



the consilient observer

applying cross-discipline frameworks to investing

The Beane-ing of Life

Investor Lessons from the A's Winning Ways

If you care to think about it at all you have to realize, as soon as you acquire a taste for independent thought, that a great portion of the sport's traditional knowledge is ridiculous hokum.

Bill James
As quoted in *Moneyball*¹

True ideas are those that we can assimilate, validate, corroborate and verify. False ideas are those we cannot.

William James
*Pragmatism*²

People in both fields [stock market and baseball] operate with beliefs and biases. To the extent that you can eliminate both and replace them with data, you gain a clear advantage. Many people think they are smarter than others in the stock market and that the market itself has no intrinsic intelligence—as if it's inert. Many people think they are smarter than others in baseball and that the game on the field is simply what they think through their set of images/beliefs. Actual data from the market means more than individual perception/belief. The same is true in baseball.

John Henry
As quoted in *Moneyball*³

How the A's Generate Alpha

In late 1999, the Major League Baseball Players Association created a blue ribbon panel to investigate the economic imbalances in the major leagues. The payrolls of the richest teams towered over those of the poor teams 4-to-1. For pro basketball the ratio was 1.75-to-1, for football, an even narrower 3-to-2. The star-studded panel concluded the poor teams didn't have a chance. Their paltry payrolls assured perpetual doormat status for those teams, a position that might persuade the owners to bail on baseball altogether.⁴

There was, however, one big fly in the ointment of the panel's case—the Oakland A's. Even with the second-lowest payroll, the A's managed to be one of the winningest teams in baseball. Doug Pappas, a lawyer and independent authority on baseball finance, set it out this way: because of the narrow skill disparity at the big league level, even a team of minimum-wage players (a \$7 million payroll) would win roughly 49 games in a 162-game schedule. So Pappas sought the above-minimum cost of each win over 49. He wanted to understand the marginal cost of the marginal win.

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Over the past three years, the A's have blown away other teams on this statistic. The marginal win cost the A's about \$500,000, and only one other team was less than \$1 million (Minnesota Twins). By this measure, the A's were winning games with six times the financial efficiency of teams with looser purse strings. The A's were playing—and winning—using a different set of rules than everyone else.⁵

In a nutshell, the A's flouted conventional wisdom and practice in baseball. Led by general manager Billy Beane, the team's front office made a concerted effort to see the game as *it is* versus how the consensus *perceives it to be*.

In his latest bestseller, *Moneyball*, Michael Lewis chronicles the story of Billy Beane and the reorientation of the A's. The book is not only wildly entertaining but also provides investors with some important insights into recruiting, stock picking, portfolio management, and psychology.

From William James to Bill James

One way to build a baseball team is to draft amateurs more skillfully than other teams. Baseball scouts use a checklist of “tools” to evaluate players: the ability to run, throw, field, hit, and hit with power. Most scouts are ex-ballplayers who have been around the game their whole lives, and are pretty sure they know a good thing when they see it. The only problem is that the tool checklist doesn't correlate very well with success in the big leagues.

Baseball statistician and writer Bill James exploded the myth that the scouts knew more than the stats. He, like the philosopher William James that preceded him, thought that true ideas should be verifiable. Much of the conventional wisdom in baseball simply didn't hold up to careful scrutiny.

Paul DePodesta, the assistant general manager for the A's, sat at the center of the team's attitudinal shift. DePodesta, who has a Harvard economics degree, took the Jamesian analysis one step further by combing baseball statistics and putting values on various skills. The data showed that some attributes were often overvalued (foot speed, defense, pitching speed), some were fairly valued (batting average), and some were undervalued (on-base average). Instead of relying on the subjective, old-boys network to identify talent, the A's applied a more objective, fact-based approach. The A's didn't have statistics that weren't easily available to others, they just used the stats much more efficiently.

DePodesta says:

*You know what gets me excited about a guy? I get excited about a guy when he has something about him that causes everyone else to overlook him and I know that it is something that just doesn't matter.*⁶

The A's experience is relevant for recruiting and hiring in investment firms. Although the richness of statistics doesn't exist for analysts and portfolio managers as it does for ballplayers, in all likelihood firms probably overvalue certain tools (finance and accounting background?) and undervalue others (psychological disposition, interdisciplinary thinking?). Investment firms must think beyond obvious, conventional measures of success to build a vibrant team.

Buffett-Friendly Baseball

When the A's evaluate hitters, they like to see a high on-base percentage, players that get into deep counts (wears out the pitcher), and a good walk-to-strikeout ratio. One player that looked great on these stats, despite his solid-but-unremarkable .270 batting average, was the Boston Red Sox's Scott Hatteberg. The A's acquired Hatteberg in late 2001, and in 2002 he posted one of the highest on-base averages in the American League, ahead of superstars like Derek Jeter and Nomar Garciaparra.

