**An Addendum to ‘Batting Order Doesn’t Matter’**

In a previous article (hyperlink), we came to the conclusion that batting order truly doesn’t matter. We did our experiments using the World Champion 2016 Chicago Cubs. What we found was that the difference between a **random** batting order and an ‘optimized’ batting order only resulted in about an extra 1.5 wins per year.

Most people will tell me that I am wrong if I say batting order doesn’t matter. Maybe they have a pointf because I made this conclusion using just one example team. That Cubs team was extremely good and their offense was potent. Even their pitchers collectively almost bat .200 that year. What we should have concluded instead was ‘If your team has a good offense, then the batting order doesn’t really matter’.

I am writing this follow up article to show that my original conclusion is still true. That is, even if we pick a team that isn’t as good we still get a similar result. In particular, we’ll choose a team who has one very good player and the rest mediocre: the 2017 Angels.

**The Team**

Why did I pick the Angels? Why did I pick that year? Well, Mike Trout is the best player in baseball and the rest of that roster was average or below. Using their most common lineup, here is everyone’s OPS for the year

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Phillips | Trout | Upton | Pujols | Calhoun | Simmons | Valbuena | Cron | Maldonado |
| .652 | 1.071 | .887 | .672 | .725 | .752 | .727 | .741 | .645 |

Now compare this to that Cubs team that we used (we used some sort of aggregate for the Pitcher).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Fowler | Heyward | Zobrist | Rizzo | Bryant | Soler | Russell | Ross | ‘Pitcher’ |
| .840 | .631 | .831 | .928 | .939 | .769 | .738 | .784 | .446 |

The Cubs had 6 players with a better OPS than the Angels 3rd best player. That Cubs’ roster has a much more even distribution of talent than the Angels’ roster.

Now, just like in the Cubs’ article (hyperlink), we are going to simulate hundreds of seasons using different batting orders to see the impact that batting order has on runs scored.

**The Results**

We simulated hundreds of seasons using multiple different lineups. We used the order given above and that same order backwards. We also tried best to worst and a pyramid style order where the best hits third with good hitters on either side of him. Here is what we found for average runs-per-game using each of these lineups.

|  |  |
| --- | --- |
| Batting Order | Average Runs Per Game |
| Most Common Order | 4.87 |
| Most Common Order, Backwards | 4.72 |
| Best to Worst (by OPS) | 4.87 |
| Best Third | 4.85 |
| Random | 4.75 |

Now, over the course of the season, the difference between a random order and the traditionally used order is, again, between 1.5 and 2 wins (in Pythagorean Expectation).

**Conclusions**

Now, when I say batting order doesn’t matter, you might say ‘2 games is the difference between a wildcard game and missing the playoffs’. Teams would do a lot for two wins. When I say that batting order doesn’t matter, what I mean is actually ‘If you use any reasonable order where your good guys go towards the beginning, the rest doesn’t matter’. The goal should be to maximize the number of times that your best players get to the plate, nothing more nor less.

A great example of how this should be used is what the Reds did in 2018. Billy Hamilton’s player profile is a speedy guy who is a threat to score if he simply reaches base. The problem, though, is that he couldn’t reach base. While he had the traditional role of a leadoff hitter, you simply couldn’t afford to give him that many extra at-bats. So, the Reds hit him ninth 106 times that year. This let them maintain the perceived benefit of having a guy like him on base when the meat of your lineup shows up while minimizing the damage he can do by soaking up too many plate appearances.

The long and short of it? Maximize plate appearances for the guys with the best bats. If there is anything else that you think will add value to your lineup, you can find a way to work it in. Don’t necessarily stick to the traditional thought patterns because you’ll probably lose more than you gain.