

# The Strikeout Ascendant (and What Should Be Done About It)

by Steve Treder

Major league baseball fans in 2014 witnessed something historic: A batter was more likely to strike out this year than in any other season in the long history of the sport, at a rate of 7.70 times per team per game.

Now, before we congratulate ourselves on having been present at some particularly rare event, let's bear in mind that the whiff rate of 2014 broke the previous record that had been set way back in...2013. And the 2013 record broke the all-time high-water mark achieved in 2012. Which had smashed the standard set in, yes, 2011...and so on. Indeed, an all-time strikeout frequency record has been set in *every* major league season since 2008.

That 2008 rate (6.77) eclipsed the record that had stood for an epoch of...seven years. The 2001 mark (6.67) beat the record set in 1997 (6.60), which was the culmination of another little stretch of year-in-and-year-out strikeout record-setting that encompassed 1994, 1995 and 1996 as well as '97. It isn't until we get back to that 1994 record (6.18) that we finally find one breaking a previous record that had stood for a long time: since 1967, when batters whiffed at a rate of 5.99 per team per game.

Thus, what we've seen in 2014 isn't something unique to this year; rather it's the continuation (though, perhaps also the acceleration) of a historic trend that's been rolling along for two decades.

Why is this happening? And what would the (apparently likely) extension of this tidal wave of Ks into the future mean for the sport? To answer these questions, we need to understand how it is that we got here. So let's embark on a little history of strike three.

For comparative purposes, it makes sense to begin our tour not in the dim original mists of 1869 or 1876, but rather at the point of physical placement of the key protagonists (batter and pitcher) that still abides: 1893, when the distance between home plate and the pitching rubber was set at 60 feet, six inches.



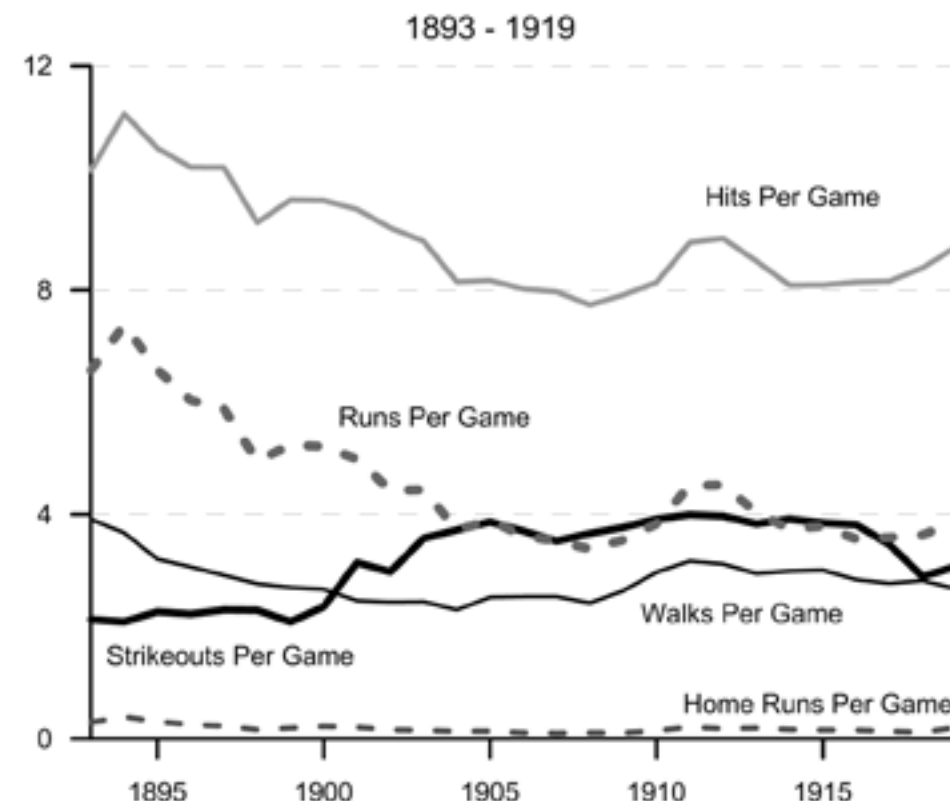
In Figure 1, we see the annual rate of major league strikeouts per team/game from 1893 through the present day. What becomes clear right away is that the long-term trend is distinctly upward. Thus, the first conclusion we can draw is that whatever fundamental structural push that's currently driving strike three to become more commonplace isn't new, but is instead something of an eternal fact of baseball life.

But that isn't all we see. It's also clear that this long-scale effect hasn't held a constant pace. In addition to minor year-to-year up-and-down fluctuation, history has presented a couple of fairly long periods in which the strikeout rate stabilized at nearly imperceptible incremental growth. And, most interestingly, we see that in opposition to the overall rise, there have been two episodes of distinct decrease in K rate, the first occurring in the late 1910s/early 1920s, and the second from the late 1960s to the mid-1980s.