Hatteberg is a thinking hitter. In his words, “If I just went up there and hacked, I'd have been weeded out well before the big leagues.” As Michael Lewis describes it, Hatteberg forced himself to look for a certain pitch from every pitcher, laid off pitches that weren't his (including strikes), and focused solely on the pitches he could hit. He defined his hitting as much by what he *couldn't do* as what he *could do*.⁷

Hatteberg's approach is Warren Buffett's investment philosophy applied to baseball. In fact, Buffett often uses a baseball hitting metaphor to describe his circle-of-competence concept. He writes:

*We try to exert a Ted Williams kind of discipline. In his book The Science of Hitting, Ted explains that he carved the strike zone into 77 cells, each the size of a baseball. Swinging only at balls in his “best” cell, he knew, would allow him to bat .400; reaching for balls in his “worst” spot, the low outside corner of the strike zone, would reduce him to .230. In other words, waiting for the fat pitch would mean a trip to the Hall of Fame; swinging indiscriminately would mean a ticket to the minors.*⁸

One investor lesson is that patience is valuable in baseball and stock picking. But an intriguing and provocative angle to the Hatteberg story is how his hitting approach was perceived in Boston versus Oakland. The Red Sox considered his patience and thoughtfulness a deficiency. The Sox encouraged the players to release their aggression and swing away. In stark contrast, the A's prized his methodical approach.⁹ How do you balance patience and action in your organization?

Beane's Rules to Live By

Billy Beane is one of the most active general managers in baseball. Besides his relentless focus on the facts, he sticks to five rules when making personnel decisions. Four of these are useful for investors:¹⁰

1. *No matter how successful you are, change is always good.* His point here is that you need to continue to work on improving your thought process and portfolio. Investing is a context-dependent activity. Stand still and you sow the seeds of failure.
2. *The day you say you have to do something, you're screwed.* Feeling the need to do something often indicates a bad frame of mind. Buying or selling a stock for the wrong reasons can be costly.
3. *Know exactly what every player in baseball is worth to you.* Buffett talks about doing deals after a couple hours of reviewing financials and speaking with management. The reason is that within his circle of competence, he has a pretty good idea of what things are worth to him. That knowledge allows for quick, opportunistic action.
4. *Every deal you will do will be publicly scrutinized by subjective opinion.* Successful investors often say that their best investments drew a lot of criticism at the time they made them because they weren't popular. According to Beane, "The hardest thing is there is a certain pride, or lack of pride, required to do this right. You take a guy high that no one else likes and it makes you uncomfortable."¹¹ Independent thinking is the mark of a great investor.

Thinking Outside the (Batter's) Box

As the A's started to change the way they managed their club, tension rose between those who focused on the stats and those who took a traditional approach. Assistant general manager DePodesta attributed the chasm to three psychological biases.

First, ex-players tend to generalize from their own experience. This sample bias is a well-established concept in behavioral finance. Second, scouts are often overly influenced by a player's recent performance. This vividness bias also exists in business, as managers and investors place greater weight on what just happened than on the balance of the evidence. Finally, insiders are biased toward what they see in a game, versus what may be really driving cause and effect. For example, a hitter who lines out after nine pitches might play a role in the next hitter's success, a fact that most observers and box scores fail to capture. This is known as the availability heuristic. The A's tried to mitigate those biases with stats that told a more accurate story.

Another parallel between baseball and investing is that most people would rather stick to the pack (and be wrong) than take the chance of being right. According to amateur baseball statistician Pete Palmer:

*Managers tend to pick a strategy that is least likely to fail rather than the strategy that is most efficient. The pain of looking bad is worse than the gain of making the best move.*¹²

The final challenge is to focus on process instead of outcomes. In any probabilistic exercise—investing, gambling, sports—the best you can do is have the odds in your favor. But even with attractive odds, you will lose in the short term. Most athletic teams and money managers worry more about their outcomes than their process. The A's, and most successful investors, do the opposite. DePodesta notes: "It's looking at process rather than outcomes. Too many people make decisions based on outcomes rather than process."¹³

The Oakland A's have enjoyed tremendous success by letting go of conventional wisdom and focusing on the facts. All the other teams had access to the same data, and had the resources to hire Harvard guys like DePodesta. But until the A's came along, no team had the willingness to break away and do things completely differently. We can now be sure that the A's strategy will be mimicked across the league (and hopefully the A's will be a step ahead of the pack).

In the investment world, we have a pretty good sense of what doesn't work. Simple price-earnings-based valuation doesn't work. High turnover portfolios rarely work because of the costs they incur. Relying on the same information sources as everyone else also doesn't work.

Yet many investment firms (buyside and sellside) are like major league baseball teams—they either don't take the time to consider alternative approaches or don't have the fortitude to change. We should all take a page from the A's book.

¹ Michael Lewis, *Moneyball: The Art of Winning an Unfair Game* (New York: W.W. Norton & Company, 2003), 94.

² William James, *Pragmatism* (Cambridge, MA: Harvard University Press, 1907), 97.

³ Lewis, 90-91. Also, see Lewis's article in the *New York Times Magazine* at <http://www.greatertalent.com/lewisnyt0303.shtml>.

⁴ *Ibid.*, 120-121.

⁵ *Ibid.*, xiii.

⁶ *Ibid.*, 114.

⁷ *Ibid.*, 175.

⁸ Berkshire Hathaway 1997 Annual Report. See <http://www.berkshirehathaway.com/1997ar/1997.html>.

⁹ Lewis, 177-179.

¹⁰ *Ibid.*, 193-194. The other rule is, "Know exactly who you want and go after him."

¹¹ *Ibid.*, 39.

¹² *Ibid.*, 80.

¹³ *Ibid.*, 146. This thought echoes a line by legendary gambler Amarillo Slim, "Decisions, not results." See Amarillo Slim with Greg Dinkin, *Amarillo Slim in a World of Fat People* (New York: HarperCollins, 2003), 101.

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