# Dynamic Full Ring 

## Poker-

Beyond The Basics

## About The Author

James 'SplitSuit' Sweeney began playing poker in 2004. What started as home games and smaller tournaments soon turned into a business. From grinding live games at Turning Stone Casino, to SNGs, to PLO8 cash games, James quickly began to strengthen his poker theory and strategies. In 2007 James returned to his NLHE roots and began grinding full ring cash games. Interested in not only playing, but sharing his knowledge, he began taking on students.

Over the years his coaching methedologies have only improved, and he has coached over 300 students in that time. He also began making training videos for the once Stox Poker Training, and is now on the CardRunners roster as well. Teaching has been a passion of James', and poker was the perfect outlet given the various strategic levels the game offers. In late 2010 James finished his first book, and he plans on writing another one in 2011. While poker will always be a semi-professional avenue for him, James hopes to always be teaching at a professional level.

A graduate in Marketing from Syracuse University, James coaches and offers various coaching mediums at splitsuit.com.

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## Table of Contents

Introduction by Steve Sundberg ..... 11
Preface ..... 15

1. The Preflop Warm Up ..... 19
The Positions ..... 21
The Player Types ..... 22
The Stack to Pot Ratio ..... 24
The Preflop Mindset ..... 26
2. Preflop Hand Selection ..... 29
The Power Of Position ..... 31
The Basic Open-Raise Range ..... 32
The Steal ..... 33
The Sizing. ..... 35
The Min Raise ..... 37
3. Calling Raises ..... 39
The Pair Range ..... 41
The Other Range ..... 43
The Multi Way Call (With Evil Intentions) ..... 44
4. Isolating ..... 47
The Weak-Tight Isolation ..... 49
The Weak-Loose Isolation ..... 51
The Unknown Isolation ..... 53
The Mutli Way Isolation. ..... 53
The Facing Of An Isolation ..... 54
The Attacking Of An Isolator ..... 55
5.3-Betting ..... 57
The Value 3-Bet ..... 59
The Bluff 3-Bet ..... 60
The Other 3-Bet ..... 65
The Size Of A 3-Bet ..... 69
5. Squeezing ..... 71
The Open Raiser ..... 73
The Through Caller(s) ..... 74
The Hand Selection ..... 75
The Squeeze Size ..... 76
7.4-Betting. ..... 77
The Value 4-Bet ..... 79
The Bluff 4-Bet ..... 81
The Flatting Of A 3-Bet ..... 89
The Art Of Sizing A 4-Bet ..... 91
6. Preflop Adjustments ..... 93
The Table Selection ..... 95
The Seat Selection ..... 95
The Image ..... 96
The Stack Sizes ..... 97
The Reloader ..... 98
The Preflop HUD Stats ..... 98
The Preflop Stat Correlations ..... 101
The Quick Inference ..... 104
The LAG Transition ..... 105
7. The Postflop Warm Up ..... 107
The Pot Geometry ..... 109
The Elastic Vs. Inelastic Calling Ranges ..... 110
The Hand Reading Basics ..... 110
The Pot Size Thresholds ..... 112
The Polarization ..... 114
The Minimax Game ..... 115
The Exposure And Mindset ..... 115
8. Understanding Showdown Value ..... 117
The Usage ..... 119
The SDV Framework ..... 120
The Other Side Of The Coin ..... 122
9. Continuation Betting ..... 125
The Mindset ..... 127
The Textures ..... 133
The Polarized CB ..... 135
The Depolarized CB ..... 139
The Multi Way CB ..... 140
The CB Size ..... 143
10. Floating And Calling ..... 145
The Floating/Calling Considerations ..... 147
The Bluff Float ..... 148
The Value Call ..... 151
11. Check Raises ..... 155
The Facing Of A Check Raise ..... 157
The Bluff Check Raise ..... 161
The Value Check Raise ..... 175
12. Playing 3-Bet Pots Postflop. ..... 179
The 3-Bet Pot Mentality ..... 181
The Setmine 3-Bet Pot ..... 182
The Small SPR 3-Bet Pot ..... 184
The Resteal Pot ..... 189
The Tricky 3-Bet Pot ..... 198
The AK 3-Bet Pot ..... 199
The Big Pair In A 3-Bet Pot ..... 207
The Squeezed Pot ..... 214
13. Playing Big Hands On The Flop ..... 221
The Big Hand Considerations ..... 223
The Donk ..... 227
The Big 3-bet Hand ..... 230
The Limped Pot. ..... 243
The Normal Pot ..... 245
14. Flop Adjustments ..... 257
The Postflop HUD Stats ..... 259
The Postflop HUD Stats Correlations ..... 262
The Free Play Pot ..... 264
The Draw ..... 265
The Facing Off Donk Bet ..... 268
The Depth ..... 270
The Future ..... 274
15. Barreling ..... 277
The Barrel Texture ..... 279
The Bluff Double Barrel ..... 280
The Semi-Bluff Double Barrel ..... 285
The Delay CB ..... 289
16. Value Betting ..... 291
The Fat VB ..... 293
The Thin VB ..... 302
The Best Hand That Checks ..... 304
The Blocking Bet ..... 308
The Bets And Their Sizes ..... 311
17. Turn/River Adjustments ..... 315
The Sticky Bets ..... 317
The Timing Tells ..... 318
The Good/Bad Card ..... 319
The Bad/Good Card ..... 320
The Love OfA Pair ..... 320
The Balancing Act ..... 322
The Leveling Game ..... 324
The Hero Fold ..... 326
The Hero Call ..... 328
The "OMG I'm Confused" Line ..... 331
18. Creative Line Composition ..... 335
The EP Steal ..... 338
The LRR ..... 339
The EP/MP 3-Bet ..... 341
The Special CB ..... 343
The Massive ISO ..... 343
The Back-Raise ..... 345
The Draw and CR ..... 346
The Database Adjustment ..... 347
The Lines of the Future ..... 351
End Game ..... 353
Glossary ..... 357

# Introduction by Steve Sundberg 

## How This Book is Different

As a poker coaching student of his, James 'SplitSuit' Sweeney asked me how this book is different than the other poker books I have read. I will answer that question with a quick story:

A recent popular book stated that the winning style to beat online 200NL 6 max was LAG (loose aggressive.) So of course, I start playing loose and aggressive. At the time, my hand reading skills were virtually non-existent. One of the things the book implied, that I missed, was that to in order to play a profitable LAG style, you need to be a good hand reader. In addition to that, the popular poker forums hype up the LAG style, and imply that nits are a pariah of the poker society. Not wanting to be a pariah, I adopted the LAG strategy, which ultimately would have been described as a "LAG-fish" style. Being a tuna in a shark tank, while foolishly thinking I was also a shark, was a recipe for disaster.

Then I was introduced to James' concept of frameworks presented in this book. This is a technique of breaking down a hand into simple components. Components that can be quickly and easily analyzed during a hand to make a decision. This is the first area where this book is different than others.

Most other books tell you to do Y in situation X . However, we rarely run into EXACTLY situation X when we are actually playing. We run into slight variations of X , and usually optimal play would necessitate variations in our lines and actions. Humans intuitively seek to find a simple set of rules that they can easily apply in poker and life (do " $X$ " if " $Y$ "). The problem is that poker is very complex. So much information needs to be gathered, analyzed, and processed into an optimal line. Which can be especially difficult while playing online, when the decision needs to be made quickly.

Next, this book differs dramatically in the explanation of poker theories. They are broken down simply, with minimal jargon, so that poker players of all levels are able to understand and utilize them. After reading this, you should be equipped with the necessary theoretical understanding to find solutions to your poker problems.

Which leads to the final area where this book diverges from others. Since it explains the underlying theory behind a line, you are able to adjust the application of the theory as the game conditions change.

Most books give strategy based on the game conditions relevant when the book was published. Especially in online poker, game conditions can literally change daily, especially after a popular online coach publishes a new article or video. Within weeks, even the fish seem to be trying the new line. With this book, you have the necessary information to adapt to the ever-changing game conditions.

In a nutshell, after reading this book, you should have the tools necessary to:

1. Evaluate your hand
2. Evaluate your opponent (his likely range, mistake propensity, etc.)
3. Decide on the most profitable line to take based on the above
4. Evaluate board textures and create profitable lines around them
5. Optimally adjust your strategy as the games mature and change

## How to Use This Book

This book contains too much info to process all at once, especially for the typical micro or low limit player, for whom much of this information will be new or clarified. I would recommend reading this entire book actively, by creating an outline as you read, highlighting any areas that are new or complex.

Then create a plan based on your current strengths and weaknesses, and decide on which strategies presented you are going to focus on first. Reread those sections, and focus on applying the concepts during a session. Then go back and re-read the section. I bet you will be surprised at what you missed or misunderstood. I know when I read the Isolating chapter, I repeated this process 3 times before I finally applied it correctly. Which reminds me... I think I'll review that one more time to be sure it's now in my unconscious competence!

Preface

My name is James Sweeney and I go by 'SplitSuit' or '*Split*' on various poker forums. I began playing this game back in 2004 at college, and I have loved the game ever since. When I began playing I was terrible. I actually read a LHE book while trying to learn NLHE, and would bet because "it was funny." Since then, I have put thousands of hours into improving my poker knowledge and putting that knowledge to use in a wide array of games.

This book is my first attempt at putting the knowledge I have gathered into an organized piece of writing. I have written many articles in the past, and various scripts for different training videos. But this is the first time I have ever tried to tackle a project this big and comprehensive. I would like to think that I did a good job at it, but of course you will have to be the judge of that.

Simply put, this book is a little different than other strategy books. My main gripe with most other strategy books, and most any strategic medium, is that they preach the "what" rather than the "why." The "why" is the most vital piece of anything we do in poker, or in life. This book doesn't aim to give you a play and then tell you to go use it. It aims to talk about what goes into making a play, which parameters are favorable or otherwise, and then why we can use the play. This is the crux of poker knowledge. If you simply ask yourself "why am I doing X?", then you are giving yourself an automatic edge.

In trying to find the exact verbiage to describe my thoughts on this book, I have decided to quote TheBryce, a player I respect a massive amount:
> "There are two parts to every poker decision:
> 1) making assumptions about what your opponent is likely to do, and
> 2) making the best possible choice based on those assumptions.

> As a coach I feel that far too much time is typically wasted discussing what opponents are likely to do. While I may have suggestions about how I think your opponents are likely to play I feel that ultimately a good intuition for how opponents will play is something that is best learned through playing a lot of poker and can't be effectively taught. Instead my focus is always to give you a better theoretical understanding of the game and the ability to make better poker choices. This, I find, is something that can be taught well, as for any given set of assumptions about what an opponent is likely to do there is a best choice, and if need be I can use math to prove it."

The entire thesis of this book is to think. Think about why we are making certain plays. Think about how we can exploit a certain weakness in our opponent. Think about how we can create entire plays based around exploitable tendencies in a player or game.

Books, coaches, and videos shouldn't be training wheels in your poker journey; they should be launch pads for your thinking ability and success.

Before we get to the actual strategy I wanted to thank a few people. These people have aided me in some major way through my poker journey to date, and it would be wrong of me to not acknowledge them in some respect. In no particular order:

- Chris 'Cwar' Warren
- Jim 'Onaflag' Galfano
— TheDatakid (TDK)
- Steve Sundberg
- Mpethybridge
-Skelm/Dutchin
- Galina Ladyka
- Philip 'RedJoker' Weedle
- Greg Lilley
- Alexander Seibt
$-\mathrm{uFR}$
And with that as my preface, let's get started!


## (1)

## The Preflop

## Warm Up

When we are building our poker brain, we do so like we build a house. We focus on building a solid foundation and basement, and then build upwards. Consider this chapter the basement of our poker house, aiming to make sure that all readers are on the same page. We all come from different points of view and skill levels, so here we just want to review some of the more basic things.

## The Positions

The strategic specifics of this book will be about full ring NLHE cash games. If you play another form, such as 6 max or tournaments, certain things will apply, but not everything. So please make sure to keep this in mind when applying this or any advice to your game.

That being said, there are effectively 4 broad positions in full ring. Early position (EP), middle position (MP), late position (LP), and the blinds (SB/BB). Different people will label them differently, but for the purposes of this book, we will consider the first 3 spots at a full table to be EP, the next 2 MP (MP1 and MP2/HJ), the next 2 (CO and Button), and the blinds ( SB and BB ). Below is a picture.


Figure 1: Full ring table

We can effectively view a table like a stop light. Notice EP and the blinds are in "red" because we want to play the tightest from there. Playing hands from EP increases our chances of being out of position (OOP) for the duration of a hand. And playing hands from the blinds against EP/MP/LP opponents guarantees that we will be OOP postflop. In an ideal world we would always be in position (IP), so we want to play only the strongest of hands if our chances of being OOP are large.

Next we notice that MP is in "yellow/orange." This is because we still have a chance of being OOP if we play a hand from here and get action. From here we can play some more hands, but we still want to be selective. Notice that the hi-jack (HJ) is in "yellow." This is because the HJ can sometimes be considered an MP or an LP. At some tables we treat it as a late position and are more aggressive, and at other tables we treat it more like an MP and play a bit tighter. How we approach the HJ is really a function of table dynamics, and we'll talk more about that later.

Late position, the CO and button, are in "green." This is because we want to treat them as our "go" positions. We want to play more hands from here than anywhere else. We have chances to steal, to isolate, and be in position in the event that we go postflop. Because of the positional-advantage, and the fundamental fact that there are less players to contend with, that these positions offer us, we play more hands from here.

## The Player Types

There are effectively six player types in poker. Nit, tight aggressive (TAG), loose aggressive (LAG), Aggressive Fish (A-Fish), Passive Fish (P-Fish), and unknown players. Let's quickly review them:

- Nit. These are super tight players. They generally have very tight VPIPs (VPIP is a stat that measures how often a player voluntarily puts money into the pot preflop) and low PFRs (PFR is a stat that measures how often a player raises preflop). Nits are notorious for only getting involved in large pots with the the nuts or the effective nuts. They are usually straight forward and understand position, but don't attack much when stealing or 3-betting.
- TAG. Tight and aggressive players tend to have tight, yet slightly looser than a nit's, VPIP and PFRs while keeping relatively small gaps between the two stats. TAGs are much more aware of position, and steal more aggressively. They will also resteal and defending their blinds more often. TAGs will bluff a little more postflop, as well as float, but still tend
to maintain a "big pots with big hands" mentality.
- LAG. These are effectively TAG players on steroids. They steal more, 3-bet more, use more aggression, and don't hesitate to run bluffs in good spots. Their VPIP and PFR are going to be looser than a TAG's, and they retain a small relative gap between them. These players can present lots of trouble, especially when they are good and solid LAGs.
- A-Fish. These are bad players that have massive VPIPs. The fact that they are aggressive usually means they will have PFRs that are a bit higher, especially in relation to the P-Fish. These players will get involved in big pots much more liberally, and have varying levels of play. We have to be prepared to loosen up our hand strength standards postflop, and remember to use preflop to set ourselves up for good spots.
- P-Fish. These are also bad players, but they tend to be much more passive, both preflop and postflop. They tend to have massive gaps in their VPIP and PFR, and usually have a VPIP higher than 20 and PFR less than 12 . These players make many more calling mistakes than betting mistakes, and thus should be value bet constantly. However, we need to make sure we heavily reconsider our hand strength if/when they raise us. Overall, approach these players in a very straight forward way.
- Unknown. These are players that we don't have any stats or information on. Usually, we just want to treat these players as P-Fish until they fall into a category. We play the most straight forward against P-Fish, and also give them the most respect on their raises, thus why we like using that as a default player type. Always make sure we are paying attention on the tables though, to ensure that unknowns don't remain unknown very long and we can make more informed and correct decisions for our plays.

Now this is not to say that every TAG is a good player, nor that these player types might not sometimes overlap. Let's quickly review some basic VPIP/PFR ranges for 2010:

- Nit. VPIP: (10-12) / PFR: (5-9)
- TAG. VPIP: (13-15) / PFR: (10-13)
- LAG. VPIP: (16-22) / PFR: (13-20) —usually with a VPIP/PFR gap no bigger than 4
- A-Fish. VPIP: (24+) / PFR: (18+) — usually they have VPIP/PFR gaps bigger than 5
- P-Fish. VPIP: (24+)/PFR: (16-) - usually they have VPIP/PFR massive gaps

These are just rough guidelines for the 2010 full ring games. For reference, in 2008 a 15/13 would be considered a LAG. In 2010, a $15 / 13$ would be considered a TAG. While we can, and should, aim to use our stats to quickly classify players, it is always good to be reevaluating which stat ranges correlate to a certain player type.

## The Stack To Pot Ratio

Stack to pot ratio (SPR) is a powerful way to consider when we are committed, or not, to a pot with certain hand strengths. I first saw this term used in Professional No-Limit Hold'em: Volume 1 by Matt Flynn, Sunny Mehta, and Ed Miller. SPR means "Stack To Pot Ratio" and is effectively how many times the pot size there is left in the effective stack. There are many different ways to consider SPR, but here we will just talk about how to approach SPR preflop.

SPR as a measure of when we are committed to a pot. This is the way that SPR is conventionally used, as a metric of when the pot is made so big from preflop that we are committed to it postflop. For instance, say Jake opens with a 40 bb stack to 4 bb and we 3 b with KK from the button (and 100bb) to 12bb. Jake calls and we see a flop. At this point there are 22.8 bb (after rake) in the pot and we each have 28 bb left. There is $\sim 1.2$ SPR, meaning that we are committed to the pot regardless of what happens (either in board texture or actions).

The easy way to think about SPR is that the bigger the SPR is going into the flop, the more maneuverability we have. The smaller the SPR going into the flop, the more definitive our postflop actions become. The simple way to think about it is an SPR between 0 and 2 pretty much means we stack off, and anything bigger than 7 gives us a lot of flexibility. This means that any time we are making a play preflop that creates a small SPR, we need to have a hand we want to stack off. For instance, if a player with 20bb raises to 4 bb , we wouldn't want to call with 77 because it would make a 2 SPR pot...and we probably don't want to stack off 77 against a good shortstacker. The smaller the SPR is, the more a mistake will hurt your long run win rate. So make sure that small SPR play is done with strong hands and played appropriately postflop.

The SPR gets really odd when we talk about the 3-6 range. This is also the range of SPR we talk about in 3-bet pots. Say at 100bb Kyle opens to 3 bb and we 3-bet AK to 10 bb , and just Kyle calls. At this point there are 20bb in the pot (we'll just ignore blinds and rake to simplify it) and 90bb back in stacks. This is a 4.5 SPR pot, which is right in the awkward zone of SPR. The reason why this zone is awkward is because we don't have to stack off given the depth of SPR, but it is a small enough SPR that making a mistake can be really harmful. As much as this book aims to dispel a lot of the ambiguity of our decisions, there is no clear-cut "do this" or "do that" in this zone of SPR. But we can say this:

- 0-2 SPR. We are comfortable stacking off, and usually do.
- 3-6 SPR. The odd zone where we have some flexibility, but whether we stack off or not is very opponent and board dependent.
- 7+SPR. We have lots of maneuverability and really only stack off if we have very nuttish hands. We can make bigger pots with bigger hands, but due to having flexibility, we should use reads on our opponents and textures to create pot sizes that are ideal.

One final note regarding favorable SPR creation. There are times when an odd stack size raises and our 3-bet size would drastically change SPR for better or worse. Take a spot where Paul opens for 3 bb with a 44 bb stack size. If we 3 -bet up to 9 bb and he calls it puts 18 bb in the middle and 35 bb back, making a 1.9 SPR pot. If we 3 -bet up to 11 bb and he calls it puts 22 bb in the middle and 33 bb back, making a 1.5 SPR pot. If we 3-bet up to 13 bb and he calls it puts 26 bb in the middle and 31 bb back, making a 1.2 SPR pot. While these may not look like massive differences in SPR or 3-bet size, it makes a big difference with hard hands like JJ or AK, where flops can come really badly.

If we think that our 3-bet size won't change the hands he continues with, then creating the smaller and easier SPR with certain hands is acceptable (assuming it also wouldn't create bad action from the opponents left to act). There is actually a pretty big difference between a 1.9 SPR pot and 1.2 SPR pot with a hand like AK. In the 1.2 SPR pot we can be shoving most flops that we miss, where with 1.9 SPR a flop shove could be -EV ${ }^{1}$ due to fold equity (FE), expected equity when called, etc. Just make sure we are considering the SPRs that we are creating and choose sizes and plans that work best in the given situation.

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## The Preflop Mindset

There are a hundred different ways to play poker, beat poker, and improve in poker. While I may think one way, and you may think another, and your friend may think yet another. Still, there are some very basic and core fundamentals that are needed to be a good or possibly great player. So while I may propose some things in this section, and probably all sections of the book, that you may disagree with, what matters is just that you understand the fundamentals behind the plays and ideas. Poker is a game where a multitude of lines may be correct, but only one is optimal. We get to optimal lines based on information. Even if you and I were playing in the same game, we might think differently of the same player and thus use different parameters to create lines against them. However, the logic that created the line is what we care about because information gathering is a personal thing that is much harder to teach (although we will try to cover it as much as possible).

Finally, let's talk about some things we might want to keep in mind:

## - Play straight forward for the most part

Many players jump in and start by playing too many hands, bluffing too much, and being too aggressive. Until you have a skill set that allows you to play a very LAG game, focus on playing TAG, or even nit if need be, until you are used to making good decisions on a regular basis.

## - $\quad$ Start on fewer tables

While playing more tables can be great for our hourly, we want to focus on good decision making first. We make better decisions when we have more time to think through the information, so make sure we give ourselves time. Once we are comfortable and making good decisions becomes second nature, then we can consider adding more tables. When we feel our bankroll is hefty enough, and that we are one of the best players on our tables, slowly adding tables into our sessions can be a great idea.

