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Game Theory

By BRUCE WEBER

Defense doesn't win championships. Teamwork isn't what it's cracked up to be. Momentum is a myth. And the Chicago Cubs aren't cursed; they just stink.

Conventional wisdom, sports division, takes a beating in "Scorecasting," a book aimed at unsettling serious fans with essays that debunk ingrained strategy (punting on fourth down is largely a waste); malign the approach of champion athletes (Tiger Woods is foolishly less aggressive when he's putting for birdie than for par); and offer a number of otherwise eye-opening assertions (officials in all sports are biased). For their arguments, the authors, Tobias J. Moskowitz, a behavioral economist at the University of Chicago, and L. Jon Wertheim, a senior writer for Sports Illustrated, have whipped up a recipe that includes statistical analysis, psychological theory, creative sociology and a brash confidence in circumstantial evidence. If that sounds a little familiar, well, they owe a debt to Malcolm Gladwell and the "Freakonomics" boys.

In any case, the results are alternately irritating, vexing, provocative and entertaining — and convincing more often than not. Indeed, for most readers the fun will involve sputtering "But, but, but . . ." and mustering counterarguments.

For example, in a chapter titled "The Myth of the Hot Hand," the authors declare that in sports, momentum, aka "Old Mo," doesn't really exist, that no matter how many home runs a slugger belts in a week, no matter how many games in a row a team wins, the likelihood of success in the next at-bat or the next game is no different than it is when no hot streak exists. Statistics prove this is so; the numbers say that a streak of any sort is simply an expected variation in an extended, observable pattern of events, the way a coin is likely to come up heads 10 times in a row at some point if you toss it 10,000 times.

**SCORECASTING
The Hidden
Influences Behind
How Sports Are
Played and Games Are
Won**

By Tobias J. Moskowitz
and L. Jon Wertheim

278 pp. Crown Archetype.
\$26.

For this reason and a few others, the authors say, the basketball strategy of passing to a shooter on a hot streak is more often than not a loser. They argue interestingly (and sensibly) that one thing that happens to shooters on a streak is that they succumb to hubris and begin taking more difficult shots. Fair enough. Still, even if a streak is not a predictor of future success, does that mean that no momentum existed while the streak was going on? That for a period of time whose length was unforeseeable, a player saw the basket with enhanced clarity or a team played with special cohesion and confidence? Doesn't that constitute momentum? And for coaches, who are supposed to be experienced observers of their players, isn't it a reasonable gamble to play a hunch from time to time and feed the hot hand?

Some of the subjects taken up in "Scorecasting" are less worthwhile than others. That a blocked shot in basketball that goes out of bounds is less valuable to the team on defense than a blocked shot that lands in the hands of a teammate strikes me as self-evident. And that defense wins championships, or that, in any sport, defense is more important than offense, is the sort of nonsensical tenet that doesn't need disproving any more than, say, "Life is like a box of chocolates." The authors spend several pages disproving it nonetheless. Anyway, the issue was better and more succinctly settled in a quip often (though perhaps not accurately) attributed to Casey Stengel: "Good pitching will always stop good hitting — and vice versa."

The authors are at their most titillating — and, unfortunately, their most smug — when they're playing shrink, attributing quite a number of statistically quantifiable sports phenomena to certain psychological concepts.

One says that humans are more likely to judge an act of commission — for instance, a referee's calling a penalty — to be intrusive or consequential than they are an act of restraint. So even though the ref who doesn't throw a flag can be just as wrong as the ref who does, and even though his nonact can put an equivalent skew on the game, we judge him — and he judges himself — less harshly. This so-called omission bias is borne out statistically in several sports, the authors demonstrate, citing umpires who call fewer strikes when the hitter already has two and basketball referees who call fewer loose-ball fouls on star players than on nonstars.

The authors also place great stock in what psychologists call risk aversion, or loss aversion, which states that humans are motivated more forcefully by a fear of losing than by a desire for winning. When a coach always employs well-worn strategies on the field; when an owner declines to hire a successful but unconventional coach; when a golfer takes a firmer stroke on a par putt to fight off a bogey than he does on a birdie putt because he is still safely under par, he is being risk averse, often to his detriment. Statistics

(and one brave high school coach in Arkansas) show, for example, that over the long haul, punting on fourth down is a fool's errand; as for golf, a putt is a stroke, no matter what the circumstances.

By far the most startling and resonant chapters in the book deal with the authors' search for the reasons behind home-field advantage, which the numbers prove exists across all sports. Using clever techniques to isolate elements of the game that can be accurately measured, they manage to dismiss some conventional explanations — that players respond to the cheers and jeers of the crowd, for one.

In the end, they determine, stunningly, that home-field advantage in virtually all sports is largely due to the bias of officials toward the home team. Soccer referees call more penalties against the visitors and allow more injury time when the home team is behind. In baseball, though the authors are a little naïve about the art of calling balls and strikes (no one, not even the players, wants or expects the umpires to call a strict rule-book strike), their numbers are, well, striking: fewer called strikes, especially in crucial situations, against the home team. In basketball, the authors write, “the chance of a visiting player getting called for traveling is 15 percent higher than it is for a home-team player.”

The authors attribute this not to a widespread conspiracy but to a common psychological trope: people want to be liked and to be confirmed in their judgments. Maybe so. I do wish the authors had been less rhetorically presumptuous in attributing behavioral predilections to groups of people and even individuals on circumstantial grounds. Most of their conclusions are, after all, subject to debate.

To wit: Moskowitz and Wertheim's study of icing the place-kicker — that is, calling timeout to ratchet up the pressure on him — concluded that the strategy is ineffectual; kickers kick successfully to virtually the same percentage whether iced or not. In December, however, The New York Times reported on a different study that had found otherwise, that iced kickers are less successful than room-temperature ones.

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