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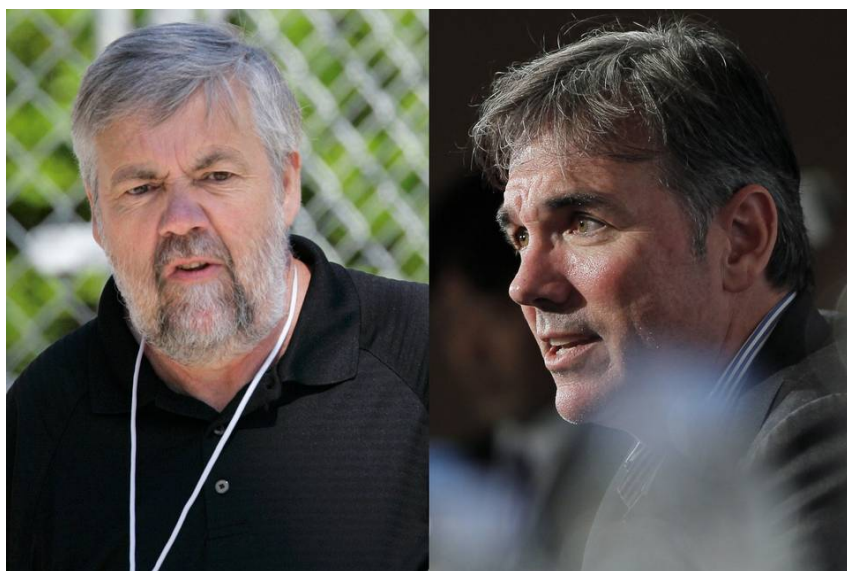
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<http://www.wsj.com/articles/a-discussion-with-baseball-revolutionaries-billy-beane-and-bill-james-1442854375>

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## Bill James and Billy Beane Discuss Big Data in Baseball

The Oakland GM and the statistical wizard are two major catalysts behind the data-driven MLB—yet their paths have seldom overlapped



Boston Red Sox senior baseball operations advisor Bill James and Oakland Athletics' general manager Billy Beane.

PHOTO: ASSOCIATED PRESS

By **BRIAN COSTA**

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Billy Beane walked up to the New York Stock Exchange on Friday morning, handed his driver's license to a security guard and was reminded once more of his "Moneyball" fame. "You do a good job," the guard said. "Not this year," Beane said, with his Oakland Athletics bound for a last-place finish in the American League West. Bill James walked in just behind him, his name and face eliciting none of the same reaction.

They are two of the most influential figures in the evolution of Major League Baseball, and they are inextricably linked. The data-driven decision-making that made Beane a

celebrity was rooted in the work of James, whose early writings on baseball statistics formed the foundation of modern statistical analysis.

But until Friday, the two of them had never actually appeared together in public. The occasion was a conference on the disruption of business models hosted by NetSuite, a software company whose board of directors includes Beane, the longtime Oakland GM.

Before appearing together at the event, Beane and James, a Boston Red Sox senior advisor, sat down with The Wall Street Journal to discuss the future of sabermetrics. Following are edited excerpts from the interview.

**James:** I appreciate all the things you've done for my career, even though you didn't do them in my interests.

**Beane:** As I always said, we invented nothing. We just stole everything.

**WSJ:** *How well do you guys actually know each other?*

**James:** We don't know each other well, personally. We've met a few times.

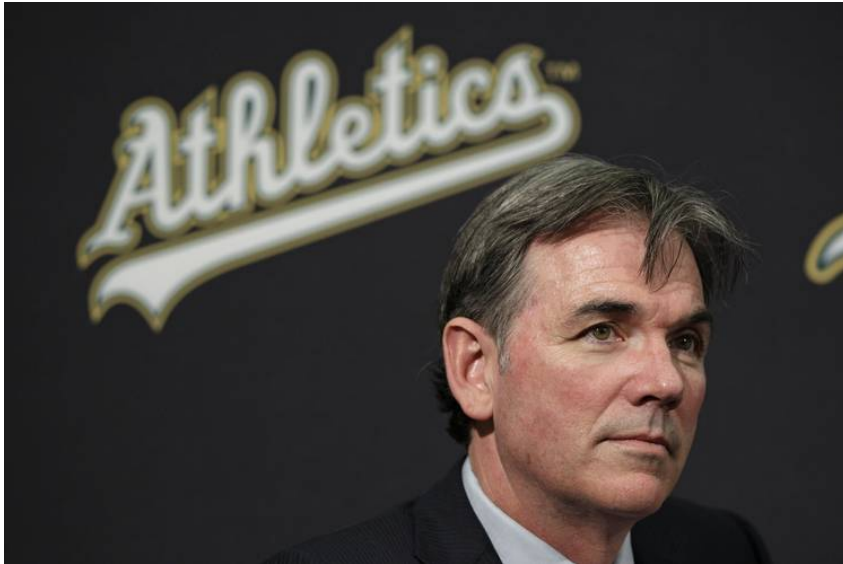
**Beane:** Just spiritual friends, I guess, in terms of the way we view the world.

**WSJ:** *Did you ever try to hire Bill?*

**Beane:** Well I thought I was going to work with him there for about 24 hours. In my brief 24-hour period of being with the Red Sox, Bill was on his way over there. And by the time I went back to Oakland, Bill was secured there with Boston.

