

Simple Secrets of Old-time Hitting

Going for home runs, too many modern players pile up strikeouts instead of making contact with the pitch!

With Barry Bonds on the verge of making history, I've been comparing the stats of some of the greatest hitters of baseball, and may have stumbled onto what may be a long lost secret of why some of the great hitters not only hit for Power, but for Average as well. Old guys from way back, guys like Stan Musial, Ted Williams, Enos Slaughter, Dixie Walker, Ralph Kiner, Pete Reiser, Joe DiMaggio and more were noted in my comparison.

Looking at some old tape of these guys swinging back when Hank Aaron and Mickey Mantle were young, and slightly older versions of Williams and Musial, it seems that each hitter swung the bat different than today's hitters. They displayed nearly a flat swing plane, flat wrist-roll and a low - rather than high - finish. This is vastly different from today's hitters' uppercutting arcs and high finishes. I've watched and compared many swings from then and today's hitters. After a thorough review, I embarked on some research in the Baseball Encyclopedia.

Old Sluggers

Player	Ht.	Wt.	Career HR	K %	Career Avg.
Stan Musial	6-0	175	475	6.3	.331
Ted Williams	6-3	205	521	9.2	.344
Frank Robinson	6-1	195	556	9.3	.294
Lou Gehrig	6-0	200	450	9.9	.340
Hank Aaron	6-0	160	755	11.2	.305
Billy Williams	6-1	175	428	11.2	.290
Mel Ott	5-9	170	511	13.1	.304
Willie Mays	5-11	160	660	14.0	.302
Babe Ruth	6-2	215	714	15.8	.342
Average:	6-0	184	563	11.1	.317

Modern Sluggers

Player	Ht.	Wt.	Career HR	K %	Career Avg.
Barry Bonds	6-2	225	754	15.7	.298
Albert Belle	6-2	210	381	16.4	.295
Frank Thomas	6-5	255	503	16.9	.303
Ken Griffey Jr.	6-3	205	588	18.0	.290
Mark McGwire	6-5	225	583	25.8	.263
Mo Vaughn	6-1	230	328	25.8	.293
Sammy Sosa	6-0	220	604	26.2	.273
Jose Canseco	6-4	240	462	27.5	.266
Average:	6-3	226	525	21.5	.285

* Modern Slugger stats through 7/30/2007

Some of this is incredible... over his 23-year career, Stan Musial struck out just 6.3 percent of the time, a phenomenal statistic for a slugger of 475 home runs. This is even more striking when compared with Ted Williams, generally considered the hitting maestro, who struck out 9.2 percent of his at-bats while slugging 521 home runs.

Through their careers (and to date) Mark McGwire had struck out 25.8 percent of his at-bats, Sammy Sosa 26.2 percent. A comparison was required between the old sluggers, who in the films displayed flat, low finish swings, and today's sluggers, who feature massive uppercuts with high finishes in terms of strikeouts and overall hitting efficiency.

This comparison clearly shows the old sluggers, using their flat-arc swings, struck out less and hit for higher averages. Today's sluggers were outdone by a wide margin in these categories.

Many reasons for this can be cited - today's better pitching, night baseball, the travel demands, bigger, stronger pitchers. But when examined by the thinking man, other factors cancel their plausibility. For instance, better pitching is actually neutralized by expansion and the livelier ball. Modern stadium lights blaring out high power wattage are at least equal to or in many cases, better than daylight. Quick air flight and divisional re-alignment neutralize the long, drawn out train travel from the early days.

Today, stronger, harder throwing pitchers are neutralized by stronger, faster swinging batters using lighter bats. Not only that, yesterdays hitters had some of the same nasty splitter and fastball pitchers that we see in Martinez, Clemons, Johnson, Carlton and Ryan of our era. Upgrade the old-timer's meat and potatoes diet with one of scientific nutrition and supplements could give the modern players an edge.

Regarding all these hypothetical reasons for building a case why modern hitters strike out more than ever before, it is best to concede the following: For well over 100 years, the game of baseball has been governed by an invisible yet remarkable astute system of checks and balances. This invisible hand has allowed the competitive balances to progress through the years as a constant. As per this system of checks and balances, it is reasonable to think that the diverse elements of the collective duel between the best pitchers and batters of yesteryear are remarkably, if not exactly, similar to today's hitter-pitcher duel.

If the pitcher-hitter duels had changed, the game would require a fundamental rule change, which has never been required. (The only rule modification in the pitcher-hitter duel has been lowering the mound from thirteen inches to ten in 1969, an adjustment that would indicate the old-time pitcher, not the hitter, had the upper hand).

The game hasn't changed. The rule has always been three strikes and you're out. It is the hitter's swing, specifically the arc that has changed. Since Hank Aaron's name is being thrown around more lately, lets use his 20 year career to look at the game's pitcher-hitter duel remaining constant. In 1955 Hank Aaron struck out 10.1 percent of his at-bats. Twenty years later, his last full season, with the Brewers in a new league, he struck out 10.96 percent. A year earlier, 1974, he struck out 8.5 percent. Certainly if the pitchers had gained leverage over the hitter, it would have shown up during that 20-year span. Yesterday's sluggers had better hitting statistics because the arc of their swings made for more contact.

