A Framework for Structured Analysis

Debates about the greatest or best teams in major league baseball history always begin with phenomenal years and invariably come down to the usual suspects. Quite frankly, they really don't need to depend on any particular methodology because the teams in the debate—the 1927, 1939, 1961, or 1998 New York Yankees, for example, or the 1975 Cincinnati Reds—established their own historical legacy by the measure of their achievements and, usually, the historical greatness of their players. Some of these teams have assumed mythic proportions, particularly in the minds of their fans—most especially if they happen to be Yankee fans. With the possible exception of the 1906 Chicago Cubs (who were upended in the only all-Chicago World Series ever played as of this writing), the debate assumes that the greatest teams in history dominated not only their league, but also won the World Series. And most serious debates require that the team have not just the one phenomenal year of dominance, but a record of winning accomplishment—pennants, World Series wins, and generally being considered unbeatable—extending over at least three years or, better yet, five years, as was the case with all of the teams I just mentioned. Otherwise, the 2001 Seattle Mariners with their 116 regular-season victories would have to go down in history as one of the best teams ever, and I don't know that anyone is making that argument, especially since Alex Rodriguez and Randy Johnson were no longer sleeping in Seattle, but in other cities with other teams. Nor are the 1954 Cleveland Indians with their 111 wins in the debate about the best teams in history because they won only the one pennant, were knocked off four straight in the World Series, and were cursed with finishing second to the Yankees every year through the mid-1950s, except for their one great season.

Choosing the best teams in history based on the phenomenal year concept does not really require any particular methodology. All you need to know, for example, is that the 1927 Yankees won 110 games, had Ruth and Gehrig in their prime, swept the Pirates in the World Series, and were in the middle of winning three straight pennants. Or the 1998 Yankees won 114 games, cruised through two rounds of American League playoffs, swept the Braves in the World Series, had Derek Jeter and Mariano Rivera in their early prime, and were in the middle of four World Series championships in five years. And which of those two Yankee teams do you like better?

So why have a methodology at all? After all, isn't it kind of obvious from their accomplishments which were the best teams in history? Maybe. Maybe even probably. But methodologies are important to provide rigor and discipline to analysis, especially when—as in major league baseball—we are blessed with such an abundance of data, otherwise known as statistics. This is not to say that data—(statistics)—should be the end-all of analysis, but data properly arrayed and considered provides important information.

Data-based methodologies to determine the best teams in history are typically of two types. The first is to identify *benchmark accomplishments* such as having a winning record, winning 90 games, winning 100 games, winning the division, winning the pennant, and winning the World Series. One specific methodological approach is to weigh each of these accomplishments equally for each team being considered for a set number of years, with the resulting totals providing the place for discussion to begin. Bill James, who has led the revolution on how to think about all aspects of baseball using the statistical record, makes note of this approach in his seminal 2001 publication of ***The New Bill James Historical Baseball Abstract***. Benchmark accomplishments, however, reinforce a winning-is-everything analysis that risks diminishing the achievements of some very successful teams and inflating the legacy of others. At least, that's according to me. I don't mean to diminish the importance of winning it all, but—

—Consider the Atlanta Braves, who won only five National League pennants and one World Series championship in their unprecedented run of 14 consecutive division titles from 1991 to 2005 (1994 doesn't officially count because the season was terminated by a players' strike). While their achievement of 14 straight division titles is quite something, and often acknowledged as such, the Braves rarely get mentioned among the best teams in history because their post-season record is so disappointing. I would argue that any methodology that gives the same weight to winning pennants (since the advent of divisional play) and World Series as to finishing first (whether in a unitary league before 1969 or in divisional alignments since) risks diminishing the achievements of teams being the best over a full season that are derailed in the post-season. Winning pennants and World Series is undeniably a measure of historical greatness, but unlike with other team sports, I have a difficult time accepting that post-season failures in major league baseball should somehow diminish the legacy (dare we say greatness?) of teams that are consistent winners, especially if they are dominant in their league, by finishing first more often than not over full seasons for some extended period of time.

