Introduction

I do not believe in luck – only in the immutable law of averages, Herbert Yardley

When Herbert Yardley wrote his short classic, The Education of a Poker Player, in 1957, No Limit Texas Hold'Em, the game that has become synonymous with poker for many people, hadn't been invented. Yardley started his poker career at a spit and sawdust club called Monty's Place. After outsmarting the eponymous Monty by spotting his tell (bluffs with one hand, value bets with the other), Monty takes him under his wing and teaches him how to play. Although the story starts out a little like the famous Oreo's scene in Rounders, and you start to wonder what sort of rubbish you've let yourself in for, Yardley's little book is packed with sound advice on how to beat the most popular games of the day (five card draw, five card stud and seven card stud are the main varieties, both Limit and No Limit), which he weaves into an entertaining narrative that ends up in China during the Second World War. Yardley was simultaneously teaching the Chinese Army how to crack codes, and his minder, a huge fish, how to play poker. How the poker world has changed since then! The majority of poker is played online, and, although seven card stud and five card draw remain popular, it's Texas Hold'Em that dominates the poker landscape.

So how would Yardley fare in the modern poker world? Since the man was clearly a genius and a gifted card player, we're sure he would be a successful player, but how would he have learnt the game? Nowadays, the internet is awash with training sites that offer articles and videos on how to play, and everyone and his uncle seems to have a coach. Perhaps Yardley would have found the online equivalent of charismatic, middle-aged Monty to guide him. JB has been lucky to find two mentors to help him continue his poker journey.

Although we can't compete with Herbert Yardley's stories of farmers literally betting the farm and dying at the table, and hunts for German spies whilst taking fish to the cleaners, we hope that we can provide something for today's aspiring poker player to learn from. The age difference between JB and his mentors is about the same as that between Yardley and Monty, although it's in the wrong direction, and we do have some stories to tell.

From ABC poker player to fearsome LAG? (JB)

Tight-aggressive, ABC poker is a straightforward approach to the game that can make you a winner in low/mid stakes, short-handed, deep-stacked, NLHE, cash games....or is it?

You raise to 4bb with A♥ K♦ from UTG and get a caller.

- The flop is 2♥, 4♣, 8♣. Should you make a continuation bet? He's probably not going to believe you have connected with a board like that when you've opened from UTG. You check. He bets half the pot. You fold.
- The flop is 4♣, 5♣, K♥. Top pair, top kicker! He checks. You bet half the pot. He calls. The turn card is 7♣. A third club. That's a worry. Some straights out there too. You probably ought to bet though. You bet half the pot. He raises. You fold.
- The flop is 2♣, 5♦, K♥. Your opponent bets two-thirds of the pot. You call. The turn is K♠. By the river, all the money has gone into the pot. He shows 2♦2♥ and scoops the lot.

If, like me, you've been playing poker for a while with some, but not much, success, I'm sure you'll recognize situations like these. You know that your thought processes are not clear. You know you should be trying to 'read' your opponent. You've heard about mysterious concepts like, 'balancing lines', '3bet bluffing', 'firing multiple barrels', 'thinking in terms of ranges', but when you sit down at the tables, it quickly becomes a bit of a blur.

As I write this, I've been playing NLHE for about a year, and have mainly played microstakes SnGs and MTTs and, more recently, shortstacked, full-ring cash games. I am trying to avoid facing the fact that postflop play is a scary minefield for me. I'm a mathematician, and have a basic understanding of the Independent Chip Model (ICM) and the short-stacked push or fold game, but the later streets of betting in a deep-stacked cash game are far more difficult to handle. Many well-known poker pros excel at deep-stacked, short-handed cash games. We'd all like to perform like loose-aggressive players like Phil Ivey and Tom Dwan, but the thought of negotiating four streets of betting with a wide range of starting hands seems as daunting as crossing a busy road wearing a blindfold.

This is not a book for complete beginners. We are going to assume that, like me, you know the rules of No Limit Hold'Em, the basics of odds and outs, how to count card combos, how to calculate expected value (EV), and that you have at least some playing experience. If this doesn't describe you, get online and register with a training site like Pokerstrategy.com and absorb the basic learning materials there, or flick to the end of this book and have a look at our list of recommended reading, learn the basics, then play some poker. Start at the microstakes and use the bankroll management rules that we'll describe later in the book. It's a demanding and frustrating game, as you will find out if you give it a try, but the rewards, both intellectual and financial, can be substantial. Once you've mastered the basics, read on - TT and Manu will try to take my, and your, game to the next level.

Mathematics and SH NLHE (JB)

Although mathematics can give us an understanding of the push or fold stage of a NLHE SnG, it would appear that the same cannot be said of SH NLHE cash games. It's all about hand reading and, as TT would say, 'soul reading' isn't it? Well, maybe not. Let me explain a game much simpler than NLHE.