We know, of course, that in baseball (as in all the rest of the world), change is the only constant. Changes in playing conditions, rules, tactics and strategies have always been afoot. Let's examine the strikeout rate through the various eras within the context of particular conditions, rules, tactics and strategies, as well as within the context of the other key outcomes to which strikeouts relate: runs, hits, home runs and bases on balls.

#### 1893-1919: The K Rises, then Falls

The term "Dead Ball Era" is generally meant to describe the period from 1901 through 1919. While mostly correct in associating a light-hitting, low-scoring mode of play with the softer rubber-centered baseball, in fact, the cork-centered "lively" baseball was introduced in 1911, and moreover, the rubber-centered "dead" ball was in use during the very high-scoring 1890s. So it's clear that while the resilience of the ball itself was a factor in determining the way the game was played, other issues were important, as well.



The major factor causing the drop in hitting and scoring and the sudden rise in strikeouts that took place in the earliest years of the 1900s was the adoption of the foul-strike rule (in 1901 in the National League, and 1903 in the American). But we see that following the stratospheric peak of 1894, hitting and scoring had been in decline across the 1890s, while strikeouts had been holding steady at the very low rate of just over two per game. So it's evident that general improvement in pitching technique (as pitchers adapted to the 60-foot, six-inch distance) as well as, especially, fielding (including gloves and positioning/relay tactics, reacting to the harder-hit-ball environment) were already underway before scoring fully hit bottom.

But one thing held steady through this entire era: home runs were extremely rare. The heavy hitting of the 1890s was contact-oriented, with lots of singles, doubles and triples, but few homers; through the entire decade only one batter hit as many as 20 in a season (Buck Freeman with 25 in 1899). The intermittent bump in hitting and scoring that accompanied the arrival of the cork-centered ball in 1911-12 was propelled by line drives, not big flies, and as pitchers re-established dominance across the 1910s (by ardently exploiting the spitball and other foreign substances, and also by more liberal deployment of relievers) the home run remained an extremely infrequent outcome.

And neither did the strikeout become common. After the big jump in the early 1900s, strikeouts stabilized at just under four per game and held steady until the late 1910s; interestingly, through those years a strikeout was just about exactly as likely (or unlikely) an occurrence as a run. For all its turbulence, from the beginning of this period through its end, one batting ethos remained dominant: to strike out was to utterly fail. Putting the ball in play was always the primary objective.

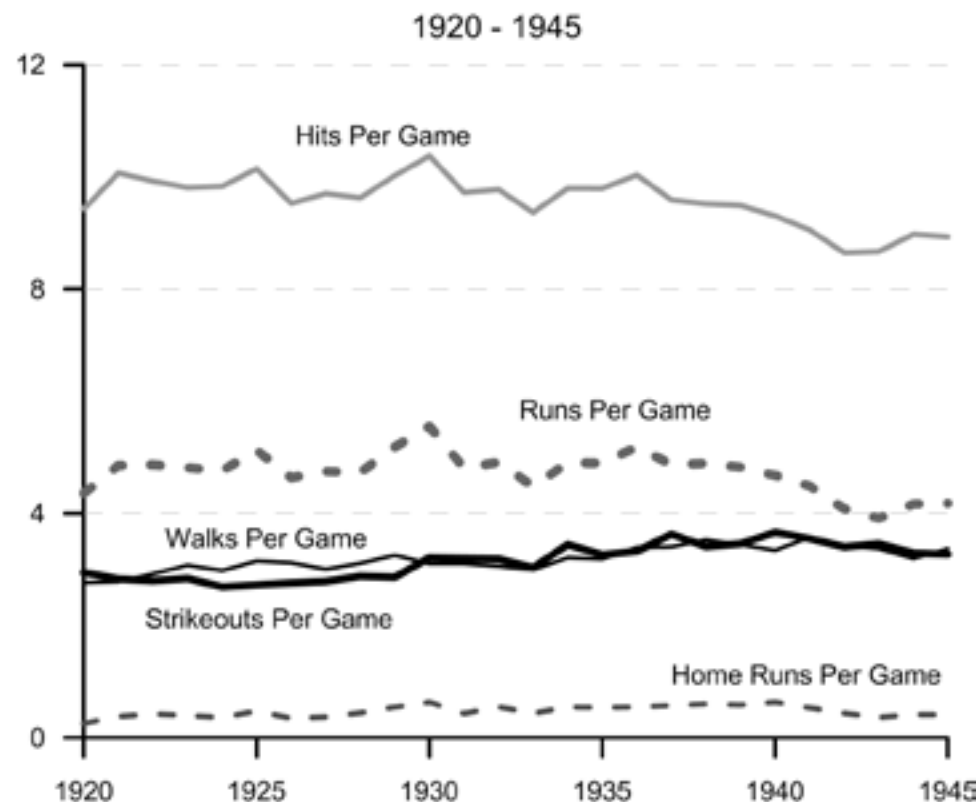
Fielding, despite its improvements, remained difficult, with bumpy fields and rudimentary gloves, so to fail to challenge fielders was to give the defense just what it wanted. And, in a circumstance with the home run nearly absent, long-sequence offense was the only way to generate runs, so the cost of a strikeout was additionally magnified. All of the most celebrated star hitters of this period, from Billy Hamilton and Ed Delahanty, to Nap Lajoie and Honus Wagner, to Ty Cobb and Joe Jackson and so on, shared a single characteristic: They almost never struck out. A very small number of hapless early 1900s batters struck out as many as 100 times in a season; they were the furthest thing from hitting stars, and most soon washed out of the majors.