Full seasons. That's 162 games each year; 154 games before the first expansion of the twentieth century in 1961 (American League) and 1962 (National League). A long season. Surely any team that dominates the competition during the regular season for many or most of five or more consecutive years should be considered in the debate about the best teams in history, even if it endures post-season woes, should it not? I feel particularly strongly about this since the playoff format that was necessitated by major league baseball's transition to divisions in 1969, and then to wild cards in 1994, increases the odds of even the best teams being derailed before they get to the World Series. Hey, stuff happens, like injuries, cold streaks at the worst possible time (in the post-season), or a team not really as good getting really hot at just the right moment. The post-season can be fickle, subject to Fate. The long season is a true test of how good a team really is.

As for inflated legacy, consider Casey Stengel's "five-and-five-in-five" New York Yankees of 1949 to 1953—winners of five straight American League pennants and five

straight World Series. A methodological approach using the six benchmarks identified earlier for a five-year period puts this Yankee team on par with Joe McCarthy's 1935 to 1939 New York Yankees, who won four pennants and four World Series in five years but match up with the same 25 points because they had three 100-win seasons, while Stengel's team had none. Analytically, this may be the foundation place to start the discussion about which are the best teams in history, but this methodological approach implies that the 1949-53 Yankees, the first four of whose five straight pennants were not decided until the final week of the season, are really in the same argument as the 1935-39 Yankees, all four of whose pennants were by blowout margins and whose players included Joe DiMaggio and Lou Gehrig and Bill Dickey, not to mention Red Ruffing and Lefty Gomez. They are *not* in the same argument; most baseball historians and researchers would agree that McCarthy's Yankees were a *much* better team than Stengel's five-and-five-in-five Yankees, not an equal or even marginally better. For that matter, were the 1949-53 Yankees really a better team than the Yankees from 1926 to 1930, winners of three straight pennants and two World Series in a five-year period, which featured Babe Ruth *and* Lou Gehrig in their prime, not to mention that fabled 110-win season in 1927?

The second type of data-based methodologies resolves concerns about benchmark accomplishments by looking at *unique statistical measures* comparing the best teams to their competition during regular seasons. This approach is exemplified in Rob Neyer and Eddie Epstein's ***Baseball Dynasties: The Greatest Teams of All Time***, published in 2000. Their approach was to rely on the *standard deviation from the league mean* of any given team's runs scored and runs allowed *as the primary statistical measure* for determining the greatest teams in history. It is hard to find fault with this approach because it appears to be about as neutral as can be with regard to evaluating the best teams across the different eras of major league baseball history. *However,* as I would also say about the benchmark accomplishments approach, I believe that relying principally on team statistical measures *misses the importance of quantitatively factoring in who their players were*. Now, I most certainly acknowledge that the impact of each team's roster of players is implicitly taken into account in both methodological approaches, and the narrative accounts of these teams in Neyer and Epstein's book, and in all others written about the greatest teams in history, name the players and show how they contributed to the greatness of the team. But that is not the same as methodologically factoring in the players themselves, with the underlying assumption being that the best teams in history would have many of the league's best players at the time, if not in historical legacy.

And so allow me to introduce an alternative approach that attempts to balance the best teams' record of achievement and how dominant they were in the league at the time with who their core players were and how good they were relative to both their time and in historical context. My approach is intended to *provide the basis for a multi-dimensional structured analysis* involving the performance of the best teams and their players.

My one basic requirement for any team to be considered for a place among the eight best teams of the twentieth century in each major league is that *the team have a record of consistent winning achievement over a timeframe of no less than five consecutive years.* Any team that has multiple (as in, more than one) first place finishes over a minimum of five years is open for consideration as a "best" team. While acknowledging that a few of these teams will have had a bad season or two in the midst of their winning ways, I require that the team

have been competitive in league or (since 1969) division pennant races in most of the seasons for which it is being considered. After all, sustained competitiveness over a specific period of time is the mark of a "best" team.