- Preflop is the core of our full ring strategy

We need to understand that preflop strategy is all about setting ourselves up for profitable postflop play. Because of this, we need to spend the most amount of time tuning our preflop game off the bat. This is why the preflop section of this book is so thick.

## - Focus on big value

Especially if we are playing smaller limits (under 100NL online and under 500 NL live), we should be focusing on big value. Because people at smaller limits tend to make a lot more calling mistakes than those at higher limits, we should look to bluff rarely and value bet often. This is why focusing on selecting good ranges and good situations preflop will help create spots where we can be value betting postflop often.

- Play smaller at first

When we are learning, trying new concepts, and amassing new skills, it is best to play at smaller stakes. For one, mistakes won't (hopefully!) cause monetary pain. But also, it allows us to gain some traction with regards to confidence. Once we feel confident, and our bankroll allows for it, moving up in stakes might be a good idea. However, if we are at all shaky on our skills and confidence, playing lower is usually best.

## (2)

Preflop Hand
Selection

Often times the hardest thing for a player is choosing a range of hands to play. The range of hands we play can severely alter our success at the tables. Most players, especially new ones, tend to want a hand chart of sorts. And they tend to get very angry with me when I explain that given the dynamic status of poker, there can be no perfect static hand range to always play, or always avoid. However, this chapter aims to give a basic chart of hands, while also arming you with the tools to add and delete from that range as the situation calls for it. Poker is dynamic, and every decision from our sizing to our actions will reflect this.

## The Power Of Position

This section is in every single poker book ever written. Yet many people still don't fully understand it. Any decision we ever make is easiest when we have the most amount of information possible. Being in position allows us to take advantage of having the most amount of information available.

As such, we should be focusing on playing more hands in late position than middle position. More hands from middle position than early position. And more hands from early position than from the blinds, where being out of position for the entirety of the hand is almost a foregone conclusion. In an ideal world we could just have the button every single hand. Our winrate should be the highest from the button, and gets smaller as we move further and further right. Because of this, and coupled with our positionaladvantage, we want to play as many hands as possible from late position.

The power of position is not only important when talking about raising hands, but also when 3-betting, flat calling, and over limping. If we get position, we effectively are able to sit in the cockpit. We control action, even when we do not have the lead in the hand. If we do have the lead in a hand, and position, we effectively control everything. We control if we take a free card. We dictate the size of the pot. We decide how we want to play our hand. Make sure to fight for that button whenever possible within reason, and watch your winrate rise.

## The Basic Open-Raise Range

Because so many people have issues choosing a range of hands to play, a quick basic chart might be helpful. Mind you, this chart is simply a guide. Due to the dynamic nature of poker, a static chart wouldn't be very profitable, if at all.

- EP (first 3 spots at a full table). $77+/ \mathrm{AQ}+$
- MP1.22+/AQ+/KQ
- MP2/HJ. 22+/AJ+/KJ+/QJ
- CO. 22+/Any 2 Broadway Cards/54s+/J9s-A9s
- BUT. $22+/$ Any 2 Broadway Cards/54s+/J9s-A9s
- SB. $22+/$ Any 2 Broadway Cards/Any 2 Suited Cards

This is just a for open-raising, aka, when it folds around to us and we are the first person to raise. The small blind range is so wide, because we only have one person to get through to pick up the pot. But again, it is dynamic. If it folds around to us in the SB with 72 o and the BB is a super tight, no 3-bet type player, then we should raise and try to take it away. But if it folds to us in the CO with 76 s , which is on the open-raise chart, and the button and BB are aggressive 3-betters, a raise would be less valuable.

We can also take our own skill and comfort level into consideration when selecting which hands to play. And whenever we are unsure, we should error on the side of tighter. For instance, say you feel very uncomfortable playing top pair hands out of position postflop. Then raising with AQ from EP won't be great because you will be forced to play the rest of the hand usually out of position postflop. Or say you don't feel comfortable playing very RIO type hands. Then there is no need for you to raise QJ from the HJ. Just because a raise preflop is outright + EV, doesn't mean it will be + EV if you will leak postflop. Make sure to select hands that you are not only comfortable playing preflop and postflop, but that you choose situations that are favorable for you. If a table, or a player, won't let you play a certain range of hands, then either change tables or adjust your preflop range.

## The Steal

Stealing is a very basic way to improve our winrate, and utilize our positional advantage to the fullest. Stealing is very beneficial because we give ourselves the chance of picking up the blinds preflop, and also being in position in the event that we are called. If we can focus on picking good spots to put free money in our pockets, we can effectively freeroll bigger pots later down the line.

The big question to ask ourselves is "who are we stealing against?" Let's take this spot where we have T6s on the BUT. It folds to us and it is our option. If we look to our left, we might consider stealing if the players are tight and fold a lot. So if we have a $13 / 10$ and a $11 / 6$ in the blinds, there is a good chance we can steal here. We also want to check some other things:

## - Their 3-bet stats

If they have a high 3 -bet\% (high being more than $6 \%$, and low being $2 \%$ or less), then stealing might be less ideal as we will get 3 b often. While a 3-bet\% isn't always the best indicator of their positional 3-betting tendencies, it can give us a clue when dealing with smaller sample sizes.

- Their Resteal

A high resteal (high being $15 \%$ or higher, low being $5 \%$ or less) indicates that a player is aware that we are stealing, and thus they are 3 -betting us with the intention of bluffing us off our weaker range. If we have a big sample size on someone, then this resteal number can give us a great deal of information. We can also couple this with their FoldvSteal and CallvSteal stats. If we see a player has an $80 \%$ FoldvSteal, $15 \%$ CallvSteal, and $5 \%$ Resteal, then we know, on average, the steal will work outright $80 \%$ of the time.

- Their AttemptToSteal (ATS)

If they have a fairly low ATS (low being $20 \%$ or less, high being $40 \%$ or more), then it usually implies that they are less positionally aware, and that they will not fight for the pot. A player with a low ATS will generally fold versus a steal more often than a positionally aware player who understands our steal range is wide and generally weak. A low ATS and low Resteal are usually great indicators that we are dealing with a person who wants to fold when we steal.

## - Their FoldvFlopCB

If we see that a player might call a little extra preflop, but plays very fit or fold postflop, then stealing and continuation betting will actually prove to be very profitable. However, if a player will call our steal a lot and will not fold to the CB much, that is reason to consider avoiding the steal situation entirely with a weak hand. For reference, a high FoldvFlopCB would be $70 \%$ or higher, and a low FoldvFlopCB would be less than 40\%.

- Our image

The more aggressive we have been on a table, especially from steal positions, the more players will understand our range is wide and weak. Always make sure to take our image into consideration when making any play, especially when a loose image might stand to get us 3-bet more often.

So lets change the situation a little bit and say it folds to us in the CO with Qd 8 d with $\$ 50$ at 50 NL . We have been playing pretty tight for the last couple orbits due to being card dead. The button is a $7 / 5$ over 700 hands with a $\$ 12$ stack, the SB is a $12 / 10$ over 480 with $\$ 45$, and the BB is a $30 / 8$ over 120 hands with $\$ 50$. At first glance everything seems to be great, except for the BB, who is a little looser. But, say the SB has a Resteal of $6 \%$, and the BB has a 3-bet\% (with such a small sample we have to use 3-bet\% over Resteal) of $1 \%$ and a FoldvFlopCB of $90 \%$. Now all of a sudden this steal looks very profitable. We expect the button and SB will fold preflop pretty much always because they are so tight, but expect the BB to call a fair amount and fold to the CB very often. Making this is a very solid spot for us.

The traditional steal positions are the CO, button, and SB. However, we can also use positions like the HJ and the BB as well. Say it folds around to the SB who completes, and we are in the BB with 73 o. If we think the SB is just trying to take a cheap glance at the flop, we should steal his limp and attack him. If he calls, well, he will probably fold to the continuation bet often due to him being out of position. This again gives us multiple ways of winning this pot. We can pick it up preflop, or hit him with a continuation bet on the flop if he calls our preflop raise. And sometimes, though rarely, we might actually hit a hand and get some value. We can also use the HJ as a steal position. If it folds to us, and the players behind us fold a lot, there is no reason not to pick up the dead money. Of course, the further away we are from the button, the more aware we need to be of our position if we get called. So if we are in the HJ and the button is a looser player, we might not want to steal with a weak hand due to having to play the hand out of position if called.

Although steals are great ways to pad our winrate, just make sure that we are not forcing steals. If a good spot arises, then by all means take it, but do not just try to steal with any two cards in all situations. Especially if you don't feel very confident in your postflop game, you don't want to be playing more hands with things like J4o or K2s. Stealing is all about taking a high probability setup. We take the spot if we think we can get it through enough of the time, but if we think we are going to get action, we want to have a strong hand. Remember, preflop play is all about setting ourselves up for good situations postflop. So make sure we are taking advantage of good spots within reason and with hands we feel we can play well in the event we see a flop.

## The Sizing

Sizing our preflop raises is very important. However, again, there is no optimal static strategy. If we take basic bet theory into consideration, we know that bigger bets tend to get less action (but action from stronger hands) and smaller bets tend to get more action (and from a wider range of hands). Does this mean we want to open-raise to 6 bb with AK to get more folds? Not really. Ideally, we would size the bets for all of our hands the same way to ensure that our bet sizing doesn't give off tells to our opponents. If we always used a "big bets equal big hands", and "small bets equal weaker hands" approach in our sizing, it would be very obvious for anybody paying attention.

There are two major approaches to preflop open-raise sizing:

- Raise $3 x$ from every position
- Raise $4 x$ from EP/MP, and raise $3 x$ from LP

Notice that both use smaller sizes from late position. The idea is to give our steals a good price, since because we are playing more hands from LP v EP, we will have a weaker range and need to have a good parlay between value and risk. There is another minor school which suggests a slight variation: raising $3 x$ from EP, and $2.5 x$ from LP, and there exist other minority opinions as well.

So which major school is correct? Both are, but both fit into different styles. For instance, if we are playing a very TAG 13/11 game, with a very tight EP open-raising range, we might use $4 x$ from EP. Our range is stronger from EP, so we should create the biggest pots possible when our hand is not only strongest, but will maintain strong hands postflop. But if we were playing a very LAG 19/15 style, we might choose a smaller 3x EP/MP open-raise size due to our range being a bit wider, and thus weaker both preflop and postflop. That would ensure that we don't risk too much when we steal, and also
would ensure that we don't turn our hands face up for aware opponents to see.

There are some specific situations where we might consider a different open-raise size:

## - Stealing against tight players

Say it folds to us on the button with J8o. The SB is a TAG $14 / 10$ with a 3 -bet of $2 \%$ ( $2 \%$ being the low side of average). The BB is a nit $1 / 5$ with a 3-bet of $1 \%$ ( $1 \%$ being very tight). Stealing for $3 x$ is decent, but these players are just going to play straight forward regardless. They will fold if their hand is weak (which it will be a very large percentage of the time on average) and they will call or 3-bet if their hands are strong. Our size won't really lean them one way or another. If that be the case, we can consider stealing for 2.5 x , or even 2 x . There is no reason to risk more if we don't need to. Whenever bluffing, risk all that is necessary to get the job done, nothing more and nothing less.

- Big hands versus bad players

If a player cannot hand read well, plays very poorly, and has an inelastic calling range; we can consider sizing our bets according to our hand strength. For instance, say it folds to us in the SB with KK. The BB is a fishy $61 / 6$ over 80 hands, with a 3-bet of $0 \%$. He is a massive calling station preflop and tends to give action postflop as well. If the size of our raise won't create more folds against him, they we can use a larger size like $5 x$ or even $6 x$. If he would call any raise size, we could go up to $10 x$. A player this willing to give action should be punished, and bigger sizing with monster hands is a great way to do this.

While a lot of players will overlook sizing as an unimportant detail, sizing is a huge determinant in our long run win rate. It isn't always easily visible in our database, but it is certainly buried in the value of our plays. If we are risking too much when bluffing or stealing, it will show up when we are wrong and are maximizing our loss. If we are betting too small and not making the most on our winners, it will show up when we are minimizing value. Always make sure we take the full parlay into consideration when sizing our open-raises preflop, and over time, we will see our results shine exponentially brighter than if we used a bad sizing strategy.

## The Min Raise

Min raising is always a very taboo topic. Some players will use it a lot, others use it sometimes, and others scoff at the very idea of using it in any situation. The min raise, for those unaware, is just open raising to 2 x . It is a very small raise, and many players hate the idea of giving opponents great odds on a preflop raise. But let's talk about the pros and cons of this raise size.

## Pros:

- Given the size, it doesn't need to work very often to show a profit, especially in steal situations.
- When players 3-bet it, they tend to keep their 3 x or 4 x mentalities. This means the 3-bet size is smaller, giving us better odds to continue. So rather than raising to 3 x and facing a 10x 3-bet, we can raise to 2 x and face a 7x 3-bet. This gives us better odds, a deeper SPR, all while retaining a 3-bet mentality from our opponent
- When called, it gives us an amazing depth of SPR which allows for maximum maneuverability


## Cons:

- It keeps the pot very small when called, which can lead to a smaller pot size with regards to pot geometry. This means we set ourselves up to make less value on our big hands than we would like.
- It gives opponents great odds, especially from the blinds.

Overall, it is a play I would not suggest using as your standard in a full stacked game. Most games have so many players that play terribly postflop, and we don't want to miss value from them by slimming the pot geometry ${ }^{2}$. However, do not hesitate to use it as a steal against tight players, or in special situations which warrant it.

[^1]
## Calling Raises

Calling raises can often times be one of the more confusing things in a poker strategy.Lots of people have the leak of calling too many raises and getting themselves into trouble postflop. We have to remember our goal with preflop is either to win the pot outright, or set ourselves up for profitable spots postflop. Having a solid cold calling strategy is imperative to winning in all games, so let's talk about what we need to know.

First, stack size is incredibly important when considering a cold call. When we are cold calling preflop we are often times doing so because our hand isn't quite strong enough to 3-bet, but too strong to fold. This means we are usually dealing with mediocre strength hands, like 55 or 98 s. As such, we want to call in spots where the effective stacks have more depth and there are greater implied odds. Implied odds are what we expect we can make if and when we hit our hand.

We cold call preflop for two reasons: either because we have a plan to call and take it away postflop, or because we think we can get paid in the event that we hit. Many people forget these simple reasons and get themselves into situations where they call weak hands without a plan. The hands we call with intentions of getting paid are usually small pairs and suited connectors.

## The Pair Range

With small pairs we are usually calling because we are set mining. Our goal is to catch a set or better and try to get paid by our opponent. Many players make mistakes in set mining which can severely hinder their win rate. It is important to make sure that stacks are deep enough to make calling these pairs a profitable play. And we want some extra buffer on the math to ensure that the call will make us enough money in the long run.

In full ring we usually want something like 20x or better in the effective stack. Say at a 100NL game, a player with $\$ 90$ raises $3 x$ from early position, it folds to us in the big blind, and we have 66 and $\$ 100$. In the effective stack, to make this a profitable setmine, we would each need to have at least $\$ 40(\$ 2 \times 20)$. If our opponent only had $\$ 30$ in his stack, we could not call here in an effort to catch a set because the effective stacks are not deep enough.

We should always make sure that we are getting enough in implied odds to make up for the times that we miss our sets, and the times we hit but do not get paid. Implied odds can be estimated with more clarity when we consider our opponent's range and frequencies. Certain player types tend to offer lots in implied odds, and other players
tend to offer very little, so always be on the look out for lucrative situations when they arise.

Let's take a situation where a nit $10 / 8$ raises $3 x$ from UTG with $\$ 140$ at 100 NL . It folds around to us in the CO with 44 and $\$ 100$. We are getting plenty more than 20 x here $(\$ 3 \times 20=\$ 60)$ so we can consider calling to setmine. If we take a deeper look at UTG's stats we see he has an EPPFR of $5 \%$, which looks like $77+/$ AK. This is the perfect kind of range for us to setmine against because his range will catch or maintain strong pairs often postflop. If we run it through Flopzilla, we see that 77+/AK will hit top pair or better almost $45 \%$ of the time, hitting top pair almost $7 \%$ and an overpair almost $28 \%$ of the time. A range that hits that strong postflop offers a lot in implied odds, and thus we should setmine here.

Notice that the big attraction is the strong ability to get paid postflop. Say we take an example where a 19/16 LAG opens for $\$ 2.50$ from MP1 and it folds us in the SB with 33. We both have $\$ 100$ stacks at 100 NL and the $19 / 16$ has an MPPFR of $14 \%$. Now, we are getting much better than 20x again so we could consider calling here $(\$ 2.5 \times 20=$ $\$ 50$ ) based on the math. But, if we take a peek at the MP1's range, we see $14 \%$ of hands looks like $22+/ \mathrm{AT}+/ \mathrm{KJ}+/ \mathrm{QJ}$. If we see how this range hits flops, we see it hits top pair or better about $32 \%$ of the time, with $14 \%$ top pairs and $9.5 \%$ overpairs.

We can see that the tight guy was hitting strong hands almost half the time, while this guy is only hitting strong about one third of the time. Not only that, but the top pairs that the tight guy hit would only be AK on an A or K high board. His looser range can hit top pairs, but it could just be QJ on a J high board, or AT on a T high board. This means more overcards that could hit the turn/river and lower implied odds later in the hand. It also means they are less definitive in value, and that he might fold more often, again reducing our implied value.

This very simple planning and evaluation lets us see which player is more callable. Tighter ranges that have more hands that hit strong will offer more implied odds. Wider ranges tend to offer much less in implied value from competent players. Now, if MP1 were a fishy $42 / 13$ with that same $14 \%$ range, then setmining value goes up because the fish is more likely to take one pair hands too far, giving us more value when we hit. But solid players will not usually get involved in larger pots with single pair hands. So calling strictly for implied odds against them is much less valuable.

The other piece of the puzzle is the plan postflop. There are times when we call preflop with pairs and our goal is to set mine. There are other times when we call with pairs
with intentions to call flops occasionally, or even to run a well-timed bluff. Let's take a hand where UTG +1 open raises, it folds to us in the CO with 9 d 9 s , and we both have $\$ 50$ stacks at 50 NL . UTG +1 is a TAG player running $14 / 11$ over 450 hands. He has an EPPFR of $9 \%$ which looks like $22+/ A Q+/ K Q$. We call here, but not exactly with the same intentions as the smaller pairs.

If we look at how his range hits boards, he will hit strong about $34 \%$ of the time, with $14.5 \%$ over pairs and $10 \%$ top pairs. However, we have added benefit in this hand. For one, we are in position. This means we will get to see how he reacts to board textures, and we can take more informed lines postflop. We also have a bigger pair, compared to a small pair like 22-66, which will beat more of his range postflop, and will retain more showdown value. Having both position and a bigger pair means we can not only try to hit our set, but also react well to our opponent's actions and possibly peel certain flops.

We end up seeing a heads up flop of Jd 8 d 4 s . He bets $\$ 2.25$. If we look at how he hits this board we see he hits overpairs $16 \%$ of the time, sets $8 \%$, and the rest of his range is mostly weak pairs and ace high...stuff that 99 beats. If we know that this opponent is likely to just CB and then give up without a big hand, calling here to get to showdown is a great play. This gives an added benefit to calling pairs preflop and will make us difficult to play against. Always make sure we check our opponent's ranges and tendencies to see if we can utilize set mining and pair calling preflop.

## The Other Range

We can also consider calling raises with hands like suited connectors, suited aces, or even suited gappers. These hands can hit powerful hands in numerous hidden ways. However, many players forget when calling with these hands to consider the range of their opponent. Every play we should make will be based off our opponent's range and frequencies.

Say a player at 50 NL raises UTG with $\$ 50$ and it folds to us on the button with 64 s and $\$ 50$. The players in the blinds are both tight players that play very straight forward. UTG is a tight player, $11 / 8$ over 400 hands. He has a CB of $79 \%$, a Foldv3B of $58 \%$, and an EPPFR of 4\%. If we take a peek at PokerStove, we see $4 \%$ of hands looks like 99+/ AK , a very tight and powerful range.

We always want to look at all of our options here. Do we want to fold, call, or raise? Well, a raise isn't going to be a great play because we don't expect a lot of folds if we 3-bet. Of
the hands he would call with if we 3-bet, they are unlikely to fold to a continuation bet, which makes 3-betting here a pretty ugly play. We could consider folding, but if calling were a profitable play, then we would do that.

So why might calling be a good play? Well, look at our opponent's range. It is very strong, and if we think about how his range hits boards, he should maintain a strong hand a large percentage of the time. Look at how we might hit a flop with a hand like 64 s . We hit on boards like $64 \mathrm{x}, 44 \mathrm{x}, 66 \mathrm{x}, 753$, etc. These are boards where over pairs feel very comfortable. Of course, it doesn't hit the AK part of his range, but it allows almost $60 \%$ of the range to maintain an over pair. This is a great situation, and something we should always consider if we are going to call a hand preflop.

Again, the major things we checked were our opponent's range, and how it would react depending on whether we 3-bet or flat call. We also checked the players behind us as flat calling here loses lots of value with aggressive squeezers behind us. We also took a look at how we hit our big hands and how our opponent will hit on those boards. When everything looks good, we can flat call and take advantage of the implied odds he is laying us.

## The Multi Way Call (With Evil Intentions)

So what if the pot goes multi way? Say MP1 open raises, the CO calls, and we are on the button with 98s. The blinds are tight players with no aggressive squeezers and everyone has 100 bb stacks. MP1 is a TAG $16 / 12$ with an ATS of $34 \%$, a CB of $72 \%$, and a Foldv3B of $60 \%$. The CO is a weak-loose $30 / 7$ over 40 hands with a Foldv 3 B of $50 \%$.

