

Humility, Mathematics, and Poker

Brian Alspach

I was back in British Columbia in early December and fortunately ran into Bib Ladder. The old guy, as usual, had something valuable to say. After exchanging pleasantries and mutually acknowledging it had been too long since we had seen each other, Bib got down to business.

“You know, professor, I love the big growth poker has undergone the last few years. All the new players generate much more activity and we now have better poker rooms in BC than ever before. However, I have my work cut out for me trying to convince many of the new players that they need more humility. The game is humblizing.”

Laughing, I replied, “Bib, ‘humblize’ and its various verb forms are not part of the English language. On the other hand, it conveys perfectly the idea you are trying to get across. The game, indeed, leads towards humility.”

“Tell me then, professor, have you had ‘humblizing’ experiences?”

“First of all, Bib, most mathematicians involved in research come across some spectacularly talented people. That in itself creates some pressure towards humility. The research game is rather competitive in that sometimes there are several individuals and teams working on the same problem. The first team to solve the problem naturally feels pride in reaching the goal first. But they have to be careful about feeling too proud as frequently someone comes along who finds a better solution or gains additional insight and makes advances the original solvers missed.

The mathematical problems themselves can be very humbling. There are several problems I’ve been working on for forty years. I don’t mean that I’ve spent most of the last forty years working on the problems; instead, I first looked at them forty years ago and over the intervening years I come back to them and work hard for several weeks in an attempt to get a new idea that might lead to a solution. This teaches humility very thoroughly.

“So, Bib, how do you see this playing out in poker?”

“Let me tell you about a young chap I’ll call C for simplicity. He first walked into the poker room about six months ago. He was hooked on hold’em from television, which had led him to books, home games, and the internet cardrooms. I chatted with C a little before he sat down for his first session in a physical cardroom. He was a little anxious but also quietly confident. That little chat led him to trust me and confide in me over the intervening months. I mean he kept me informed about how he was feeling about his game, but he never asked for playing advice or comments on his play. I certainly didn’t volunteer any information, as I had a feeling it might not be welcome.

His first session was unfortunate in some ways. In spite of some bad plays on his part, the cards ran in his favour and he walked away with a solid win. For three months the cards were simply going his way. His opinion of his own play soared along with his bankroll. After three months he confided in me that

he had decided to drop out of UBC and head for Las Vegas and a life as a professional poker player.

I was alarmed at this information and decided to try to prevent what I saw as a big mistake given the state of his game at that point. I had to do so without actually talking much about his game; I just had a feeling that would be a mistake. I talked a lot about how the game manages to ‘humblelize’ just about everyone and eventually convinced him to give it another three-month trial before making a decision. I also convinced him to do some tracking of the hands he played.”

I, of course, asked Bib what happened with C. He continued as follows.

“C went through a streak of missing a disproportionate number of drawing hands compared to hitting a disproportionate number like he did the first three months. He lost big sets to straights and flushes. He started being on the ‘humblelizing’ ends of hands rather than the grinning end. He also started thinking about what he was tracking and has come to realize that if one believes one knows everything there is to know about poker, then you are mistaken. He’s becoming much humbler and is on his way to becoming a dangerous player.”

“What did you have him tracking, Bib?”

“I wanted C to get an accurate picture of the relationship between his effect and the effect of other factors on the outcomes. He had fallen into the trap of believing his early successes were mostly due to his terrific play rather than luck. So I asked him to track his decisions at each betting stage for hands that saw the flop. We looked at them later and assigned a skill factor and luck factor for each hand he took to the river. It wasn’t a precise scientific experiment because it is hard to assign skill and luck factors to every decision. Also, he often did not see what hands he had beaten when he had the winner. Nevertheless, C began to see that the skill factor involved in his play was much lower than he perceived. He decided to start thinking much more seriously about his decision-making — the first step towards improving his play. He also became acutely aware of the role luck had played in his initial action.”

“Well, Bib, it was good talking to you again. One little thing we can take from your work with C, if nothing else, is to urge newer players to ask themselves at the end of a winning hand whether they did so mostly by skillful play or luck. If the answer is mostly luck too often, the player is going to have some painful sessions.”