Why five years, and not three or seven? Because, looking at the career longevity of successful major leaguers, five-to-seven years is equivalent to a "generation" of baseball players. Any team, according to me, that can stay competitive for at least the short end of a baseball generation—five years—has demonstrated sustained excellence rather than a lucky roll. I'll go with five instead of seven years for the "best" teams because, history shows, staying competitive for the long-end of a baseball generation is rare indeed.

I have chosen to identify a team *by its core group of regular position players and pitchers for the years under consideration*. Baseball generations being relatively short-lived (five-to-seven years), a franchise with an extended run of significant success, such as the New York Yankees winning 14 pennants in 16 years from 1949 to 1964, is likely to have had two or three "teams" built around different groups of core players during that timeframe, each with an identity and a legacy of its own. The Yankees over those 16 years had three different teams during their remarkable run, according to me. There were the 1949 to 1953 Yankees of DiMaggio (through 1951), Berra, Rizzuto, and pitchers Reynolds, Lopat, and Raschi; then there were the 1954 to 1958 Yankees of Mantle, Berra, McDougald, and Ford; and finally the 1960 to 1964 Yankees of Mantle, Maris, Howard, Richardson, Kubek, Boyer, and Ford. The first two of those Yankee teams also had the magic of maestro Casey Stengel, but that is a different tale to tell. (The Atlanta Braves from 1991 to 2005 had two different teams during their streak of 14 straight division titles, based on nearly a wholesale turnover of their core position players about halfway through, even as their stellar trio of Maddux, Glavine, and Smoltz as starters transcended the two teams.) Each team under consideration in this analysis, therefore, is identifiable by its core players—the Jackie Robinson-Campanella-Snider-Hodges-Reese Brooklyn Dodgers in the 1950s, for example, or the Rose-Bench-Morgan-Perez Cincinnati Reds in the mid-1970s.

Having defined "team" and established a minimum timeframe for consideration, the structured methodological approach I propose addresses three elements that I believe are critical in the "best teams" debate—***record of achievement*** (which is where most methodologies usually end, and which I believe gives too much weight to post-season success); ***how dominant was the team*** (which is routinely discussed but, aside from Neyer and Epstein's focus on run differential, is not specifically factored into any methodology I'm aware of); and ***performance of the team's core players relative to the league at the time, as well as in historical context*** (which is also not specifically addressed in any methodology, even though great players on the team are always part of the discussion). **Transparency Annex A** describes my methodological approach in detail, but the basics are as follows.

I measure "***achievement***" by what a team accomplished over a period of no less than five years, with greatest emphasis on accomplishment during the regular season rather than post-season success. *Achievement is weighted according to accomplishment:* three points for each time finishing first; two for each second-place finish; and one for every third-place finish. Prior to 1969, finishing first meant winning the pennant. With the advent of division play, winning the division counts for the same three first-place points as winning the pennant before then, to which I add an addition half point (.5) if the division winner had the best record in the league, and an additional one point if the division winner went on to win the

pennant in the league championship series. This means that teams in the divisional era can have a higher achievement score than teams before them despite having exactly the same accomplishments over the same number of years because their pennants would count for four points (three for finishing first in their division, plus one for winning the league championship series) compared to only three for teams in the era of unitary leagues, to which I give no additional point for winning the pennant by virtue of finishing first. This seeming inequity should not be considered discriminatory against teams that came before because the playoff format since 1969 makes it more difficult to win a pennant than when finishing first and winning the pennant were one and the same, and teams should get credit for the additional difficulty. Whether before or after divisional alignment, winning the World Series counts for only one point in my methodology. Total achievement points are divided by the number of seasons (at least five) for the team under consideration, multiplied by ten (in order to deal with double digit numbers).

The obvious point of controversy is that winning the World Series, and since 1969 even the pennant, counts the same as finishing third during the regular season, and for less than finishing second. While winning the World Series is the ultimate achievement in any year, I am evaluating teams according to which are the best over the course of l-o-n-g baseball seasons. World Series and League Championship Series are short series, and sometimes a team that established itself as the best, and even the most dominant, over a long season doesn't win in the post-season—just because, as is so often said, anything can happen in a short series. Just ask the 1973 Cincinnati Reds—they with 99 wins—who were upended in the NLCS by the New York Mets, whose mere 82 victories was enough to win their division, but only the fourth best record in the National League.