If we run through our options here, we could either 3-bet, call, or fold. A 3-bet isn't looking like a great option given the weak-loose caller who most likely isn't going to fold if we 3-bet. Also, if MP1 is paying any sort of attention, he isn't going to be opening a wide range of hands with the weak-loose player in position on him, which should make MP l's range a little stronger than average.

Folding is an option, but again, if flatting can show a better profit, then we should flat call here. Flatting here gives us two different ways to win the pot. First, we could hit well ( $98 \mathrm{x}, 88 \mathrm{x}, 99 \mathrm{x}, 567,7 \mathrm{TJ}$, etc) and win a big pot either against the strong MP1 range, or the weak-loose player who will take one pair type hands too far. Secondly, we can utilize our position to our advantage. We can pick up flops where we get two checks to us. MP1 is less likely to not only continuation bet into two players, but he's even less likely
to continuation bet into a weak-loose player without a real hand. So when MP1 checks the flop, we know he is pretty much done with the hand and has no interest in fighting for it. So we can win when we hit, and we can win when we miss and both players check to us. This is why we want to play as much as we can in position, because we can take advantage of the extra information given to us by the time it is our action.

We call, the flop is Q $7 \uparrow$ and we get two checks to us. Even though we hit a draw, we really just want to pick this pot up now. MP1 checking looks like he didn't hit it and wants to be done with this pot. He might occasionally peel with something like JJ or TT, but those are rare hands given his total range. And the CO, if we assign a cold calling range of something like 22+/ATB (minus $\mathrm{QQ}+/ \mathrm{AK}$ )/SC/A6s+, only continues on this board about $50 \%$ of the time. If we use a half pot bet of $\$ 5.5$, it only needs to work at least $33 \%$ of the time to show a decent profit. And this is a worst case scenario, assuming the weak-loose player always continues with weak pairs, and that his range is tighter than it might really be.

These situations arise all the time on the tables. Even if the CO were a TAG set miner, this could still be a good situation to call in position and utilize this <flop stab» line when facing checks to us. However, don't get too carried away and try doing this with 3 or more callers, as it will usually not work enough of the time. And again, we need to make sure that we don't have aggressive squeezers behind us: they will blow us off our hand preflop too often and ruin our implied odds, and play, all together.

Remember: calling raises preflop is something we can do when there are either implied odds or when we can maneuver ourselves into a win postflop. Position is ultimately one of the most important things to consider when calling raises. Being in position allows us more flexibility postflop, not only in terms of being able to peel more profitably, but also by letting us control the pot size and take good stabs when possible. We only need to make sure that we pick the best of spots to flat call raises. Often times players call too often, especially with hands that would show a better profit being shifted into either their 3-bet or fold range.

## 4

Isolating

Isolating is when we attack a limper with the goal of getting a heads up pot that we can win a large amount of the time. This play allows us to take advantage of certain player types and apply pressure to a weak player. There are 2 kinds of players we want to isolate: weak-tight and weak-loose. We already know they are weak because they are open limping, something a strong or aggressive player would almost never do.

## The Weak-Tight Isolation

Let's talk about isolating a weak-tight (WT) player first. Say UTG open limps with \$100 behind at 100 NL , and it folds to us on the button. What do we want to look for?

First, we always look both ways. We want to check our left and our right before we isolate, and really, before we do anything. We want to check our right to make sure there is just one limper, and that that limper is a weak-tight player. There is a totally different strategy for isolating multiple limpers, so we need to make sure to adjust when there are two or more limps in front of us. We then want to check our left to make sure there are no problem spots. Remember, we want to get a heads up pot, so if there is a fishy $85 / 22$ on our left, it probably won't be a good spot to isolate with a wide range. If there is one, or a few aggressive 3 -betters behind us, we might not get the situation we want. So make sure the people behind us will fold a large percent of the time if we raise. If we cannot isolate and get a good situation, we should just revert to our normal strategy (limp behind with appropriate hands, raise our strong hands, and fold everything else).

Next, we want to make sure the limper is actually weak-tight. These players tend to look like $12 / 7$, or $13 / 5$, or $11 / 6$. They have low VPIPs and large relative gaps in the VPIP and PFR. Their range is usually something like a small pair with the occasional suited connector. These players, given their passive nature, tend to be very fit-or-fold on the flop. So they limp/call preflop, set mine, and usually set-or-jet on the flop. They will occasionally peel the flop with a pair, but its a rare and usually only happens on specific board textures.

Let's say the UTG player is a $13 / 5$ and the players behind us are both TAG players with small 3-bet percentages. This might be a great spot to isolate, but what size bet do we want to use? Well, we know this player is fit-or-fold, won't make a big pot without a big hand, and wants to set mine. Given that, we want to use a larger sized raise, something like 5 x or even 7 x is a great choice. Because this player has such a propensity to call preflop and fold on the flop, we stand to make more money in the long run by making the raise size bigger.

We pretty much have everything planned out. Raise preflop (given that the conditions are very favorable for this play) using a nice big sized bet, and continuation bet the flop. So we do just that, see a flop of Q83, and he checks. What size bet do we use? Using a half pot bet here is a really good size. Our plan is that something like $\$ 7$ should do the job more than enough of the time. A half pot CB only needs to work at least $33 \%$ of the time, we expect he will fold around $80 \%$ (he hits sets about $12.5 \%$ of the time, and we factor in some percentage of peeling), so we make a nice profit every time we do this.

If he check/raises, we are totally done, unless we flop the nuts or something close to it. If he calls, we are still pretty much done unless our hand strength changes towards the nuts. We said this player was not going to make a big pot without a big hand, and we shouldn't deviate from that plan. Remember, in poker we will take high probability set ups, and of course they will sometimes fail, but in the long run we are going to make a ton of profit if we pick our spots well.

We've talked about everything so far except for the hand range we want to use. Well... does our hand really matter? So far we came up with an entire play with a good ROI based on the table, our opponent, and logical happenings. Technically, our hand doesn't matter at all. But, we do have to keep in mind that we will sometimes get a call from someone behind us, so we want to use a range that can do all right in multi way pots. We should consider isolating with $22+$ /any two broadway cards/anything suited/unsuited connectors. This is a very wide range of hands, and we choose these hands because they can out-hit boards that our opponent hits. That is, we give ourselves the chance to hit flushes when they hit sets, hit straights when they hit two pair, etc. Again, our range doesn't really matter, but we always like having some backup value in case something goes awry.

Let's look at another example. Say there is an open limp in MP1 with $\$ 25$ at 25 NL , and it is our action in the SB with KK. He is ${ }^{11} / 5$ over 900 hands, and the BB is a $13 / 10$ with a 3 B of $2 \%$. We want to isolate here, and we want to do so to the same 6 bb . We know this player has a tendency to limp/call a lot preflop, so make sure to pinch out that extra value when he does it.

We get called by just the limper and we see a flop of Tas 3e lead out for half pot ${ }^{3}, \$ 1.75$, and he raises up to $\$ 6.5$. A lot of players will want to continuation bet

[^2]here for something like $\$ 2.25$ or even $\$ 2.75$. Make sure that we veer away from that. Remember, our hand doesn't really matter. We can, and should, play $8>5 \leqslant$ the same way we play A here. This player type isn't really going to make a big pot unless he has the nuts, so unless we have a set or better here, our hand strength is far from being able to compete with his when he raises. Isolating is based entirely around our opponent and his logical actions: if he raises us, we are generally behind. So we don't bet bigger! We just go for a bet/fold because we know this player type won't make a large pot size unless we are behind.

## The Weak-Loose Isolation

Isolating a weak-loose $(\mathrm{WL})$ player is much different than isolating a weak-tight player. First, what does a weak loose player look like? These guys tends to look like 33/5,51/8, $18 / 4$, or even $24 / 6$. We notice they have large relative gaps in their VPIP and PFR, and they tend to have PFRs in the 10 or lower range. Yes, we can consider an $82 / 14$ weakloose... but don't start thinking that an 18/12 is weak-loose.

Lets take this spot where there is an open limp from MP1, and it folds to us in the CO. We want to check both ways like we always do. Check our right to make sure there is just one limper who is weak-tight or weak-loose, and this guy is a $38 / 3$ over 30 hands. Then we check our left to make sure there are no aggressive 3-betters or calling stations. Assuming that is the case, we have a possible isolation situation!

Our plan against the weak-tight guy was just to raise preflop, continuation bet, and be done. Sadly, we cannot use that same plan against the weak-loose player type. The weak-loose player is just not going to release to the continuation bet enough. He loves his pairs. He loves his draws. He likes high cards. He pretty much loves everything but the fold button. Which means we have to have a totally different plan in mind to beat him.

First, let's build his range: 22-JJ, suited connectors, any two Broadway (ATB) cards, Bx, Axs, suited gappers, etc. Obviously their VPIP and PFR can help us define their range better, but rest assured, it is wide to begin with. These players look at their hand, raise the strongest of hands, and then limp the rest of the hands they deem too strong to fold. They usually have very little positional awareness, and overall are fishy players full of leaks.

Second, how is he going to react if we isolate? Well, we know he is probably going to call our raise a lot, and not going to release easily to a continuation bet. So our plan to just raise/ $\mathrm{CB} /$ win is null and void. We instead have to set ourselves up to play postflop with this person. They probably won't get involved in an AI pot without having what they consider a strong hand, but they will certainly call multiple bets with top pair no kicker, over call draws liberally, hold on too long with weak pairs, and float unimproved broadway cards often.

Now we have information to work with and we can start coming up with the best plan. Sizing here is actually fairly simple. We almost always want to go to about $4 x$. This gives us lots of playability and maneuverability postflop. There are times we could consider going larger, like with AA or KK, but usually sticking to around 4 x is going to be the better size with our range. We have to play postflop against this player, and we should do much better in a small to mid sized pot than by making a huge bloated pot that we cannot pick up with a continuation bet very often.

We isolate here to 4 x , get a HU flop of Ks 9 c 5 c and he checks to us. Our action here is totally dependent on our hand, as a bluff continuation bet isn't going to be very profitable against such a liberal floater. Because this guy is not going to fold to continuation bets often, we know that we have to have some sort of hand value. Something that can win at showdown, or sets us up to win at showdown. So unlike isolating against a WT player, our hand preflop actually matters.

When selecting a range of hands to isolate with, we want to use a stronger range: something like 88+/ATB. We don't want to use a pair like 33 that has to hit a set often to feel comfortable. We would have to check it down with 33 when we miss the flop, and would often times either be giving a five card coin flip, or giving him three chances to blow us off our baby pair. Hands like 88 and $\Pi$, however, can maintain strong pairs postflop that can either get to showdown unimproved comfortably, or can get some value here and there on good boards.

Using ATB is solid for our range due the inherent strength of them. He will be calling preflop with a wide range of hands, suited aces, hands like Q8s or J9s, and other reverse implied odds (RIO) type hands. Don't feel like you have to isolate here with things like QTo if you don't feel comfortable. Rather, you should focus on improving your postflop game so that playing QTo in this spot eventually becomes a profitable endeavor.

A final note on isolating these players preflop, is that position is incredibly important. Whenever playing postflop becomes a serious consideration, being in position amplifies
our success. It allows us to close action, dictate the size of the pot, and control action in a beneficial manner. Tightening up our OOP range even further is a good choice. Something like $T \Gamma+/ A Q+$ is a very solid range. Being out of position will further complicate tough spots, and we can avoid those situations by using a better hand range preflop.

## The Unknown Isolation

There are times when a player that is brand new to us, or possibly is one with whom we have a very small sample size, open limps in front of us. Usually we want to use the same range and size that we used versus the weak-loose player type when isolating them. Because we have no idea of their postflop tendencies (which is the major attribute that allows us to isolate WT players as we do), we need to use a stronger range of hands. This is just good global advice: if we have to play postflop without direct information on how our opponent will play, we should pick a preflop range that will do well postflop.

However, plenty of hands are strong enough to play here, but not quite strong enough to isolate. Hands like 44 or T9s can be limped behind, especially in position. Again, those hands are getting great implied odds given the depth of stack, such that limping them behind is perfectly acceptable. Just make sure not to take this too far and start limping things like K9o or 85s. Remember to keep position in mind and tighten up our isolation range from the blinds, as we don't want to create incredibly difficult spots with very marginal and tough hands OOP if it isn't necessary.

## The Multi Way Isolation

Oddly enough, having multiple limpers in front of us can make for some very awkward situations. The simple advice here is to be very selective with the hands we isolate with. Due to the dynamic of the situation, it is standard that once there is a call of our raise, there are multiple callers. Because it is very likely we will have to play a multi way (MW) and bloated pot, hand selection is ultra important.

A range like $T \Gamma+/ \mathrm{AJ}+/ \mathrm{KQ}$ (assuming we are in position) is usually as wide as we would want to go. Notice this isn't terribly different than the weak-loose isolation or the unknown isolation, but we did cut out some of the weaker pairs and some of the excess broadway combos. However, instead of raising those hands, we can actually limp them behind in position, or even complete them from the small blind (assuming that we don't leak postflop). We can also limp some extra hands as well with multiple limpers, hands
like Axs KJs , or 87 s can certainly be limped behind from the button and cutoff. Those hands are getting really good implied odds, and coupled with position (or a small price from the small blind), we can take advantage of that.

When isolating multiple limpers we need to do so with a clear plan in mind. Usually we will need to be selective with the continuation bet due to the natural tendency for this pot to be MW on the flop. Because of this, we need to be a little tighter in our hand selection from the blinds. Using an even tighter range, like $\mathrm{JJ}+/ \mathrm{AQ}+$, is perfectly acceptable. Continuation betting with bluff hands out of position in multi way pots is usually going to be a losing proposition, and thus we select a range that can hit strong often. Again, preflop is all about setting ourselves up for good and profitable spots postflop, and isolating is no different.

## The Facing Of An Isolation

There are times when we limp and get isolated and have an awkward decision to make. However, because we should rarely be open-limping, it makes the situation a bit more straight forward. Let's take a normal spot with full stacks where there is an open-limp in EP, we limp behind with 55 from MP, and the CO raises up to $6 x$. We have things to consider and questions to ask before we can come up with an optimal play.

First, who is the isolator? If he is a tight player who tends to raise only with big hands, then we can assume his range is still relatively strong. (It should also be noted, that most player types will naturally isolate a stronger range from the blinds) Against that kind of range, assuming that it doesn't get 3-bet before it gets back to us, a call here with the plan of set mining with proper odds is a great play. The entire situation becomes odd if the isolator uses a wider range in this spot. Because wider ranges tend to offer less implied odds, a plan to set mine here can lose a lot of validity.

Second, who is the open-limper? If he is a looser player, then we can assume that most good players will isolate with a much stronger range. Against a stronger range, we get more implied odds when we hit our set, and thus set mining here becomes a solid play getting a little better than 20x even if everyone else folds. If the limper is a tight player, then we need to try and deduce whether the isolator is using an any two cards (ATC) mentality like we would do, or if he is just using a strong range. Usually this boils down to how aggressive the isolator is and we can check things like the "Steal Limped Pot" stat from LP to get an idea on his range in this kind of situation.

Next we want to see what actually happened. We are privileged in this situation to be able to close action. So if there are a few callers to us, or even just one, we can just default set mine here. At that point we are getting 20x as a minimum, and thus a call is very easy. If there is any sort of 3-bet we are just folding as we would be risking too much for a low profitability set mine. However, if everyone folds to us, we have a decision to make. Here we should set mine if our opponent isolates with a very strong range and we think there are implied odds. If he isolates wide, then folding as a default would be the best play in this example. Now our plan can change a little bit as our pair gets higher and higher. Say we had 88 in this spot against a wide isolator with no callers: we might consider calling and peeling some flops against the "CB-and-quit" player type. If we know he will double barrel a ton in this spot, then folding preflop is better unless we plan on calling multiple barrels and getting involved in a very large pot OOP with a mediocre pair.

## The Attacking Of An Isolator

As the games get more and more aggressive, isolating becomes more prevalent. By that same token, open-limping also happens less often, but where there are fish and passive nits, there will also be open-limping. We want to be on the lookout for habitual isolators as they can provide a really nice profit for us if we attack them well.

Take a common situation where there is an open-limp in MP, the CO isolates to $5 x$, and it is our action on the button with everyone having full stacks. Of course if we have our strongest hands we would want to 3-bet here for value (KK and AA, as a flat call would encourage a multi way pot with an awkward SPR, and a 3-bet should provide direct value for us), but what if we had K8s or A4o? These can be great 3-bet spots if a few conditions are satisfied:

- The open-limper isn't a fish who might call more often
- The isolator has a wider range that will fold at least $75 \%$ of the time (this number has a lot of buffer built into it)
- We have no calling stations behind us that might call and ruin our play

The first and third conditions are very easy to see just by checking our HUD, but the second one can be hard to spot. But there are things that we can check to make our life easier though. First, who is he isolating? If he is isolating a fish, chances are that
his range is stronger and thus we would get less folds from him. Next, does he tend to isolate aggressively? We can check his "Steal Limped Pot" stat from LP for that. If it is high, along with him showing some positional awareness, then his range is probably wider if he is isolating a nit or tight/passive player. We also want to check his "Foldv3B" stat to ensure he actually folds when facing this 3-bet. We don't really want to have to play postflop out as this play is designed to pick the post up now as opposed to later.

It should be noted that this is not a play we "have" to make. If absolutely perfect conditions arise then we can take them, but there is no need to force a play that has this kind of exposure. While we should always be on the lookout for profitable edges, we shouldn't constantly take edges that might be breakeven at best. In this play we are risking 18 bb for an 8.5 bb win, which is a considerable win compared to our normal win with trash hands. But again, only take it if you are comfortable with the situation and the stars are properly aligned.

## 3-Betting

3-betting is one of the most popular topics of strategic discussion. It can seem incredibly complicated due to the information necessary to do it correctly. This chapter will deal with value 3-betting, bluff3-betting, and "the other" 3-betting. It will cover the necessary variables to consider, the sizing, and the hand ranges that work best. So let's start the fun.

## The Value 3-Bet

When we have a strong hand and are facing a raise, we usually want to 3-bet in order to get involved in a bigger pot. However, just like any action we make in poker, we need to look at the necessary variables to ensure our play is going to be optimal. The big thing we need to remember whenever we bet or raise is that we are doing so for one of two reasons: to get worse hands to continue or to get better hands to fold. If we ever 3-bet and no worse hands give us action and no better hands fold, then the 3-bet probably isn't the best play.

For instance, say a $12 / 9$ TAG open raises to $3 x$ from EP with $\$ 25$ at 25 NL . It folds to us on the button with $\mathrm{QQ}, \$ 25$, and nits in the blinds. QQ is a very strong hand preflop and we consider a 3-bet. We take a second peek at his HUD and see he has an EPPFR of $6 \%$, which looks like 44+/AK. Now we ask ourselves the basic question: if we raise, what continues and/or folds?

- Hands that continue: $T \Gamma+$ and sometimes AK
- Hands that fold: 44-99 and sometimes AK

We do get some value from worse hands, sometimes $\Pi / / \mathrm{JJ} / \mathrm{AK}$, but pretty much everything we beat folds. Of course, he could call us a bit more liberally preflop on occasion, but even still, he is just doing so to set mine and won't give us any good action past that. So a 3-bet here doesn't really get us much value, and thus we might call here. Even though QQ is the third strongest hand preflop, there isn't much value because not enough worse hands continue, and we never get folds from better hands.

However, hand strength is relative. Against such a tight continuance range, a 3-bet isn't very ideal with QQ there. Say we change the situation and say MP1 open raises to 3 x with $\$ 25$ at 25 NL and it folds to us in the CO with $\mathrm{QQ}, \$ 25$, and tight players behind us. MP1 is a $35 / 13$ over 100 hands with a Foldv3B of $40 \%$ and an MPPFR of $15 \%$. Now, with a smaller sample size like 100 hands we cannot really use positional PFR as it doesn't have enough samples to be more exact. But we see he doesn't seem to love folding to 3-bets in the few samples that have arisen thus far.

This actually gives more validity to 3-betting here. He seems like he enjoys calling raises, he is playing over $1 / 3$ of his hands so far, and seems to be passive overall. We can expect he will probably call much wider than the opponent in the first example. So instead of just $\Pi+/ \sim$ AK continuing, we can expect most pairs to call, and mistake-prone hands like AJ or KQ. This gives our 3-bet more value and sets us up for a nice and profitable spot postflop.

Because we are in position, a 3-bet is even better. We will be able to close action postflop. So say we 3-bet, he calls, the flop comes K87 and he checks to us, we can check behind to control the pot size. Of course, we will have to deal with an A or K hitting the flop about $35 \%$ of the time, but when we are in position it will be much easier to handle optimally. Plus, we got direct value from him preflop, which always helps our bottom line.

## The Bluff 3-Bet

As the games get more and more aggressive, we will not only face bluff 3-bets more, but we will get more opportunities to bluff 3-bet ourselves. Bluff 3-betting is very simple, and we do so for one of two reasons. Either the 3-bet is going to be outright profitable, or it is going to be profitable later. Of course, lots of things factor into a good bluff 3-bet, and we will spend this time talking about what to look for.

Let's first look at an example. It folds around to the MP1 who open raises to 3 x with $\$ 50$ at 50 NL . It folds to us in the BB with two random cards, $\$ 50$, and no image. We check the HUD and MP1 is a $15 / 12$ over 2 K hands, with an MPPFR of $12 \%$, a Foldv3B of $75 \%$, and a 3 B of $3 \%$. We like to check things like his $3 \mathrm{~B} \%$ to see how aware he is of the 3-bet game. The more aware he is, the less we can expect a 3-bet to work because he will understand how to combat it better on average.

