CONVERSATIONS WITH A BOOKIE

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Recently, I had one of those charmed days when things fell my way. No, I didn't win the lottery. But I did luck into a first-class upgrade on a long flight. I settled into my spacious window seat. The seat next to me stayed empty while a few dozen passengers filed slowly by. As new faces appeared at the door I scanned them unobtrusively. Eventually a man appeared whose gaze went right to the seat next to me. As he stowed his bag, I recognized the logo of one of those companies that gained prominence a few years ago through heavy advertising of Daily Fantasy Sports.

"So," I ventured, referencing that wellknown marque, "I imagine you are pretty busy these days with real sports betting?"

"It has been a busy time for me," he said. "I used to work on the fun side of the house, but right now the need is for someone to go around and explain to state legislators what our business is all about. So I end up explaining why it's hard to make a lot of money running a sportsbook."

"I was under the impression you were doing pretty well."

"We are doing great! And we can do a lot more! But some legislators seem to think that running a sportsbook is like running a lottery. It's a very different business."

Realizing that we might have an interesting conversation, but that it could get awkward if I waited too long to reveal my interest in lotteries, I introduced myself and explained that I consult with state lotteries. "And I don't know anything about sports betting. It's still considered illegal where I live. But you know, if you could help me understand something about your business, I might be able to help you. I have heard before that running a sportsbook is risky, but I can't explain why. How would I explain, to a person who understands lottery, what you need to do to make money in a sportsbook?"

The ritual admonition to stow bags first under the seat in front of you gave him cover to pause and consider this. As boarding continued, he introduced himself (Andre) and said, "OK, let's do this. Sportsbook for lottery people. I will confess that I don't know much about lottery games either, so I might learn something too."

Now, I did say this was a long flight, and we did not talk the whole time. Both Andre and I seem to have the gift of speaking so as to be heard by a person at our elbow, without projecting a lot further. I think we each improved our understanding of the other's business without annoying our fellow passengers. In this and a following article, I recap what I remember as the most important points, vignette-style. Any errors or omissions are my own.

OTHER PEOPLE'S MONEY

One thing we quickly agreed upon is that our role, whether lottery or bookmaker, is to set up a proposition on which people want to bet their money. We don't have money that we want to bet, ourselves. Rather, we are service providers. We help people play with their money, and for that service we keep a slice for ourselves.

"We both need to play with other people's money," I ventured.

"Yes," Andre replied, "and what we both count on doing is taking all the money we collected from bets placed on outcomes that did not happen, and out of that paying the wins of players who bet on the outcomes that did happen. The difference is: You in the lottery business put up propositions with crazy-many possible outcomes, and count on players spreading their bets across that big range of outcomes. Even your smallest game has



1,000 different ways it could turn out, right? So, so long as bets are spread across the whole outcome space, you're going to be OK."

I realized that he did in fact understand quite a bit about the lottery business.

"We in the bookmaking business generally get it down to only two outcomes. And ideally, regardless of which way it falls, we should be able to pay all the winners from the bets of all the losers. And then some, if we want to make money."

"But even in the lottery case," I said, "we know that bets aren't evenly spread. For instance, even in that little Pick 3 game, with 1,000 possible outcomes, we know that people like to bet on straights like 7-7-7, and on dates like 4-2-0, and so on."

"So what would be your approach if the betting on one outcome – like today's date, maybe – got too big? I mean, big enough that you could not possibly pay all the winners from all the losers, if that outcome happened?" he asked.

"Oh, we probably wouldn't mind losing money on one drawing; it's good for public relations when there are lots of winners. But I have seen liability limits defined. There was a provision to stop accepting bets once the liability on a particular outcome got to some crazy level. As I recall, it was like 'If we have a 1 in 1,000 chance of losing all the profit we would make from this quarter, that's enough. Don't take any more bets.""

"Don't take any more bets at all, or just bets on that particular outcome?"

"I don't remember."

"OK, maybe you just decline getting out-of-balance beyond a particular level. How often do you hit that limit?"

"I have never seen the liability limit used."

Dear Reader: Actually, I was putting a more rational face on the liability limit I recalled, than it perhaps deserved. I think it was defined in the game business requirements as a dollar amount, with no explanation of how it related to the likelihood of loss, or the expected profit of the game.

"OK. So balancing liability across outcomes is not usually a big deal for you, because you have so many outcomes," he said. "We in the sports betting world, on the other hand, want to deal with the two outcomes people care about: win or lose. Two teams have a match, one is probably favored. Loyalty aside, people are likely to bet on the team they think will win. Our business need is to get enough bets on both possible outcomes, so that we can pay the winners from the losers, and also keep some for ourselves. So, we have to put out attractive offers for both outcomes. We have two basic ways of doing that: the spread and the line."

"I think I understand the spread, from hearing people talk about friendly bets. That's generally talk about even money and points."

"Right. You like the Dogs, I like the Cats. Cats are favored to win. I'll bet you \$20 the Cats win by more than five points. You bet me \$20 that that will not happen. We would want to agree beforehand on what happens if the Cats win by exactly five points."

"Wouldn't you lose in that case?"

"If that's what we agreed."

"OK, but that was a friendly bet with no bookmaker. How can you get in the middle of that to make money?"

"Our service is to broker the deal, between parties who don't have to meet and agree. We charge for that service, and we work our charge into the offer. When we propose the terms of the bet, our cut is already baked in. In order to make the terms clear, we have a standard notation and standard rules."