I define a "***dominant***" team as one so superior to its rivals that it is unlikely to be seriously challenged for first place, except on rare occasions (usually by another dominant team). Or put another way, a dominant team typically blows away the competition and cruises to the finish line. I measure a team's dominance by four equally weighted factors: *the number of 100-win seasons; the number of times finishing first by a margin of at least eight game; the number of times leading the league in runs scored; and the number of times leading the league in fewest runs allowed*. A team that meets any one of these factors is very good, but dominant teams have to have indeed dominated their competition. One can argue these factors are related, but they are not mutually exclusive. Total dominance points are divided by four (for each factor) times the number of seasons (at least five) for the "best team" under consideration, then multiplied by ten (in order to deal with double digit numbers).

- I chose 100 victories instead of 90 as my first benchmark for dominance because a 100-win team is far more likely to dominate. Any number of teams might have 90 wins in a season, which typically contributes to wonderfully tense and exciting pennant races when that happens, but rarely allows a team to have a stranglehold on first place. In the one hundred years from 1901 (the beginning of baseball's modern era) to 2000 (the end of the twentieth century), 163 teams in the National League won between 90 and 99 games, 87—or 53 percent—of which finished first, but 35 of the 39 teams that won at least 100 games, or 90 percent, came home first. In case you're wondering, the four teams that won 100 and finished second were the 1909 Cubs, 1942 Dodgers, 1962 Dodgers, and 1993 Giants—all before the wild card that would have guaranteed these teams a place in the post season. In the American League, 161 teams won between 90 and 99 games, 77 of which (48 percent) finished first; 41

teams won 100 games or more, of which 37 (again, 90 percent) finished first. The four American League teams that won 100 games and came in second were the 1915 Tigers, 1954 Yankees, 1961 Tigers, and 1980 Orioles—also all of whom went home because the wild card was not yet a figment in Major League Baseball's imagination.

- I chose finishing first by a margin of at least eight games as a reasonable standard for dominating the league or, since 1969, the division. Including division titles since 1969, not counting the 1981 split-season and the terminated-by-strike 1994 season, there were 134 pennant races in each major league in the twentieth century. In the National League, 49 were decided by margins of eight games or more; that's 37 percent. This is virtually the same as the 47 of 134 pennant races decided by three games or less. In the American League, 55 of 134 pennant races—41 percent—were won going away by eight games or more, with the New York Yankees accounting for 20 of those blowout races, and 46 were decided by three games or less.

- Why most runs scored and fewest allowed instead of measures like leading the league in batting average, on-base plus slugging percentage, home runs, earned run average, strikeouts, or maybe even defensive efficiency rating? Those are all fine, and feel free to use them if you wish, but for me looking at most runs scored and fewest allowed is sufficient because runs are what determine winning and losing. A team that leads the league in either—and certainly both—runs scored or fewest runs allowed is more likely to dominate the league than a team that might nonetheless win pennants without doing so. Both of these factors can be related to number of wins, which is the basis for baseball's Pythagorean theorem, but not necessarily in reality. The 1972-76 Cincinnati Reds, for example, won four division titles, had the best record in the National League three times, but scored the most runs only twice and were never better than third in fewest runs allowed.

We now have a score for achievement and a score for dominance, and it is entirely possible for there to be some dissonance between them. History shows there have been many teams with a remarkable record of achievement that have not dominated the league during their run, at least not as much as supposed. There is a difference between a team that wins consistently, even all the time like the 1949-53 Yankees, and one that wins so decisively that they are rarely challenged, like the 1936-43 Yankees.

