The Bill James Gold Mine 2010
by Bill James
ACTA Sports (2010)
$23.95, paperback. 341 pages

On the surface, *The Bill James Gold Mine 2010* looks like a pretty close approximation to the original *Bill James Baseball Abstract*. The similarities are easily apparent: It's 300 pages of Bill James talking about baseball; it's got a section for every team; and it's got a lot of numbers in it.

But it's different in one important way: It's got a lot less hardcore sabermetrics. Not just hardcore as in math and numbers, but hardcore as in scientific. In the days of the original Abstract, Bill would have a bunch of studies in them, scientific studies designed to reveal fundamental truths about baseball. Some of those were in the form of statistics, like Runs Created, where Bill would show that his formula did indeed accurately project how many runs a team would score. Others were the kinds of research that you'd read about in the paper in the context of academic studies in the social sciences. Do strikeout pitchers have longer careers than control pitchers do? Back in the 1980s, Bill did a study where he took pitchers with lots of strikeouts, then found a control group of pitchers with very similar records except fewer strikeouts. It turned out that the strikeout pitchers did last longer—much longer—and now that finding has become part of conventional sabermetric wisdom.

There's a lot less of that stuff in the new book. Bill's most complex work over the past decade or so has been Win Shares and Loss Shares, a complex way of breaking players' contributions down into wins and losses. But this book spares us details of the method and just gives us the results. So, instead of using sabermetrics to explore the structure of baseball, here James uses it mostly as a baseball historian.

In the service of helping us understand baseball history, Bill additionally comes up with a couple of more intuitive measures.

The very first essay in the book is called "Comparing Starting Pitchers Across History." A traditional sabermetrician might pick up his toolbox and rank pitchers by how many runs they saved, or how many Runs Created they limited the opposition to, or how many Win Shares they had. But the 2010 Bill James says, Let's come up with a less formal method of ranking outstanding pitcher seasons, the way an ordinary fan would, and proceed that way. So what he does is give points every year to the top six to ten starting pitchers, bonus points for being more outstanding than even the usual best, and just add them up. There's no attempt at a formal mathematical justification for why this system is the most accurate possible—just an understanding that the system is pretty good, produces reasonable results, and matches our intuition for what makes a good career and what makes a better one.

Coming from anyone else, this might be dangerous stuff. Serious sabermetricians have historically been very critical of what Bill has called *amateur* attempts at numerical rankings, many of which suffer from the problem that they ignore what's actually known about how baseball games are won. But Bill understands the difference between a formula that's supposed to measure something empirical and a formula that's supposed to come close to measuring something intuitive.

How do you compare Sandy Koufax to Jim Kaat? Koufax was a much better pitcher at his peak, but he had a shorter career. Which achievement counts for more, Koufax's brilliance or Kaat's longevity? To most of us, it's Koufax. But now, try Ron Guidry versus Bert Blyleven. Now, Blyleven's longevity seems to come out on top.

Bill's brilliance is his ability to come up with a method that roughly matches our intuitions. In some ways, it's actually harder than a formula that predicts runs, because, with the empirical formula, you can compare your estimate to actual runs and tweak it until you get it as accurate as you can. But when you're trying to match an intuition, rather than a number, it's harder to tweak. The genius of Bill's method is that he's kind of figured out what it is we admire in a player's career and that he's been able to create an accurate arithmetical framework in which to estimate it.

Is it possible that Bill's method could be improved on? Sure. Someone could come along and say, If you change the point scoring from this to this, and give a little bonus for this, and add this one other thing, it makes the system a little bit better. But, again, since you can't compare the results to anything you can measure, how would you know any change is really an improvement?

And, more important, what does it matter? Bill is using the method as a baseline for evaluating careers. It's not like a runs formula, where accuracy is paramount. A single run, these days, is worth close to

$500,000 in player salary. If in his capacity as an analyst for the Red Sox, Bill figures out that one free agent is actually three runs better than another, similar player . . . well, he might have saved the Sox a million dollars right there. But when you're just trying to get an organized idea of whose careers were the most brilliant, it's not important to get things right to the last decimal place.

So what do we get out of all this? First, as Bill writes, the system shows that contemporary pitchers compare quite favorably to the greats of the past. He says that this is what he *learned* from the method, which suggests that he didn't have a grip on that before. Perhaps we're too close to the active players and their current reputations to be able to clearly evaluate their legacies, and a structured method like this can help overcome any preconceptions that we have and that the next generation might not.

Second, Bill writes that his system has a fairly clear demarcation between Hall of Famers and non–Hall of Famers. It turns out that his method is so close to our intuitive feel for what constitutes a Hall of Fame career that, as a side effect, it's extremely accurate in predicting what the voters actually will decide.

———

Anyway, I've written a lot of words on this method of Bill's, but that's not really central to what the book is about. Bill's explanation of his system takes up about the first three pages of the chapter; the other twenty pages or so are a pitcher-by-pitcher discussion of the best starting pitchers in baseball history.

If you're familiar with Bill's other books, you know what that's like. He'll list a pitcher, then talk about whatever comes to mind about him and his career. Sometimes it's just a sentence or two, sometimes it's a couple of pages when he gets going on some way this pitcher relates to the issue of ranking careers. Reading the pitcher chapter here was a lot like reading the pitcher chapter in his Historical Abstract. It's perhaps a tiny bit more technical, but not so mathematicky that it should turn off non-sabermetricians.

It's history as much as it is sabermetrics.

———

There are a few such history chapters in the book, mostly essays that originally appeared on Bill's website during the year. He's got one breaking down the 1959 *Go-Go* White Sox (a chapter that would be of very little interest to me if Bill weren't such a good writer—if he did the 1981 Blue Jays, now, that would be a different story). He's got a chapter breaking down the Hall of Fame qualifications of four *Chicago*s—Minnie Minoso, Andre Dawson, Bruce Sutter, and Lee Smith. He investigates whether players in the free-agent era switch teams more often than they used to (they do). And he presents a method for estimating what percentage of a player's potential he actually reached in his career (Luis Aparicio and Willie Mays, 90; Jackie Robinson and Ralph Kiner, 43).

And one of my favorite chapters is where Bill lists his observations as he watches a rebroadcast of a 1974 World Series game. Among them:

> Runners on first and second, Cey grounds to shortstop for a 6-4-3 Double Play.
>
> But neither runner is anywhere *near* being out. On the play at second Dick Green is 3 to 4 feet off of second base, and hasn't *been* on second base anytime recently. I would have thought the *in the neighborhood* call at second was getting worse, rather than better, but . . . I haven't seen anything like that in years. There is *no* question that if you did that now, the umpire would not give you the call.
>
> And then Cey beats the throw to first, and they call him out as well.

After more than half a lifetime of reading Bill James, my instinctive reaction is to think about how to study the issue. What kind of statistical evidence would there be if the phantom tag of second were indeed getting less prevalent? Can we pinpoint the timeline when it happened, figure out whether it was a gradual or a sudden change?

Perhaps you could check the percentage of groundballs that turned into double plays . . . if that percentage has been going down, while other measures of fielding skill have been going up, that would qualify as evidence. Something to think about.

———

The book's title, *The Bill James Gold Mine*, refers to the several hundred little statistical facts that form most of the text. They're the kinds of unusual statistical anomalies that, back in the old days, Bill would quote in his player ratings.

Most of them pertain to specific, nontraditional stats that Bill (and his staff) kept track of for 2009. For instance:

> The secret to [Gary Sheffield's] 2009 success . . . was that his ground balls got through the infield. Sheffield hit .349 on grounders, almost 100 points

higher than a normal batting average with the ball on the ground.

The Cardinals' opening day starters accounted for only 57% of their regular-season starting lineup, a remarkably low figure for a playoff team. All other teams that made the postseason were at 62% or higher.

When Placido Polanco swung the bat in 2009 he put the ball in play 57% of the time, the highest rate among American League hitters. This is typical for Polanco. His 57% career rate leads all active batters who have seen a minimum of 5,000 pitches.

Brett Anderson in 2009 threw 237 changeups—*none* of them to a left-handed hitter.

On pitches in the strike zone, Josh Hamilton swung 82.5% of the time, the highest percentage in baseball. He took only 103 called strikes, which works out to about one for every 3.5 plate appearances.

In 2009, Hank Blalock hit 51 fly balls to left. Fifty of them were caught, giving him a .020 average on them. None left the park. He also hit 56 fly balls to right. Twenty-nine of them fell safely, including 19 that left the park, giving him a .518 average on those.

Russell Branyan swung at the first pitch he saw more frequently than any other player in the American League. He took a rip at 37. 3% of the pitches he saw [for a .415 average in those at-bats]. Franklin Gutierrez took the other approach, swinging at just 7. 7% of the first pitches he saw [and hit .348 on those]. . . . The interesting thing is that Branyan is not a swing-at-everything guy. He actually takes a lot of pitches. He just likes to swing at the first one.