At the very end of this era, a curious thing happened. In 1918-19, the strikeout rate suddenly dropped. There is no ready explanation for it, as the big rules/conditions changes that would begin in 1920 hadn't yet occurred. Perhaps in some mysterious way it had to do with the shortened season schedules caused by World War I, or perhaps it was just a bizarre fluke, or perhaps the boom in hitting success that we always consider as having begun in 1920 was actually somehow getting a head start. For whatever reason, batters struck out more rarely in 1918 and 1919 than they had since 1902.

#### 1920-1945: The K at Rest

Starting in 1920, of course, the baseball world fundamentally changed. The causes began with the ball itself, in two definite ways, and perhaps a third. First, the spitball and all other ball-doctoring techniques were outlawed. Second (as a means of enforcing the first, and also as a means of making the game safer following the beaming death of Ray Chapman), any scratched or stained ball was removed from the game and a fresh white replacement introduced. And third, new ball-stitching yarn was

introduced in 1920, and this (though it's debated) in combination with more modern manufacturing methods yielded a more tightly-wound, and thus harder, ball.



With the baseball easier to see and to hit hard, batters went to town. Leading the charge, as everyone knows, was the spectacular Babe Ruth. His towering success is often said to have convinced everyone else to eschew the traditional choke-up-and-put-it-in-play approach and swing for the fences, and while there's some truth to that, in fact, the freewheeling slugger remained a rarity through the 1920s and '30s. The great majority of hitters maintained a contact-focused approach. The main difference from the pre-1920 period is that with that the ball more readily squared up, batters just generally found more success.

The Babe never struck out as many as 100 times (his high was 93), but he fanned a lot relative to his peers, leading the league in strikeouts five times and finishing second in seven additional seasons. Several other prominent power hitters, following Ruth's lead, belted lots of home runs while striking out far more than any star before 1920. These included Hack Wilson, Jimmie Foxx, Hank Greenberg and Dolf Camilli; the latter three all tallied seasons exceeding 100 Ks yet were celebrated nonetheless.

Still, though the long ball was far more frequent than before 1920, the typical team was hitting a home run only about once every two games. This era's high scoring was mostly a product of lots of singles, doubles and triples. Strikeouts were down from their 1905-1917 peak, but they bottomed out in the mid-1920s and rose only slightly thereafter. Through this entire period of remarkable overall stability, strikeouts were always just about exactly as common as walks and never approached as many as four per game.

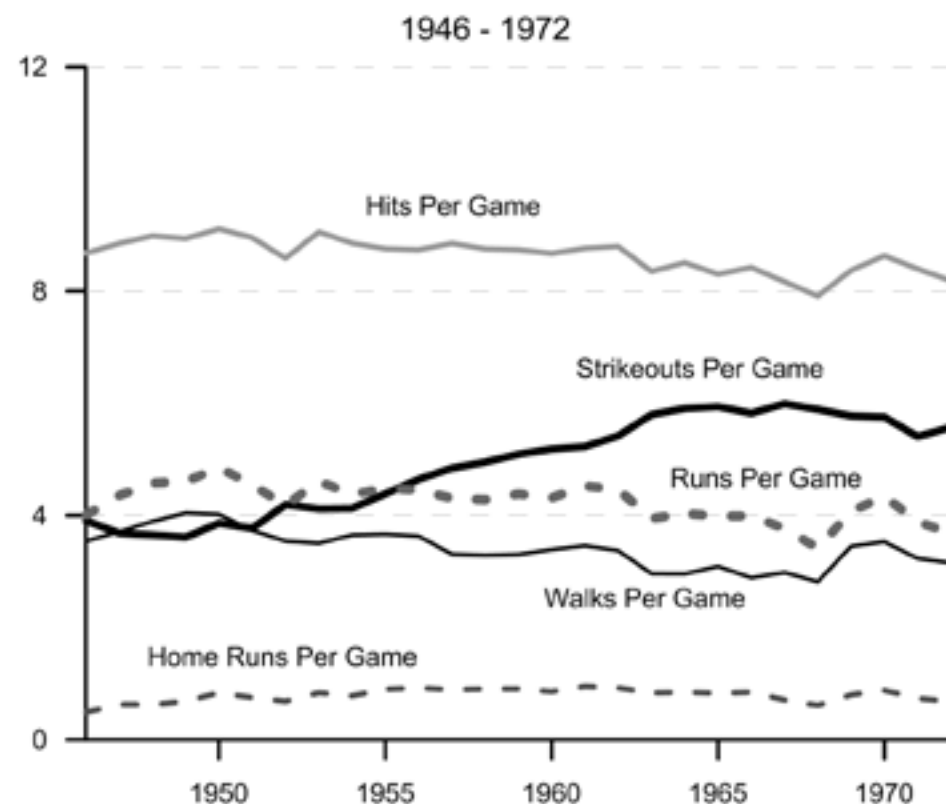
As the 1930s gave way to the 1940s, hitting and scoring declined. This was mostly a function of the inferior-quality baseball being used during World War II (effectively, a return to the "dead" ball), but the fact that the decline started before 1942 indicates it was more than that. Probably the major cause was the introduction of night baseball beginning in 1935; though night games were still rare, primitive lighting systems provided poor visibility and clearly favored pitchers.

