Analysis

**Not Your Grandfather’s Stats: Baseball Redefined**

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As Zack Greinke’s magical season rolled along, another [Kansas City Royals](http://topics.nytimes.com/top/news/sports/baseball/majorleague/kansascityroyals/index.html?inline=nyt-org) pitcher, Brian Bannister, excitedly tracked his teammate’s progress. With the Royals long out of the pennant race, it did not matter to Bannister how many victories Greinke compiled, or how many points he shaved off his earned run average. To Bannister, it was all about WAR.



Eric Risberg/Associated Press (Lincecum); Jamie Squire/Getty Images

*Cy Young picks Tim Lincecum, of the San Francisco Giants, and the Kansas City Royals’ Zack Greinke combined for 31 wins.*

That is an acronym for Wins Above Replacement, which measures how many more victories a player is worth than an average replacement who could be found on waivers or at Class AAA. It is not commonly talked about in baseball clubhouses, but to Bannister, it was relevant.

“I love WAR, because you’re not only seeing if a guy had 20 home runs and 90 runs batted in, but how good is he compared to other guys at his position?” Bannister said. “I thought Zack had a chance to be the first 10 WAR pitcher.”

Alas, Greinke just missed, posting a WAR of 9.4, the best in the majors this season but a half-victory behind [Randy Johnson](http://topics.nytimes.com/top/reference/timestopics/people/j/randy_johnson/index.html?inline=nyt-per)’s 9.9 mark in 2004. A WAR of 10 does not have resonance as a hallowed number in a sport with so many others. But it will be a goal for Greinke next season, whether or not the Royals contend.

“He loves challenges, and I think the numbers bring him more challenges in how to get better,” Bannister said.

Baseball is the ultimate numbers sport. There are so-called counting statistics (home runs, strikeouts, anything that can be compiled) and percentage statistics, like batting average and E.R.A. Increasingly, there are also advanced metrics that try to give a deeper understanding of who the best players really are.

The statistics revolution scored a major victory last week when won/lost record was largely ignored by voters for the Cy Young Awards. On Tuesday, Greinke [captured the American League award](http://www.nytimes.com/2009/11/18/sports/baseball/18pitcher.html) with just 16 victories, matching the lowest total for a starter who won the award in a nonstrike season. Two days later, the [San Francisco Giants](http://topics.nytimes.com/top/news/sports/baseball/majorleague/sanfranciscogiants/index.html?inline=nyt-org)’ Tim Lincecum set the bar even lower, [winning the National League award](http://www.nytimes.com/2009/11/20/sports/baseball/20cyyoung.html?ref=baseball) after posting only 15 victories.

Among the pitchers Lincecum beat was Adam Wainwright, who had more first-place votes and was 19-8 for St. Louis. He would have won 20 if his bullpen had held a five-run lead in his last start.

“It seems to me that the best pitchers won, and they might not have two or three years ago,” [ESPN.com](http://ESPN.com)’s Rob Neyer wrote in an e-mail message. “That said, I also believe that if the [Cardinals](http://topics.nytimes.com/top/news/sports/baseball/majorleague/stlouiscardinals/index.html?inline=nyt-org) hadn’t blown that big lead in Wainwright’s last start, he certainly would have beaten out Lincecum.”

That may be true because 20 victories, while an arbitrary number, is a well-established benchmark for excellence. But Lincecum’s victory was still significant.

“Five years ago, Lincecum wouldn’t have stood a chance in the voting,” Dave Cameron wrote at [fangraphs.com](http://www.fangraphs.com/), the site Bannister used to check [Greinke’s WAR](http://www.fangraphs.com/leaders.aspx?pos=all&stats=pit&lg=all&qual=y&type=6&season=2009&month=0). “He might not have even stood a chance a year ago. But there are clearly members of the Writers Association who are not clinging to the analysis that they grew up with.”

The Baseball Writers’ Association of America assigns two writers per league city to vote on the major awards. As more newspapers — including The New York Times — forbid writers to vote, and some newspapers fold or eliminate daily baseball coverage, the pool of voters changes.

The vast majority of voters are still traditional newspaper writers. But two writers from [Baseball Prospectus](http://www.baseballprospectus.com/), a Web site specializing in sabermetric analysis, also voted for awards this season. So did Keith Law, a former Baseball Prospectus writer who now works for ESPN.com.

“I think, whether the traditional baseball community wants to acknowledge it or not, the fan base and the media have finally embraced and immersed themselves in advanced statistics,” Bannister said. “I think you’re going to see more and more people brought up with that influence. I really just think that the future of the game is in the numbers.”

Even baseball card companies are catching on. Since 2004, Topps has listed O.P.S. (combined on-base and slugging percentage) on the back of its cards. Expect that statistic to be mentioned this week, when the winners of Most Valuable Player awards are announced.

The overwhelming favorites are Joe Mauer of the [Minnesota Twins](http://topics.nytimes.com/top/news/sports/baseball/majorleague/minnesotatwins/index.html?inline=nyt-org) and Albert Pujols of the St. Louis Cardinals; the only suspense is whether each will be unanimous. Mauer and Pujols led their leagues in O.P.S. — and, unlike Greinke and Lincecum, they played for postseason teams.

Because of the word valuable in its name, the M.V.P. is harder to define than the Cy Young Award, which simply honors the best pitcher. The last time both O.P.S. leaders captured the M.V.P. awards was 1994, a strike-shortened season with no playoffs. But O.P.S., despite its relatively recent ascension in popularity, is probably the most accurate measurement of the league’s most productive hitters.

Thirteen of the 17 players who led a league in O.P.S. from 1946 through 1970 eventually made the Hall of Fame. (The exceptions were Dick Allen, Bob Allison, Norm Cash and Al Rosen.) Yet only once in that time did both O.P.S. leaders also win the M.V.P. awards — in 1946, with Stan Musial and [Ted Williams](http://topics.nytimes.com/top/reference/timestopics/people/w/ted_williams/index.html?inline=nyt-per).

Revising history, with a greater emphasis on modern metrics, would surely change many award winners. But we do not have to look back very far. Take the 1990 A.L. Cy Young voting, when Oakland’s No. 2 starter, Bob Welch, beat the Boston ace, [Roger Clemens](http://topics.nytimes.com/top/reference/timestopics/people/c/roger_clemens/index.html?inline=nyt-per), whose E.R.A. was more than a run better.

Clemens had 82 more strikeouts and 23 fewer walks than Welch. Clemens allowed 7 home runs, Welch 26. Clemens held opponents to a .584 OPS, Welch to a .695. Clemens had a WHIP (walks and hits per inning) of 1.082, Welch 1.223. And so on.

The only real advantage for Welch was that he won 27 games and Clemens won 21. Yet Welch won handily.

Had the same race occurred almost two decades later, Welch almost certainly would have lost. And if Greinke and Lincecum had pitched in an earlier era, their performance would not have been appreciated as it was last week. The perception of excellence has changed greatly, and come into sharper focus.