These little nuggets, I guess you could call them, are usually presented without comment (but with lots of white space between them, and the same little photo of stacks of coins, over and over again—gold mine, get it?). Sometimes I kind of wished that Bill would tell us what he thinks they mean. Take the Hank Blalock factoid, for instance. Should Hank stop trying to hit to the opposite field? Or would that screw him up to the point where he'd be worse off than when he started? Or maybe he makes up for all those fly-ball outs by hitting lots of line drives to left (batting averages on line drives are in the .700 range)?

It's something to research, I guess, or at least think about. In any case, serious fans of baseball in 2010 will find these the most thought-provoking part of the book. The kinds of granular data that Bill and his staff calculated, the breakdowns of pitches, at-bats, innings, games—these were new enough to me that they got me thinking about issues I'd never considered before.

And if the pictures of gold coins were line drawings instead of photos, I could color them in while I'm thinking.

———

Bill has access to 2009 zone-rating stats, from John Dewan, I believe . . . and, on page 162, he's got a chart rating every position in the American League.

In 2009, Seattle Mariners fielders were 110 runs above average. The Kansas City Royals were 62 runs below average.

That means the Mariners were 1.06 runs per game better than the Royals just in fielding. Since the Royals gave up only 150 runs more than the Mariners did, that suggests that Kansas City actually had better pitching than Seattle did, even though the Mariners led the league with a 3.87 ERA and the Royals were third-last at 4.83.

Wow.

———

Overall, I'd say that the book is about two-thirds nuggets, one-third essays. I've described only the historical essays, so far. I should briefly mention some of the rest. There are a couple on contemporary events—the 2009 Cy Young races, and the future of Michael Bourn. There are a couple of opinion pieces—a proposal from Bill on how to improve the All-Star game, and a prediction of how history will treat steroid users. There's also a fun rant on the *attribution problem*, which explains why we don't let kids play by themselves in the park anymore and risk getting kidnapped. Some of my favorite Bill James pieces are the ones, like that one, that aren't primarily about baseball. Bill has a true-crime book coming out next year, and I'm very much looking forward to getting my hands on it.

And I should mention that there's one mildly technical essay, about defensive Win Shares, where he argues that the more outs you make at the plate, the greater your responsibility for fielding. I'm not sure I agree with that (or even understand it fully), and other

sabermetrics sites I've seen were similarly perplexed with Bill's logic. It's still an entertaining read, though.

Those of us who subscribe to Bill James's website will have read all the essays already, so only the nuggets will be material we haven't seen before. For my taste, Bill is such a good writer and sabermetrician that I'm willing to pay $23.95 even if only half the material is new. Your mileage may vary, of course, but Bill is so important a sabermetrician, and so much fun to read, that I can't imagine any serious Bill James fan would pass this up, even at twice the price. ■

Satchel Paige

Off on His Own, at the Center of the Crowd

Lee Lowenfish

Satchel: The Life and Times of an American Legend
by Larry Tye
Random House (2009)
$26.00, cloth. 416 pages

Satch, Dizzy and Rapid Robert: The Wild Sage of Interracial Baseball Before Jackie Robinson
by Timothy M. Gay
Simon and Schuster (2010)
$26.00, hardcover. 368 pages

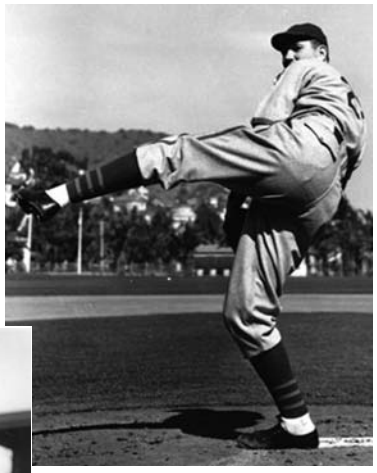
"If Jackie Robinson was the father of equal opportunity in baseball, surely Satchel Paige was the grandfather," Larry Tye declares in one of the many provocative passages in *Satchel*. I don't necessarily agree with this statement, because Paige was too independent and self-centered a figure ever to truly represent any social movement. He was also almost forty years old when Branch Rickey decided to break the color line in 1945, so clearly Paige was born too early. Although I take issue with Tye's occasional unnecessary denigration of the roles of Rickey and Jackie Robinson in taking the first steps toward the racial integration of baseball, I can still recommend *Satchel* as a good read and a probing study of a man who from the most modest beginnings became almost a household name.

Tye, whose previous credits include a valuable book about Pullman porters, *Rising from the Rails: Pullman Porters and the Making of the Black Middle Class* (2004), does a fine job of getting to the core of what made the man born Leroy Robert Page in Mobile, Alabama, in 1906 tick. I am struck by the similarity in the story of Paige and the stories of two slightly older icons of twentieth-century American culture, Louis Armstrong and Babe Ruth. All three were great natural raw talents who needed the supervision provided by juvenile institutions before they could fulfill their promise. Paige, who probably got his nickname from carrying many bags on a pole as a Mobile railroad-station porter, was not yet twelve years old when he was arrested for stealing trinkets from a five-and-dime store. His mother, Lula, cried when she heard the news, but she had her hands full trying to support six older children on a washerwoman's wages without any support from her absentee husband.

It was from his mother that, Tye tells us, Paige inherited some of his style and native wit. It was Lula who may have changed the family name to Paige because the other spelling "looked too much like page in a book" and who advised her seventh child (she would have five more later on), "If you tell a lie, always rehearse it. If it won't sound good to you, it won't sound good to anyone else."

During his five years of incarceration at the segregated Alabama Mount Meigs Reform School for Juvenile Negro Law-Breakers, Paige joined the choir, learned the basics of dealing with white society, and perfected many of his baseball skills. Babe Ruth had his Brother Matthias in Baltimore and Satchel Paige had as his mentor coach Edward Byrd, who taught him the fundamentals of baseball, like how to use his tall frame and high leg kick to best hide the baseball. (I wish Tye had told us more about Byrd.)

In 1923 Paige was released from Mount Meigs with a letter stating that "inmate has an excellent record at



Dizzy Dean, right, commenting on an actor who, slated to portray him in a movie, suffered a mental breakdown: "He's only been me for two days, and already he's nuts!"

"What his teammates did not really grasp," Larry Tye writes in his biography, "is that Satchel Paige was an introvert. There are two places to hide if you're shy: off on your own or at the center of a crowd. Satchel did both."

BOTH PHOTOS: NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

this institution." And shortly thereafter began his remarkable career in segregated black baseball. Tye does a good job of describing the chaotic conditions Paige encountered, first with the black minor-league teams he played for, the Chattanooga Black Lookouts and the New Orleans Black Pelicans, and then in 1927 with his first team in the black major leagues, the Birmingham Black Barons, for which he played off and on for the next four years.

It was actually more off than on, because the club's owner knew he had a great drawing card in Paige and rented him out many times to semipro and barnstorming teams. Paige's mound exploits and colorful wandering lifestyle soon made him a legend not just in black communities but wherever baseball fever was high.

In the early 1930s, Paige's primary employer became the Pittsburgh Crawfords, founded by the cunning and charismatic Gus Greenlee, who also operated the Crawford Grill, what Tye calls the Harlem Cotton Club of Pittsburgh. (For some reason Tye chooses not to use the usual spelling "Crawford Grille"—a hot spot, incidentally, where Duke Ellington met his great future collaborator Billy Strayhorn.) "In Pittsburgh, the redhaired, cigar-chomping Gus Greenlee did it all," Tye explains in an instructively jam-packed sentence, "hijacking beer trucks, bootlegging, buying off politicians, masterminding gambling, and assembling a black baseball dynasty called the Crawfords."

Greenlee couldn't hold Paige's services for long, however, and by 1933 he was playing for an interracial team in Bismarck, North Dakota. Then in the summer of 1934 he pitched for the House of David team at the *Denver Post* integrated tournament, and then it was back to Bismarck in 1935. Tye tells these stories with aplomb and good narrative drive. In 1937 Paige played for a team sponsored by Dominican Republic dictator Rafael Trujillo. "Games were played exclusively on weekend mornings or afternoons, and they were hot as well as wild," Tye writes, adding one of the more gruesome stories in the biography about Trujillo's massacre at this time of more than 15,000 Haitians who, living at the border of the Dominican Republic, had the misfortune of giving the wrong pronunciation for the Spanish word for parsley.

It is to Tye's credit that he does not ignore the many black sportswriters who were critical of Paige's team-jumping. Chester Washington of the *Pittsburgh Courier*, the most prestigious of the black weeklies, called him "as undependable as a pair of second-hand suspenders."

Shortly after his Dominican experience Paige journeyed to Mexico, where he came down with a mystery arm ailment that threatened to curtail his career. The ministrations of one of the great personages in the Negro Leagues, Frank "Jewbaby" Floyd, trainer for the Kansas City Monarchs, slowly restored Paige to health. (More is needed to be known about the dark-skinned Floyd and how he developed his politically incorrect nickname.)