An interesting figure in these years was Vince DiMaggio. Like his superstar brother, Vince was a top-notch defensive center fielder, but that's where the similarities ended. Joltin' Joe DiMaggio, though he hit with terrific power, was extremely old-school in that he practically never struck out. Vince, on the other hand, fanned with great regularity: He reached the century mark in Ks four times, and his 1938 total of 134 set a record that would stand for nearly 20 years.

Vince DiMaggio was no superstar. He had good power, but his batting average was poor. Yet unlike earlier journeymen with high strikeout totals, Vince D. was allowed to stay in the majors (perhaps because of his last name) and was deployed as a regular in eight seasons, while leading the league in K's six times. He may be seen as an indicator of a new tolerance for the strikeout. Putting up stat lines that were strange at the time but would be considered normal today, he was a harbinger.

### 1946-1972: The K Comes of Age

The 1947 season is often described as the beginning of modern major league baseball, because racial integration began then. Certainly that's a valid point. But beyond the issue of who was allowed to play, the period beginning in the late 1940s—and most definitely, the decade of the 1950s—also can be properly comprehended as the beginning of the modern *style* of major league baseball.



No statistic better illuminates the changing mode of play than the strikeout. The new style was power-centered, a game of heightened reward and heightened risk. In 1948 and 1949, the record home run rate was threatened, and then it was shattered in 1950. Newer still home runs-per-game records were established in 1955, 1956, and 1961. In the wake of all this swinging from the heels, batting averages declined, and strikeouts flourished as never before. The strikeouts-per-game record that had stood since 1911 was overtaken in 1952 and then broken again every year from 1955 to 1962. Vince DiMaggio's individual record of 134 strikeouts in a season was broken by Jim Lemon in 1956 (138), and that was eclipsed by Jake Wood in 1961 (141), and that by Harmon Killebrew in 1962 (142).

The causes of this dramatic new phenomenon were several. Fielding efficiency was steadily improving, and hitters were plainly dispensing with the traditional put-it-in-play approach. Pitching staffs were making ever-more sophisticated use of the bullpen, and pitchers working shorter stints worried less about pacing themselves and instead just threw harder. Team management advanced the dynamic, as field managers filled lineups and general managers stocked rosters with more power-oriented

hitters, and owners, sensing that fans did indeed dig the long ball, frequently moved outfield fences inward to stimulate home run totals.

Another factor was the changing nature of the athletes themselves. Particularly by the 1960s, arriving on the scene was a generation of young men who'd been raised amid unprecedented abundance, with better nutrition and health than ever before, and they were taller, bigger and stronger than ever before. Stronger hitters were prone to go for the bomb, and stronger, harder-throwing pitchers were prone to exploit this tendency and pitch for the strikeout.

And with all this going on, the Lords of Baseball threw gasoline on the flames with an ill-advised rule change prior to the 1963 season: enlarging the strike zone. The motivation was a desire to shorten the length of games, whose pace had been slowed by deeper counts and more frequent pitching changes. The bigger strike zone succeeded in speeding up the game, but it did so at the expense of batting averages and long-sequence innings. Scoring plummeted and strikeouts soared, with the 1962 K record rate being obliterated in 1963, and that record was surpassed again in 1964, '65 and '67.

The poster player for this era was Dave Nicholson. A big, strong (6-foot-2, 215-pound) right-handed-batting outfielder, Nicholson was signed out of high school in 1958 to a big-bonus contract by the Baltimore Orioles. Confident he would emerge as a slugging star, first the Orioles and then the White Sox gave Nicholson opportunities at the major league level, in which the youngster did indeed deliver home runs, but he was unable to hit for any kind of average, as he struck out at appalling rates. In two trials with Baltimore, Nicholson struck out 131 times in 286 at-bats, and in his one mostly-regular season for the White Sox in 1963, he blew away the record by fanning 175 times in 449 at-bats.