The third element of my methodological approach is *to identify the core players on those teams and how good were they in both contemporary and historical context*. The players, after all, make the team. It seems intuitively obvious that the best teams in history would have some, or at least one, of the best players in history, and everyone who has ever had a say on which were the best teams invariably says who those players are. In fact, who those players are—as well as their achievements—goes a long way in establishing a team's historical legacy: think Ruth and Gehrig; DiMaggio and Dickey; Robinson, Snider, and Campanella; Mantle, Berra, and Ford; Rose, Bench, and Morgan; Maddux, Glavine, and Smoltz. But there is no other specific analysis that quantitatively measures *the number of best players* on the best teams as part of any structured methodological approach. Notice, I did not say, "that quantitatively measures a team's best players' *impact or contribution* to a team's achievement or dominance." What I am interested in is the number of baseball's best

players on the best teams relative to their time and history, and this is what my methodological approach proposes.

The trailblazing and innovative baseball researcher and historian Bill James comes closest, according to me, when he writes in ***The New Bill James Historical Baseball Abstract*** that one can sort players into "star" classes by using his metric of "win shares" to make objective determinations about the brightness of a team's "stars" to come up with a quantitative factor for great players on a team. He suggests that applying a point system—wherein each "superstar" accounts for so many points, each "all-star" for somewhat fewer points, and so on—would allow for measuring which are the best teams according to their roster of players, but James is unclear whether he means based on their performance for the team and years in question or their career legacy. James in his book also does not follow through with such an analysis.

To best measure quantitatively the "***players***" part of the methodology, for which I rely on the metric developed by Sean Smith of ***BaseballProjection.com*** called Wins Above Replacement (WAR), I believe that three elements must be considered: first, the relative importance of the core players to their team's success for the years under consideration for "best team"; second, the number of core players on that team who were the best at their positions at the time of their team's achievement; and third, the number of players on that team who were among their league's best in the surrounding decade, in the half-century, or in the full century based on their performance (particularly as captured by the WAR metric) during the specific years (at least five) of their team's run of success. WAR presents the number of wins any specific player added to his team above what a replacement-level player from Triple-A or shuttling between the major leagues and Triple-A would contribute. Annual WAR data for both players and for team rosters in any given year is readily available on the indispensible website ***baseball-reference.com***.

The foundation for my "players" equation is established by identifying the regular position players, starting pitchers, or the designated relief ace who were the core group of players that give the team its unique identity. To count in that group, *I required that the player had to be on the team for at least four years* and *for at least half of the seasons under consideration—which means, for example, that he must have been a regular for a minimum of three years on a team whose run of achievement was five years*.

The first part of the "players" equation is to represent the core regulars' combined wins above replacement for the years under consideration as a percentage of the total wins above replacement earned by the team's entire roster during those years. My purpose is to quantify their relative importance to their team's achievement, even while acknowledging that a lower percentage for the core regulars can be indicative of the overall depth of the team that helped establish its claim to greatness. Measuring the overall impact of a team's core regulars to the success of their team is key to my approach because, notwithstanding that teams lacking depth are much less likely to have sustained success—especially over multiple years—I am interested for this analysis in determining the best teams in part by who had the best core players. The "players" equation begins by adding the percentage of the team's core regulars collective WAR to the average annual total WAR of the team's entire roster for the years under consideration and dividing by ten, thereby attaining a single digit number to serve as a baseline for building a total "players" score. Doing so takes into account both the overall excellence of the team's entire roster, including depth, and the impact of the core regulars.

Next, I made an *informed judgment* based primarily (not exclusively) on the WAR metric as to how many of the team's core regulars were the best in the league at their positions—or whom I would consider "significant others," if not the best—with the stipulation that the player must have been the best in the league at his position for at least five consecutive years. Best in the league at their position takes into account one player for each fielding position (including three outfielders); a multi-position regular (Stan Musial, alternating between first base and the outfield throughout his career, is the most notable example of a multi-position regular in National League history, and Harmon Killebrew in the American League, alternating between first and third base); five starting pitchers and a relief ace; and any indisputably great players who would have been the best at their position at the time had it not been for another indisputably great player (Jimmie Foxx to Lou Gehrig at first base in the American League in the 1930s, for example). *Each player must have been the best in the league at his position for at least half of the years of achievement for the team being considered*, meaning that a minimum of three of the player's five-or-more years as the best in the league must correspond with his team's run of success. The number of players who were the best at their position (or a "significant other" at their position, counting for half-a-point) is divided by the total number of the team's core players. **Transparency Annex B** identifies the best players at each position in both leagues through the twentieth century (and the first decade of the twenty-first), at least according to me, and details the methodology I used to make that determination.