If we check out what his range looks like in PokerStove, we see his MPPFR of $12 \%$ looks like $22+/ \mathrm{AJ}+/ \mathrm{KJ}+$. This is his original range (O-range). Next, we want to get an idea of his continuance range (C-range), i.e., what would continue if we 3-bet. Because we are bluffing and looking for outright profitability, we do not care if he continues by flat calling, or continues by 4-betting. We just want to know how often we can expect a fold now. If we can expect an outright fold enough of the time, then we can bluff 3-bet. If we don't expect him to outright fold enough, then we should only 3-bet him for value without other information.

Because we are dealing with a TAG, we can expect that most of his C-range is going to be made up of the strongest hands. If he were only to continue with $\Pi+/ A K$, which is fairly logical for a TAG, then he is continuing very tightly. So we can look at this in a mathematical way:

- His O-range: $12 \%$ of hands ( $12 \%$ of hands make up $100 \%$ of his original range)
- His C-range: $3.5 \%$ of hands ( $3.5 \%$ of hands make up $100 \%$ of his continuance range)

To figure out how often we will get a fold we take

$$
100 \%-\frac{C-\text { Range }}{O-\text { Range }}
$$

So,

$$
100 \%-\frac{3.5 \%}{12 \%}=100 \%-29 \%=71 \%
$$



Figure 2: 12\% O-Range


Figure 3: 3.5\% C-Range

We always want to take this number and confirm it with his Foldv3B stat. His Foldv3B stat is $75 \%$, which means we are on the right track as far as his C-range is concerned. The last thing to do is just to check it with the math to make sure our bluff would show an outright profit. Say we 3 -bet up to $10.5 x$, so $\$ 5.25$. We would be risking $\$ 4.75$ to win $\$ 1.5+\$ .5+\$ .25$, so $\$ 2.25$. In this example we would need it to work at least $68 \%$ of the time to show a profit. We expect it work about $71 \%$ of the time, and thus a 3-bet is outright profitable.

Notice in this entire example we never once looked at our cards. We looked at our opponent, his O-range, his C-range, some basic math between size and ranges, and came up with a profitable play. This is how great poker is played. When plays that we make are based $100 \%$ on our opponents and their frequencies, we can shift lots of hands from our fold range or call range into our 3-bet range. There are some other things we can tweak as well to make this play even more profitable.

For instance, we can tweak the size of our 3-bet. Now, as with any bet size that we make, we need to consider some basic bet size theory. Bigger bets tend to get less action, and usually only get action from a stronger range of hands. And smaller bets tend to get more action, and usually from a wider range of hands. So let's first look at some sizes and see how often each size would need to work:

| OR size | 3B Size <br> $(\mathbf{Z x})$ | 3B Risk <br> $(\mathbf{b b})$ | Has To Work At Least Z\% To <br> Breakeven |
| :---: | :---: | :---: | :---: |
| 3 | 2.50 x | 7.50 | $63 \%$ |
| 3 | 2.75 x | 8.25 | $65 \%$ |
| 3 | 3.00 x | 9.00 | $67 \%$ |
| 3 | 3.25 x | 9.75 | $68 \%$ |
| 3 | 3.50 x | 10.50 | $70 \%$ |
| 3 | 3.80 x | 11.50 | $72 \%$ |
| 3 | 4.00 x | 12.00 | $73 \%$ |
| 3 | 4.25 x | 12.75 | $74 \%$ |
| 3 | 4.50 x | 13.5 | $75 \%$ |

## Table 1: 3-Bet Sizing and Its Profitability (When not in the blinds)

In a pure vacuum, we see how often each $3 b$ size needs to work based on where we are on the table and what size our opponent open raised to. We see that the small $2.5 \times 3$-bet size needs to work significantly less than a 4x 3-bet size. Even just a small difference of $.5 x$ changes the $\%$ the 3 -bet needs to work by almost $3 \%$. While $3 \%$ might not seem like much, it can add up quickly if we are making mistakes, and can also add a nice buffer to our plays when we are working in uncertain environments.

So if we are playing with a player who's range continues and folds the same amount, regardless of our 3-bet size, we should always 3-bet as small as possible. However, in the real world, this is almost never the case. Players will continue more liberally against smaller bets, and will usually continue with a smaller and stronger range of hands against larger sizes. Because of this, we need to find a number that doesn't need to work too much to show an outright profit, but isn't so big that is risks too much money. We also don't want to reveal our hand strength in our sizing, which is why we would ideally use the same size for our bluffs and value 3-bets. This makes us tough to play against, and should offer a good parlay overall.

Let's recap some things that make a good bluff 3-bet spot.:

- Outright Folds. Our opponent understands and will push the fold button. There are effectively 6 different player types in poker: Nits, TAGs, LAGs, Aggressive Fish (A-Fish), Passive Fish (P-Fish), and unknowns. Because A-Fish and P-Fish don't fold often (outright, nor later), we won't want to bluff 3-bet them hardly ever. Nits usually have an O-Range and C-Range that are too close together to create a profitable bluff 3-bet, so we can't really bluff 3-bet them. We don't have information on unknowns, and we don't want to bluff 3-bet without information, so that is useless. So the only two player types that we should really consider bluff 3-betting are TAGs and LAGs
- Ranges. Always make sure we consider O-Range and C-Range. The closer they are to each other, the less we want to bluff 3-bet. The further apart they are, the more we can consider it. As a default, if I know a 3-bet will work at least $75 \%$ of the time, I will take it every time.
- Future Folds. When bluff 3-betting we pretty much always want to know that it will be outright profitable. If we have information that they call the 3-bet a lot and fold to a CB in a 3-bet pot often, then we can make that play, but often times we don't have conclusive information on that situation.
- Risk. Because we have to risk so much, in the relative sense, when 3-betting, we want to be selective with it.
- Our Own Range. We don't want to fall into the category of weighting the garbage part of 3-bet range too heavily against players that are paying attention.
- Position. Remember that position is king. 3-betting in position will often times create more pressure, and thus more folds. Don't hesitate to 3-bet hands in late position, especially against wider MP/LP O-Ranges and tight C-Ranges.
- Equity. A 3-bet that is outright breakeven can still be good if it gets called because our hand has equity. Of course, with position, we will be able to more correctly play our equity out (take free cards when we need to, VB well, etc.).Higher equity hands, like suited hands, hands that have connectivity and can catch straights and draws, etc., can drastically change the EV of a hand when we consider postflop play.


## The Other 3-Bet

There are plenty of times when we 3-bet preflop with hands that we would be perfectly happy with an outright fold, but don't hate life if we get called. Hands like AK, AQ, or JJ will often times fall into this category. This section is going to be broken into playing AK and then playing a polarized versus depolarized range.

Playing AK can seem incredibly complicated, and lots of players have their bigger leaks stemming from this hand. The thing about AK is that it is a hand that is a semi-bluff. If we 3-bet AK preflop and win the pot outright, that is a great win for AK. It is a semi-bluff hand that has it's value derived from fold equity, while retaining some strength if given action.

A lot of times players will flat call raises with AK preflop. This should really only be done in super special situations that come up very rarely. In reality, there is almost always more money to be made by 3-betting or folding AK preflop. For instance, take a hand where we are in the BB with AK. UTG raises and it folds around to us. UTG is a $12 / 5$ player with an EPPFR of 4\%, which looks like 99+/AK. A 3-bet here will get called by almost all of that range, most of which beats us and will continue beating us on the flop. So rather than mindlessly 3-bet, we might consider folding the hand.

Lots of players think they should call it and play it out. But in doing that, how are they going to make money? They will miss the flop about $2 / 3$ of the time, which means they are just calling preflop with the expectation of losing $2 / 3$ of their call. And the times they do hit, they do so on an A or K high board. A or K high boards are not conducive for getting paid off as smaller pairs shut down very quickly on them, and they create a lot of RIO situations (K high board and we run into AA, or AT6 board and we pay off, TT, etc.).

This is the exact reason why AK should be 3-bet or folded in most situations. AK also has blocker value with it by blocking out the AA and KK part of ranges, thus giving us more folds preflop. It also has a decent amount of value if we get called and go postflop. We will improve almost $1 / 3$ of the time, we improve in a near absolute way, and we can use some scary boards to our advantage due to our lead in the hand. So rather than taking the very passive "call and play fit-or-fold" line, we can take the aggressive line and give ourselves multiple ways to win the pot (outright, bluffing postflop, or with value postflop).

Which brings us right into talking about polarized versus depolarized 3-betting strategies. Polarization means the poles of something, so in terms of a range; nuts or bluff. So a polarized 3-bet range might looks like $\mathrm{KK}+/$ trash. Thus, a depolarized range would look something like $\mathrm{JJ}+/ \mathrm{AJ}+/ \mathrm{KQ}$. A depolarized range 3-bets the mediumstrong hands like JJ or KQ , rather than flatting or folding them like the polarized strategy would.

Polarized ranges are the standard for 3-betters. This kind of range gets direct value when it has the top part (the AA and KK) , and gives hands value that have no value ( 830 or J 6 s ). A polarized 3-bet range takes advantage of fold-rich environments. If a player is going to fold a large percentage of the time, why not 3-bet a weak hand like 73 s and give it some value? There is nothing inherently wrong with a polarized range, except when the weight gets tipped too heavily one way or the other.

For instance, take Francis. Francis is a $17 / 15$ over 4Khands, with an ATS of $42 \%$, a 3B of $7 \%$, and a Resteal of $12 \%$. We would, without a doubt, consider him an aggressive player who is positionally aware and aggressive while 3-betting. Let's say we figure out that Francis is a polarized 3-better. It folds around to us with $\$ 100$ at 100 NL , we steal with A8s from the CO, and it folds to Francis who 3-bets from the BB. His Resteal is $12 \%$, so we have some idea of his range.

If we first start and assume he would 3-bet $\mathrm{QQ}+/ \mathrm{AQ}+$ for value, that makes up 4\% of hands. But we said his resteal range is $12 \%$ of hands, so where does the other $8 \%$ of hands come from? They come from the bottom side of his range. Hands like 22-55, A4s, 86 s , or even J4o. So we automatically know that $2 / 3$ of his range is weak. This is amazing information. This gives us an idea on how often we can expect a 4-bet to work outright.

But let's say he has the same 12\% resteal range, but he doesn't always 3-bet QQ or AQ, instead he sometimes flats them. Then, his range starts to weight even heavier towards the trash part of his range. This makes 4-betting him more and more attractive and profitable. The issue for players that polarize is that they will sometimes too heavily weight their trash range. Players that do this usually don't pay attention to how balanced they are, and are usually incredibly exploitable (assuming that he never 5-bet bluffs with trash). If we think about how a 4-bet piechart would be made (assuming the standard 3x open raise, 3 -bet to 11 x , and a 4 -bet to 24 x ), $58 \%$ is the breakeven point. We always want to add some buffer, and we say so long as we get the fold $65 \%$ of the time, we should 4-bet anything.


Figure 4: 4-Bet bluffing 65/35

Well if we find someone who is 3-betting a polarized " $80 \%$ bottom $/ 20 \%$ top" range, then we should always 4-bet him assuming he doesn't shift his trash into his 5-bet range. Lots of players not only do this in their 3-bet range, but also in their 4-bet range. Again, this is very exploitable for anyone paying attention. Which not only means that we need to be paying attention to how other players are approaching their ranges, but also in how we are weighting our own range.

It should be said, that a polarized range is amazing versus straight forward players and non-hand readers. Assuming the player understands folding as the pots gets larger, has a wide enough O-range, and a tight enough C-range, a 3-bet can be profitable with any hand.

The other side of the coin is a depolarized 3-bet range. This range, rather than being a "nuts/bluff" type range, consists of top range hands. So rather than flat or fold a hand like AJ or KQ , we would 3-bet it in a depolarized range. A depolarized range is a great range to use in position. This is because these types of hands will do much better with a positional-advantage.


Figure 5: Polarized vs. depolarized
(As we see in the picture above, we have 2 different ranges. We have a polarized range on the left (a $10 \%$ range), and we have a depolarized range on the right (also a $10 \%$ range). They both are the same $\%$ range, but we notice they are very different.)

Let's take a spot where we have KQ s in a full ring game. It folds around to the CO who open raises to $3 x$. The CO is full stacked, is $15 / 13$ with an ATS of $37 \%$ and Foldv3B of $64 \%$. If we were in the BB and it folded to us, a strong argument could be made for flat calling or folding rather than 3-betting. Our hand is ahead of his overall range. But if we 3-bet and he 4-bets, we probably have to fold without a read. If we 3-bet and he calls, then we are out of position, against a stronger than normal range, with a hand that is going to be very hard to minimize our losses and maximize our winners (minimax*).

However, if we are on the button, we have more flexibility. A 3-bet now becomes a very valid option. Yes, our opponent will still have a strong range if he flats our 3-bet (especially from OOP), but being in position will make minimaxing postflop much easier. We should also get some extra folds preflop, thus increasing our outright profitability, because smart opponents don't want to put themselves into spots playing 3-bet pots OOP.

With all of that being said, we should still consider calling here. If our opponent has a range with many second best hands (so the RIO shift from us, to him), we can call and
utilize our positional, card, and skill edges. 3betting a hand like this is best when the hand has no edge (or worse, a negative edge) going forward.

Now, this all this is not to say that you should never 3-bet a hand like AJ or KQ from out of position, nor to say that you should never 3-bet a hand like 830 in position. This is just to show that certain hands ranges do much better from certain positions. And in situations where our opponents don't have $100 \%$ Foldv3b stats, we need to consider postflop maneuverability. As we have talked about many times already, preflop is all about setting ourselves up for good situations. So make sure we are considering our hand strengths, plans, and opponents before making plays.

## The Size Of A 3-Bet

The size we decide to use is actually very important to the profitability of our 3-bet, regardless of whether it is for value, bluff, or other. The standard sizing is usually $3 \mathrm{x}-3.8 \mathrm{x}$ when facing a raise and no callers. We need to be very aware of our opponents when making size changes though. If we are in position and 3-bet, we can sometimes use a smaller size because our forcing them to play the pot out of position can apply the same pressure that a bigger size would. And if we look back at the 3-bet size chart from earlier, a 3x size needs to work almost $5 \%$ less often than a 3.8 x size. Why risk more if we don't need to?

Keeping our size in this range is also helpful because it works both as a value size and a bluff size. There is a massive parlay going on when we size in this situation. A smaller size for value should keep more hands continuing based on basic bet theory, but a small size gives our bluffs the best equity. Because we don't want to become exploitable with our sizing, keeping our size in the $3 x-3.8 \mathrm{x}$ range is perfect.

There is one specific instance in which we can utilize a larger 3-bet size with a value hand, and that is against a calling station player who calls a lot preflop, but folds a lot postflop. These players usually don't ever want to fold things like AK or TT preflop, but tend to play a bit more fit-or-fold postflop. Against them, we should size our 3-bet as large as they will call preflop. This situation is fairly rare, but can produce some extra profit if used correctly.

## 0

Squeezing

A squeeze is a 3-bet when there has been an open raise and at least one caller. Take this example where there is a raise from MP1, MP2 calls, and we are on the button with A3s. If we were to 3-bet here, it would be considered a squeeze. We are squeezing the weak and dead money out of this pot. So, let's talk about what we want to look for in a good squeeze scenario.

There are 3 major things: the open raiser, the through caller(s), and our hand. If everything is favorable, then we can take advantage of this very profitable play.


Figure 6: Squeeze Example

## The Open Raiser

The first thing we want to look at is the open raiser. Let's say in this example that he is 17/14 with a PFR from MP of $10 \%$, which looks like $22+/ \mathrm{KQ} / \mathrm{AJs}+/ \mathrm{AQo}+$. We also want to look at how he reacts when facing a 3 b . Is he going to fight for it by flatting us or 4-bet-ing? Or is he going to fold and give up a lot? Well if we think he would only continue, by either 4-beting or flatting, with $\mathrm{JJ}+$ /AK then he would be folding $70 \%$ of the time. That is perfectly acceptable for an outright profitable 3-bet.

The original raiser in these spots tends to react to a squeeze in one of two ways. They either fold and give action very tight (with a range like JJ + and some AK), or they call
most of their open raise range preflop ( $22+$ and some AK ). If they give action very tight and fold a lot, it makes the 3-bet outright profitable against them. If they give action with a wider range, and notice it is with a set miner's range, then we can expect less outright profitability. But if they call PF and fold to the CB a large percentage of the time, then a squeeze can still be very profitable.

However, let's assume for a minute that he were an aggressive 4-better. This will increase his continuance range, as he shifts hands from his fold range into his 4-bet range. He might turn his 22-66 into a 4-bet bluff to combat our squeeze. If that's the case, the light squeeze is less ideal because it won't work even close to enough of the time outright. It also won't work later because we have to fold facing a 4-bet, nullifying a squeeze play plan here.

We can use lots of stats from our HUD to piece together an image of our opponent, and his logical actions if we squeeze here. We can check his Foldv3B stat, as it gives us an idea if he folds a lot facing a 3-bet. If he has a Foldv3B of $70 \%$ or higher, this should be a very outright profitable squeeze versus him. We can also check his FoldvCBin3Bpot. Assuming he calls our 3-bet often, this gives us an idea if the continuation bet would be profitable the times he calls PF and we go HU. The more information we have on our opponent, the better and more informed plays we can make.

## The Through Caller(s)

Next, we want to check the player or players who called between the open raiser and us, also known as the through caller, or callers. In this case, just MP2 called. Lets say he is a $12 / 8$ over 350 hands. We think his range is hands like $22-\mathrm{QQ}$, with an occasional suited connector. If he were a looser player, then the range might be much wider, but tight players tend to just through call with set mining type hands.

All we care about here is how he will react to the squeeze. Will he fold often and thus make the play outright profitable? If so, we should heavily consider making a squeeze. If he won't fold to the squeeze, will he fold to the continuation bet a lot? If so, we should also heavily consider squeezing here. If he is the kind of player to call the squeeze a lot and continue liberally postflop, then squeezing with such a weak hand would be a very losing play.

We can usually assume that very tight players are going to fall into the "check and fold facing a continuation bet almost always" category. So we really don't care if he calls the squeeze or folds to it, as both will be profitable against him. However, it gets tricky when the through callers are looser players. Say a 24/6 (who is not only set mining, but calling
the open raise with suited connectors, AT or KJ type hands, etc) or a $42 / 20$. If these players are through callers, we should tend to veer away from light squeezing. They will call wider ranges preflop (making our outright profitability lower) and they will float continuation bets more liberally (not allowing our bluffs to work).

If there are multiple through callers we should be more selective with our frequency. We don't want to constantly try squeezing four players, as it usually won't work outright or later enough of the time. We usually will only squeeze three players max (so the open raiser and two through callers) if the through callers are tight players and we have information on their folding frequencies.

Remember not to force this situation. If a great squeeze play arises, then by all means take advantage of it. But if the original raiser won't fold enough outright, or the through callers aren't ideal, just revert to a squeeze range of the strongest hands. Of course, certain hands can be flat called in this situation, so let's talk about the hand selection we want to use to squeeze.

## The Hand Selection

Our hand selection in this spot is very important. We love hands that have blocker value as it gives us lots of power. By having an A in our hand, we block the ways that the original raiser can have hands like AK or AA. Same thing if we have a $K$ in our hand, except we block out AK and KK. Whenever we can block out more of the top/left quadrant hands, we can usually expect more folds, thus increasing the value of a bluff play.


Figure 7: Card Combinations

In an ideal world we would have something like A2-A5 , or K8+. We like the suited baby aces because they block the AA/AK part of the original raiser's range, they have added value in the straight and flush draws, and we have an ace so we can sometimes catch top pair and notch their pairs. We like suited big kings because we block the AK/ KK part of the original raiser's range, we have some added straight and flush value, and we can notch either of their ranges postflop. There is also some value in hands like Q8 or even J7a, but suited (and even unsuited) aces and kings provide more value due to having more blocking value.

We can also, when in position, consider hands like suited gappers. Hands like 64 or 85 s are perfect in certain situations. If the original raiser has a wider O-range and tight C-range, and the through caller is a tight player, these hands play perfectly. They can notch flops versus their C-Ranges, which provides extra postflop value. Position with this range is vital though, as it will allow us to take free cards when necessary.

## The Squeeze Size

A good baseline to use is $3.5 \mathrm{x}+.5 \mathrm{x}$ per through caller. So if the open raiser goes to 3 x , and there is one caller, the squeeze would be to $12 x$. If the open raise is to $4 x$ and there are two through callers, the squeeze would be to 18 x . This is only a guideline as the sizing here is an art. We need to make sure we give ourselves a good enough price for working against the original raiser, and make sure we make the most that we can when the through caller calls and folds to the continuation bet. Of course, if we have a monster hand and think people will call more money preflop, then we should make our squeeze bigger with AA and KK. If we are bluffing and think we can get it through for cheaper, then we might consider using a smaller size. But because there are so many different parlays happening with this raise, using this fairly static baseline will work well for all hand strengths.

## 4-Betting

4-betting can be a very daunting topic of conversation. Because of the amount of money risked to 4-bet, it is often times not the preferred way to bluff opponents. However, in this section we will talk about not only 4-betting as a bluff, but also what to look for to make quality value 4-bets. This play can revolutionize our game and create a favorable dynamic for us as today's games continue to become more aggressive preflop.

## The Value 4-Bet

There are times, although seemingly rare, that we actually have a big hand. When we have these big hands we usually want to create the biggest pots possible, making 4-betting a great option. However, many people get in the habit of mindlessly 4-betting every single time and end up missing value. So we want to talk about what constitutes a good 4-bet spot, and what spots would make flatting the 3-bet a better option.

Let's take this example at 50 NL . We open raise to $\$ 1.50$ from MP1 with AA and $\$ 50$, and it folds to the button with $\$ 50$ who 3 -bets to $\$ 5$. It folds back to us and it is our option. Let's review this given three different 3-bet ranges.