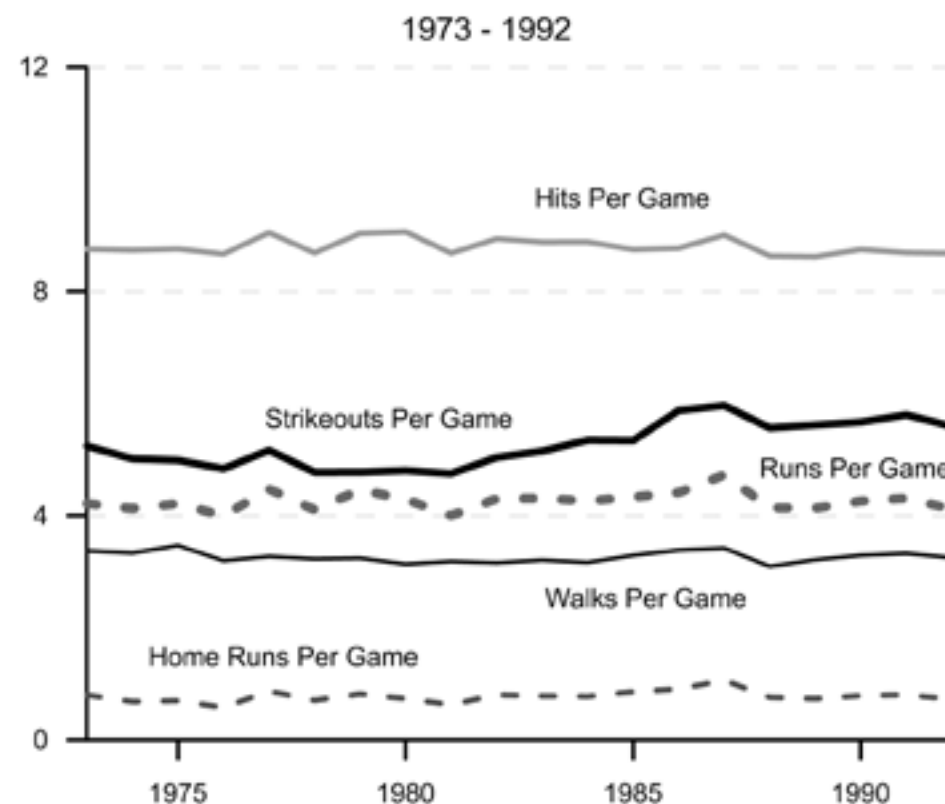
League-wide, by 1968 the shrinking run totals were agreed by all to have reached a crisis. For 1969, the strike zone was returned to its previous dimensions, and the height of the pitching mound was lowered. This yielded immediate scoring improvement along with strikeout reduction. However, the run-production effect was short-lived, as scoring declined from 1970 heights in 1971 and '72, prompting the American League to enact the extreme measure of the designated hitter rule beginning in 1973.

### 1973-1992: The K Meets Resistance

Removing pitchers from the batters' box in one of the leagues was bound to decrease strikeouts, but it wasn't the only way in which teams endeavored (wittingly or not) to reverse the trend of fewer balls in play. The wave of new ballparks arriving in the 1960s and early '70s tended to have larger outfield dimensions than those they replaced. Moreover, many parks (new and old) deployed artificial turf in this era. The combined effect was to make home runs more difficult to hit and to place a new premium on speed and defensive range. Teams responded by turning back the clock in roster and lineup-management choices, deploying fewer slow-footed sluggers than

had become the norm in the 1950s and '60s, and finding more room for faster, slimmer athletes who tended to focus on old-school contact hitting.

The erosion in batting averages was arrested, and despite fewer home runs, scoring stabilized. Not only was the 1967 strikeout peak never approached in the 1970s, strikeout rates following 1972 were similar to those of the late 1950s and very early '60s.



But as the 1980s unfolded, very gradually things began to change again. Artificial turf had proven unpopular with players and fans alike, and it was phased out of all but a few stadiums. Playing on grass, teams again felt safe deploying bigger and slower fielders, and hitters, seeing the advantage of upper-body strength, began to favor weight training as never before (and, of course, more than a few sought to optimize the weight training with the use of steroids).

The overall effect was incremental, essentially imperceptible at first, but by the mid-1980s it was apparent that the game was different than it had been in the '70s. Scoring was up only slightly, but the construction of runs was resembling that of the 1950s, as the 1985 home run rate (0.86 per game) had been exceeded only twice since

1962. The revived power game was coming at a price of revived strikeouts, as the rate in both 1984 and '85 was the highest since 1972.

Then in 1986, and especially in 1987, these trends rapidly accelerated. Power hitting and scoring jumped (indeed, in '87 an all-time rate of home runs was achieved, surpassing one per game for the first time), and at the same time strikeouts spiked, very nearly matching the peak rates of the mid-1960s.

It was commonly observed that hitters were achieving their newly shaped success with the apparently inadvertent assistance of umpires, who appeared ever-less willing to call the strike zone as defined in the rule book. Nearly nothing above the belt was a strike (though, curiously, pitches several inches off the plate low and away frequently were).