The third and final part of the "players" equation uses a point system similar to that suggested by Bill James for those on the team who have a place among the best players in their league during some part or all of the twentieth century. If a player on the team under consideration was one of his league's 10 best position players, five best starting pitchers, or the best reliever in the *decade surrounding* his team's run of success—which will always be in the middle of that ten-year period—that counts for *one point*. The team under consideration earns *an additional two points* if the player—based on his performance in the surrounding decade—was also one of his league's 25 best position players, 15 best starting pitchers, or three best relief pitchers in the first half of the twentieth century (1901 to 1950) or one of his league's 30 best position players, 18 best starting pitchers, or six best relievers in the second half-century (1951 to 2000). (The number of best players in each league is higher for the second half-century because expansion substantially increased the number of major league players, and I selected only three best relievers for each league in the first half-century because the concept of a dedicated relief ace did not take hold until the mid-1930s or later.) Finally, I magnanimously give the team under consideration *three more points* if the player was also one of the 50 best position players, 30 best starting pitchers, or six best relief pitchers in his league since the beginning of the twentieth century extending into the first decade of the twenty-first for a century-plus legacy, again based on his performance in the decade surrounding his team's specific five years (or more) of achievement. These totals are added to the baseline number, based on WAR, and to those for best in the league at their positions to comprise the total "players" score.

All of these judgments about players are according to me, informed once again by wins above replacement. They are not based on the totality of the player's career, *but on the player's five or more best consecutive seasons, with at least three of those years corresponding with his team's five-year run of success, or four years for teams whose achievements span seven or eight years*. In this construct, the incomparable Joe DiMaggio counts for six "historical legacy" points for the 1936-42 Yankees—one for the *surrounding*

decade of 1934 to 1943, two for the first half-century, and three for the full century—because those are coincident with the best consecutive years of his career (1937 to 1950, minus the three war years he served in World War II), but for only one historical legacy point—as one of the American League's 10 best position players in the surrounding decade—for the five-and-five-in-five Yankees of 1949 to 1953 despite some of his most heroic moments occurring in those pennant races. Why? Because 1949 to 1951 (when he retired) were not part of DiMaggio's best consecutive seasons that would have merited the Yankee Clipper either a half-century or full-century legacy, at least not according to me. **Transparency Annex C** identifies each league's best position players, starting pitchers, and relievers for each half-century and since the start of the twentieth century, according to me based on WAR for what I identified as their best consecutive years, and details the methodology I used for making those determinations.

And so, the calculation: team achievement + team dominance + league's best players on team = a "best teams" score. But the score is not by itself definitive. I would not presume to rank teams by their total score alone because the methodology itself raises some questions. Should each element of the methodology I propose count the same, or should there not be some determination as to their relative importance? Although I have thought long and hard about whether there is some optimal balance between achievement, dominance, and players that reveals the best teams, I was unable to find one. I'm not even sure there should be a balance or weighting between them. So in the end, I deliberately decided not to weigh the three parts of my methodology in importance relative to each other. *They are there to inform, not dictate, my comparative analysis* of the best teams.

Furthermore, all of these teams have an historical narrative that should be taken into account. In the final analysis for each team being consider, the three parts of my methodological approach independently and taken together provide insight into the team and its place among the best teams in history. This methodology is a foundation for analysis, with other data-based factors and historical narrative in play, not a by-the-numbers determinant.

Having introducing and explaining my methodological approach, I will be so bold as to join the ranks of those who take it upon themselves to evaluate and rank the best teams in major league history. My inquiry will use this approach as the basis for ultimately identifying the eight best teams of the twentieth century (1901 to 2000) in each of the two major leagues—National and American—and to get there by identifying the five best teams in each league for each half century.