**WSJ:** *That was a time when it was still relatively unheard of for an outside analyst to be hired by a front office. Now, many of the best outside writers from places like Baseball Prospectus are being hired by front offices, where their work is proprietary. Bill, do you worry at all about sabermetrics remaining something that is strong in the public sphere, where fans will be as enlightened as front offices? Is there a potential downside for fans in that work becoming protected?*

**James:** I suspect that the best work will always be done in the public arena. What's done in the public arena has a million eyes on it. Somebody sees what you've done wrong and they figure another way to do it, and somebody else figures another way to do it. I do see sometimes work being done by the Red Sox and think, 'I wish the public could know about that.' But I think the best work will mostly be done in public view.



Oakland Athletics general manager Billy Beane during a news conference in 2012. PHOTO: ASSOCIATED PRESS

**Beane:** Sort of an open-source?

**James:** Yeah.

**Beane:** I agree with Bill. It is self-correcting. As soon as you come up with something, you write it and you post it, you've got a million people in there correcting it or telling you where you're wrong or taking it in another direction. Anytime you have an open-source situation, you're probably going to have something better than three or four guys in a private situation.

**WSJ:** *In the past, what was being done in the public sphere was ahead of where many front offices were. Has that changed? Do you see work being done internally that is far beyond what people have seen publicly?*

**Beane:** I would say yes. The great thing about what's gone on is there is a transparency to the game. It's now a meritocracy. The best and the brightest now are part of baseball teams. It's no longer an insider's game where, 'I played, therefore I inherit the position.' To me, that's what this last decade has busted open. The people that we're hiring and other baseball teams are hiring, we're competing with the Apples and the Googles of the world. I just had an intern presentation a few weeks ago from the interns we have and what they were working on. It'll make your mind spin.

**WSJ:** *Clearly, sabermetrics has improved the management of the game tremendously. How, if at all, has it made baseball a better game to watch?*

**James:** I don't know that it has, but we produce information, and information ties the

fans to the game. People in a culture with no information about baseball have no interest in baseball. If you give people a little bit of information about baseball, they have a little bit of interest, and if you give them a lot of information about baseball, there's the potential that they have a lot of interest. I've lived most of my life in the fans' world and I see what I do as a fan's activity. Granted, I work for the Red Sox. But I do know also that there are fans who go to sleep cursing my name.

**Beane:** It's a different generation of fan that now has exposure and an interest in why things happen. Give them some rational reason for outcomes. We're an information-hungry society, and one that is constantly trying to understand. I think there are a group of kids who love it for the numbers and love it for the information.



Red Sox statistician Bill James stands by at the MBTA's Boylston Street station in downtown Boston in 2011. PHOTO: BOSTON GLOBE/GETTY IMAGES

**WSJ:** *We've seen advances in particular areas of the game in recent years—pitch framing, defensive shifts—that are now better understood. What do you guys see as the aspect of the sport that is most in need of more research, more data and better understanding?*

**Beane:** I'm jumping out of my chair on this one. It's using analytics—and this sounds sort of non-field-related—but it's injuries and medical. Even the healthcare industry is doing the same thing – trying to use big data to help solve healthcare. It's the same in a simpler form for baseball or any sport and injuries. That's the black swan for anyone involved in a baseball team—our injuries. Trying to predict them, minimize them, limit the downtime.

**WSJ:** *Have you seen any progress to that end or are teams still sort of scratching their heads?*

**Beane:** It's a challenge because if you're using a lot of data, there are certain restrictions on how much you can collect data [on players' medical history], so you're sort of straddling that line a little bit. But ultimately, I think we will make progress at some point, and the foundation of that will be analytics.

**WSJ:** *Is there another sport that stands out to either of you as being most ripe for the kind of revolution baseball has undergone with analytics?*

**James:** Football, from a popular perception angle, has lots of openings for analysts to rush in. There's been this ongoing debate in football. Billy and I met in Arizona. When was that?

**Beane:** 2000, 2001 maybe. It was a little half-conference that Bill had and I joined him for. It was before the book.

**James:** The guy who put it together was a distinguished economist from the University of Chicago. One thing we talked about then, I remember, there was a guy from AT&T who studies football, and he was arguing then that it's foolish for football coaches to punt in many situations in which they actually do punt. At that time, I was very skeptical that his research would hold up, but now there is a large community of people who argue that if you're in the middle of the field, punting to gain 15 yards and the possession is just foolish. The percentages don't pay off. That's a way in which an analytical insight is probably going to significantly reshape how football is played on the field. I suspect that there are other things like that that we will see.

**WSJ:** *Billy, you've been on a number of corporate boards, and you're now an advisor to a soccer team in Holland. Is there a dream job for you beyond the one you have now?*

**Beane:** Privately. Listen, I love what I do. I'm one of 30 people who have an amazing job that kids dream of and amazing people around me. I certainly have some interests. You mentioned soccer, European football. My first draw to it was the emotion. [The English Football Association] and professional baseball leagues started about the same time. The older they are, probably the better opportunities there are because they're ingrained. I've always thought the most progressive sports leagues in the states were the newer ones. Specifically as to what that would be, I probably had better keep that to myself.

**WSJ:** *If I guessed soccer GM, would I be in the ballpark?*

**Beane:** I don't think they call them GMs there. It's an interest of mine, yeah, but it's

been for a long time. I've got plenty of work to do in Oakland right now.

**WSJ:** *Bill, is there anything else you'd like to do professionally?*

**James:** Most successful people I know are people who plan and have a career path in mind. I, on the other hand, just take the opportunities that are rolled at me. I've never had any plan to get where I am. I'm like the horse with the blinders. I just keep walking forward, and people feed me carrots.

**Beane:** Is that all I would have had to pay you, carrots? I would have had you in Oakland a long time ago.

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