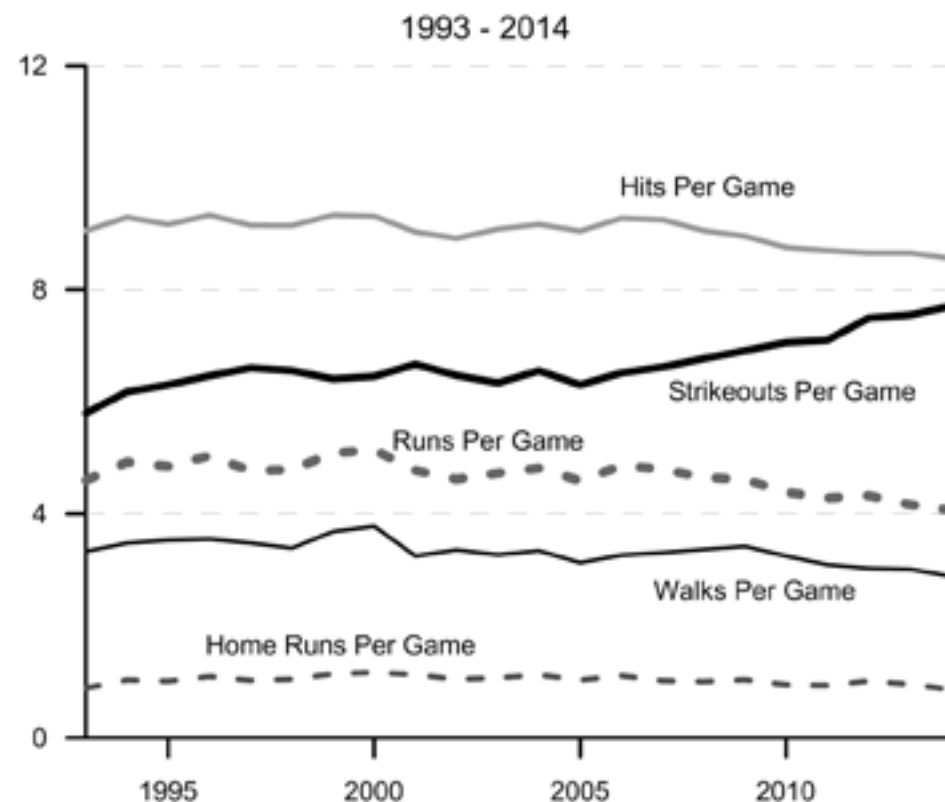
MLB cracked down prior to the 1988 season, issuing an edict to umpires to enforce the strike zone as the rule book intended or face replacement. Umpires complied, and the result was a sudden return to early-'80s levels of power hitting and scoring. Unable to take and rake with the confidence they'd gained mid-decade, batters struck out slightly less often, though the rate stabilized at a level distinctly higher than that of the 1970s.

Then, suddenly and dramatically, new changes arrived.

### 1993-2014: The K Triumphant

Exactly why the nature of the game transformed so rapidly beginning in 1993 was hotly debated at the time and has remained so ever since. What's certain is that it was not a single factor but the combination of many.

Hitters suddenly enjoyed success they hadn't known for decades. Scoring reached heights not seen since the 1930s, and the rate of home runs was unprecedented, with new league-wide records being set in 1996, 1999 and 2000. Yet all this raucous bashing was not accompanied by a decline in strikeouts: Instead, as we know, season after season, strike three was occurring at rates never seen before.



It was an altogether new form of baseball. To what degree it was purposefully engineered by MLB (presumably as a means of pleasing fans with an action-packed brand to counteract the depressing effects of the mid-1990s labor strife) is anything but clear. But in any case, the wave of new ballparks coming online as the decade advanced was distinctly hitter-friendly (and significantly, one was at mile-high altitude). And, though it's never been proven, much less admitted as a conscious decision by MLB, it seems nearly obvious that the liveliness of the ball increased beginning in 1993.

It's plainly obvious players were bigger and stronger than ever before, to whatever extent enhanced by steroid use. Added strength helps pitchers at least as much as it does hitters (as it had done in the 1950s and '60s), and the overall effect is more strikeouts along with more power.

Though it didn't capture nearly as much media and fan attention at the time, a key factor fueling the run explosion of the 1990s was a boom in the rate of walks. After having held fairly steady since the re-imposition of the traditional strike zone in 1969, the rate of bases on balls climbed in the 1990s, until in 1999 and 2000 it was approaching an all-time high.

Clearly, this particular phenomenon was not something desired by MLB's brain trust, as following the 2000 season, baseball cracked down on umpires again (as in 1988) to call the strike zone articulated in the rule book. And this time, MLB enforced the edict by introducing an automated system (often referred to as QuesTec, for the company supplying the technology) to measure umpires' strike-calling accuracy and provide objective feedback to them.