The second stage of Paige's Negro League career began with the backing of J. Leslie "Wilkie" Wilkinson, the co-owner of the well-regarded Monarchs and earlier the founder of the first racially diverse baseball team, the All-Nations Team of World War I vintage. Without going into depth about the issue, Tye does mention that Wilkinson's co-owner, Thomas Baird, was a member of the Kansas City chapter of the Ku Klux Klan. Until Bill Veeck signed Paige for the Cleveland Indians in 1948 and again for the St. Louis Browns from 1951 to 1953 and later had a role in Paige's pitching for the minor-league Miami Marlins, Wilkinson was the only owner toward whom Paige felt a real loyalty. "He gave Satchel fat paychecks when all he could deliver was fat pitches" is how Tye felicitously phrases the roots of Paige's affection.

As noted earlier, the one area where Tye's account strikes a false note is in his criticism of Branch Rickey and Jackie Robinson. They weren't saints, of course, and their ambition and self-possession earned them many enemies in both white and black baseball. It does seem a gratuitous slap for Tye to write in describing Robinson's brief period as Paige's Monarch teammate in 1945, "Satchel had little use for Jackie and he was not alone." Tye also errs when he says that Robinson was a Monarch second baseman; he was a shortstop in Kansas City, though he came to realize that he didn't have the arm for that key position.

There are other nagging errors in Tye's book that have not been corrected in the paperback edition. The biggest one is that he has the second Joe Louis–Max Schmeling bout occurring shortly before Paige broke into the majors with the Indians in 1948 when of course it was 1938 when the Brown Bomber avenged an earlier loss to the German heavyweight with a first-round knockout. Tye also makes a reference at one point to a *Sports Illustrated* article from 1949, but the magazine was not founded until 1954. And in praising the Monarchs for playing games under the lights as early as 1930, he exaggerates how long it took white owners to follow suit. It was five years, not fifteen, when the first major-league night game was played (hosted by Larry MacPhail's Cincinnati Reds in 1935). In his copious bibliography and notes, Tye somehow has omitted David Zang's indispensable biography

Fleet Walker's Divided Heart: The Life of Baseball's First Black Major Leaguer (1996). He does mention that Moses Fleetwood Walker and his younger brother Weldy Wilberforce Walker predated Jackie Robinson's appearance in the majors by more than sixty years, but he doesn't seem to realize that the extreme black nationalism of Fleet Walker's post–playing career attracted no followers.

On balance, though, Tye's *Satchel* is a very worthy contribution to both the literature of baseball history and biography. He has drawn a memorable portrait of an earthy, contradictory man who once said that he "wasn't married but I'm in demand" but in fact was married three times, once to two women in different countries. "What his teammates did not really grasp was that Satchel Paige was an introvert," Tye explains. "There are two places to hide if you are shy: off on your own or at the center of a crowd. Satchel did both."

Satchel Paige shares top billing with Dizzy Dean and Bob Feller in Tim Gay's *Satch, Dizzy and Rapid Robert*. The writing in Gay's opus is much more pedestrian than in Tye's book, and for the most part it presents a chronicle of the many barnstorming tours that Paige, Dean, and Feller engaged in with their "all-star" aggregations. Certainly the reader who wants deep insight into Paige should consult the Tye volume, but every now and then Gay turns a phrase or digs up a source that should be valuable to baseball researchers.

He cites, for instance, an army superior's description of Dizzy Dean, who lied about his age in order to enlist: "That boy couldn't pour piss out a boot with directions on the heel." In the early 1950s, when Dean went to Hollywood to serve as an adviser on the biopic *The Pride of St. Louis* (my vote for one of the worst baseball-themed movies ever), he was thrilled to receive $50,000 as his fee. "Jeez, they're gonna give me 50,000 smackers just fer livin'!" When, two days into the shooting, Dan Dailey, cast as Dizzy, had a nervous collapse and production was halted for two weeks, Dizzy quipped, "He's only been me for two days, and already he's nuts!"

Gay also provides some tantalizing tidbits about other barnstorming teams of the 1930s and 1940s. One was led by Earle Mack, one of Connie Mack's sons, and another was led by one-armed Pete Gray, the St. Louis Browns outfielder whose presence in World War II baseball provided integration activists with vivid evidence that white owners would rather hire disabled white players than fully abled black ones. Gay informs us that on one of Pete Gray's tours he competed against a one-armed black player.

There is no great insight in the bulk of Gay's book, and his dismissal of Commissioner Kenesaw Mountain Landis as the stock racist in so many histories is not helpful. We could have used some hard evidence on how he tried to stop interracial barnstorming, even though there is no doubt that he did try. And Gay's treatment of Branch Rickey is no better and has some unfortunate errors. The biggest is that Rickey gave tryouts to aging Negro Leaguers at the Dodgers' Bear Mountain spring-training headquarters in 1945 as a "publicity stunt" when in fact he was outraged when the black activist journalist Joe Bostic barged into the camp with the players. Rickey tried them out only to avoid being branded indifferent to the cause.

Just when I thought that only duty would force me to finish Gay's book, a genuine highlight came near the end, when Bob Feller opened up to him about his memories of playing interracial baseball with Paige after the Second World War. Where Larry Tye in *Satchel* was largely dismissive of Feller's dour, self-centered personality, Tim Gay presents a more nuanced picture of Feller, even if he bluntly called his All-Star games against Paige "racial rivalry" games and felt the customers liked to see black–white competition.

Feller could indeed be stubborn and prickly, and Paige and Jackie Robinson at separate times sued him for not living up to his contractual obligation to pay them their fair share of the exhibition proceeds. It must be remembered that major-league ballplayers were very underpaid in the 1940s and that barnstorming augmented their meager salaries. Gay notes that Stan Musial commented that he would have made more money barnstorming than playing in the 1946 World Series! The author also valuably augments the Feller section of his book by citing his 1957 TV interview, with Mike Wallace, in which the recently retired pitcher uttered strong criticisms of baseball owners for their penurious ways.

Near the end of his book Gay quotes an author unfamiliar to me, Robert Cole: "Black–white exhibitions . . . had an edgy, almost forbidden quality—a little like sneaking off to an all-night jazz club on the wrong side of the tracks." I wish more of the book had captured that flavor instead of being a litany of the runs and hits in games played. It may be heretical to say in this age of statistical overload and political correctness, but what is needed in future studies of the pivotal era of mid-twentieth-century baseball is greater probing into the depths of the participants as they played the exhibition games joyfully, demonstrating by their example on the field, and without trying to prove a political point, what cooperation off the field might mean. ■

Baseball Cards

Arthur Zillante

The T206 Collection: The Players and Their Stories

by Tom Zappala, Ellen Zappala, and Lou Blasi
Peter E. Randall Publisher (2010)
$38.00, hardcover. 224 pages

Mint Condition: How Baseball Cards Became an American Obsession

by Dave Jamieson
Atlantic Monthly Press (2010)
$25.00, hardcover. 320 pages

Cardboard Gods: An All-American Tale Told Through Baseball Cards

by Josh Wilker
Seven Footer Press (2010)
$24.95, hardcover. 243 pages

House of Cards: Baseball Card Collecting and Popular Culture

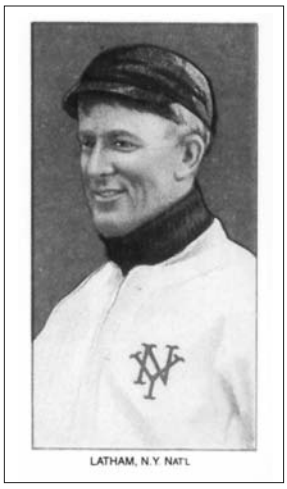
by John Bloom
University of Minnesota Press (1997)
$23.50, paperback. 160 pages

To some, a baseball card is simply a piece of cardboard (or cardboard-like material) with a monetary value attached. To others, though, it represents a slice of nostalgia, and, to understand the allure that baseball cards have for them, we must travel to a time and place where you can't see the latest news and game highlights on a device you hold in your hand. Before television, pictures of baseball players might have been the closest that most people ever came to seeing their heroes. One of the most famous early sets was produced by American Tobacco as an advertising gimmick and is now referred to as the T206 set after its designation by Jefferson Burdick, who is typically recognized as the first supercollector of cards.

The T206 set is shown in its entirety, including the different known variations, in *The T206 Collection: The Players and Their Stories* by Tom and Ellen Zappala with Lou Blasi. I'm no art critic, but, thumbing through the pages of this book, one does see the vibrant use of color in the card pictures and the simple yet pleasing design of the card fronts. The attraction of the T206 set is so strong that Topps has produced a brand of cards in their style—and has done so three times in the past ten years (2002, 2009, and 2010).

In addition to its generally recognized beauty, the T206 set was also the most comprehensive set of its era and the largest baseball-card set ever produced until the 1950s. *The T206 Collection* brings the subjects to life by providing a brief biography, usually limited to a paragraph or two, on every player in the set. The players are categorized into six subsets: Hall of Famers, Overlooked by Cooperstown, the Uncommons, the Bad Boys of Baseball, the Minor Leaguers, and the Commons. Most SABR members are probably familiar with the general story of players such as Chase, Cobb, Mathewson, and Wagner. But the brief biographies of less celebrated players such as Bill Cranston, James Helm, and Dutch Revelle are helpful, providing some brief insight into their playing careers. The final chapter has pictures of some of the high-profile cards in the set that have been graded by PSA, typically in the 7 or 8 range. Seeing those cards in that high a condition is amazing.