The deck contains just three cards: A, K & Q. There are two players, John and Tom, who are each dealt one card and contribute \$1 to the pot. John is forced to check. Tom then has to decide whether to bet \$1 or check. If Tom bets, John must decide whether to call or fold (he isn't allowed to check-raise). What's the best strategy for this game? And what does 'best' mean anyway?

If Tom has an A, he knows that he has the best hand, and will bet for value. If he has a K, he will check, because John will know he's beaten if he has a Q, so will only call with an A. But what should Tom do with a Q? Should he bluff and hope John will fold a K (he won't fold an A), or should he give up, knowing he's beaten? If Tom bets, John will call with an A (he knows he's winning) and fold a Q (he knows he's beaten), but what should he do with a K? If John always calls, Tom can just fold all his Q's and know that John will pay him off every time he bets an A. If John always folds, Tom can bluff with all his Q's and take the pot with the worse hand.

The AKQ game contains more than a hint of real poker: don't bet hands that will only be called by better (Tom's K), bluffs (Tom's Q), value bets (Tom's A) and bluff catchers (John's K). Playing the AKQ game in real life, Tom will sometimes decide to bluff, but not every time. John will try to decide whether Tom is bluffing (by soul reading perhaps) and call sometimes ('I just knew you were bluffing!') but not every time (Sigh....'I think you have me beat.').

For this simple game, a mathematical analysis, which I'll go through later in the book, shows that if Tom bluffs at random with 1/3 of the Q's he is dealt, John cannot affect his winrate by changing his ratio of calls to folds with a K (Tom is unexploitable). Similarly, if John calls at random with 1/3 of the K's he is dealt, Tom cannot affect his winrate by changing his ratio of bluffs to folds with a Q (John is unexploitable).

Tom has a positional advantage - he can check behind and show down his K's, an option that John does not have. After playing a large number of hands, Tom's unexploitable strategy earns him about 5.6c per hand played. However, if John decides that he can do better than losing this much, perhaps because he thinks Tom likes to bluff more than 1/3 of the time, he can try calling more often. This makes no difference if Tom now continues to bluff with 1/3 of the Q's he is dealt, but if he can see that John is calling too much, he can in turn exploit John by bluffing less often (playing tighter against a calling station). Similarly, if John decides to call with less than 1/3 of his K's, he opens himself up to being exploited by Tom, who can bluff more often (playing looser against a nit). Is this how a good shorthanded NLHE player thinks? Does TT try to play an unexploitable strategy? I expect him to tell me that small stakes players use a far from unexploitable strategy, and that he knows how to exploit them. Is it even possible to say what an unexploitable strategy would look like for a game like NLHE? NLHE is enormously more complex than the AKQ game, with four streets of betting, no limit to the bet size, check-raising, multiple opponents, and a board that changes on every street. How does this affect the strategies that are available? How do you go about finding to exploit opponents in such challenging opportunities а environment?

Poker is Not a Game of Cards (TT)

If you think poker is a game of cards ... sorry, it's not. It's a game of human psychology and information, of mindset and position, and last but not least – our professor will love to read this – it's a game of mathematics.

There are many forms of poker, and all of them have different characteristics. For this book we will be concentrating on NLHE, since it's currently the variant of poker that's played the most in online casinos and card rooms around the world.

NLHE is a game played by human beings. Even in something as simple as the AKQ game, where unexploitable strategies are easy to determine, variance will have an impact. Imagine John accidentally makes several "wrong" calls (not wrong in terms of range and frequency, but wrong because Tom shows down an A several times in a row). Human psychology will tell him that he made a mistake, simply because he saw the unfavourable outcome. If he analysed the situation with our professor, he would see that his call is EV neutral in the long term. But most of us don't like to lose. We get angry or sad. We don't want to be outplayed. The angrier we get, the closer we come to what dominates the whole poker world – **tilt**.

Tilt can be defined in many ways. One of my favourite definitions is given by Tommy Angelo in his classic book *Elements of Poker*:

Tilt has many causes and kinds, but it has only one effect. It makes us play bad. It makes us do things we wouldn't do if we were at our very best. And that's how I want to define it, exactly like that. Tilt is any deviation from your A-game and your A-mindset, however slight or fleeting.

So John will start calling down too many K's because he "wants to see it". He "must" be right "this time". He forgets even the simplest unexploitable strategy he developed ten minutes before. His brain is no longer in A-game mode. He is on tilt.

Poker is a game of getting into your opponent's head (soul-reading). Once you can identify how and on which level he thinks about the game, the cards are no longer important in the long run. Short term bad cards and suckouts can lead to big swings, but in the long term your decisions will just lead to a positive expected value.

I am not one of the best players in the world - there are just so many exceptional players in today's games - but, I am one of the more successful. How can that be? It's all about mindset. When you are capable of playing your A-game even after losing with quads in a deep pot against one of your worst enemies, you are ready to win big. In the long run, we all get the same setups and suckouts, so it doesn't matter too much. The key is to make sure you play the best you can in all the other situations, and that's much easier said than done, as JB will find out. If you are playing poker long term, you should think of it as one long session. It doesn't matter when and from whom you take the big blinds. The things that matter are, that you:

- 1. Improve your game as much as possible.
- 2. Adapt to the changing conditions at the tables.
- 3. Play your best game (your A-game) in every single spot.