- Tight. Against a player with a tight 3-bet range, we just need to ask ourselves if a 4-bet would get action from worse hands. Logical tight 3 -bet ranges are usually $1 \%$ or $2 \%$, meaning they are on KK + or $K K+/$ AK. While a player might 3-bet QQ or JJ sometimes, we can usually figure it out based on their 3-bet\% or notes. Players that 3-bet super tight PF should either be 4-bet with AA, or flatted to induce more comfortability postflop. Flatting is an option, but 4-betting AA PF will never be a mistake and should be our default play if we don't know what else to do.
- Medium. Against a 3-bet range of $3 \%$ to $5 \%$, which are ranges that certainly have some bluffs in them as well as strong hands, we have many options. We can 4-bet to induce some 5-bet shoves by bluffs, but also to get strong worse hands (KK, AK , etc.) to continue. Or we could flat and play postflop against this person. If we know this person has a tendency to spew postflop when they 3-bet, then flatting and playing postflop is a very valid option. Again, defaulting on 4-betting the nuts is standard without other information.
- Loose. Against a very liberal 3-bet range, something like 6\% or higher, we know bluffs start to make up a large part of this player's range. Because
of this, we just think about how they would make the most amount of mistakes. If they are super aggressive with AK and would always stack it off preflop, then we should 4-bet for pure value as combo-wise AK makes up a large percentage of ranges. If they would 5-bet bluff shove a lot, then we should 4-bet to induce that action. The more aggressive they are in the 3-bet/4-bet game, the more aggressive they tend to be in the 5-bet game as well. If they wouldn't make many mistakes to the 4-bet, but would spew postflop if we just called, then flatting and playing postflop is a valid option. And again, as a default, 4-betting is standard without information to lead us to another decision.

Like everything we do, we care about ranges and how our opponent makes mistakes. If he is more apt to call our 4-bet with many second best hands, then we should usually 4-bet for pure value. The difficult part of talking about value 4-betting is when we talk about hands like AK or QQ. Hands that are strong, but become stronger or weaker dependent on the situation. For instance, if we raise AK from EP and get 3-bet by a tighter guy, AK is a bluff hand and should usually be folded. But if we steal AK from the CO and get restolen by an aggressive guy in the blinds, AK becomes more of a value hand.

As pots begin to get more positional, i.e. when players from steal/resteal positions tangle, hand strengths begin to slide. While hand strengths are always judged on a sliding scale (what is nuttish versus one opponent could be a bluff versus another), it is important that we adjust ASAP. Let's look at a standard situation. Say it folds to us on the button with AK . We steal for $\$ 2.5$ and the BB resteals to $\$ 8.5$. Let's look at our options:

- Fold. If our opponent were a very tight player who just wouldn't bluff 3-bet, then folding here is fine. But against a player who is positionally aware, has a higher resteal \%, has shown himself to 3-bet bluff, etc., folding could be losing some value.
- Call. If we call we will miss the flop about $2 / 3$ of the time. The $1 / 3$ we do hit the flop we usually won't make much money. The same rationale that leads us to not flat calling open-raises with AK leads us to usually folding or reraising in a spot like this.
- Raise. Against an aggressive resteal range we have a very strong hand. While it isn't paired, we do beat all of his non paired hands. We would consider 4-betting here if his 3-bet range is wide and he would make some mistakes versus our 4-bet. Let's say his resteal range here is $12 \%$.

And if we 4-bet he would only shove with $\mathrm{QQ}+/ \mathrm{AK}$ ( $2.6 \%$ of hands) and never flat call. Against that range we have $39 \%$ equity. Let's do a basic \$EV equation if we 4-bet and called if he shoved:

$$
\$ E V=0.78 \cdot(\$ 11.5)+0.22 \cdot(0.39 \cdot \$ 103)-0.22(0.61 \cdot \$ 97.5)=+\$ 4.72
$$

What about if he shoved with $\Pi+/ A Q+(4.7 \%$ of hands)? That would give us $49 \%$ equity. We'll keep the other factors constant, so the $\$ E V$ equation would look like:

$$
\$ E V=0.61 \cdot(\$ 11.5)+0.39 \cdot(0.49 \cdot \$ 103)-0.39(0.51 \cdot \$ 97.5)=+\$ 7.3
$$

These are great ROIs for our hand. And if our opponent starts turning trash into 5-bet bluffs, the \$EV only gets higher and higher for us.

The big thing to take away from this section is sliding hand strengths and thinking about how to best exploit our opponents. If they do something badly, we should take lines that exploit that. If they tend to call 4-bets too liberally, then we should 4-bet for pure value and rarely bluff them. If they tend to 3-bet and spew postflop, then we can consider flatting some value hands rather than mindlessly 4-betting them. If they tend to get too aggressive in positional pots, then we can consider shifting hands like QQ or AK into our value 4-bet range. Everything we do is based on our opponents and their actions. If we are unsure, defaulting on playing tighter and only 4-betting KK+ will keep us out of serious trouble. But we should strive to play with as much information and knowledge as possible so our actions are more exploitative and optimal.

## The Bluff 4-Bet

Bluff 4-betting is a great way to combat aggressive games. As 3-bet ranges continue to get wider and more aggressive, 4-betting ranges can be widened or tightened in an effort to fight back. We could also adjust by tightening up PF and being able to fight back with more of a value range, but this section focus strictly on the bluff 4-bet.

Let's review some factors that make for a great bluff 4-bet situation:

## - Wide O-Range/3-bet Range

Like always, we want to start by thinking about ranges. Bluff 4-betting isn't going to be great against a player who 3-bets with a range of $\mathrm{QQ}+$ / AK and never folds any of it. His 3-bet range is too strong and we don't expect to solicit enough folds by making a bluff 4-bet. We like players
with very aggressive 3-bet ranges. Either resteal situations where they keep something like a $10 \%+$ resteal percentage, or LP spots where they 3-bet a large range. We can usually glean this information from their stats/ pop up, but we want to make sure that we are taking notes on their 3-bet ranges and frequencies.

## - Tight C-Range/5-bet/flat Range

While we are looking for wide and aggressive O-Ranges, we are also looking for tight C-Ranges. When we are bluffing we are usually only interested in outright profitability. Because most players don't call a 4-bet with a range that they are going to fold much postflop, we can only win by getting enough folds now to show outright profit. We don't care if our opponent continues by shoving or by flatting, what we care about is ensuring that he folds enough of the time if we were to make a 4-bet. Often times very aggressive players tend to amp up their 5-bet range, especially in positional pots, so we need to aware of this and use notes/ stats to help create our 4-bet frequency against them.

## - Our Perceived Range

If we want a bluff 4-bet to work, we need it to be believable. Against thinking players, and these are really the only players we usually attack with bluff 4-bets, we need to ensure that they will believe us and fold enough of the time. So if we are playing incredibly LAG, and our opponent realizes this, he might be less apt to 3-bet us wide or more apt to 5-bet us wide. Neither option is great for us nor the profitability of our bluff 4-bet.

## - Blockers

Having blockers in our hand can be great and make it harder for our opponent to have a larger C-Range. Us having an A or K is great as it makes it harder for our opponent to have hands like AA/KK/AK, a range that tends to continue more often when facing a 4-bet. While blockers aren't the crux of a good 4-bet strategy, they can certainly add a little extra profit to the $\$$ EV of a play.

- Size

The size of a 4-bet can drastically alter the profitability of our bluff. We want to make sure that the size blends in with our value size, represents well, and gives us the best price possible. With some simple math we can
come up with optimal bluff sizes that offer great $\$$ EVs.
What we can see here, is that we really need the stars to line up right for a worthwhile bluff 4-bet spot to arise. Many players make the mistake of forcing bluff 4-bet spots, and given the amount of money risked, it can be a very losing endeavor. Let's look at an example to make sure we are thinking about this spot correctly. Say we open raise Ad5d to $\$ 1.25$ from the CO. The SB 3-bets us to $\$ 4.5$ and the action is back on us. Let's look at this versus three different players:

- P-Fish. A P-Fish should have a relatively strong 3-bet range as he is a tighter player when it comes to raising preflop hands. Also, P-Fish tend to love pushing the call button, so when he decides to 3-bet, we should be more than a little frightened. Against this player, folding would usually be the best option. A5s isn't strong enough to call, we don't want to bluff 4-bet a fish, and thus folding becomes our best option.
- A-Fish. An A-Fish will be more aggressive, and thus might 3-bet very liberally here. While that is good in that it makes his O-Range wide, it's not great because he is a fish. He might decide to 5-bet a larger percentage of his range. He might flat the 4-bet with things like AJ or KQ , hands that we will have an insanely difficult time playing against postflop. Because fish don't like to fold, we usually want to take more of a straight forward approach versus them and just play value hands against them. It should also be noted that if we expect to get 3-bet a ton by this guy, then opening with A5s in the first place could be very problematic.
- Other. There are two parts of a normalized resteal range. The part that will continue versus our 4-bet, and the part that will fold to it. Because most nits, TAGs, and LAGs are polarized when 3-betting from OOP, they tend to keep the same "top-side" of the range. The most popular nuttish parts of the range are this:


Figure 8: A 1\% Range


Figure 9: A 2.5\% Range


Figure 10: A 4\% Range


Figure 11: A 6\% Range

Those are the most standard "top-side" ranges that players would use. Of course, if a player had a 3-bet of $15 \%$ and would only continue versus a 4 -bet with $\mathrm{KK}+$, we know that they would be folding $93 \%(14 / 15)$ of the time. If they have a 3-bet of $9 \%$ and would only continue versus a 4-bet with $\mathrm{QQ}+/ \mathrm{AK}$, we know they would be folding $72 \%(2.5 / 9)$ of the time. This is why having big samples on players is great, because we just check our notes and their stats and can estimate the profitability of our play.

So we know better than to 4-bet bluff fish or other players who won't fold enough of the time to show an outright profit. We know who we can 4-bet bluff, and how they would tend to continue. The issue arises when players start shifting hands from their folding range into their 5-bet shove range. For instance, say we steal and get 3-bet by a guy with a $10 \%$ resteal range. We know his normal shove range here would be $\mathrm{QQ}+/ \mathrm{AK}$, meaning that $25 \%$ of his resteal range is continuing.


Figure 12: 75/25 Range
But what if he started taking some of his bluffs, like 73 s or K9s, and started putting them in his 5-bet shove range? Then instead of getting folds $75 \%$ of the time, the success rate might drop to something like $60 \%, 50 \%$, or even $40 \%$ if he gets very frisky. The more likely a player is to shift bluff hands into their 5-bet shove range, the less likely our bluff 4-bet will be outright profitable.

We can extrapolate a lot from this. For one, we want to take bluff 4-bets against players that are more likely to fold to it, and not get tricky with the bluff part of their range. Two, if
players are shifting a lot of bluff hands into their 5-bet shove range, then we should make our 4-bet range more for value. And three, if a player is 3-betting us a large percentage of the time and we don't know how their 5-bet range contorts, we can consider making our opening range into that person stronger so we can 4-bet for value.

The last thing we want to talk about here is the bet size and necessary folding frequencies to show profit. Just like with 3-betting, we are risking a decent amount of money to run this play. The normal size for a bluff 4-bet should resemble that of a value 4-bet. We don't want to go so large ${ }^{4}$ that we risk too much, and we don't want to go so small that we risk them continuing too often, even though it gives us a better price. Because of this, the normal size is around 20-25bb. Here are the normal opening sizes and 3-bet sizes we would deal with. From there we can look at some different 4-bet sizes to see how often they would have to get folds to show outright profit in Table 2.

As always, the more we risk with our 4-bet size, the more often we need our opponent to fold to show an outright profit. And again, because we can't really win this pot postflop if he calls our 4-bet, we care the most about outright profit potential. We can also run very simple $\$ E V$ equations to see how much money we can expect to make, or lose, with a 4-bet. If we can estimate how often a 4-bet would solicit a fold, we can just plug in the other variables:
$\$ E V=\%$ Folds (Open raise size +3 bet + Dead money $)-\%$ Continues (Total 4bet size - Open raise size $)$
Let's take a hand where we open raise to $\$ 3$, our opponent 3-bets to $\$ 12$, and there are $\$ 1.5$ in dead blinds in the middle. We decided we want to 4-bet up to $\$ 24$. Let's run the outright $\$ E V$ if we expect $50 \%$ folds, $66 \%$ folds, and $80 \%$ folds.

$$
\begin{array}{ll}
\cdot & \$ E V=0.50 \cdot(\$ 3+\$ 12+\$ 1.5)-0.50 \cdot(\$ 24-\$ 3)=-\$ 2.25 \\
\cdot & \$ E V=0.66 \cdot(\$ 3+\$ 12+\$ 1.5)-0.34 \cdot(\$ 24-\$ 3)=+\$ 3.75 \\
\cdot & \$ E V=0.80 \cdot(\$ 3+\$ 12+\$ 1.5)-0.20 \cdot(\$ 24-\$ 3)=+\$ 9
\end{array}
$$

We can play around with the outright \$EV formula and try out different fold rates and 4-bet sizes. We should do a lot of this kind of work off the table so that we have very clear ideas on the profitability of our plays when we are in a hand. While basic bet sizing principles are still true - smaller sizes get action more, bigger sizes tend to fold out more of their range - we need to ensure that we don't make our bluff sizing noticeably different from our value sizing.

[^3]| OR size (bb) | 3B Size Size (bb) | 4B Total Size (bb) | BE \% |
| :---: | :---: | :---: | :---: |
| 2.5 | 7 | 20 | 65\% |
| 2.5 | 7 | 21 | 66\% |
| 2.5 | 7 | 22 | 67\% |
| 2.5 | 7 | 23 | 68\% |
| 2.5 | 8 | 21 | 64\% |
| 2.5 | 8 | 22 | 65\% |
| 2.5 | 8 | 23 | 66\% |
| 2.5 | 8 | 24 | 67\% |
| 2.5 | 9 | 22 | 63\% |
| 2.5 | 9 | 23 | 64\% |
| 2.5 | 9 | 24 | 65\% |
| 2.5 | 9 | 25 | 66\% |
| 3 | 9 | 21 | 60\% |
| 3 | 9 | 22 | 61\% |
| 3 | 9 | 23 | 63\% |
| 3 | 10 | 22 | 59\% |
| 3 | 10 | 23 | 61\% |
| 3 | 10 | 24 | 62\% |
| 3 | 10 | 25 | 63\% |
| 3 | 11 | 22 | 58\% |
| 3 | 11 | 23 | 59\% |
| 3 | 11 | 24 | 60\% |
| 3 | 11 | 25 | 61\% |
| Avarage BE\% |  |  | 63\% |

## Table 2: 4-Bet Sizing and Its Profitability (No Dead \$)

Overall, bluff 4-betting usually isn't a massive part of our game. It is a great play to use when the situation is perfect, but it isn't the kind of play we really want to force. Like we talked about earlier, it is often times better to change our opening range rather than change our 4-bet range, unless we have a very clear idea on how profitable the bluff 4-bet will be. We should just make sure we stay focused on who we are attacking, and ensure that if we are going to bluff 4-bet that we are getting folds at high frequencies.

## The Flatting Of A 3-Bet

There are times when we are 3-bet and we have a hand that we might consider flatting. One of the bigger mistakes that players make is flatting 3-bets too liberally. We really only flat a 3-bet in full ring when we have no other good option. Take this hand:

We steal from the CO with JJ, the SB (an aggressive TAG with an aggressive resteal percentage) resteals, and it is our turn. Let's review our 3 options:

- Fold.JJ is probably ahead of his 3-betting range. He is aggressive, resteals liberally, and should have a range much wider than just AA/KK/QQ. Because we are so far ahead of his 3-bet range (especially if he heavily weights the bottom-side), folding here, especially with position, would be losing value
- 4-bet. While JJ is probably ahead of his 3-bet range, a 4 b here might not be doing much more than turning our hand into a bluff. No better hands will fold, and unless we know that his 5 b range has quite a few bluffs in it (aka, our 4-bet is for value), no worse hands will continue.
- Call. Using our positional edge and post-flop edge (i.e. card edge), a flat here can be a good play. We also notice that no other option was good, and thus flatting just kind of becomes the only play to make.

The hands that tend to fall into this category are hands like $99-Q Q, A Q, A J, K Q$, etc. Hands that are strong, probably ahead of our opponent's range, but hands that don't do great facing a 5-bet. However, there are other times, and with other hands, that we can consider flatting a 3-bet. Let's look at two spots.

We raise with AA from MP 1, the button (an aggressive LAG) 3-bets us, and it folds back to us. Let's review our 3 options:

- Fold. We have AA, we aren't folding preflop in a cash game.
- 4-bet: 4-betting AA is certainly $+E V$, but just because something is $+E V$ doesn't mean it is optimal. We would 4-bet if we knew enough second best hands would continue to it. If he would take things like JJ/QQ/AK too far preflop, then we should go for the 4-bet. But if we think he folds everything but KK to a 4-bet, then flatting can be a better option.
- Call. Assuming that he would player closer to perfect versus a 4-bet, we could certainly call and keep him in the hand with a weaker range. This gives him chances to keep bluffing, or feel committed with second best hands postflop. Calling with things like AA or KK here are good from time to time so our "flat call vs. a 3-bet" range isn't just JJ/AQ type hands.

Or this hand where we steal with T8s from the BUT, the BB 3-bets. We know the BB is a $17 / 14$ with a $12 \%$ resteal, but also know that he is a "CB-and-quit" type player in 3-bet pots.

- Fold. Certainly an option. But, being that we know he resteals light (and thus the garbage side of his range is large) and that he will CB and check/fold turns if he misses, we know how we can win the pot. If we are planning on folding to the resteal that we know is coming a large percentage of the time, we might just open fold instead of stealing.
- 4-bet. We could 4-bet, but if our opponent is an aggressive 5-better, that could be a poor option. Let's just assume he would 5-bet most all of his range, so 4-betting isn't an option.
- Call. We can consider calling here because we know how we can win the pot. T 8 s will hit $\mathrm{TP}+$ or a FD/OESD about $32 \%$ of the time. But, we also know when we miss that we can float flops and stab turns as well, giving us more ways to win the pot. While it is pretty rare that we run into a situation with these specific parameters, it is important that we understand and consider all of our options whenever possible.

We should be noticing that the option to flat a 3-bet, as opposed to folding or 4-betting, is heavily influenced by information. The more information we have in terms of width of range or postflop tendencies makes our decision to flat easier. While it is rare that we have the information necessary to flat T8s, we should look for spots where players tend to play a "CB-and-quit" strategy and abuse them. Again, flatting a 3-bet is not something that we do often, but with information or the correct hand in the correct spot, it is a nice play we can add to our playbook.

## The Art Of Sizing A 4-Bet

Most players tend to make a lot of mistakes in the sizes of their 4-bets. They either size them too large and lose value, or they make them too small and lose value. While the size of our 4-bet can change drastically based on stack size, the average 4-bet size is around 20-25bb. This size is used for a couple of reasons:

- For Value. When we 4-bet for value we want to use a size that doesn't automatically tell our opponent that we are stacking off. This size gives them room to bluff 5-bet shove, and also let dumber players call and put more money into the pot badly.
- For Bluffs. Because we don't 4-bet bluff fish, we don't need to worry about the calling frequency of our opponent going up in an a very harmful way. As a bluff, this size looks the same as our value 4-bets, while also giving us a price on our bluff. While on average we still need a $60 \%$ success rate just to breakeven, it fits well in our overall strategy.
- For Blend. If both our value and bluff sizes are the same, it makes it very difficult for our opponents to know what we are doing. While we don't care about blending for fish (we play straight forward and for value against them), we do care about doing it against the players we would consider 4-bet bluffing.

This doesn't mean we want to be static though. If we were playing against a player who we thought a bluff 4-bet would be good against, but they would fold to a any sized 4-bet, then we should make smaller bluff 4-bets. If we were playing against a fish who would call our value 4-bet more, regardless of size, then we should make it as big as they would call. While we should stay within the area of $20-25 \mathrm{bb}$ on average, we can make more exploitative sizing if we have information leaning us one way or another.

## 8

## Preflop

Adjustments

There are numerous things we need to adjust to well in order to thrive in today's games. This chapter will go over some of the major adjustments we need to make in our preflop game to achieve higher win rates. While improvement in any one of these areas should prove beneficial to your game, improvement in all of them will improve your game quality in no time at all.

## The Table Selection

Table selection is always an important part of our game, but a part that is not often times talked about. Table selection is a personal thing. Based on your style of play, you should consider looking for different table types. For instance, if you are playing a very tight and passive style, then a table full of nits and TAGs will not be the best table for you. Of course, you should always adjust your game as the conditions of a table change, but initial selection is still very important.

Usually we want to choose tables that allow our style to thrive. If we are going to play a lot of tables and use a tight and robotic strategy, then selecting loose tables with lots of fish will be the best choice. If we are going to play a very positionally aggressive style, then we want tables with lots of players that fold preflop, or fold to continuation bets. Make sure to select tables that allow you to play your best game without needing to force things.

## The Seat Selection

Having a good seat at a table is almost as important as the table itself. In an ideal world, we would have very passive/folding players sitting on our left, and some fish on our right. This allows us to steal relentlessly and pick up easy blinds, and also get direct value by being in position on the fish on our right side. Of course, we don't live in an ideal world, but such seats are still something we should strive to look for and sit in whenever possible.

Aggressive players on our right aren't the worst of things, but aggressive players on our left are annoying and create lots of issues. They 3-bet often and force us to get into a " 4 -bet or defend" mode fairly quickly. The obvious option is to cut down our stealing and stick to playing stronger hands that can compete well against their aggressive 3-betting, but this can reduce our expected win rate from the button and cutoff. Having to choose a seat where a player on our left reduces our most profitable positions at a table is something that is usually unnecessary. Not only do we not want that to happen
on any table, but we usually have so many other table options available that we can and should leave and choose a better table as soon as possible.