Baseball cards soon fell by the wayside but were revived in the 1930s, when Goudey started using them to sell more gum and candy. After the Second World War, Bowman and Topps engaged in a heated compe-



[LEFT TO RIGHT]: LIBRARY OF CONGRESS, PRINTS AND PHOTOGRAPHS DIVISION, LC-DIG-BBC-09953F, LC-DIG-BBC-07899, LC-DIG-BBC-0734F

From the T206 set, left to right: George Moriarty, a journeyman infielder and outfielder, shown here with the Tigers, with whom he had his best years, 1909–15; Arlie "The Freshest Man on Earth" Latham, a third baseman with a 17-year career, shown here in his last season, 1909, the only one he spent with the Giants; and Big Ed Reulbach, a right-hander who in 1905–9, his first five seasons in the big leagues, won 97 games for the Cubs.

tition for the rights to individual ballplayers. Topps eventually won and held a monopoly for about twenty-five years. In 1989, Upper Deck launched the first "premium" brand of baseball cards available in pack form, and soon thereafter all the card manufacturers began inserting rare cards inside the packs. Eventually a perfect storm—of overproduction by the manufacturers, the exit of investors from the market, and a general decrease in interest among children as they turned their attention to other activities—led to the decline of the baseball-card market. Dave Jamieson looks at these details, and more, of the history of the baseball-card industry in his *Mint Condition: How Baseball Cards Became an American Obsession*.

But Jamieson delves into more than just the history of the industry. He spends chapters on some of the more interesting characters who have helped shape it, for better or worse, depending on your point of view. In one chapter he details the life of the original supercollector, Jefferson Burdick, and the process he went through to have his collection become part of the New York Metropolitan Museum of Art in the 1940s. Burdick is credited with bringing organization to the hobby, and many sets predating the Second World War, including the T206 set, are still referred to by Burdick's designations. Woody Gelman, the subject of chapter 6, was essentially the driving creative force behind Topps products from the 1950s through the '70s.

Jamieson also tells the story of contemporary figures in baseball-card collecting. He profiles Mike Gidwitz, a supercollector who was the first person to sell the T206 Honus Wagner for more than one million dollars. Gidwitz, who seems to epitomize the deep-pocketed investor/collector, was sought out as a buyer by another figure in the industry, Bill Mastro. The method by which Mastro conducted his auction business is detailed, and Mastro is given credit for his part in elevating the hobby into a more respected diversion. In particular, his role as special consultant in the Sotheby's auction of the James C. Copeland collection is viewed as a watershed event in bringing baseball-card collecting to the mainstream. Finally, Jamieson, turning his attention to some of the current problems, interviews noted card doctor Kevin Saucier. For those unfamiliar with the general history of baseball cards, Jamieson gives the details. To those who are familiar with it, it is the in-depth look at some of the primary characters who helped shape the industry that is the most appealing part of the book.

For a specific example of the cultural impact of baseball cards, look no further than Josh Wilker's *Cardboard Gods: An All-American Tale Told through Baseball Cards*. At its heart, Wilker's story is that of a man recalling his past, with baseball cards as the window on it. After finding an old box of his baseball cards in a storage unit, Wilker recounts various events in his life as he works his way through the cards. It is a moving story, and essentially a no-holds-barred one. Those who have collected baseball cards will recognize the power that looking at and holding a specific card can have.

Cardboard Gods is written in a journal style, with a specific card serving as a springboard to a specific memory. There's a 1975 Topps card of Herb Washington, representing the era of "trying new things," even if they (like the designated pinch-runner) didn't quite work out. Wilker's desire for bonding with his own brother is reflected in the 1977 Topps Big League Brothers card of Paul and Rick Reuschel. Then there are the Carmen Fanzones, Bake McBrides, and Rowland Offices of the world, evoking laughter through some combination of their poses and names.

While Wilker tells the personal story of how one man reflects on his life through baseball cards, John Bloom's *A House of Cards: Baseball Card Collecting and Popular Culture* presents an overview of the general baseball-card subculture in the late 1980s and early 1990s. Bloom's primary finding is that there tends to be a struggle, sometimes interpersonal, sometimes intrapersonal, as adult collectors attempt to recapture the fun of their youth while simultaneously yearning for the hobby to be recognized as a legitimate adult endeavor.

Many of the older collectors in that era returned to their collections as a way of returning to their past and were unprepared for the changes that the industry was undergoing. For many collectors in Bloom's study, their childhood pastime of baseball-card collecting was simply play, without any thought ever given to the collectability of the cards. At the sportscard shows he attended, he noticed that the competitive environment there upset that notion of play. The changes in the hobby, though, particularly as baseball cards began to be viewed as a possible investment, are what brought legitimacy to it. Before the 1980s, collecting baseball cards was viewed as a child's diversion, and many adults kept their collections hidden. Bloom's focus is on the subculture in the upper Midwest, but traces of the shame associated with participating in a child's hobby are scattered throughout the other works being reviewed here.

Indeed, Wilker stops collecting baseball cards as he transitions into his teenage years, viewing baseball cards as being for kids. Jamieson's book is rife with examples of collectors who hide their collections. In a

story of Lionel Carter, it's mentioned that he received packages while serving in the Second World War and opened them in the barracks bathroom, safe from the view of other soldiers. Woody Gelman was once interviewed by a *New York Times* reporter who called him "a specific kind of nut" for his collecting habits.

An interesting follow-up to the Bloom study could be conducted today, with 25-to-40- year old collectors who, as children, collected cards for many of the same reasons (play, social bonding, etc.) as did their Baby Boomer counterparts but who, unlike the Boomers, were also likely to be aware that the cards held monetary value. These Gen Xers and Gen Yers should probably be more at ease with the investment aspect of the cards.

In the minds of collectors there will likely always linger some struggle between the feeling of childlike innocence and adult legitimacy, but the two can coexist. Perhaps the best advice for collectors of all ages was given in the early issues of the Beckett magazines. Baseball card *collecting* is a hobby, and individuals should collect what they like. Do not think of items in your collection as investments any more than you would think of the movies on your shelf as an investment. Yet this view of the matter does not somehow make the cards lose their investment value. If you do choose to collect baseball cards as an investment, you should be prepared for swings in the market, just as you are when investing in stocks. And you should be prepared to part with your investments.

Then again, parting with your baseball cards is easier said than done when you're holding them in your hand. Ask Dave Jamieson and Josh Wilker. ■

Charlie Radbourn's Record-Setting Season

David Quentin Voigt

59 in '84: Old Hoss Radbourn, Barehanded Baseball, and the Greatest Season a Pitcher Ever Had
by Edward Achorn
Smithsonian Books (2010)
$25.99, hardcover. 384 pages

Big-league baseball was entering its stormy adolescence in 1884, a year when three major leagues battled for predominance. Of the three, only the National League endures, but that year the NL was sorely tested. Having recently buried the second man to hold the office of league president, the new NL leader, A. G. Mills, welcomed new franchises in New York and Philadelphia—two major markets that had been disenfranchised by Mills's stubborn predecessor.

It was a wise move and none too soon, as the rival American Association and the Union Association posed serious threats. Most menacing, with its cheaper admission rates, was the AA, which already had staged two profitable campaigns. To meet that challenge, Mills signed the National Agreement, which effectively allied the two circuits against the UA threat.

Against this backdrop the 1884 season was played out, and author Edward Achorn, a *Providence Journal* newsman, makes the campaign the centerpiece of his book, *59 in '84*. The number refers to pitcher Charlie Radbourn's unsurpassed seasonal total of pitching victories, which he amassed while carrying the Providence Grays to the first official world championship. And his feat restored the NL to baseball preeminence—at least for the nonce.

Over the course of 19 chapters, Achorn tries hard to vivify Radbourn—no easy task, as the pitcher was the semiliterate son of a butcher who eyed pro baseball as an alternative to meat cutting. Taciturn and moody, with a drinking problem, Radbourn was a gifted pitcher from the pitching box, as it was called, which at the time was 50 feet from home base. And in 1884 he benefited from the new rule allowing overhand pitching—not that he needed it, as over the past three seasons Radbourn's underhand and sidearm deliveries had accounted for more than a hundred victories.

Achorn is at his best covering the Grays' 114-game season in an exciting, suspenseful, though at times awkward "sportuguese" style. He gives full coverage to the games and to Radbourn's rivalry with teammate Charlie Sweeney, a promising young pitcher. Their rivalry, marked by Radbourn's envy, posed a serious morale problem for the team, ending only when Sweeney jumped to the UA. At that point Radbourn volunteered to pitch all the remaining games from late July to September. And he very nearly did. For that feat Radbourn received as additional compensation the money that otherwise would have gone to Sweeney had he stayed with the team.