REASONS FOR THE FLAT SWING

Musial, Ted Williams, Aaron, and Frank Robinson emerged from an era when the strikeout was considered a humiliating defeat. Each strikeout tolled ultimate failure in the mano-a-mano duel with another competitor, the pitcher, and was something to be avoided at all costs. Today, team's accept more K's if you can put up a share of HR's to counter them.

Too many K's meant the player was defeatable, that he hadn't learned his trade and was not qualified for the big leagues. A player striking out on a scale to exceed 100 strikeouts annually couldn't make it - he was farmed out quickly by managers who demanded the hitter move the runners with each at-bat, preferably with team hits - ground balls and line drives. Today, it is not uncommon for middle infielders to approach or exceed 90 to 100 strikeouts.

Thus, for security reasons, the old-time hitter treated the strikeout like the plague. And, to get on the good side of the manager, he concentrated on moving runners with team hits - line drives and ground balls. The formula was simple: hit line drives or ground balls, and avoid fly balls and strike three. Sounds very familiar if you've coached from LL to College... "team baseball" is the only concept to winning and teams that have built their offense solely around the Home Run have found very little success. They accomplished this by swinging on the same plane as the incoming pitch - level plane, almost a chop, in order to deliver the bat on a linear collision course with the pitch. Players like Musial, Mays, Aaron and Gehrig mastered it.

Today, major league security seems to come not from avoiding the strikeout and moving runners with team hits, but by hitting double-figure home runs in order to sign a three-year deal for seven figures. This is best accomplished with a low to high uppercut, which gets the ball into the air, and finish like Tiger Woods watching a tall three-wood. Today, any middle infielder authoring a dozen home runs annually is granted the leniency of 90 strikeouts. This makes the strikeout an acceptable part of modern hitting, rather than a statistical plague. And rather than being farmed out to perfect his skill, it is hoped he will learn on the job, for which he is getting paid handsomely.

The "uppercut" Williams used and recommended for home run hitters would be considered almost level when compared with the massive uppercuts used today by Mo Vaughn, Mark McGwire, Tony Clark, Frank Thomas, Sean Casey, Tim Salmon, among many others.

MECHANICAL PRECISION

Another reason tells why hitters emerging before the '70s swung their bats on a level plane. They had to use dense, heavy bats, which required utmost mechanical efficiency to deliver the bat to the pitch on time. For efficiency, the shoulders, arms and wrists had to be pushed/pulled in a high to low action, identical to cutting a tree down with an axe. The entire torso, particularly the shoulders, had to be rotated directly at the target, not upward into an uppercut.

Today, bats are light as feathers. In his book, *The Science of Hitting*, Ted Williams talked about "modern" light bats shrinking to 34 ounces, while 1930s and '40s players swung bloated 36 and 38-ounce bats. Now, in the current era, the average bat is below 32 ounces and getting smaller. The lighter the bat, the less efficiency required to swing it. Lighter bats allow for mechanical inefficiency (the uppercut with high finish) leading to mechanical inaccuracy, and with this comes the strikeouts.

Furthermore, today's hitters come up using the best of composite / aluminum lightweight bats with a sweet spot nearly the size of the entire barrel. Mechanical precision is not required to swing these bats and that's why using wood bats bring out the flaws of your swing – and “make” you a better hitter by learning to hit the wood bat's sweet spot of only around 2” of the barrel. With aluminum bats, mechanical precision can be (and is) sacrificed in favor of long, elliptical, golf-like mechanics, designed to get the ball into the air with a lot of excess whip.

To make matters worse, the majority of hitting coaches today are of the metal bat generation leaving them ignorant of mechanical precision required to deliver the bat on a level plane. Which is exactly why the secrets Aaron, Musial, Gehrig, and others used are lost - modern instructors never had to hit with the type of bats from long ago.

It may seem that hitting has never been better, with high averages and home run totals. This is easily accounted for by two factors: the ball is livelier and the athletes are stronger. (If the ball isn't livelier, then the players' strength has increased exponentially because the home run totals are through the roof. Television highlight clips consistently show off-balance, fooled hitters launching the ball into the outfield bleachers).

This increased strength factor allows the mechanical imprecision - the uppercut, which results in high strikeout totals. Stating it straight up, superman swinging a feather can appear to hit as effectively as "Joe Average" swinging with mechanical precision using a war club, except he'll strike out a heck of a lot more. This is what is happening today.

No matter how you slice it, an uppercut may hit home runs but it will also strike out more and get less team hits. The proof of this statement lies in the comparison of the physical size of the older and modern player. Study the relative height, weight, average, home runs totals and strikeout percentages in the table previously presented. Do you recognize the clincher? Look at the differences in the averages between the charts. The old masters hit for higher averages, struck out less, hit as many or more home runs than the moderns while hitting a deader ball, and were smaller in height and weight. To do this, they must have hit the ball not only more often, but harder. This is overwhelming evidence in favor of the mechanically precise, flat arc swing of the older sluggers. Clearly, the older sluggers got as much or more mileage with less physical strength than today's sluggers.