A lot of players will argue that we should stay at the table and try to compete against the tough player. They say we should learn to fight and beat this player because we will have fewer tables available to us as we move up the limits. While this is valid to an extent, it is important to realize that we have multiple online card rooms to choose from, giving us even more table options. Also, when we are playing higher and against better and more aggressive players, our reaction should not be "I am going to try to outplay him and get into an aggressive 3-bet defense/4-bet game." Our reaction, unless we have an edge, should be to play more straight forward. There is no reason for us to get into super high variance, and possibly -EV, situations when they are easily avoidable in lieu of better profit potential.

## The Image

Keeping our image in mind is important at all times. This can be hard when we are playing multiple tables, but it is still very crucial while playing against observant players. There are sessions where we are playing an overall TAG style on 10 tables, but on one of those tables we are running $33 / 28$ and on another we are running $6 / 6$. Keeping our HUD stats up on each individual table will help us judge how our opponent's view us on that particular table.

Some big things to consider about our image are:

- How often we are stealing. The more we steal, the more people will start to aggressively resteal on average.
- How often are we 3-betting. The more we 3-bet, the more people will tend to start 4-betting/defending against it on average.
- Fish don't care. Fish just don't care all that much about our image. They may notice if we are super tight or super loose, but on average, they just aren't paying attention to us.
- Fit-or-fold players don't usually care. These players, especially postflop, tend not to care about our image. They just care about their hand strength on average.
- Balance. Many players will argue that they have to raise a certain hand
from a certain position, or call a certain hand here to keep a balanced range. While this is true in a game where everyone cares, that usually isn't the case at the tables we play on. So we don't need to do things for the sake of balancing on average.
- We stacked off badly. Just because we happened to stack off with AK on a K high board versus a set, doesn't mean most players are going to approach us any differently the next hand. On average, players are so focused on their own hands that they don't adjust their stack off ranges.


## The Stack Sizes

One of the most important pieces of our profit puzzle comes from stack sizes. It never ceases to amaze me how often players overlook this very simple, yet incredibly important, piece of information. Stack sizes are simple. The smaller a stack size is, the more direct value our hand needs to have. The larger a stack size is, the more implied value becomes important.

These are the standard stack sizes:

- 1bb-29bb: short stacks
- 40bb-60bb: medium stacks
- 80bb-120bb: standard stacks
- 150bb: medium-deep stacks
- 200bb: deep stacks
- 300bb+: super deep stacks

Take a hand where we have 86s on the button. UTG open raises and it comes around to us. Without even talking about player types, we would always fold this to a short stack. Our 86 s hand has no direct value; all its value is implied from hitting a strong hand and getting paid offlater. We might consider calling it, or even 3-betting it, against a 100bb+ stack, but would always fold it against a short or medium stack size.

Relative stack sizes can also help us plan with certain hands like JJ or AQ. Say a player opens the button and we are in the BB with JJ. Well if the player were a short stack then calling would make for a very awkward situation (an over card will hit the flop about $45 \%$ of the time and there will be about 3 SPR left). So shifting the hand into either our

3-bet range might be better. The same thing if we have AQ. The small SPR can make this spot very difficult to play optimally if we call, and thus either 3-betting or folding would make for better options.

## The Reloader

This may seem very basic, but it is important to be aware of. Players that reload to the stack of their choice tend to have a strategy built for that stack size. For instance, if you see a player with 20 bb who loses a pot and reloads to 20 bb for the next hand, we can assume they have a strategy built for a 20 bb stack. Now, whether that strategy is good or bad is certainly up for debate, but it is important to note.

The same is true about players that buy in for 100 bb and constantly reload to 100 bb if they lose even a single big blind. They feel that they have a strategy that works for them with that stack size. We should also be falling into this category. The theory is that if we are +EV , then we should have the most amount of money possible to start each hand so that we can maximize our edge. Why start a hand with 87 bb if we might miss out on 13bb of value if we get stacks in the middle? We should make sure to reload our stack (most big poker sites have auto-reloading options) to create the most + EV environment for us.

Pay special attention to players that don't reload. The players that buy in for an arbitrary number and play until it is either gone or until they are done playing, are players we should keep our eye on. These players tend to have very little strategy for any specific stack size, and tend to be very bad. If we see players with random stack sizes we can usually assume they are fish and treat them as such. It is a nice way to quickly spot bad players, so make sure to attack them whenever possible.

## The Preflop HUD Stats

The layout and statistics in our HUD is a very personal part of our game. Different players with different play styles will be more interested in certain stats over others. A LAG player might be interested in stats that revolve around knowing how often a player folds to preflop pressure. A TAG player might be interested in stats that revolve around knowing how often a player calls with worse hands preflop. In this section we will look at some stats we definitely want on our HUD, and also explore some other stats that can aid our preflop game.

- Hands. Sample size is always very important. The more hands we have on a player, the more "real" we can assume their stats are. (Read "The Quick Inference" section below for a more in depth look at how we can use sample size)
- VPIP. This is the measure of how many hands a player played by putting money into the pot voluntarily. So if a player checks their option from the BB and never puts a cent in the pot, that doesn't count as VPIP. This very basic stat gives us an idea of how many pots this player is getting involved in, and color coding it for quick analysis is a good idea.
- PFR. This is the measure of how many hands a player is raising preflop. PFR should always be taken in the context of VPIP. If a player has a $15 \%$ PFR, that means something entirely different if the player has a $55 \%$ VPIP or a $17 \%$ VPIP. Color coding this stat is also a good idea so as to quickly get an idea of a person's player type.
- AF. The aggression factor stat can give us an idea of a player's aggressive tendencies. The formula for it is $(\mathrm{AF}=($ Bets + Raises $) /$ Calls). A higher AF implies a player is more likely to bet or raise rather than to call.
- ATS. A player's attempt to steal can be very helpful for us. A higher attempt to steal lets us know they are stealing with a higher frequency and that their steal range is inherently weaker. This can also be a decent gauge of a player's positional awareness, as a high ATS implies that they understand the wisdom of playing lots of hands from late position.
- Limp/Call. This stat lets us know how often a player limps and then calls a raise preflop. A high limp/call percentage let's us know this player isn't folding to a raise often, and that we should be selective with our isolation range.
- 3B. The 3-bet percentage is helpful in allowing us to visualize a player's 3-bet range. A higher 3-bet percentage can tell us that this player isn't just 3-betting the strongest of hands. The larger a 3-bet percentage is, the more bluffs they tend to have in their 3-bet range.
- Foldv3B. A player's "Fold Facing A 3-bet" stat gives us an idea on how that player proceeds when facing a 3-bet. If a player has a very high Foldv3B, then we know that they only continue with strong hands. But this needs to be taken in context with their VPIP/PFR. If a player who is running
$12 / 6$ has a $50 \%$ Foldv3B, it is entirely different than a 19/17 having a $50 \%$ Foldv3B. The $12 / 6$ is rarely folding when facing a 3 -bet because their opening range is so inherently strong.
- Resteal. The resteal percentage lets us know how often a player is 3-betting a steal. This is very helpful when trying to visualize a players 3-bet range when we steal and they 3-bet. A higher resteal generally has more air and semi-bluff hands in it, and can help us make better decisions.
- FoldvResteal. This lets us know how often a player steals and then folds when somebody resteals. This number needs to be taken into context with ATS. If a player steals rarely, it means their steal range is strong and thus seeing a low FoldvResteal percentage would not be shocking. Players with a large FoldvResteal and an aggressive ATS should be restolen against often.
- CB. While a player's continuation bet percentage isn't a preflop stat, it can help us create lines before we even make our preflop action. If we know a player is going to CB almost always, we can call a different range against them than a player who would CB rarely. A player who would CB rarely is perfect for calling often IP and taking the pot away when they check. (Please note that there is a difference between " CB " and " CB in a 3-bet pot.")
- FoldvCB. Again, not a preflop stat, but a player's "Fold Facing Flop $C B$ " is very helpful for our preflop plays. If we see a player has a high FoldvCB, then we know we can play more aggressively because if our play doesn't work preflop, we know it will work with a CB a large percentage of the time. (Please note that there is a difference between "FoldvCB" and "Foldv CB in a 3-bet pot.")
- Pop Up. A pop up is useful for all the detailed information that we don't have space for on our HUD. Detailed information like position specific PFR or 3B can be helpful in creating lines not only preflop, but postflop. Make sure the pop up is organized so finding information is easy in realtime.


## The Preflop Stat Correlations

Stats are great as they give us information about our opponents, but stats used in correlation with other stats are even better. Because almost all stats are taken in context of other stats (at least VPIP and PFR), we should always be looking to put more information together by looking at the big pictures available.

- VPIP and PFR. These stats are the most important as they converge the quickest. Because of this, we want to glean as much useful information from them as possible. The gap in these two stats can be very telling and help us pinpoint a player type efficiently.

The wider the relative gap between these two stats, the more passivity we will tend to see in the player's game. For instance, take a player who is playing 17/4. We see a large gap between their VPIP and PFR, which leads us to believe they aren't usually raising when they enter a pot. A player who open-limps more than he open-raises is usually more passive in nature. Their passivity also tends to carry over to postflop and we notice more fit-or-fold or calling station tendencies from them.

However, the gap is relative. Take Paul who is $15 / 12$ and Sam who is 22/17. Paul has a 3 point gap in his VPIP and PFR, and Sam has a 5 point gap. Just because Sam's gap is a bit bigger than Paul's does not mean that Sam is less aggressive. In fact, Sam is probably more aggressive because he is playing so many more hands and raising most of them. Remember that everything is relative in poker, especially when making inferences from stats.

- Position and PFR. This is an amazing way to great a handle on somebody's exact raising range by position. While we need a bigger sample for this to be more exact, it can help us pinpoint a player's range very quickly. Say we have a player who is $14 / 12$. This is good to know, but it doesn't give us a great idea of his range by position. Let's say we have 400 hands on him and see this is his PFR by position:
- EP: $8 \%$
- MP: 13\%
- LP: $22 \%$
- $\mathrm{SB}: 5 \%$
- BB: $5 \%$

This let's us know a lot about him. In fact, we can just open up a program like PokerStove and visualize these ranges ${ }^{5}$. Usually we build a range by starting with $\mathrm{QQ}+/ \mathrm{AK}$, and then build the pairs down to 22 , then start adding things like $\mathrm{AQ}, \mathrm{KQ}, \mathrm{AJ}, \mathrm{KJs}$, etc.

- Position and Any Stat. Position is very important for being able to accurately assign ranges given the action of our opponent for a given seat. For instance, being able to see that a player has a large cold call \% from the button is very helpful if they call our raise from there. It is also helpful if we see a small $4 \%$ cold call from MP. This lets us know that this particular villain is logically setmining, and we can take lines that attack and exploit that.

We can also use this when looking at 3-betting, 4-betting, squeezing, etc. Anytime we can see a more detailed version of how this player plays by position we have an extra edge. This is why we use HUDs and stats. Of course, the more detailed the situation is, the more of a sample size we need for reliability. We can get an idea on 3-betting faster than 4-betting (as players 3-bet more than 4-bet), ideas on PFR faster than squeezing, etc. Make sure we are considering relative importance and sample sizes, and we will be able to put more statistical backing to our range analysis.

- ATS and 3-Bet. A player having a high ATS usually implies they are more positionally aware than a player with a small ATS. They understand playing the bulk of their hands from late position as opposed to early position, and they attempt to take advantage of stealing situations. This also means they are more likely to recognize a steal attempt, and thus more likely to attack it with a weak hand. So ATS, coupled with 3-bet, can help us put their range together more precisely than just using the 3-bet percentage alone.

Now, if we have a big enough sample on a player, we can use their resteal percentage to more correctly judge their restealing frequency and range. But, if we have a smaller sample size, we can use ATS + 3-bet to visualize their actions and range. Say we have two players, Jake and Bill. Jake is a $15 / 13$ with an ATS of $38 \%$ and a 3 -bet of $4 \%$. Bill is also a $15 / 13$, but with an ATS of 15\% and a 3-bet of 4\%.

[^4]We notice they both have the same VPIP, PFR, and 3-bet percentage, but a wildly different ATS. And say we steal from the button, the SB folds, and we face a 3-bet from either of them. Well, Jake has a high ATS. He understands stealing, and thus understands that you are probably stealing. Because of this, his range is probably a bit more polarized. He will 3-bet hands like QQ+ of course, but will flat call things like KQ or TT that he knows are ahead of our range.

Bill, on the other hand, is less aware of the stealing game. We can presume that his lower ATS suggests that he would only raise from a steal position if he had a strong hand, and thus he should believe we would do the same. This actually changes his 3-bet range. He only plays the strongest of his range, and thus his 3-bet range would not have hands like 33 or A4s in it, it would be comprised of things like JJ or AQ (making for a very depolarized range).

So while they both have the same VPIP, PFR, and 3B, they actually create ranges differently. This information can help us create a 4-bet/ defend strategy and also to understand their thought processes in this, and other, situations.

- Limp/Call and FoldvCB. This is a great combination of stats to use when isolating players. If a player has a high limp/call, then we know that they are going to continue a lot of the time when we isolate them. If we see the same person has a low FoldvCB, then we know that they are going to call the preflop raise a lot and call the CB a lot. This would mean we would need a stronger hand to isolate with because a raise/CB line won't pick the pot up, so we have to set ourselves up with a hand that can play well postflop.

We can also look at it when a player has a high limp/call and a high FoldvCB. This player is usually going to call preflop but play fit-or-fold on the flop. This means our hand doesn't matter as much because we know a simple raise/CB will show an outright profit, regardless of our cards. Again, we can make better plays given information gleaned from stat correlation.

There are plenty of other stat correlations that we can use, but those are the ones that are most helpful to our game. As we get more and more comfortable with our HUD we should look to see if certain stats in certain ranges tell us other things about our opponent,
but for now, just using these will put us ahead of their game. Just remember to keep the sample size in mind, and don't make big decisions based off small amounts of data!

## The Quick Inference

There are plenty of times when we don't have a large sample size on a player. Maybe we have only an orbit's worth of hands, or maybe a few orbits. Sample sizes are key to knowing if the stats we have are "real" or if they are unreliable. Here are some basic breakdowns on sample sizes:

- 0-30 hands: a very small sample size
- $\quad \mathbf{5 0}$ hands: a small but usable sample size
- $\mathbf{2 5 0}$ hands: a good sample size
- $\mathbf{1 0 0 0}$ hands: a really good sample size
- 2500+ hands: an amazing sample size

This doesn't mean that a sample size of 25 hands is useless. It just means that our reads will be less reliable in that sample size. It also means certain stats will have little to no relevance. For instance, say a person restole once in those 25 hands. That means their resteal stat might be $100 \%$ on our HUD. Obviously their resteal will not be $100 \%$ over 800 hands, so we can pretty much just assume we have no real data on their resteal, because the situation hasn't come up enough for us to have a good idea.

Now, the VPIP and PFR stats gain datapoints with every hand, and thus we can use a small sample size to more effectively estimate a player's player type using those stats alone. If a player is $66 / 8$ over 30 hands, we can assume they are shaping up to be very weak-loose. If a player is $10 / 10$ over 50 hands we can assume they will most likely be a TAG or nit player when their sample size gets larger. However, it should be noted that we will often times not have big sample sizes on fishy players. They tend not to last long enough, nor play enough tables, for us to collect enough of a sample size on them. This is why small samples are helpful, assuming we use the data with a grain of salt.

Certain stats will need larger samples to be reliable. We should consider setting our HUD to only show certain stats when we have enough samples of it happening. For instance, seeing how a player resteals over 3 situations isn't very useful, but seeing how they resteal over 10 situations gives us more samples and thus more reliability. Looking
at a Foldv3B stat over 25 hands won't give us much information, and thus we might ignore ${ }^{6}$ the stat until enough samples of that action occur. Just because a player has $\mathrm{X} \%$ for a stat, doesn't mean they will have X\% against us. Some players might attack us more or less than they would other players. Because of this, remember to take notes so we have more specific information on given players.

Players might also change their style over time. Having 9,000 hands on a player is great, but if they played $12 / 10$ over the first $4,000,14 / 11$ over the next 2,000 , and $18 / 15$ over the last 3,000 hands, we have really skewed data. Because of this, we really only want to see current data on a player to ensure our stat reads are real and reliable. Ensuring that our HUD only shows the latest 3 months (or less) of data on a player is a good way to ensure the stats are as real as possible. However, if we see a player who's stats are 12/9 but it seems like he has been ramping up preflop aggression over the last week, we might want to set our HUD to filter specifically for him. Remember that any information is always helpful, but lots of reliable information is the nuts.

## The LAG Transition

Because many players either utilize a LAG style incorrectly, or totally dismiss it, I wanted to talk about it for a little bit. First off, LAG play is not necessary. You don't ever have to play it if you are not comfortable with it. Many players make the mistake of jumping into LAG play without fully understanding the style and it often times turns out poorly. The thing to remember about LAG play is that it really isn't much different than TAG play. I normally just say that a good LAG is effectively a TAG on steroids.

There are really just 2 big differences between a TAG and a LAG:

- Preflop Pressure. A TAG understands position, steals well, 3-bets well, and uses a very solid range from all spots. A LAG isn't all that different. They keep a tight EP range, relatively similar MP range, but use LP more aggressively. They steal much more often, 3-bet more in good spots, and pressure players more liberally. However, a LAG isn't just making plays for the sake of buffing up their stats. They take situations that are good and make + EV plays. If a good spot arises, they take it. Yes, their stats are a bit higher, but only because they are taking as many spots as they can find, whereas a TAG will pass up on some of the thinner edges.

[^5]- Postflop Pressure. A TAG will apply some pressure postflop by CBing in good spots, double barreling in good spots, and by making some well-timed bluffs. A LAG takes this a step further and looks for more spots where he can use his aggression to pick up pots. A LAG assumes that every pot belongs to him, and if he senses a bluff will show profit, he stabs at it. However, he still understands showdown value and not bluffing players that don't fold, just like the TAG does. Again, a LAG just looks for more spots to apply pressure, taking the spots that a TAG might avoid.

So, there is a clear distinction between the two player types. This is not to say that we need to go out and play LAG tomorrow. In fact, this is written for quite the opposite reason. As poker players, we have certain edges. Our edges grow as we get experience and improve our strategic game. When we are starting out we want to play tight to keep ourselves out of trouble while building a solid foundation. Once we improve, we can start looking for more spots which can be to our advantage. While we should always be on the look out for edges to exploit, we don't take them until we know how to and are comfortable with the parameters of a certain play. Again, preflop play is all about setting ourselves up for good spots postflop. So don't get too crazy preflop until you are sure that you can handle the postflop spots that can and will arise.

## The Postflop

## Warm Up

For the postflop warm up, we again want to make sure we're both on the same page as far as terms and framing parameters. The postflop part of the book will be a bit more theory based because the vast number of situations that could arise would fill up about 28 volumes. The goal is for you to be able to process the necessary information and extrapolate the best play from that information. So let's talk about some of the basics of postflop play.

## The Pot Geometry

I first came across this term about five years ago and have loved the concept ever since. Pot geometry is a way of visualizing what every chip we put in the pot does to the size of the pot now, and also later in the hand. Let's take a hand at 100NL where we raise to $\$ 3$ and a P-fish calls from the button. Let's look at some different situations:

- The pot on the flop is $\$ 7.5$. If we bet pot on all streets, it would make for a $\$ 7.5$ bet on the flop, $\$ 22.5$ bet on the turn, and $\$ 67.5$ on the river, for a total pot size of $\$ 202.5$.
- The pot on the flop is $\$ 7.5$. If we bet $2 / 3$ pot on all streets, it would make for a $\$ 5$ bet on the flop, $\$ 11.5$ bet on the turn, and $\$ 27$ on the river, for a total pot size of $\sim \$ 94$.
- The pot on the flop is $\$ 7.5$. If we bet $1 / 2$ pot on all streets, it would make for a $\$ 3.75$ bet on the flop, $\$ 7.5$ bet on the turn, and $\$ 15$ on the river, for a total pot size of $\$ 60$.

We see with three very different bet sizes we have accomplished incredibly different pot sizes. Betting pot on every street makes getting stacks in the middle very easy, whereas betting half pot on all streets creates a much smaller pot size. This is not to say that one size is overall better than another. But by understanding pot geometry we can visualize situations better. We can think ahead and plan for pot sizes that our hand strength flourishes in.

This concept is also important when thinking about betting versus checking. Say we have a hand strength on the turn that doesn't do well in a large pot size and a bet would start creating that large pot size. This would usually be a good time to consider checking which can ultimately create a better pot size for our hand. Of course, this is very general advice because it is so hand specific whether a check is best here, or a bet turn/check river line, or whatever. Again, the goal is to get us thinking deeper and considering the pot sizes we are creating, and the validity of those pot sizes.

## The Elastic vs. Inelastic Calling Ranges

Many economic principals carry over nicely into poker. The concept of elasticity is one that we want to consider quite often when thinking about our bet sizing in a particular hand. Let's first define elastic and inelastic calling ranges:

- Elastic calling ranges

These are ranges that get more or less calls based on the size of the bet. For instance, if the pot is $\$ 100$, our opponent would call a $\$ 5$ bet at a much higher frequency than a $\$ 90$ bet if he were an elastic caller. Most players in the game are elastic. They call more often versus smaller bets and they call less versus bigger bets. Our goal when value betting is finding the size that generates us the highest \$EV.

- Inelastic calling ranges

These are ranges that call at the same frequency, regardless of the size of the bet. So if the pot is $\$ 100$, an inelastic caller would call a $\$ 5$ bet just as often as he would call a $\$ 90$ bet. Many fish are inelastic because when they think their hand is strong enough they don't consider bet sizes like we do.

As the games continue to get tougher and tougher, one of the best ways we can improve our winrate is by improving our bet sizing. We need to ensure that we minimize the loss on our losing hands and maximize the profit on our winning hands (minimax). Understanding elasticity is one of the ways to help our bet sizing. Taking notes is a helpful way of figuring out if a player is elastic or inelastic, but hand reading can also help.