In focusing on Radbourn, a man of few words oral or written, Achorn fleshes him out by fictionalizing the pitcher's moods, physical complaints, and romantic interests. For added detail Achorn launches forays into such topics as the 1884 brand of baseball, the geography and industrial growth of Providence, and the town's boarding house, where bachelor Radbourn lived and presumably loved.

Run by Mrs. Carrie Stanhope, a woman of questionable virtue, the boarding house became the hub of a budding romance between her and Radbourn. Truth to tell, there is little factual detail to be had, but Achorn struggles imaginatively to make a romantic fire out of cold tinder.

The author's labor leads to trouble, as the possibility of Stanhope's prostitution prompted Achorn to tread into the subject of the ubiquity of that activity in America. In speculating that the two lovers also caught cases of syphilis, Achorn discusses the widespread prevalence of that malady and is led to claim that even Abraham Lincoln was a victim. The author's uncritical acceptance of the wild surmise of recent Lincoln biographer Daniel Epstein as his source is sure to alienate readers. Far better would it have been had Achorn ended his discussion when he wrote how Radbourn and Stanhope, each suffering from syphilis in 1895, "snuck off" to Milwaukee to get married. And two years later Radbourn was dead.

Another criticism I would offer concerns the book's title. In choosing, or perhaps accepting from his publisher, the phrase "59 Wins," Achorn admits to having to decide between two statistical claimants—one calling for 59 wins and the other for 60. Ironically, both claims are spurious, inasmuch as each tampers with the record of 62 victories that appears in Spalding's Official Base Ball Guide for 1885. Such retrofitting of past performance to contemporary statistical definitions is rife among modern statisticians, who take the purblind view that past records can be changed in light of present-day standards. An example of the fallacy of misplaced concreteness, that view flies in the face of a basic rule of historiography, a rule that holds that past records must stand on the terms that were agreed on at the time the record was set.

At least in their time Radbourn and his teammates knew that the number of Old Hoss Radbourn's pitching victories in 1884 was 62. Caveats aside, Achorn delivers a well-researched and spritely written book that is well worth the reading. ■

The Seven-Tool Player

Andrew Goldblatt

Willie's Boys: The 1948 Birmingham Black Barons, the Last Negro League World Series, and the Making of a Baseball Legend
by John Klima
John Wiley and Sons (2009)
$25.95, hardcover. 303 pages

Willie Mays: The Life, the Legend
by James S. Hirsch
Scribner (2010)
$30.00, hardcover. 628 pages

Willie Mays last played professional baseball in 1973, which means a generation of fans have heard stories about him and secretly thought, "No disrespect, Grandpa, but he probably wouldn't hit .250 today." Two recently published books seek to set the record straight: Mays would be just as dominant today as he was from 1954 through 1966, when he did everything required of a major leaguer better than anyone else. Believe it, children. He had that much talent.

And durability. Most fans are familiar with the concept of the five-tool player: one who can hit for average, hit for power, run, field, and throw. Durability is the sixth tool, because those other skills are useless if you're on the disabled list. Over those peak years of 1954 to 1966, Mays set a record by playing at least 150 games in each of them. That iron-man quality gave him the edge over his equally talented contemporary Mickey Mantle and a more recent five-tool player, Ken Griffey Jr. Before him, Honus Wagner and Ty Cobb might have proven equal had power been valued in their time. Ruth and Williams were better hitters, but you don't hear much about their baserunning or fielding. Mays's contemporary Henry Aaron came close, but few claimed that Aaron ran, fielded, or threw better than Mays. Joe Morgan didn't have Mays's power, and Barry Bonds didn't have Mays's arm.

By the time he's finished, Alex Rodriguez might turn out to be Mays's equal, but, if you had a choice, which man would you want in your clubhouse? Because there's a seventh tool, character, and Mays showed more of it in a single moment in 1965 than A-Rod has shown in his entire career. Character animates the other six tools but isn't as easily measured (or even defined), which makes it an attractive subject for ambitious baseball writers.

In *Willie's Boys*, John Klima traces Mays's character back to the coal mines and steel mills of Birmingham, Alabama. The baseball diamond was the only place African American men working the mines and mills felt free, and as a result they played with an urgency and daring distinct from so-called white-folks' ball. Mays's father, William Howard "Cat" Mays, named for President Taft and nicknamed for his feline quickness, was a talented center fielder, but he played for fun. For him, the mills offered a better future. By the time Cat's prodigiously gifted son joined the Birmingham Black Barons of the Negro American League in 1948, however, the integration of the major leagues made it possible for black players to escape the "hot box"—Negro League slang for a run-down play, more broadly applied to mean an inescapable situation.

For the older Black Barons, including player-manager Piper Davis, Jackie Robinson's breakthrough paradoxically made the hot box hotter, dealing a fatal blow to the Negro Leagues while offering few opportunities in white-folks' ball. They were facing the end of their careers at the same time their 17-year-old center fielder was drawing attention from the Braves, Red Sox, White Sox, Indians, and Giants. Jealousy could have led them to destroy young Mays. Instead, they tutored him—not just about baseball, but about the challenges he would face in years ahead, racial and otherwise.

That noble choice is the heart of Klima's book. "The men of the Negro Leagues remain largely lost to time, and it was my sincerest hope to illuminate their way of life, as well as their happiness, hopes, and dreams," Klima writes. As a veteran of book-title battles, I may be projecting, but my guess is that Klima knows the title *Willie's Boys* betrays his intentions. Willie was the Birmingham Black Barons' boy, not the other way around. It's easy to imagine the marketing geniuses insisting that Willie's name be in the title, because who would buy a book about Piper Davis? Klima had to submit, but to his credit, within the text he largely resists the temptation to characterize Mays as the king and his older teammates as the court.

Like ballplayers, writers need multiple tools to succeed: research, intellectual honesty, narration, and wordcraft. When it comes to research, Klima is "very desirable," as Buck O'Neil wrote in his scouting report of Willard Brown. Klima interviewed Mays's four surviving teammates from the Black Barons, combed archives and libraries in Birmingham, Memphis, and the University of Kansas, pored over stories in African American newspapers of the period, and even succeeded in getting quotes from a wary Mays. Barring the discovery of fresh documents, Klima's account of the 1948 Negro League postseason and his myth-busting chronicle of the often conflicted, never straightforward efforts of major league teams to sign Mays figure to remain definitive for years.

And then there are the little gems Klima tosses off every few pages: the young Piper Davis inspired by Bull Connor's radio broadcasts of Southern Association games—the same Bull Connor who turned dogs and hoses on Martin Luther King's civil-rights demonstrators in 1963; the perfidy of Bullet Joe Rogan and the other umpires working home games for the Kansas City Monarchs, part of an ugly rivalry between the Black Barons and the Monarchs' white owner, Tom Baird; Mays and Jackie Robinson playing against each other for the first time on October 12, 1948, years before they faced off as Giant and Dodger; the fiery demise of the Black Barons' beloved team bus as it passed through the Holland Tunnel en route to the Polo Grounds the day Mays's future as a Giant was sealed. At times the detail gets a little too thick, but Klima's excitement over what he's discovered is contagious.

NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.

Mays became "a loner who does not like to be alone," in James S. Hirsch's apt phrase, trusting only pets, children, and fellow players (even though some players were among his loudest critics).

Other than the occasional forced nod to the book's title, Klima consistently lets the evidence guide his judgment rather than the other way around, and his chronological narrative structure is sturdy and straightforward. If Klima has a weakness, it's with that last tool, wordcraft. If a sentence like "But the Black Barons had to win at Blues Stadium, which was a fortress laced with pitfalls" doesn't bother you, it's probably because you've grown

accustomed to a pervasive blight on modern baseball writing: the conviction that the more strained the metaphor, the better the sentence. It's the literary equivalent of a long, looping swing, and it produces the same result. And Klima isn't always clear. I often found myself reading sentences—sometimes whole paragraphs—twice, trying to puzzle out Klima's intent. When Willie Mays was struggling to hit .200 in the summer of 1948, Piper Davis gave him simple advice: "Aim, don't peek!" In other words, square up the pitch and take a level swing; your power will flow from there. Writers as serious about craft as the Black Barons were about baseball would do well to heed Davis's words.

In *Willie Mays: The Life, The Legend*, James S. Hirsch tracks Mays's character through his entire life rather than through one formative experience. Wordcraft is not an issue here. Hirsch has been a reporter for the *New York Times* and the *Wall Street Journal* and has written four other nonfiction books. His good fundamentals make for smooth, pleasurable reading. Like Klima's, his narrative is chronological, although he interjects chapters on marriage, housing problems, race relations, and other concerns to break up what might otherwise prove a monotonous march of seasons. And Hirsch too has exhaustively researched his subject.

The challenge for this project is intellectual honesty. As it says right on the cover, the book is authorized by Willie Mays. Just how independent of his subject is the writer? Hirsch addresses the concern in an author's note. Mays sat for interviews, shared his personal archives, and encouraged friends and associates to speak with Hirsch. In exchange, Mays had the right to correct factual errors (he found only one) and to receive a share of the book's profits, which go largely to his Say Hey Foundation. Most critically, Hirsch retained the right to make his own interpretations and conclusions. Though he is sympathetic to Mays, his book is no hagiography. Mays's warts are contextualized, not ignored or excused.