SIMPLE LOGIC

Musial, Aaron, Mays, DiMaggio, Ruth, Gehrig, all the successful players of the past, knew a few simple principles:

1. The fastball arrives from the pitcher's hand to the strike zone, for the most part, on a straight-line path.
2. The hitter, must swing his bat on the same straight line as the pitch for maximum collision factor. (meaning many points through the zone the bat will make solid contact with the ball and have the highest energy transfer.
3. If his swing bisects the straight-line path of the fastball with an uppercut, contact is minimized because now there is only one point at which the bat and ball will meet perfectly through the strike zone.

These simple principles were put in play by DiMaggio, Dixie Walker, Vern Stephens, Ralph Kiner and nearly every other hitter featured in the vintage films. This is what they were doing. When viewed in slow motion, it almost seems like their bats are guided by some invisible precision that keeps it perfectly level.

Each Of These Rail-Straight Swings Are Characterized By Three Movements:

- a. An angled (approximately 45 degree) approach of the bat from the stance position. As the arms and hands extend forward at this angle, the bat head lags behind, tracing out the level path to the contact zone.
- b. After contact, the wrists execute a flat "roll over." This flat rollover action serves to keep the bat on the level plane well after the ball has left the bat. The wrists do not roll upward into a golf-type finish. This way, the rollover does not distort the end of the level path as it connects with the ball.
- c. The level plane and wrist rollover continue into a low finish, at or below shoulder level.

With these skills, the old masters carved out a swing which neutralized any pitcher's fastball, made for maximum collision with it, and thereby minimized strikeouts and hit the ball harder, more consistently.

These observations are not important to men the size of Mark McGwire, Frank Thomas, Jose Canseco, or the strength of Mo Vaughn and most of the 40-plus home run club. But for the average-size man or boy, like Aaron, Mays, Musial and 99 percent of the rest of us, the "old-time" mechanical efficiency is the secret to making the big leagues today!!

I cannot emphasize this enough. An average size man trying to swing like the big guys cannot pack enough power or consistency. The strikeouts and lack of team hits eventually eliminate him.

Mike Schmidt, who struck out a whopping 37 percent during his rookie year, acknowledged that he became a bona fide hitter and cut his strikeout totals in half by "swinging down on the ball", something that came to him ten years into his career!

Charlie Lau, (long time Hitting Coach for the Orioles, A's, Royals, Yankees and White Sox and had students such as Hal McRae, Amos Otis, Willie Wilson, George Brett and Carlton Fisk.) a brilliant man who never advocated the high finish, said, "To produce a level swing, you have to get on top of the ball by swinging down at it," He wrote the book "*The Art of Hitting .300*" which supplanted Ted Williams book "*The Science of Hitting*" as "The Bible of Batting". He emphasized releasing the top hand after making contact with the pitch and following through with only the lower hand on the bat. This allows maximum extension of the arms and lets the bat maintain a flatter plane through the hitting zone.

Yet, look at the hitting styles of today... few modern hitters employ either the logic or the movements to perform the level swing – to be a base hitter as with the old-timers of yesteryear. I would say perhaps one out of six or seven major league players use precise mechanics bearing resemblance to the hitters of yesterday.

Some have had huge success. Paul Molitor was a fine example of the modern level cut, using the high-to-low approach, flat wrist roll and low finish. Carlton Fisk's dramatic sixth game home run in the 1975 World Series is a perfect example of such execution, as is Aaron's 715th home run.

Roger Maris' home run swing is a perfect model, as is Schmidt's 500th. George Brett's "pine tar" home run is as good as it gets. (and I'm talking about his swing mechanics, not the drama that Billy Martin created afterward – but that's another story)

Craig Biggio, at 5-11, 180 pounds, is another fine example, belting the ball on a par with bigger men.

Barry Bonds and Albert Belle model the level-cut principles very well as home run hitters, and their strikeout percentages back it up. All are getting maximum production from an ancient style of hitting, using time-proven principles.

They don't have to be alone, now that the secrets are out. The skill of the level swing is remarkably simple to learn! All it requires is seeing the examples, shifting one's hitting goal from fly balls to line drives, & changing one's physical paradigm from a "low-to-high approach" to a "down-and-through"..... As Mike Schmidt knows, the results can be dramatic!

As always, if you have questions or need help with your game, stop by Hit & Run Baseball and ask for Coach Jackson. I'll be more than happy to assist you.

Good Luck,
Coach Jackson



Anyone who emails me (mjackson@hit-n-run.net) and correctly identify's the player in the picture above by August 3rd, 2007, will be emailed a coupon for \$10 OFF any Cage Rental to use by August 30, 2007. Have Fun and SWING LEVEL!