Many players are elastic callers, but inelastic with certain hand strengths. Lots of times players just never want to fold sets or trips or stronger hand strengths. So if we deduce that a player most likely has one of these holdings, and that they are inelastic with them, then value betting bigger would always be a good idea.

## The Hand Reading Basics

Hand reading is a very complex topic to talk about given everything that goes into hand reading well. Oftentimes it is experience that makes a player a very solid hand reader. Exposure to the game and logical actions and frequencies of the player types in the game will improve hand reading. This section aims to give some basic advice on improving this essential skill.

## - It's in the ranges

We are not trying to guess our opponent's exact hand. Very often we would just never know their exact holding. Instead, we care about putting our opponent on a range of logical hands. For tighter players this range is usually easier to deduce. For looser and more erratic players, this range can be very difficult to figure out.

## - Always start from the beginning

Whenever we are hand reading we start from the beginning. If our opponent raises from EP and he has an EPPFR of 7\% and we call IP, we can assume his range is $22+$ /AK. If we open a pot and an opponent with a $3 \mathrm{~b} \%$ of $2 \%$ 3-bets us, and we call, we can assume his range on the flop is $\mathrm{QQ}+$ /some AK . Many players forget to start at the beginning which makes hand reading almost impossible. When we are figuring out a range we start with a range (made from his preflop actions) and then that range gets smaller and smaller based upon his postflop actions. We never want to treat a range like a bag that we just randomly throw hands into. Instead we use a logical progression of range elimination based upon actions.

## - Actions indicate ranges

Most players take particular actions with certain hands, and we can use this to our advantage. If we know a player would always CR the flop with a set, but he check/called the flop, we can heavily discount sets (considering hand combinations) from his range. Regulars in the micros tend to take the same lines over and over with certain hand strengths. So if we know this, and see them take a particular line, we can more accurately figure out their range and take correct actions later in the hand. Erratic players can make this difficult, but they still tend to be passive with mediocre hands and aggressive with bluffs and nuts. Any information helps, so make sure to take notes on the lines our opponents take and with which hands.

## - Allocate for idiocy

The dumber an opponent is, the more we need to allocate a percentage of his range to unknown stuff. Usually, the more aggressive and dumb a player is, the more of a percentage we should allocate for them. Maybe we say that $10 \%$ of their range is idiotic (random bluffs, turning bottom pair into a bluff, etc.) which could be the deciding factor in making a call
or fold. Usually the tighter, and more normalized, a player is the less of a percentage we would allocate. If we are playing against a nit, we can just assume he would rarely do anything idiotic enough for us to allocate a percentage of his range to it.

## - Blind spots

There are times when we have blind spots to our opponent's range, and we rely almost entirely on their actions and board textures to figure out our line. Take a spot where we steal with $\Pi$, a player resteals with a $12 \%$ range, and we call. We think his range of restealing is $\mathrm{JJ}+/ \mathrm{AQ}+/$ KQ and bluffs. This means almost half of his range is bluffs, which could mean hands like 22, A5s or J7o. So half of his range is a blind spot to us. We need to read his postflop action based on the board texture to have a better idea of what to do. While it is frustrating dealing with these blind spots, they are standard when dealing with aggressive players who $3 \mathrm{~b} / 4 \mathrm{~b} / 5 \mathrm{~b} / \mathrm{CR} /$ raise aggressively.

## - Bet sizes can contort ranges

As we've talked about quite a bit already, and will continue to talk about, our bet sizes can change our opponent's ranges. If we bet smaller, we expect our opponent to continue with a wider range of hands. If we bet bigger, we expect our opponent to continue with a stronger range of hands. So if we have been betting pot sized bets in a hand, we can expect our opponent's range is going to be incredibly strong as we get deeper and deeper in the hand. Subsequently, if we bet smaller on every street, we can expect more hands to continue. Again, the actions tweak the way our opponent's ranges contort in a hand.

## The Pot Size Thresholds

Pot size thresholds (PST) are a more theoretical concept but frame how we can think about postflop play. One of the biggest issues that micro players have is pot size creation, or more correctly, the pot sizes they create with certain hand strengths. They make pots that are too large and blow out second best hands when they value bet (VB), and they risk too much for bluffs. Much money is made or lost in this important bet sizing detail of our strategy.

Pot size thresholds are certain points where bets can turn from good to bad. They are
dependent on lots of things such as board textures, opponent's player type, history, previous actions, range, etc. Let's take an example so we can visualize it:

Say we raise AJ from MP and the SB calls us with 100bb and we go HU on an A82 flop. He checks and we bet $\$ 4$ and he calls. The turn is a T and he checks to us. At this point we can check or bet, but let's take a look at some things that might help us come up with an answer.

- "If we bet, what kinds of hands will he continue with?"
- "If we bet, what pot size will it create?"
- "If we bet, and face a CR, can we continue?"
- "What is the rest of our plan in this hand?"

These are simple questions, but all of them revolve around the size of the pot we are ultimately creating. If we bet the turn and nothing worse continues and nothing better folds, then we should just check. If a bet would get called by a very wide range of second best hands, then we should more heavily consider betting. By simply asking ourselves a few questions, the big ones being "what does a bet accomplish?" and "what pot size would be good or bad," we can create our lines much more easily.

This all relates to PST because certain hands tend to continue more liberally in smaller pots than larger pots. Just thinking about basic bet theory we remember that small bets get called by a wider range, and bigger bets get called by a smaller and stronger range of hands. This same concept is true with pot size creation. In a smaller pot size players will show up with more hands, usually weaker in strength. In bigger pot sizes we can expect players to show up with stronger and stronger ranges as the pot gets bigger and bigger.

What we can extrapolate from this is more heavily considering pot size creation as we play and plan our hands. If we know that a particular opponent wouldn't get involved in a pot bigger than 40 bb without a set or better, we know how to bluff him, and just as importantly, how to value bet him. We know that if we want to bluff we need to threaten a pot bigger than 40 bb , and if we want to value bet him we probably need to keep it under 40bb. Thus, 40bb is his PST. It is his size threshold where he only continues with the strongest part of his range.

While we could map out his PST for each hand strength (2 pair, sets, flushes, boats, etc) versus different board textures, it would be very time consuming for something that is so relative: people think of their hand strengths in relative terms. A player might value
top pair (TP) for 50bb against an A-fish, but might only value TP for 30bb against a tight player. A player might value a set at 200 bb on a rainbow board, but might value a set at 100 bb on a monotone board. So ultimately the PST is a swinging number that is never exact, but just having an idea on someone's PST can help us frame how much we would need to risk on bluffs, and up to how much we can VB.

## The Polarization

Understanding polarization jumps us from basic strategy up to intermediate and advanced strategy. Simply put, when something is polarized it means we are dealing with the poles. So if a range is polarized, it means it is effectively a "nuts or bluff" range. Depolarization is the exact opposite. Let's visualize this by looking at a 10\% 3-bet range:


Figure 13: Polarized vs. Depolarized

We see both ranges are $10 \%$. The one on the left is polarized and has the strongest hands, while the rest of the range is comprised of weak hands. The range on the right is depolarized, and almost all the hands are strong hands with varying levels of strength.

We can use polarization in numerous ways postflop. We see polarization in CB spots, double barrel spots, and bluff/VB spots. Understanding polarization, coupled with hand reading, can make both hero calls as well as making big folds easier. While a
solid understanding of weighing ranges helps the process, just understanding when a range is poled or not will get us thinking in the right direction. As a general rule, better players that understand SDV tend to be more polarized postflop than other players. Bad players, and players who don't grasp SDV, won't be purposefully polarized, and thus hand reading against them is a little more difficult.

## The Minimax Game

In game theory, we sometimes talk about minimax. Minimax is a game theory decision where a player aims to minimize the loss on their losers and maximize the gain on their winners. This is incredibly important while playing poker. If we are playing a hand against an opponent and we always lose the least possible when we are behind, we are doing well in the minimax game. If we are also always getting the most money from his second best hands, we are crushing the minimax game.

We will talk about the minimax game a lot in the upcoming chapters. Take a spot where we bluff resteal a player. If his Callv3bet range is super strong and would never fold on the flop, and we never bluff CB and always VB when we flop super strong, then we are crushing the minimax game. We never lose much when behind (we just lose our 3-bet), and we always make the most when we flop huge by VBing. Spots like this happen all the time, and if we are focused on winning the minimax game we are going to be a profitable step ahead of our opponents.

## The Exposure And Mindset

When we talk about exposure in poker we are talking about how much of our stack we are putting at risk. Players come into playing FR from a variety of places. Some come from SNG/MTT backgrounds, others from 6max, and some yet from games like PLO. Every game has different levels of exposure that are correct or incorrect. So in an MTT we might have no issue exposing our entire stack with TP and a small M. In FR cash games, our exposure goals are a little different.

If we could sum up FR cash games in a single sentence it would be this:
"Use a solid hand range and position, value bet winners within reason, and take good potshot bluffs."

Effectively we are saying that we don't want to expose a lot of our stack when bluffing, and that we consider exposing more and more of our stack as our hand strength gets stronger and stronger. Notice we said consider, because there are times when trips, a very strong hand strength, can be little more than a bluff catcher. In a nutshell, this is how we should be looking at FR. We are not looking to run massive bluffs, we are not looking to VB so thinly that it becomes -EV, and we are not looking to play an insane range of hands preflop that make the two other factors too difficult. If we keep that in mind while playing, we are on the right track to valuetown.

## 10

## Understanding

Showdown
Value

Showdown value (SDV) can seem like a very complex issue, but it is also a powerful one. If we understand when our hand has SDV, or when it doesn't, it can frame our hand in an entirely different way. And because of this, we want to fully understand this powerful idea so it makes our lives easier and more profitable.

SDV simply means that our hand can, or would probably, win at showdown. It fits right in between a bluff hand and a hand with pure value. For instance, say we steal from the button preflop, and just the BB calls. The flop comes K86 and he checks to us. Say we had 3 different hands; 66, 43s, JJ.

Well 66 of course has pure value. We would ideally like to make a very large pot when we have a set. 43s, on the other hand, has almost no value. If we bet, nothing worse is going to call, and thus it is a total bluff hand. JJ is the odd hand. It has showdown value, we probably don't get too much value if we bet, and thus trying to get to showdown as cheaply as possible would generally be a good play.

SDV is based on a bunch of different things: our image, the board texture, our opponent, previous action in the hand, etc. But if we constantly ask ourselves "what does a bet accomplish here?" utilizing SDV becomes infinitely easier. If we would probably win at showdown, and a bet wouldn't do anything but lose us more money, then utilizing SDV and getting to showdown is usually the best play.

## The Usage

Knowing about SDV is helpful, but we also need to understand how we can actually apply it in real time. Let's take an example where we open raise with J9s from the CO. The SB is the only caller and we see a heads up flop of Q54. He checks, we CB, and he calls. The turn comes a 9 and he checks to us again. At this point we want to ask ourselves 'if we bet, what does it accomplish?' Anytime we bet we want to have a clear idea of what purpose it serves. If we cannot come up with a solid reason for putting a bet out, then we should usually veer to the side of getting to showdown as soon as possible.

So we ask ourselves what a bet accomplishes remembering that a bet is valuable because it either gets calls from worse hands or folds from better hands. The hands that probably called us on the flop are things like $76, \mathrm{KQ}, 77$, or 65 . If we bet the turn, the only worse hands that will logically continue are the 76 -type hands. The weak pairs, like 77 or 65, will most likely fold, believing the story we have told thus far. We raised preflop, CB, and bet the turn. It looks like our hand is very strong, thus weak hands will usually fold.

However, he probably won't fold things like top pair. Players in full ring, especially in positional (stealing) pots, tend to get a bit stickier with top pair hands.

If all those things are true, then a bet is fairly useless. Nothing better folds and not much worse continues. Our hand has pretty much turned into a hand with SDV. We have a pair that can win at showdown against a lot of his range, and we have a pair that won't make much if we are ahead and bet now. When we have this kind of SDV, our goal is to just get to showdown as cheaply as possible. So a check here would be the best play against your normal opponent.

There are other times this kind of SDV situation happens as well. For instance, say the CO open raises and we 3-bet with AK from the button, and just the CO calls. The flop comes KQ3 and he checks to us. What does a bet really accomplish? Do AA or QQever fold? Do JJ or TT really call that often? Once we start asking ourselves these questions, and give honest answers, we see that lots of the time our 1 pair hands in full ring are just SDV hands.

## The SDV Framework

A great way to quicken our information processing and decision making on the tables is by creating and implementing frameworks. Being able to quickly analyze our hand strength may seem simple, but it is something that most people do incorrectly. The SDV framework helps us quickly assign a strength to our hand and create more optimal lines.

There are effectively four kinds of hands strengths postflop: bluffs, value hands, semibluffs, and SDV hands. Yes, there are hand strengths like air, 1 pair, 2 pair, flushes, straights, sets, etc., but if we learn to simplify down to those core four kinds, our postflop play becomes much easier as it takes us away from making mistakes, such as thinking 'we have two pair, and two pair is the nuts!'

For instance, let's take a hand where we raise from UTG and get called by the button. The flop comes Q 2 2, we CB and he calls. The turn is a 5 and it is our option. Let's look at the hand from the beginning. Say we raised $77+$ /AK preflop, and CB our entire range on that flop. This means we still have $77+$ /AK when we are making our turn decision.

Let's categorize each hand:
Bluffs: 99/88/77
Value Hands: AA/KK/QQ/JJ
Semi-Bluffs: AK
SDV Hands: $T^{7}$
Now this framework, as it currently stands, is useless unless we go on to take into account how our opponent plays. Let's say the button is a calling station who never folds a pair on any street. Then our hand categorization might look like this:

Bluffs:<br>Value Hands: AA/KK/QQ/JJ<br>Semi-Bluffs: AK<br>SDV Hands: ТТ/99/88/77

What if our opponent were a very tight and nitty player who gave action with only strong hands? Then our hand categorization might look like this:

Bluffs: TT/99/88/77
Value Hands: QQ/JJ
Semi-Bluffs: AK
SDV Hands: AA/KK
Notice how as our opponent got tighter, our hand strengths changed dramatically. Against the calling station our AA/KK were pure value hands. We knew if we bet, that worse hands would continue. However, against the nitty player, AA/KK got shifted into our SDV category. If we bet the turn against the nit, we wouldn't expect many worse hands to continue. Maybe the occasional AQ, but not nearly enough hands to make a turn bet worthwhile. And thus our hand got shifted from value, into SDV, because we want to get to showdown as cheaply as possible now.

Of course, when we are playing in real-time we will only have one hand to categorize, the one we actually have. We want to put it into the correct category for the purpose it serves:

[^6]Bluffs. Hands with no real value. We can bet if we will get a fold enough of the time to show an outright profit. Otherwise, we should usually just check and cut our losses.

Value Hands. Hands that have direct value. If we bet, worse hands will continue enough of the time to show an outright profit.

Semi-Bluffs. Hands that are behind almost always, but have solid equity. We can bet these when we will get folds enough of the time, and usually when we won't face a raise.

SDV Hands. Hands that would probably win at showdown, but wouldn't get worse hands to continue anywhere near enough of the time if we bet.

Once we are able to categorize hands correctly, postflop begins to play itself quite easily. We simply figure out where our hand lies against our opponent's logical range and C-range, and create a profitable line. While this may seem incredibly simplistic, it is the baseline of optimal play, and thus why it is so important.

## The Other Side Of The Coin

While SDV can help us plan our hands and lines postflop, it can also help us when we are playing against our opponents. If our opponent understands and practices SDV, then we are able to take more correct lines against him. This is why playing against spastic players can be so difficult. Spastic players who do not understand SDV will bet in spots where a logical player would check. This creates situations where we might get involved in bigger pots with less nuttish hands, something we wouldn't normally do versus more straight forward opponents.

Let's take an example where the CO open-raises, we call on the button with 99 , and we see a heads up flop of T33. He bets half pot and we call. The turn is a K and he bets half pot again. The CO is an aggressive 15/13 TAG over 600 hands, with an ATS of $39 \%$, a CB of $71 \%$, and a TurnCB of $60 \%$. We also have a note on him that he understands SDV. A player understanding SDV usually makes their betting ranges fairly polarized on the turn and river. They would bet their strong hands ( $\mathrm{AK} / \mathrm{AA} / \mathrm{T} / 43$ ), would bet their bluffs/semi-bluffs (76s, QJ, 22), and would check their bluffs they are quitting with and SDV hands in an effort to get to showdown ( $\mathrm{JJ} / \mathrm{T9} / \mathrm{QQ}$ ).

We see he has a solid FlopCB\%, and a fairly high TurnCB\%, and also know he wouldn't bet certain hand types (the SDV hands). Because of this, we can assume we are ahead of a fair chunk of his range. We also know he is smart and that he would use the K as a barrel card. We also know this is a positional pot which makes for more aggression and less density in strong hands. Everything coupled together with us getting 3:1 makes calling a good idea if we know he won't triple barrel with bluffs often (unless we are planning on calling the river as well). Again, we utilized the concept of SDV, both in our hand (trying to get 99 to showdown in the cheapest pot possible, thus why we didn't raise) and in our opponent's hand (figuring out his betting range). This can help us easily create lines that keep pot sizes favorable to our own hand strengths.

However, problems can arise when we get into pots with players who don't understand SDV. Their misunderstanding, or complete ignorance, of the concept changes the way we approach them, both in terms of planning our hand, and in the pot sizes we create with certain hand strengths. For instance, say we have 99 on the button and call a raise from a P-Fish from MP. We see a HU flop of 774. They bet and we call. The turn is a $Q$ and he bets again. While a player aware of SDV might bet AQ/AA/76 and check $\Pi / 66$, a fish most likely doesn't understand SDV. So he might bet the entirety of his range, might bet only the strong stuff, or possibly a combination of both. Usually the more aggressive they are the wider their betting range is. And the more passive they are, the stronger their betting range is.

So we can't rely on this player's understanding of SDV turning his range face-up. Instead, we have to use his actions, the logical hands he would take those actions with, bet sizes, board texture, etc to come up with our line. While it is much easier if we know a player has a polarized betting range (which players that understand SDV tend to use on the turn/river), we don't have that luxury against fishy players. Because of that, we have to use other information to come up with more optimal lines. We are also forced to sometimes create bigger pot sizes than we would normally create with hands, and our line selection becomes more blurry as our hand strengths change from strong to mediocre.

While it may not seem like it, this section wasn't written just to discuss the complexities of playing 99 with a sliding hand strength. The point was to discuss how line selection and hand strength evaluation changes with our opponent's understanding of SDV. Be aware of players who understand SDV and use it against them. If they are constantly trying to get to showdown as soon as possible with certain hand strengths, then consider running a large bluff. Or if they treat TPTK as a SDV hand, then we know their betting range is $2 \mathrm{pr}+$ or bluffs. The more information we have on our opponent's and their mindsets, the more profitable we will be.

## (11)

Continuation
Betting

Continuation betting (CB) is one of the most necessary skills in our postflop game. Having a solid CB strategy will make us very difficult to play against. One of the biggest leaks that micro and/or small stakes players have is either CBing too little (less than $55 \%$ ), or CBing too much (more than 80\%). This chapter aims to cover the composition of a good CB and simplify the complexities of this profitable bet.

## The Mindset

The standard hand in full ring tends to go like this: Player A open raises, Player B calls, a flop comes, Player A continuation bets, Player B folds, and Player A wins. Of course, the games are maturing so floating and bluff raising are becoming more prevalent, but the majority of hands still fall into the raise $/ \mathrm{CB} /$ win action. Because of this, we want to understand which flops are good for attacking, and also how we want to go about attacking them.

Like always, we care more about our opponents and their actions than we do about our own hand when continuation betting. For instance, say we open raise from EP, just a very tight setmining villain calls from the button, and the flop comes AJ2r. We know the button's calling range preflop was something like $22-\mathrm{QQ}$, and if we look at how often that range hits a set on a flop of AJ2r, we see it's about $10 \%$ of the time.


Figure 14 (a): 22+ on $\mathbf{A J} \mathbf{2 r}$


Figure 14 (b): 22+ on AJ2 (Results)

If we think he would only continue versus our CB with a set, then we know he would fold $90 \%$ of the time, making this an extremely lucrative bet.