Hirsch duly recounts the on-field exploits that confirm Mays as baseball's greatest all-around player, and it's a service that he's gathered them in one place for easy reference. But his real contribution is to give us a credible and comprehensive portrait of Mays the man. From birth, Mays exhibited a gentle, joyful—and hence vulnerable—spirit that brought out a ferociously protective streak in the adults around him. Cat Mays was the first to recognize that Willie blossomed when praised and withered when scolded. Despite long work-related absences, he provided the emotional support young Willie needed. Always the life of the party, Cat was also a deeply private man who seldom shared his inner thoughts. Willie absorbed that dual aspect of his father's personality.

Annie Satterwhite, Willie's mother, never married Cat, and entrusted Willie to the care of her younger sister Sarah. Just thirteen years old when she essentially became Willie's mother, Aunt Sarah was also considerate of his sensitive nature, excusing him when it was time to slaughter an animal for dinner. She inculcated a fanatical work ethic in Willie. "He wasn't raised to do anything halfway," said his cousin Loretta, who grew up in the same household. Aunt Sarah defined family for Mays as a place of acceptance, trust, and protection. But she didn't provide affection, and as a result Mays became deeply reserved, to the point where his wife Mae would dare him to kiss her in public and he'd answer, "You're crazy."

For the anxious six-tool player promoted to the Giants shortly after his twentieth birthday, success depended on which facet of his character would dominate. Striving to excel just as Aunt Sarah taught him, he pressed—and went 1-for-26. Had manager Leo Durocher berated him or returned him to the minors, his confidence might have been ruined. But Durocher (cleverly used by Hirsch as comic relief) promised the despairing Mays that "as long as I'm the manager of the Giants, you're my center fielder." Mays understood: This was his family now, where he was accepted, trusted, and protected. Out popped the joyful persona that soon had New Yorkers calling him the Say Hey Kid. Though just one side of his character, it forever shaped the nation's perception of him and cemented his place in the American psyche.

When Durocher left the Giants after 1955, Mays had to face the world without a father figure, a challenge compounded by the Giants' move to San Francisco in 1958. Mays was the best player on the field and, except for an inability to handle money, irreproachable off it. He didn't drink, didn't smoke, didn't chase women, and stayed out of the tabloids. But he wasn't the exuberant Say Hey Kid anymore. There were whispers about his aloofness and complaints that he was coddled. More seriously, he was belittled as a purely instinctive player and, as the civil-rights era progressed, characterized as an Uncle Tom.

Mays bristled at the criticism, but outwardly his gentle nature prevailed. He wouldn't dignify demeaning remarks with a response unless cornered by interviewers, and then he would almost always turn the other cheek. Inwardly, however, he fell back on

his emotional inheritance from Cat and Aunt Sarah, growing increasingly suspicious of strangers and reticent with friends. He became "a loner who does not like to be alone," in Hirsch's apt phrase, trusting only pets (he adores poodles), children, and fellow players, even though some players numbered among his loudest critics.

This is where Hirsch comes closest to losing his distance. He feels compelled to defend Mays against the charges of stupidity and submissiveness. We're told that even the feat popularly deemed Mays's most stupendously instinctive—the over-the-shoulder catch and whirling throw off Vic Wertz's line drive to the deepest part of the Polo Grounds during the 1954 World Series—was thought out beforehand. As he raced to the wall with his back to home plate, Mays planned the throw. "To keep my momentum, to get it working for me, I have to turn very hard and short and throw the ball from exactly the point that I caught it. The momentum goes into my turn and up through my legs into that throw. That's what I did."

When it came to civil rights, Mays and his most vocal critic, Jackie Robinson, reflected the larger divide within the African American community between the nonviolent, patient approach of Martin Luther King and the militant, confrontational tactics of Malcolm X. In defending Mays's lead-by-example efforts to combat racial discrimination, Hirsch criticizes Robinson as few have done in recent years. "Robinson could not recognize that any great social movement needed a continuum of voices—the militants who would prod a reluctant country to change, and the conciliators who tried to find common ground among hostile factions," he writes. Mays the conciliator (who termed Dr. King "my president") may not have issued statements to the press and carried signs at rallies, but whenever the child of a bigot caught a fly ball and said, "Hey, I'm Willie Mays!" Jim Crow waned.

In both instances, Hirsch's arguments are persuasive. And it's important for Mays's authorized biographer to set the record straight. But these criticisms of Mays were made nearly half a century ago, and time has exposed the absurdity of both. Dwelling on them to the extent Hirsch does may be the surest sign that even as Mays approaches his eightieth birthday, he still elicits a protective impulse from those around him.

For Hirsch, Mays's core character was most vividly displayed on August 22, 1965, when he stopped a potential riot at Candlestick Park after the Giants' Juan Marichal assaulted Dodger catcher Johnny Roseboro with a bat. The fight between the rival teams was genuine, and the fans were braying for more blood than the stream flowing from the two-inch gash in Roseboro's skull. Mays somehow reached Roseboro, led him to the Dodger dugout, and held him while the Dodger trainer examined the wound. The fighting eventually ceased, and when play resumed, Mays, in a uniform speckled with Roseboro's blood, hit a three-run homer off Sandy Koufax to win the game.

Asked why he pulled Roseboro from the fray, Mays said, "I hate to see good friends fighting like that." Years after all pretense of innocence was gone, Mays still saw baseball players as family. He still played every day, no matter how banged up he was, out of loyalty to his teammates and to the fans who paid to watch him. Above all he remained a peacemaker, a gentle soul for whom baseball was not just a source of income, but a medium for sharing joy. As Hirsch summarizes: "Baseball has always been an imperfect institution, but as much as anyone, Mays evokes its highest ideals."

Top that, A-Rod. ■

Baseball Memoirs

Nicholas Frankovich

The Game from Where I Stand: A Ballplayer's Inside View
by Doug Glanville
Times Books (2010)
$25.00, hardcover. 304 pages

The Bullpen Gospels: Major League Dreams of a Minor League Veteran
by Dirk Hayhurst
Citadel Press (2010)
$14.95, paperback. 340 pages

Travel is rewarding but hard. Sometimes it's impossible. So you resort to maps. Is there some place you're curious about and would like to set foot in but can't? One of the things you do is look at maps. Some maps are like the final standings, reflecting the ups and downs of a long season, giving you a bird's-eye view of the grand sweep of the larger region and providing context. Other maps—think Pitch f/x and all it tells you about the trajectory and speed of hundreds of thousands of regular-season pitches and then how it pinpoints their destination in the direction of home plate—show you the fine details, how a particular

street curves to conform to the bank of a river or how it's punctuated by cross streets, the occasional major thoroughfare, and, here and there, a narrow alleyway or cul-de-sac.

Most of us know baseball from box scores, line scores, various arrangements of numbers—from the equivalent of maps. Not entirely from maps, but they probably mean more us than to most professional ballplayers, who tend to know their way around their own workplace. If you spend your workday between the white lines, you come to know the lay of the land. You may get engrossed in maps of it too, but your experience of it on the ground, in all its four-dimensional, living, noisy reality, is going to make the stronger impression. It's something you share with your peers but not the rest of the world, because you can't, although you could write a baseball memoir and try.

If you're a ballplayer, you probably think more, for example, about how this or that kind of glove webbing might work for you than you do about UZR and whether that or Plus/Minus is a fairer indication of your fielding performance. So what do you do? Go to a sporting-goods store, like a civilian? Browse online at the Rawlings site? It turns out you shop for and select your glove on glove day in spring training, when the manufacturers set up shop in a makeshift exhibit area in the parking lot of the complex or on the ballpark concourse. Doug Glanville in *The Game from Where I Stand: A Ballplayer's Inside View* describes the atmosphere as that of a flea market. He ended up going with an H-Web Rawlings. Jimmy Piersall, the Cubs' minor-league outfield coach, dissuaded him from the Trap-Eze, which Piersall had a reason (read the book if you're curious) for dismissing as "style before substance."

Glanville, who studied engineering in college, applied his analytical skills to his job between the white lines. "If there were a pie chart illustrating how players prepare for their opponent," he writes, "scouting reports would be only one sliver."

"Thank goodness," writes Glanville, who retired in 2005, "I didn't have to choose from the 2009 Rawlings collection. There are sixteen types of gloves on its Web site. Can someone tell me the difference between a Double Post Triple Bar and a Horizontal Bar X-Laced? Ordering a Rawlings glove has gotten dangerously close to ordering at Starbucks." The appeal of what Glanville does here and throughout the book is that, to those of us who are curious about this foreign country, he not only gives us a taste of some of its idiosyncrasies and local customs but also joins us when we step back from all that for a moment, shake our heads, and question whether we could ever really assimilate to the culture and live there successfully. Glanville shakes his head along with us, reminding us that he too entered it as an outsider, just like us, and that even now, having passed through it and come out on the other side, he still finds a lot of it to be strange and wonderful.