"Now that's where it starts to look complicated. I see postings and frankly I don't know how to read them."

THE NOTATION

"Well," he said, pulling out his phone, "look at this."

The web page he showed me related to a football game between the New England Patriots and the Los Angeles Rams. In fact, it was an archival page from February 2019, and the game was Super Bowl 53.

"Did you have a bet on this?" he asked. I confessed that I had not.

"OK, if you were more of a sport, you might have seen this point spread:

Patriots	Rams
-2.5	+2.5
-127	+115

"So, standard notation, the favorite gets a minus sign," he said. "Patriots were favored to win, you remember. The offer is to bet for New England to win by 2.5 points or more."

"How do you get half a point?"

"You don't. That's just to make clear that if you take New England and they win by two points, you lose the bet. If they win by three points or more, we say they cover, and you win the bet." "What would I win?"

"Standard notation is set up to show a \$100 win on the favored team. What this number shows (pointing to the -127) is

what you have to bet to win \$100. You are betting to collect \$100 if the Patriots win, or lose \$127 if they don't."

"So, I stand to lose more than I stand to win?"

"If you're betting on the favorite, sure. You want to bet on L.A. instead? Standard notation again: For the underdog, we show what you could win for a \$100 bet. So this number (pointing to the +115) says if you bet \$100 on the Rams and they win, or get beat by less than three points, you collect \$115."

"OK. This is kind of complicated. Is there any reason for this notation, I mean minus for the favorite and plus for the underdog?"

"Well, it's pretty clear for us at the sportsbook. You can think of it as showing what happens if the favorite doesn't cover: We collect \$127 from those who backed the Patriots, and pay \$115 to those who backed the Rams – for hundred-dollar transactions, that is."

"And is \$100 kind of standard?"

"As a minimum. It takes money to make money." "And I still don't see how you make money on this."

"You couldn't, because I haven't shown you where the money was actually bet. See here: At one point, 67% of the point spread money was on the Patriots. Let's say we're talking about conventional bets to win \$100 if the favorite covers, and lose \$100 on the underdog if the favorite covers. Then we can use this handy table that I made for when I go around talking to legislators and such. Who, by the way, are pretty knowledgeable about this illegal activity. Here's how that looks for the book." (See Spread Outcome chart on the next page.)

"So, in effect you were betting on the underdog! Were you happy with that?" $\ensuremath{\mathsf{M}}$

"Well, we could have been happier. And in fact, we accepted a lot of bets on the Patriots, and we paid out a lot of money when they covered. They won 13 to 3, if you remember."

"Wow. It never occurred to me that the house would lose money on the most likely outcome."

"That's not how you do it in the lottery business, right? When you put up a big jackpot, the most likely outcome is that nobody wins it, and you make money on that. But when you're a bookmaker, you might have to make your money on the less likely outcomes."

Now, I like to think that I am less risk-averse than most of my peers, and in my earlier career I certainly backed some long shots with everything I had. And lost. But at that moment I tried to imagine what a risk-courting state lottery would look like. All I could imagine was a lot of very anxious people around a conference table.

Andre, I sensed, was a very smooth educator. Rather than emphasizing a "life is hard when you're a bookie" line, he moved on to explain more of the arcane notation.

"Now, if you want to bet without a point spread, then you have the moneyline." And he pulled up another archived page from Superbowl 53.

The moneyline. That is one of those words that the initiated use, that remind the rest of us that we really don't know what's up. Anticipation sharpened my eyesight. Perhaps the book was

Spread Outcome	Patriots	Rams	Book Net
Patriots cover	Pay 67 x 100 = \$6,700	Collect 33 x 100 = \$3,300	Lose \$3,400
Patriots fail to cover	Collect 67x127 = \$8,509	Pay 33x115 = \$3,795	Make \$4,714

making money here.

"See, the moneyline is strictly about who wins the game," he said. "No point spread. If they happen to tie, no money changes hands, it's a push."

Andre showed me:

Moneyline Information

New England (-115; Bet \$115 to win \$100) Los Angeles (+130; Bet \$100 to win \$130)

"So again, New England favored to win, you will need to put up \$115 to win \$100. If you want to bet \$100 on L.A., you stand to win \$130 when they win the game."

"OK," I said. "I get that it ought to be even easier for New England to win and for L.A. to lose, compared to the spread. Is that why the moneyline pays better, if the underdog wins? But it also costs less to win \$100 on the favorite. Is that because there is no payout for the tie?" "There is no tie in the Super Bowl – sudden death, remember. And look: Even if the action was the same as for the spread, which it won't be, it will be even stronger for the Patriots. Once again, the likely outcome is not that good for us." "But that can't be the whole story. I hear people talk about the juice, or the vigorish or licorice or some such thing..."

"That's not really a term we use. Nor is it money we collect, as you see."

"Don't you ever get in a position to make money on either outcome?"

"Well, we do try."

As the flight continued, over first class food and beverages, Andre told me about things the sportsbook might do to move toward a position of equanimity about the outcome of the game. I will try to recount what I learned in my next article. But my strongest impression from this trip remains this: As a lottery person, my comfort zone is centered on making money from the most likely outcomes. As a bookie, I might not spend a lot of time in that zone.

Game Outcome	Patriots	Rams	Book Net
Patriots win	Pay 67 x 100 = \$6,700	Collect 33 x 100 = \$3,300	Lose \$3,400
Rams win	Collect 67 x \$115 = \$7,705	Pay 33 x 130 = \$4,290	Make \$3,415