Perhaps I should say "our" inquiry, because I invite you the reader to reach your own conclusions with the methodological approach I propose as a guide to frame the analysis. Consider this methodological approach a *shared framework* for analysis so that we all begin from the same place, meaning your selection of the eight best teams in each league will not necessarily be the same as mine. It is intended to *inform*, *not dictate*, the outcome of your or my evaluation and ranking of the best teams in each league in the twentieth century. It allows for flexibility in how to weight its principal elements, and your emphasis and mine may differ—probably will differ—for each of the teams under consideration. Moreover, while baseball more than any other team sport lends itself to contemporary and historical analysis

by its numbers, it would be wrong *not* to take into account historical or season-by-season context. Which brings up an important distinction—

—While I am comparatively ranking teams historically, I am doing so in the context of their *own time in baseball history*, not in *direct* comparison to all best teams in the broader sweep of major league baseball history. The reason for this is the undeniable fact that the refined skills of baseball players and the absolute quality of baseball itself inexorably improved as the twentieth century progressed. There are many reasons why—significant improvements in training and nutrition and even pharmaceutical supplements; staying in baseball shape becoming a year-round vocation once players began earning millions and no longer worked off-season jobs; technological developments such as video allowing players to study themselves and their opponents in minute detail; and substantially improved health and working conditions for the nation as a whole (very few, if any, players today grow up having worked in the mines or other back-breaking labor in dangerous or unhealthy conditions) to name but a few. Even the powerhouse Yankees of the 1920s and 1930s might not have been not so dominant if they had to play against the best teams of the late twentieth century, and dead ball era teams of the first two decades are often derided for likely being hardly competitive in today's baseball, even while being acknowledged as playing exciting and good baseball in their time. The quality of competition was not uniform in the one hundred years of the twentieth century.

Each team shall be evaluated in the context of its own time in history, not in any other time. Comparisons are across that bridge. The constituent parts of my methodology and its "final score," leavened by subjective judgment about relative competitive balance, provide a multifaceted basis for determining the best teams in each league's twentieth century history precisely because the methodology takes into account the relative levels of success and dominance of both the teams and their players in the eras they played the game.

Let us now begin our journey through one hundred years of major league baseball to determine the eight best teams of the twentieth century in the National League (which is longer established) and in the American League. And to get there, we'll identify for both leagues the five best teams of each half century.

Why not just identify the 12, 15, or 20 best teams of the century in all of major league baseball without regard to league? Because, while they played the same game, the two leagues often had a different emphasis in the style of play their teams favored: the American League, for example, at various times in the past century (and even today) being considered more of a hitter's or power league than its counterpart; the National League at various times being known and often celebrated for its greater reliance on team speed, defense, and "small ball" offensive strategies. These are of course broad generalizations, but there is nonetheless some reality behind them.

Furthermore, while both are "major" leagues, there has rarely been parity between the American and the National Leagues. In any given decade in the last century, one league was usually dominant (more often than not the American League, thanks to the New York Yankees), with better teams and better players. For these reasons, it seems to me most appropriate to rate and evaluate the best teams in the context of their own leagues, as well as the context of their times.

Rather than simply identifying in rank order the best teams in each league for each half century and the full century and explaining why, I intend for this analysis to be a *dynamic ranking*, beginning with the first decade of the twentieth century. I believe that measuring each subsequent "best team" against those that came before provides the most analytical rigor because, after all, who in 1927 when the Yankees won 110 games would have known about some of the great Yankee teams still to come or, for that matter, the 1970s Big Red Machine?

Finally, an important reminder (which bears repeating)—*this methodology is intended to inform, not dictate, my rankings of the best teams in each league*, and I will note and elaborate on how I weighed the three major elements of my approach in evaluating each team against other best teams, as well as any other considerations when I ranked a team with a lower "best teams score" ahead of a contemporary or previous team or teams with a higher score. I invite you to do the same.