Among his peers Glanville is exceptional for having a degree, as most players who are drafted out of college sign before completing their senior year. He studied engineering at the University of Pennsylvania and brings to his writing, as he brought to the diamond, an aptitude for analysis. Don't put away those maps yet. As a player, he took them seriously, looking at the game along lines that the average keyboard-jockey baseball fan would appreciate. His playing career spanned the transition from VHS tapes to digital technology, which enabled him to study onscreen his at-bats against particular pitchers. "If there were a pie chart illustrating how players prepare for their opponent, scouting reports would only be one sliver" is how he puts it. After finally identifying a pattern in Randy Johnson's pitch selection, he correctly guessed slider in real life once and got a base hit and two RBIs off him. And he studied the spray charts of opposing hitters because

> as a center fielder, I was captain of the outfield and responsible for positioning my left fielder and right fielder as well as myself. Mindful of this added duty, I tackled the charts as if I were studying for a final exam in my Transportation Systems Engineering course in college. Good thing. Some of my teammates blew off their homework from time to time.

The book is like that—a carefully constructed thing that works because the author knows what he's doing. When he tells about his personal life, is he offering it as an example of how the game exerts influence on the world outside the lines and, in turn, is influenced by it, the subject of his discourse in both cases being, ultimately, the game? Or is the idea that, no, life is the thing and, to paraphrase Jacques Barzun, whoever wants to know the heart and mind of Doug Glanville had better learn baseball? I think it's the former.

That's not to say that Glanville loves the game more than he values his family and friends. Rather, it's that his good manners prevent him from assuming that you'd be more interested in his life than in what, as an insider, he can tell you about pro ball. His job and the declining health of his father competed for his attention. For Glanville the man, that's not primarily a baseball story. But for Glanville the author of a baseball book it is. In baseball, what's important about his father's illness is the aspect of it that's baseball-relevant. At a closed-door debriefing while with the Texas Rangers, Glanville and his teammates learned from manager Buck Showalter all manner of potentially useful information, including an alleged domestic incident that, Showalter insisted, would render a Tampa Bay player "mentally unavailable" on the field.

Glanville writes from his own perspective but maintains eye contact with his readers, appreciating their perspective as baseball fans and adjusting his delivery accordingly. In that, his approach is like Jim Brosnan's in *The Long Season* (1960) and Jim Bouton's in *Ball Four* (1970), although the style of each is distinct. For Pat Jordan in *A False Spring* (1975), on the other hand, baseball is more the setting than the subject, which is his life as a young man—also a fair approach, and he follows it to good effect. The distinction between the two kinds of baseball memoir may be worth keeping in mind. Although, when you think about the universe of baseball memoirs long enough, you realize that none of them could ever really be so simple. Inevitably, they're all the product of both the personal and the professional. Classifying them as one or the other is a matter of noticing which genes are dominant.

Because of its tone, your first thought about Dirk Hayhurst's recent contribution to the genre, *The Bullpen Gospels: Major League Dreams of a Minor League Veteran*, might be that it's more about Hayhurst than about baseball, but it isn't. True, Hayhurst skates lightly over in-game tactics, the fine points of pitching mechanics, and the like, but the autobiographical material he provides is sketchy too. He includes just enough about himself to advance the dazzling portrait he paints, in bold strokes, of pro ball, mostly in the minors. In the foreword he indicates that his book is not on the subject of Planet Baseball but rather is about how life here below is affected by the gravitational pull of this heavenly body. What he really means is that he's no cartographer. He's an artist. A certain kind of artist, actually—inspired and intuitive, as opposed to disciplined and exacting, although in fact the two categories aren't really mutually exclusive. In this season's contest of the baseball memoirs, Hayhurst plays Mozart to Glanville's Salieri, a theme I might be tempted to press if the comparison weren't so unfair to Glanville, so forget I said that.

Glanville's book is built, like a house. Hayhurst's is secreted, like so much sweat. Glanville by temperament is formal and button-down—his manager in single-A ball had to tell him to stop calling him "coach," drop the formality. Hayhurst has some instinct for decorum in him too, but his wry fascination with the frat-boy grossness of minor-league culture prevails, and that's what he writes about, in the main. Unlike Glanville, he forgoes serious discussion of technique. He got burned when, as a rookie in an audience of minor leaguers listening to Trevor Hoffman share his wisdom, he asked, during the Q and A,

> "what kind of mantras or psychological routines [do] you operate under? Do you have beliefs that you inculcate yourself with to remain focused and directed as a player?" I thought the question was deep, intelligent, and perceptive. Surely, a man of his greatness was impressed by it. Hoffman stared at me as if I just asked him what testicles were.
>
> "Whoa, who, whoa there, buddy. I don't know about all those big words. 'Mantras' and 'inculcating,' whew!" he chided, smiling at the rest of the guys as if to imply, *what's with this guy, huh?* Brent's head dropped, Ox snorted. "Why don't you try and keep it down to a level we can all understand. We're just ballplayers here, pal."
>
> ⁂
>
> Later in the day, I took the mound in a scrimmage against the Cubs. . . . I got blasted. . . . When the last out was made, I went into the dugout and plopped on the bench, took off my hat, and hung my head. Ox came over to me, slapped one of his big meat hooks on my shoulder, and asked, "So, what mantras or psychological routines did you inculcate yourself with to get your ass kicked out there today?"

Living during the offseason in his grandmother's house in Canton, Ohio, he's visited one day by some guy who's there to drug-test him, to make sure he's not juicing. I hadn't thought about this before, but, to prevent offending players from submitting urine samples not their own, you need a witness. So the guy follows Hayhurst into his grandmother's pink bathroom. As Hayhurst works on producing his sample, he asks him how he likes his job.

The book is one long series of related anecdotes told by a comic genius. The spirit here, part *Bull Durham*, part *Animal House*, is conveyed in a droll manner, which makes everything funnier. Some of the characters are composites ("for the benefit," Hayhurst explains, "of those who may not want to deal with any extra drama this book brings their way"), and the episodes, "based on actual experiences," have a fictionalized feel that suits the book's definition of itself just fine and that discerning readers will take as their cue that, no, this is not *Ball Four*.

Hayhurst's charm may put you in mind of Mark Twain or Garrison Keillor, whose success as humorists is bound up with their affection for their characters. That someone makes you laugh means that you have contempt for him—or that you like him. It all depends. Hayhurst's crew are a piece of work and, in the aggregate, conform to a type that is familiar enough and that for most men, at least in theory, triggers an instinctive response: I want to belong to that, I want to travel with them on the team bus and get sick of their company already and know they think of me, though they'd never say it, "He's one of us." Lionel Tiger in *Men in Groups* (1969, 2005) studied male bonding, a term he coined, or at any rate popularized, and he reported his observations as anthropological insights. What Tiger told about, Hayhurst shows.

COURTESY OF THE SAN DIEGO PADRES

"The burden of the player," Dirk Hayhurst writes, "isn't to achieve greatness, but to give the feeling of it to everyone he encounters. It was wrong of me even to try to separate life and the game."

Membership in a fraternity, which, in one of its aspects, pro ball is, tends to raise your status in the eyes of women you'd like to impress. In turn, your standing with them tends to affect how you rank with your brothers in the fraternity. It's a feedback loop. Glanville makes some interesting observations in this regard. He makes note, as do his peers, of the beautiful women who are the wives or girlfriends of various players. And he soon finds that his own major-league credentials enable him to do as well. What's going on, he explains, though he doesn't use this analogy, is that along with the major-league uniform comes a medal from the Wizard of Oz, who, pinning it on the player's chest, declares, "You're the man," thereby transforming the Nutty Professor—to borrow from another movie—into Buddy Love. Sign a major-league contract and

> suddenly you have a free pass to social acceptance. It gets you into those inner circles; it most certainly will get you into the good graces of the girls who once seemed out of your league. They may have been unapproachable because they didn't think you were cool enough, but more than likely you struck out or never even took a swing because of your own insecurity, your conclusion that you had no chance.

What there is of that dynamic in Hayhurst's world is for the most part commensurate with that world's minor-league character. From what we see and hear of them, the women in the lives of his teammates are a shifting cast of characters, sometimes colorful (does the hermaphrodite count?) but seldom stunning. Actually, the only thing in that department that his buddies are stunned by comes when they explain to him the superstition that sleeping with a fat girl or playing with a hangover will pull you out of a slump. In a Tim Tebow moment, Hayhurst divulges that he doesn't drink and he's saving himself for marriage. Wow. "The bullpen was staring at me as if I walked into a party I wasn't invited to and the record skipped."

> "Are you religious or something?" Slappy asked.
>
> "Baseball god religious or real religion religious?"
> "Real religion religious."
>
> "Yes."

That's all we hear from him on the subject of religion—his reticence is eloquent. It's at least as powerful as anything Tebow, bless him for trying, accomplishes

through words, whether spoken or painted on his face, although the comparison is not entirely apt, as Tebow's message, besides being intentional, is theologically pointed and specific.

More disturbing to Hayhurst's peers is his declaration that he doesn't drink.