The impact of the new strike-calling protocol was immediate and significant. In 2001, the walk rate dropped back to historically normal territory. Though home runs remained at very high levels through the 2000s, and scoring remained quite healthy, the "silly ball" heights of 1999-2000 have never again been reached.

As for the strikeout rate: In 2001, it peaked, and then it dropped a bit and stabilized. But beginning in 2006, it began to climb again and has been climbing ever since into ever-higher record territory.

Significantly, beginning in 2010, the high rates of power hitting and scoring that had been sustained since 1993 began to wane, and walk rates also—gradually but steadily—have dropped. Through 2010, historically high strikeout rates were a feature of a high-scoring environment, but increasingly that's no longer the case. The dynamic currently underway bears more than a little resemblance to that of the mid-1960s.

Yet the shape of the game today is somewhat different from the '60s. Even with the recent decline, today's scoring is slightly higher than it was then, and so is the rate of home runs. But in the mid-'60s, when for the first time strikeouts far surpassed the frequency of runs, they never approached the rate of hits. In the 2010s, strikeouts are not just far more common than runs, they are now approaching the frequency of hits. We're nearing a point at which batters will be more likely to strike out than to reach base with a hit, a situation quite unlike anything ever imagined in history.

And today's strikeouts don't occur evenly throughout the game. Modern starting pitchers, though they fan more batters than they used to, are the least likely on the staff to rack up strike three, so hitters manage to put the ball in play with something comparable to historically normal frequency through the fifth or sixth inning. But once the starter is out (which he almost always is, rarely later than the seventh), a parade of relievers marches in, each working an extremely short stint. Most throw extremely hard (virtually every bullpen now includes multiple relievers who routinely exceed 95 mph), and produce strikeout rates never seen before.

For many decades, relievers have produced greater strikeout rates than starters, and in the modern era, relievers' increasing share of the innings load increases the impact of this effect. To illustrate: In 1954, relief pitchers worked 26.8 percent of the innings and contributed 28 percent of all strikeouts. By 1984, they were up to 30.1 percent of the innings and 32.7 percent of the Ks. And in 2014, relievers handled 33.5 percent of the innings and produced 36.7 percent of the strikeouts. Thus, today's strike threes are rarely achieved by heroic stars along the lines of Bob Feller, Nolan

Ryan or Randy Johnson, and instead are commonly recorded by essentially anonymous, replaceable relief pitchers who come and go from team to team and rarely sustain a long major league career.

### The K Lessons Presented

The tendency toward increasing rates of strikeouts, while certainly accelerating in the present day, is not uniquely modern but is instead an elemental function of the eternal battle between hitter and pitcher. While the dynamic has been interrupted from time to time, the default condition is weighted toward ever-more frequent strike threes. The factors favoring growth in strikeouts include a willingness of batters to swing for power at the expense of contact, but are mostly driven by the willingness—and, most significantly, by the ability—of pitchers to pitch for strikeouts at the expense of in-game endurance, as they are deployed in ever-shorter stints. The persistent decade-upon-decade increase in the size and strength of baseball players feeds both of these tendencies.

In discussions about this issue (and/or the issue of declining scoring rates in general), one often encounters an assertion to the effect of, "These things are cyclical. Left alone, current trends will revert toward historical equilibrium." However, baseball history provides no evidence to support such an assertion. Indeed, the historical record indicates that reversal of long-scale dynamics occurs only through imposition (whether intentionally or not) of significantly new conditions. Therefore:

*If no changes are undertaken, we will see ever-greater rates of strikeouts. As the rate of strikeouts overtakes the rate of hits, batting averages, base runners, long-sequence innings, and scoring will continue to decline.*

### So What?

There is no objective "good" or "bad" to any of this. One's preferred style of play is entirely a matter of aesthetics. If you're a fan who loves strikeouts and isn't so crazy about ground balls or singles, then bully for you. Baseball has never been better, and will only improve.

But for many fans—especially, it must be admitted, those of us who've been privileged to closely observe the game for many decades—the baseball we're watching today is distinctly suboptimal, and increasingly so. Today's game presents ever-fewer balls batted into the field of play, and therefore ever-fewer challenges to fielders to catch and throw the ball, as well as ever-fewer base runners facing the split-second decision to stay put or attempt to advance, to force a throw and risk a tag play. For fans like us, today's baseball is therefore less interesting than it once was, and can be. Make no mistake, it's still baseball, and we love it, but we know it can be better than this.

Therefore, fans like us aren't content to let the present dynamic roll along. We advocate the imposition of thoughtful and careful changes in rules/conditions, to do

what can be responsibly done to push against the inescapable and enduring pressure for ever-more strikeouts.

### Theoretical, but Not Practical

One thing that would reduce the ability of batters to hit home runs, while simultaneously increasing the value of speed, would be to move outfield fences outward. This generally happened in the 1970s, and the impact of increased contact-hitting was significant. However, given modern stadium configurations, this simply can't happen. Outfields are almost never bounded by easily-movable chain-link fencing these days, but are instead limited by permanent grandstand structures. Until a new stock of ballparks is constructed, the only direction fences can be moved practically is inward, and that would be precisely the wrong direction.