In this book, Manu and I will try to get the professor on the right track to beat SH NLHE. We will tell him that he can throw his maths degrees into the dustbin and show him how position, aggression and mindset make \$\$\$.

Part One: Fish

A Fish at Play (NL10)

Confidence is ignorance. If you're feeling cocky, it's because there's something you don't know. Eoin Colfer

JB: I've never played a short-handed cash game before, although I have played some full ring. I tried to wait for a decent hand, did a bit of set mining, hoped to hit the flop, and bet if I thought I'd got the best hand. That approach never made me much money. If I'm going to play short-handed, I'm going to have to play some real poker.

In order to 'evaluate my play', by which I suspect he means, 'see how much of a fish I am', TT wants me to try a session of SH NLHE. I'm going to play four tables of NL10, without a HUD, and record a video of my play so that he can see the magnitude of his task. So how should I play? Presumably I can't wait around for premium hands or the blinds will gobble up my stack. He wants to teach me how to be loose-aggressive, so I think I'll try to play loose-aggressive, although I'm not entirely sure what that involves - a wide range of starting hands presumably. I'm not entirely sure how wide, but it's probably best to play in position. I don't want to go mad from UTG. I'm not sure that I have the skill to carry on being very aggressive postflop. Surely I can't be too bad at this. I have been playing for more than a year now. JB is CO with A ♦ J♥. MP raises to 40c, JB 3bets to \$1.20, MP calls and they go HU to the flop, 100bb deep.

TT: 3betting MP from CO can be very powerful when used correctly. However, 3betting just for the sake of being aggressive is not a good option. I don't want to go into detail why and when you would want to 3bet AJo in this situation, but for now it's a good hand to call with. Playing a strong hand in position is guaranteed to make you money in the long term.

JB: A random act of aggression. I suppose 3betting here just folds out the weaker hands that I'd like to play against.

The flop is $J \diamond Q \diamond 2 \diamond$. MP checks and calls JB's bet of \$1.50 into \$2.55.

TT: Think about Villain's hand range and your perceived range. Checking behind is a very good option, although betting also has some merit. I prefer checking back against an unknown, especially because you have $A \bullet$ and don't mind seeing a diamond on the turn. Villain will mostly fold his underpairs on this double broadway flop, but might bluff into you with those hands on the turn. You also don't lose value against Jx, since you can't get three streets of value anyway. Other than that, your opponent's range consists of a few Qx, probably AK and maybe T9. Against this overall range you would be better off giving him some rope and letting him bluff, while also minimizing your losses against a hand like KQ. You won't usually fold to a turn and river bet; your plan is to call both streets and see a showdown.

JB: I was cbetting just about every flop during this session. At least I was consistent!

The turn is 3♦. MP and JB check.

TT: After betting the flop, I would also check back the turn, and get some more value on the river or potentially spike a bluff. If Villain bets really big on a blank river, I think you could even find a fold. If you hadn't bet the flop, you should bet the turn when checked to.

JB: I did something right!

The final board is $J \diamond Q \diamond 2 \diamond 3 \diamond 8 \diamond$, which gives JB the nuts. Villain bets \$2.60 into \$5.55, and JB raises to \$5.20, leaving himself \$1.40 behind.

TT: Definitely value shove! His calling range is absolutely inelastic. If he has a big flush, he will call any amount. Shove it!¹

JB: So logical. Surely I can learn to think like that too.



JB is SB with A A 3 A. UTG limps in, and it folds round to JB, who raises to 35c. BB folds and UTG calls.

TT: Fold. Although A3o is in the top 38% of hands, so we can't really say it's bad, its playability out of position is terrible. Especially as a beginner, you will end up making too many mistakes postflop to justify playing it by either raising or calling preflop, because of both the risk of being dominated and the fact that it flops so poorly.

¹ To keep things simple, we will use 'he' to describe my opponents throughout the book, even though we're not, or at least not all, appalling misogynists.

JB: What was I thinking? Was I thinking? Someone once said 'Never disgrace an Ace'. I suspect they never won much money playing poker.

The flop is 2♥8♠4♣. JB check/calls UTG's overbet of 90c into a pot of 80c.

TT: As played, cbet the flop and go from there. Never check/call an over pot size bet out of position with a pure gutshot.

JB: So embarrassing.

The turn is $5 \blacklozenge$, which gives JB a straight. He checks and UTG checks behind.

The river is K♣. JB bets \$1.50 into \$2.60, and UTG calls with 8♣7♦.

TT: As played, lead the turn and also lead the river. Or check the turn and plan to check/raise; if he checks back, also check the river planning to check/raise again. If he played for pot control with a one pair hand on the flop, he might value bet it on the river and will be very confused by your check/raise.

JB: I was planning to check/raise the turn. It never occurred to me to try to check/raise the river instead of just value betting.