> Your sex life is private if you want it to be, and I could always cite religion to make the skeptical questioning stop. The drinking thing, however, was a male-bonding ritual. Tossing back a brew with the crew was part of donning the uniform, and guys would frequently remind me that even Jesus put down a glass of wine now and then. The fact is, a lot of guys, baseball or otherwise, don't feel comfortable around a guy who won't throw one back occasionally. Baseball and drinking go hand in hand.

The book ends with Hayhurst at his wedding, married to a woman he met apparently through an online dating site. They communicated by e-mail and phone for months before meeting in person, after the season was over. In his speech to their wedding guests, Hayhurst talks about Trevor Hoffman, with whom, we learn, he eventually developed a relationship of mutual respect. The last time they spoke, Hayhurst asked him,

> "Do you remember a few years back, during spring training, coming out to speak with the minor league pitchers?"
>
> "Yeah, I think so."
>
> "Do you remember being asked a certain question about psychological routines and inculcating yourself?"
>
> He looked at me funny, then smiled, "Yeah, I do remember that. You were the one who asked me that huge question. Now that I know you, it doesn't surprise me at all!"

So Hayhurst finally gets the girl, as in the conventional happy ending, but what distinguishes this tale is how that outcome is linked to that other dimension of male psychology—to the need for, even before a bride, a big brother, who gives you his approval in return for your admiration and says, though without saying it, of course, OK. You're OK. You're one of us. ■

Corrections

The National Pastime: Monumental Baseball—The National Pastime in the National Capital Region, SABR convention journal, 2009

"Leon Allen Goslin: The Wild Goose of the Potomac," by Cort Vitty, 43–45.

Page 45: Reference to "the decisive seventh game" of the World Series is incorrect. It should read "sixth." The Tigers won the 1935 World Series against the Cubs, four games to two.

***The Baseball Research Journal*, volume 38, number 1, spring 2009**

"Low Risk—Any Reward?" by Eric Seidman, 103–5.

Page 103: Reference to the "2004 Washington Nationals" was incorrect. It should read "2004 Montreal Expos."

***The Baseball Research Journal*, volume 38, number 2, fall 2009**

"What Inspired 'Take Me Out to the Ball Game'?" by Steven A. King, 57–58.

Page 57: The caption should read: "During the Giants' first home series, this ad for the four games appeared in the weekly *New York Clipper*. Jack Norworth's 'Take Me Out to the Ball Game' was copyrighted about a week later, on May 2, 1908." Endnotes were ordered incorrectly. A full, corrected version of the article appears on the SABR website at SABR/Publications/Journals/Addenda.

"Ty Cobb's Splits" by Trent McCotter, 51–56.

Page 52: Table 3, Cobb's Splits by Ballpark. The table was truncated. The full version appears on the SABR website at SABR/Publications/Journals/Addenda.

"The Sport of Courts: Baseball and the Law" by Ross E. Davies, 59–78.

Page 62: The eight White Sox players were indicted in 1920 and reindicted in 1921 not for conspiring to throw the World Series but, more precisely, for fraud.

"Arbitrator Seitz Sets the Players Free" by Roger I. Abrams, 79–85.

Page 85: Bud Selig in 1994 was not commissioner but chairman of the Executive Council of Major League Baseball.

"The Origin of the Baseball Antitrust Exemption" by Samuel A. Alito Jr., 86–93.

Page 86: The name of the organization is National League of Professional Baseball Clubs (not Professional Players, as appeared in the subtitle and in the first paragraph). The error is the editor's, not the author's.

Page 92: The case number is 259 U.S. 200.

Contributors

JEFF ANGUS, a baseball writer and management consultant, is the author of *Management by Baseball: The Official Rules for Winning Management in Any Field* (HarperCollins, 2005).

MARK ARMOUR, author of *Joe Cronin: A Life in Baseball* (Nebraska, 2010), writes from Corvallis, Oregon.

DAN BASCO is a graduate student and teaching assistant in the statistics department at the University of Akron.

EDWARD BELTRAMI is professor emeritus at Stony Brook University.

PHIL BIRNBAUM is editor of *By the Numbers*, the newsletter of the SABR Statistical Analysis Committee. He lives in Ottawa, Canada.

CLIFFORD BLAU, a retired CPA living in White Plains, New York, is a frequent contributor to SABR publications.

JOHN BURBRIDGE is a professor at the Martha and Spencer Love School of Business, Elon University.

JEFF BURD, an Orioles fan since May 27, 1979, works as a high-school reading specialist. His blog is at http://seeker70.wordpress.com.

BILL CARLE is chairman of the Biographical Research Committee of SABR and a long-suffering Kansas City Royals fan.

DAVID FLEITZ, author of *The Irish in Baseball: An Early History* (McFarland, 2009), is a contributor to SABR's Baseball Biography Project.

VINCE GENNARO is a consultant to MLB clubs and the author of *Diamond Dollars: The Economics of Winning in Baseball* (Maple Street Press, 2007). He teaches sports-business management in graduate programs at Columbia University and Manhattanville College. He is executive director of Manhattanville's Sports Analytic Institute.

STEVE GIETSCHIER is university curator and assistant professor of history at Lindenwood University. He is the former editor of the *Complete Baseball Record Book*.

ANDREW GOLDBLATT is author of *The Giants and the Dodgers: Four Cities, Two Teams, One Rivalry* (McFarland, 2003) and contributed the entry on the Giants to the *Encyclopedia of Major League Baseball Clubs* (Greenwood Press, 2006). His book about current major-league umpires is expected in early 2011.

JIM KREUZ was introduced to SABR by former major-league pitcher Tim McNamara, whose high-school catcher was a kid named Gabby Hartnett, whose shortstop at Fordham was Frankie Frisch, and whose best friend on the Boston Braves was an outfielder named Casey Stengel.

LEE LOWENFISH, a member of SABR since 1978, is author of *Branch Rickey: Baseball's Ferocious Gentleman* (Nebraska Press, 2007), for which he won the 2008 Seymour Medal. His first book, *The Imperfect Diamond: A History of Baseball's Labor Wars*, originally a collaboration with the late Tony Lupien, has recently appeared in a third, expanded edition (Nebraska, 2010).

JOHN MANUEL is coeditor of *Baseball America*, where he has worked since September 1996. He has covered everything at the magazine and website from college baseball and prospect rankings to the Olympics and the draft.

JAY MENDELSOHN is a retired associate professor of computer science at Hofstra University.

WYNN MONTGOMERY, author of the biography of Willard Nixon for SABR's Baseball Biograph Project, has seen ballgames in every major-league city except Arlington, Texas, and in almost fifty minor-league parks. He is coeditor, with Ken Fenster, of *The National Pastime: Baseball in the Peach State*, the 2010 SABR convention journal.

JEFF OBERMEYER earned a master's degree in military history from Norwich University in 2009, where he wrote on the relationship between Major League Baseball and the military during the Second World War. In the offseason he researches the history of hockey in his hometown of Seattle.

CHUCK ROSCIAM, a retired navy captain with 43 years of active service and an amateur catcher for more than forty years, is the creator of www.baseballcatchers.com. His baseball writing has appeared in *The Baseball Research Journal* and *The National Pastime*.

KEN SAULTER, a retired economist, writes from Ann Arbor, Michigan.

DAVID W. SMITH joined SABR in 1977 and has made research presentations at fourteen national SABR conventions, winning the USA Today Sports Weekly Award for his presentation in 2001. In 2005 he received SABR's highest honor, the Bob Davids Award. He is also the founder and president of Retrosheet.

STEVE STEINBERG, a frequent contributor to SABR publications, is author of *Baseball in St. Louis, 1900–1925* (Arcadia, 2004) and coauthor, with Lyle Spatz, of 1921: *The Yankees, the Giants, and the Battle for Baseball Supremacy in New York* (Nebraska, 2010).

JOHN THORN, editor of the journal *Base Ball*, is the author of many baseball books.

DAVID VINCENT, a longtime member of SABR, received the Bob Davids Award in 1999.

DAVID QUENTIN VOIGT, author of more than a hundred articles and reviews and of several books, including the three-volume *American Baseball* (1966–83), was recently awarded an honorary degree by Albright College, where he taught for more than thirty years.

BEN WALKER, a recent college graduate, is moving with his new wife and electrical-engineering degree from Seattle to Chicago, where he will look for work, a home, and Cubs tickets.

ARTHUR ZILLANTE is assistant professor of economics at UNC Charlotte. He has been an avid baseball card collector since 1986.

JEFF ZIMMERMAN writes for Fangraphs, Royals Review, and Beyond the Boxscore.

RICHARD ZITRIN is a trial lawyer, law professor, and the author of three books on ethics and the law. He hired Jules Tygiel for his first post-college job and remained his close friend for thirty-eight years.

DON ZMINDA, a SABR member since 1979, is vice president and director of publications for STATS LLC. He is the author or editor of numerous sports books. A Chicago native, he lives in Los Angeles.

ERIC ZWEIG is a writer and an editor with Dan Diamond and Associates, consulting publishers to the National Hockey League. A baseball fan since Toronto received its AL franchise when he was thirteen, he worked for the Blue Jays ground crew from 1981 to 1985.