Another idea, definitely more radical, would be to move the pitchers' rubber backward from the longstanding 60-foot, six-inch distance. Even a modest increase, say six inches or a foot, would have the effect of reducing pitch velocity and increasing batter response time. The evidence from 1892 to 1893 is that the result would be a dramatic increase in hitting and scoring (though the evidence from the 1890s suggests it might not be enduring, as pitching technique adapted). However, stadium configuration again presents a practical obstacle: While it's easy to move the pitchers' mound in the middle of the diamond, bullpens in most stadiums (major and minor league) are frequently hemmed in to accommodate the traditional dimension. The difficulty and expense of remodeling bullpens (not just in professional baseball, but in all the amateur levels across the United States and in so many other countries, where every aspiring pitcher develops) would likely prove prohibitive.

### What Can be Done

Fortunately, several practically implementable options could be enacted by themselves or in some combination. These include:

1. *Reduction in the size of the strike zone.* The evidence from 1963 and 1969 strongly suggests this can have a dramatic effect. The downside risk is that along with stimulating hits, it would significantly increase the rate of walks (and long counts in general), and just about no one finds the base on balls to be an exciting play. Still, this obvious option merits serious consideration.
2. *Reduction in the size of fielders' gloves.* Today's players are better athletes than ever before, and year after year, decade after decade, they commit ever-fewer fielding errors. Steady improvement in fielding equipment has only aided this dynamic. Imposing incremental reductions in the size/efficacy of gloves would make fielding more difficult, increasing the value of balls batted into play, and increasing the value of fielding aptitude at the expense of power-hitting ability.
3. *Increase in the thickness of bat handles.* Bill James suggested this more than a decade ago, and it continues to be sensible. An increase in the minimum circumference

of the handle of the bat would render the lightning-quick "buggy whip" power swing less effective for all but the biggest and strongest of batters and thus would motivate a revival of old-school contact-first approaches, especially if fielding the ball were slightly more challenging than it is today. (Another method of rendering swinging for the fences less productive—and thus potentially motivating swinging for contact—would be to deaden the baseball. Simply doing this might have a similar effect as thickening the bat handle. However, the World War II "balata ball" experience indicates that a deader ball works entirely in favor of pitchers and offers nothing advantageous to hitters, and in itself provides no motivation for pitchers not to pitch for strikeouts. Even with a deader ball, a strikeout is safer for pitchers than a ball hit into play.)

4. *Increase in the typical length of pitchers' stints.* Of all the factors stimulating the historic increase in strikeout rates over the decades, the more frequent deployment of relief pitchers into shorter stints appears to be the most significant. (Ever-more frequent mid-inning pitching changes are also a major element disrupting the pace and flow of games.) There are two obvious ways this trend could be reversed: a limitation on the number of pitching changes per inning/game, and/or a reduction of the number of pitchers included on the 25-man roster. (The latter would have to be enforced by a requirement that a pitcher demoted to the minor leagues could not return for a significant time, such as 30 days.) Making it necessary for teams to deploy fewer pitchers per game would require pitchers to work longer stints, thus requiring them to pace themselves and more readily pitch to contact than simply overpower hitters.

Every change in rules and regulations brings risk of unintended and possibly negative consequences. Certainly that's true of each of these suggestions. But to enact no change, and to expect current (and long-term historical) trends to slow or reverse themselves, is the height of folly.

If MLB does nothing, we will continue to see the rate of strikeouts climb to ever-unprecedented levels, and therefore continue to see ever-fewer plays in the field and ever-fewer runners on the bases. Here is one voice raised in favor of striving to act to improve the quality of the game we love.

### References & Resources

- An excellent place to find an historical essay examining the ever-changing nature of baseball rules, equipment, conditions, and techniques is reliably found in any edition of the iconic baseball resource *Total Baseball*. The first (and perhaps still the best) is "The Changing Game," by Bill Felber (*Total Baseball*, edited by John Thorn and Pete Palmer with David Ruether, Warner Books, New York, 1989, pp. 259-277). Another would be "Our Game," by John Thorn (*Total Baseball Fifth Edition*, edited by John Thorn, Pete Palmer, Michael Gershman, and David Pietrusza, Viking, New York, 1997, pp. 3-12).



- The overarching historical text in *The Ultimate Baseball Book* is organized into decade-by-decade examinations of the peculiarities of each succeeding era through the 1970s (*The Ultimate Baseball Book*, edited by Daniel Okrent and Harris Lewine, with Historical Text by David Nemec, Houghton Mifflin, Boston, 1979).
- An unsurpassed contemporary observation of the state of baseball scoring in the 1960s, originally published in 1968, is Roger Angell's "A Little Noise at Twilight," found in *The Summer Game*, by Roger Angell, Popular Library, New York, 1972, pp. 195-210.