While things like texture and size will certainly change the way we approach the CB game, there is a simple way to start thinking analytically about this spot. Start by building a pie chart. This pie chart is simply our opponent's range. Once we have this pie chart, we just need to chop it up into the correct pieces. Say we are at 100 NL , we open raise to $\$ 3$ from the CO, just the SB calls, and we see a heads up flop of Q86r. He checks to us and it is our option. We know he is a tight player and assign him a range of $22-\mathrm{JJ} / \mathrm{AQ} /$ $\mathrm{AJ} / \mathrm{KQ} / \mathrm{KJ}$ when he calls preflop. We think he wouldn't bluff and would only continue with something like TP+, maybe float some 99-JJ as well, and of course continue with sets. Now we have all the information we need.

| Hints Off | No-lil | limit |  |  | Star | rti | ing |  |  |  |  |  | Nowei | eight |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA | AKs | AQs | A/s | ATs |  | 198 A | Ass A | A7s | A6s | A5s | A4s | A3s |  | 100\% |  | Ac Ad | As |
|  | AKc | кк | KQs | K/s | KTs | Ts K9s | 99 K8 | K8s K | K7s | K6s | K5s | K4s | K3s | K 2 s | 9 |  | Kc Kd | Ks |
|  | AQc | KQc | QQ | QJs | QTs |  | 9s Q8 | Q8s Q | Q7s | Q6s | Q5s | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | ${ }^{\text {AJO }}$ | Klo | Qo | II | JTs | J9s | ${ }^{95}$ J8 | J85 J | J7s | J6s | I5s | I4s | 135 | 12 s |  |  | Jc Id | Is |
|  | ${ }_{\text {ATo }}$ | Kтo | QTo | [To | TT | T9s | 9s T8 | T8s ${ }^{\text {T }}$ | T7s | T6s | T5s | T4s | T3s | T2s |  | Th | Tc Td | Ts |
|  | A90 | K90 | Q90 | 190 | T9 | 99 | 9898 | 98597 | 975 | 968 | 95s | 94s | 93s | 92 s |  | 9 h | 9 cc 9 | 9 s |
|  | A80 | K80 | Q80 | I80 | T80 | 980 | 80 | 8888 | 875 | 865 | 855 | 84s | 83 s | 82 s |  |  |  |  |
|  | A70 | K70 | Q70 | 170 | T7\% | 970 | 7087 | 870 | 77 | 768 | 75s | 74s | 73 s | 72 s |  |  | , |  |
|  |  |  |  | 160 |  |  |  |  |  |  | 65s | 645 | 63 s |  |  | 7 h | 7 c 7 d | 75 |
|  | A60 | K00 | Q60 | 150 | T50 |  | \%0 860 | 860 | 760 | 6 | 65s | 645 | ${ }_{535}$ |  |  |  | 6068 | 6 |
|  | A50 | K50 | Q50 | 150 | T50 | 950 | 5085 | 85075 | 750 | 650 | 55 | 54s | 53s | 52s | - | 5 L | 5 c 5 | 55 |
|  | A40 | K40 | Q40 | 140 | T40 | 940 | 4084 | 84074 | 740 | 640 | 540 | 44 | 43 s | 425 |  |  |  |  |
|  | 130 | K30 | Q30 | 130 | T30 | 1930 | 3083 | 83073 | 730 | 630 | 530 | 430 |  | 32 s |  | 4 h | 4 c 4 dd | 45 |
|  |  | K20 | Q20 | 120 | T20 | 920 | 2082 | 82072 | 720 | 620 |  |  |  |  |  | 3 h | 3 c 3d | 35 |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 h | 2 cc 2 d | 25 |
| Store | 9 |  |  |  |  |  |  |  |  |  |  |  |  |  | 9.35\% |  |  |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  |  |  |  |  |  |  |  |  |  |  | ear |  |  | Random |  |



Figure 15: Flopzilla Analysis

We see his range hits this flop roughly $44 \%$ of the time. Now we can chop the pie chart into two pieces. The piece that would continue if we bet, and the piece that would fold if we bet.


Hands that missed

Hands that hit

Figure 16: C-Range Visualization

When we are bluffing this is all we care about. If a player will fold enough of the time, then we want to bluff. If a player will not fold enough of the time, then we probably do not want to bluff. Simple. If we look at the CB size tool for a static 44\% C-range, we see this:

| (CB\% of Pot) | CB Size | Pot Size | \$EV |
| :---: | :---: | :---: | :---: |
| $35 \%$ | $\$ 2.45$ | $\$ 7$ | $\$ 2.84$ |
| $40 \%$ | $\$ 2.80$ | $\$ 7$ | $\$ 2.69$ |
| $45 \%$ | $\$ 3.15$ | $\$ 7$ | $\$ 2.53$ |
| $50 \%$ | $\$ 3.50$ | $\$ 7$ | $\$ 2.38$ |
| $55 \%$ | $\$ 3.85$ | $\$ 7$ | $\$ 2.23$ |
| $60 \%$ | $\$ 4.20$ | $\$ 7$ | $\$ 2.07$ |
| $65 \%$ | $\$ 4.55$ | $\$ 7$ | $\$ 1.92$ |
| $70 \%$ | $\$ 4.90$ | $\$ 7$ | $\$ 1.76$ |
| $75 \%$ | $\$ 5.25$ | $\$ 7$ | $\$ 1.61$ |
| $80 \%$ | $\$ 5.60$ | $\$ 7$ | $\$ 1.46$ |
| $85 \%$ | $\$ 5.95$ | $\$ 7$ | $\$ 1.30$ |
| $90 \%$ | $\$ 6.30$ | $\$ 7$ | $\$ 1.15$ |
| $95 \%$ | $\$ 6.65$ | $\$ 7$ | $\$ 0.99$ |
| $100 \%$ | $\$ 7.00$ | $\$ 7$ | $\$ 0.84$ |
| $120 \%$ | $\$ 8.40$ | $\$ 7$ | $\$ 0.22$ |
| $150 \%$ | $\$ 10.50$ | $\$ 7$ | $-\$ 0.70$ |
| $200 \%$ | $\$ 14.00$ | $\$ 7$ | $-\$ 2.24$ |
|  |  |  |  |

## Table 3: CB Profitability Given Static C-Range (44\%)

We see here that if he would fold $56 \%$ of his range, regardless of the size, that any bet size up to $120 \%$ pot makes a profit here. Of course, the smaller we bet, the more profit we expect to make with this bet. And all of this is done simply by looking at our opponent's O-range, C-range, and bet size.

Now this is a very simple approach to continuation betting. There are some factors that change our approach though. The dynamic nature of the game will have certain features that change how this pie chart gets created:

- Texture. Different textures will create more or less floating, and also more or less bluffing. In the following section on textures we'll see how they tend to get approached by players.
- Size. The size of our CB will create more or less floating and/or bluffing against elastic action ranges. The bigger a bet is, the less action it will tend to get, especially from weak hands. The smaller a bet is, the more action it will tend to get, both in the call and bluff sense.
- Image. Our image will tend to get us action in different ways. Player's that pay attention to image might give our CB more respect if we have been very tight, and might float us more if we have been very loose. Lots of players do not pay attention to image and only care about their own hand, so make sure we know who we are dealing with in a particular hand.
- Tilt. This could mean our own tilt level, or even the tilt level of our opponent. If a player is tilting, they will tend to give action more liberally, either by peeling or bluffing. This increases their C-range, and makes bluffing more difficult and usually less profitable.
- Idiocy. Our opponent's level of idiocy is very important. The dumber they are, the less they will care about the complexities of our plays. Do not bluff idiots unless their C-range is incredibly small. The dumber a player is, the more straight forward we should approach them.

We could come up with a hundred other factors that change how we assign the pieces of our pie chart, but these are the major ones. When we consider a CB we need to quickly analyze these factors and create a plan based on our analysis. Always make sure that we give ourselves some buffer as well. The buffer adds to the C-range to increase our global profitability in a play and takes into account the times we are incorrect in certain analyses. There will always be unknowns, or even totally random actions made by opponents, and we need to be cognizant of them. The tighter a player is, the less buffer we need to assign as they will bluff and float less often due to being straight forward. The looser a player is, the more buffer we should assign because they will bluff and float more for random reasons. If a bluff would still be profitable even with a buffer added, we should certainly make it.

## The Textures

We could look at the three card flop in a very complicated way and look at each card individually versus the others. But the nice thing about poker is that only so many different kinds of flops can come up; in other words we can simplify the boards into certain textures. We should always be looking for simple ways to process information efficiently, and compartmentalizing textures can help.

The texture of a flop is simply what the flop looks like. Certain textures appear more comfortable and allow for more peeling, and other textures are scary and make people fold more. Let's look at some basic flop textures, and talk about how people tend to approach them:

- 0 Broadway Card: ( $8 \uparrow 6 \mathbf{2 h}$ or $9 \uparrow 8 \uparrow 5 \star$ ). These boards have no broadway cards (T/J/Q/K/A) on them. These boards tend to allow lots of comfortability for single pairs, and thus peeling frequencies increase. Non-broadway card boards do not look like they hit the preflop raiser (as players heavily assign hands like AK and KQ to open raising ranges). These boards also tend to get attacked more often as well. Players love to "bluff the raiser off their $A K$ " and raise more liberally on these types of boards. While a good player wouldn't choose this board type to attack a CB as often, bad players love them.
- 1 Broadway Card: (A $9 \times 7 \times$ or J 645 ). These boards have a single broadway card on them. These boards tend to look like they hit the open raiser's range. There is peeling happening on this kind of flop, but less than the 0 broadway card board. Good players tend to attack these boards more liberally, especially on A or Qhigh flops, and bad players will attack them occasionally.
- 2 Broadway Card: (K $\mathrm{J} * 4 \diamond$ or $\mathrm{A} \geqslant \mathrm{T} \leqslant 8$ ). These boards have two different broadway cards on them (so ATT is a two broadway card board, as well as a paired board). Having two broadway cards on the flop makes it look like the preflop raiser really smashed the board. These boards are not peeled very often, as players have no real interest in trying to get 66 to showdown on an AQ3 board. Bluffing also tends to go down on these textures due to players assuming, and usually correctly, that players are less willing to fold pairs in the broadway range.
 boards. They look like they hit very strongly for the preflop raiser, making him some sort of two pair, set, or even straight. Due to the perceived strength of hand for the preflop raiser, these boards rarely get peeled on. Players tend to respect these boards, and also rarely bluff them.
- Monotone: (AマJ『6Y or 9\%3\%8\%). These flops have possible flushes made already. They are super wet and also very dangerous. Players tend to play very variably on them as well. Some will shutdown everything but flushes and sets, and others will peel any flush draw or decent pair. The tighter the player facing the CB , the less hands they will usually continue with on these boards. Most players will not choose these boards to attack very liberally, but due to the dangerous nature of them, they can be perfect to attack due to the tight continuance range generally associated with them.
- Paired: $(J \diamond J \geqslant 8$ or $6 \leqslant 2 \triangleq 2 \varphi)$. On paired boards people peel more because they don't believe the original raiser hit it often due to card removal. Most players will not bluff raise this board, but will peel liberally. So if we are going to bluff CB on paired boards, we usually need to be prepared to fire multiple barrels.
 to create odd action. Players don't tend to attack these boards often, but many call more liberally with most pairs and lots of ace high type hands.

While board types can be easily classified with any of the above, they can be classified even more simply as "dry" or "wet." A monotone board will always be a wet board, but a single broadway card flop can be either dry or wet. Simplifying board textures gives us the ability to create lines quicker and categorize our hand strength accordingly.

- Dry: $(A \leftrightarrow 7 \leqslant 2$ or $9 \diamond 5 \vee 2$ ). These boards have ranks that are usually very spread out with minimal draws on them. A "dry" flop is just a descriptor of one of the other flop types. Dry flops with a single broadway card are usually perfect for continuation betting. They look like they hit the original raiser's range and the dryness means there are fewer drawing hands that could continue facing a bet.
 and have multiple draws on them. A "wet" flop is just a a descriptor of one of the other flop types. Certain wet boards are very good for a
continuation bet, while others can be terrible. A KhQs 8 h board can be a good CB, while a 7 s6s5h can be a bad spot to continuation bet with air. Everything is relative and revolves more around our opponent's range than our hand, but it is still important to classify flops correctly.


## The Polarized CB

Again, a polarized range is one that is a 'nuts or bluff' type range. Say we steal from the button, just the BB calls, and we see a heads up flop of K54r. The BB checks and it is our action. Let's say we have five possible hands: AK, K9, JJ, 98, 55. Let's categorize each hand:

```
Bluffs: }9
Value Hands: AK/K9/55
Semi-Bluffs:
SDV Hands: JJ
```

If we were polarizing our CB range we would CB the 98 (the bluff) and the $\mathrm{AK} / \mathrm{K} 9 / 55$ (the very valuable). We would check the JJ behind in an effort to get to showdown and not get check-raised off our hand. But if we ask ourselves the question we always should ask when betting the AK/K9/55 part of our range, "what does our bet accomplish?" we get an interesting answer.

As it turns out, not too much. Of course, there is a tremendous difference between 55 and $\mathrm{AK} / \mathrm{K} 9$ here. We should bet 55 in order to make the biggest pot possible when our opponent has the KJ or sticky pair part of his range. (We could check if our opponent is for sure going to make a ton more (and bigger) mistakes if we check as opposed to if we bet) But why should we bet AK/K9? Do any worse hands continue? Sometimes we get called by $66+/ \mathrm{KT} / \mathrm{KJ} / \mathrm{KQ} / 76$, but that is pretty much it ${ }^{8}$. Let's start by assigning a range for BB and then get to working out this problem.

Let's assume the BB is a fishy $24 / 6$ player. We see from his stats that he calls a lot preflop, and raises very rarely. For all intents and purposes, let's say he has something like 22+/ AT-AQ/KT-KQ/Q/QT/JT/SC. We see this range hits the flop about $40 \%$ of the time he continues with $66+/ \mathrm{OESD} / \mathrm{TP} /$ sets. This means if we bet, we should expect a fold about $60 \%{ }^{9}$ of the time.

[^7]| Hints Off | No-1) | limit |  |  | Sta | rti | ing | $g$ h | han | nd |  |  | No-we | eight |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA |  | AQs | A/s | ATs |  |  | A8s | A7s | A6s | A5s |  | s A3s | A2s | 100\% | Ah | Ac Ad | d As |
|  | АКс | кк | KQs | KIs | ${ }_{\text {KTs }}$ | Ks $\mathrm{K9}$ |  | K8s | K7s | K6s | K5s | K4s | K K3s |  | 9 | Kh | Kc Kd | Kd Ks |
|  | AQc | Kec | QQ | QIs | QTs | Ss Qs |  | Q8s | Q7s | Q6s | Q5s | Q4s | Is Q3s |  |  | Qh | Qc Qd | d Qs |
|  | \% | K10 | Qo | J | JTs | I9s |  | f8s | 17s | J6s | J5s | J4s | ${ }^{\text {J3s }}$ | J2s |  | Jh | Ic Jd | Is |
|  | 4 ATO | кто | Qто | T0 | IT | T9s | (9) ${ }^{\text {T8}}$ | T8s | T7s | T6s | T5s | T4s | T3s | T2s |  | 7 Th | Tc Td | d |
|  | A90 | K90 | Q90 | 190 | T9 | 99 |  | 988 | 97s | 968 | 95s | 94s | 938 | 928 |  | 9 h | 9 cc 9 d | d 9 s |
|  | A80 | K80 | Q80 | 180 | T80 | 9080 |  | 88 | 87 s | 86 s | 855 | 584 | 535 | 82 s |  | 8 h | 8 d | d 8 |
|  | A70 | K70 | Q70 | 170 | T7\% | 970 |  | 870 | 77 | 76 s | 75s |  | 73s | 72 s |  |  | d | 8 s |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 h | $7 \mathrm{7d}$ | d 7 s |
|  | A60 | K60 | Q60 | 160 | T60 | \% 960 |  | 860 | 760 | 66 | 65 s | $5{ }^{645}$ | 63s | ${ }^{62 \mathrm{~s}}$ |  |  | 6c 6 d |  |
|  | ${ }^{\text {A50 }}$ | K50 | Q50 | 150 | T50 | 950 |  | 850 | 750 | 650 | 55 | 54 s | 53s |  | - |  | $6 \mathrm{6c}$ | d 6 |
|  |  |  |  | 540 |  |  |  |  | 740 | 640 | 540 |  |  |  |  | 5 L | $5 \mathrm{5c} 5$ | d 5 s |
|  | A40 | K40 | Q40 | 540 | 140 | 940 |  | 830 | 740 | 640 | 540 |  |  |  |  | 4 h | $44.4 d$ | d 4 s |
|  | A30 | K30 | Q30 | J30 | T30 | 930 |  | 8307 | 730 | 630 | 530 | 430 | 33 |  |  | 3 h | 3 c 3d | d 3 s |
|  | ${ }^{\text {A20 }}$ | K20 | Q20 | 120 | T20 | 920 | O 82 | 820 | 720 | 620 | 520 | 420 | 320 | 22 |  | 2 h | 2 cc 2d | 2d |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 17.9\% |  |  |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  |  |  |  |  |  |  |  |  |  |  | ear |  |  | Random |  |



Figure 17: Flopzilla Analysis

While we do get some value by betting, we should always ask ourselves if checking could possibly show a better profit. If we look back at where the density of this player's range is on the flop, we see he has 'nothing' and 'ace high' a very large percentage of the time. We also want to take conceivable actions into consideration as well. Do we get bluff check-raised a lot if we bet here? Do we want to face a check-raise here? Do enough worse hands continue if we bet? Do other hands make more mistakes if we check as opposed to bet here?

Let's explore some reasons why checking could be a good play:

## - Minimize loss

There is always the chance we could be behind, unless of course we have the nuts. If we take economic principle into consideration, we know that minimizing loss is the same thing as maximizing value. We should always try to keep our loss in any hand to a minimum.

## - Pot control

Whenever we bet we increase the size of the pot. This is of course great when we have a hand that we want to make the pot bigger with. However, when we have mediocre strength hands, and even strong hands can have mediocre relative strength, we want to control how big the pot becomes to ensure we aren't getting involved in too big of a pot with too weak of a hand.

- Induce bluffs

Lots of players will assume a check signifies weakness. Because of this, a check is often times a great play to induce a bluff. When we check the flop in position, we give our opponent the chance to stab either the turn or river. If we can get our opponent to bluff a hand he would have folded to a bet on previous streets, we are allowing ourselves to make more profit from that part of his range.

- Induce comfortability

In signifying weakness, a check can also induce some lighter calls later in the hand. Many players wouldn't feel comfortable floating 55 on a K32 board, but might call a later street if the flop gets checked through. This correlates nicely with bet theory. Players feel more comfortable facing smaller bets, and less comfortable facing bigger bets. While this is true with bets, this is also true with bigger and smaller pot sizes. Players tend to make many more 'loose' calls in small pots than bigger pots. And again, the check creates a smaller pot size, one where these loose calls/bluffs can happen more liberally.

- Way ahead, way behind (WAWB) with minimal possible over cards
Many times when we catch top pair we are in a 'way ahead, way behind' situation. Either we are drawing to a handful of outs, or our opponent is. In these situations, where few over cards can come on later streets, checking can be very beneficial. A check with KT on a K94 board is going to be better than with Q 8 on 842 . While both have top pair, there are many more over cards that can come on the 842 board, creating incredibly difficult spots later in the hand if we were to check the flop.


## - Unsure of the raise

We should always have some sort of plan in the event we are raised. Of course, this is easy with nut hands, but can be very difficult with marginal ones. If we are unsure what we are going to do when raised, especially check-raised, it makes checking a more viable option when we have a marginal hand. When we bluff $C B$, we know we are just going to fold to a raise (or possibly run a bluff 3-bet/float occasionally), but with a marginal hand we can become very exploitable if we make mistakes. Why should we get involved in a bigger pot with less of an idea how to proceed if we could create a smaller pot where we have more control?

Usually in this example we'll want to induce while keeping the pot smaller, and thus creating a more 'mistake-rich' environment. While all the factors are important and can lean us closer or further away from checking, we can only process so much information so quickly. In the example with the K54 flop, we might consider checking behind with $\mathrm{JJ} / \mathrm{AK} / \mathrm{K} 9$, and just CBing the 55 and 98. If our opponent would make many more bluff/calling mistakes later in the hand, and put us in a tough spot if we faced a CR on the flop, a check can be a very valid option.

Polarizing our CB range is great against mistake-prone opponents. Opponents that amplify their mistakes, either by calling or bluffing, in smaller pots are perfect for this kind of check. This is also much better in position, as we can close action on future streets. While checking out of position is also an option, it is often times done with a different plan in mind. Say we raise QQ from EP, the button calls, and we see a heads up flop of A76. We check, he bets, and we call. We know a CB would just turn our hand into a bluff ${ }^{10}$, and thus we check to induce bluffs or crying calls later in the hand, while

[^8]keeping the pot size smaller. We also call usually with the intention of folding to a double barrel, assuming that most players wouldn't bet the turn without having us beat.

We also need to be careful with polarizing our CB range. Doing so against solid hand readers will turn our hand face up and allow them to play very close to perfect. Tough opponents understand that our CB range is nuts and bluffs, and our check is just a SDV hand. Thus polarizing our CB range is best done against players that are dumb, and again, mistake-prone. Good players will make more mistakes when we CB, and bad players will make more mistakes if we check and allow them to bluff/call poorly later in the hand. Of course, if our opponent will call with many second best hands, we don't want to miss a bet with a strong enough holding. We always want to ensure that our actions exploit our opponent's mistake-propensities whenever possible.

One final note on polarizing the CB range is the parlay the play takes. By checking behind with KQ on a Q64 board we give hands like 33 a chance to catch a 3 on the turn. Or hands like JT to catch a 9 on the turn and 8 on the river to beat us. By checking we are giving our opponent free chances to improve against us. Checking can still be good if our opponents will make more mistakes for more money than what we will lose on the times they improve. Remember, that just because we lose the pot (and we will a nonzero percentage of the time), doesn't mean we made a mistake. When we take the best line possible against our opponent and their perceived actions, everything will work out for us in the long run.

## The Depolarized CB

A depolarized CB can be a good play in certain situations. Let's take a situation where we raise from MP, get a caller from the BB, and see a HU flop of J83r and he checks to us. A depolarized CB range would mean we CB hands like 88, J6s, 55, T7, and 54s. We CB the bulk of the range rather than checking the SDV parts. But why would betting the bulk of our range be a good thing?

Let's list some of the more common factors that make depolarizing our CB range good:

- Where a check wouldn't accomplish anything: We talked in "The Polarized $C B^{\prime \prime}$ section about checking to induce good action. Either a check would minimize loss, induce bluffs, induce lighter calls later, etc. But against certain players, a check just wouldn't do anything. For instance, say the BB was a nit. We think he calls preflop with things like
small pairs in an effort to setmine. If we thought a check by us would never get 66 to call the turn, or to bluff the turn at us, then the check wouldn't be creating good action. Yes, it would keep us from getting check-raised, but it would just give our opponent the chance to crush us in the minimax game.
- Against good hand readers: When playing against good hand readers, we acknowledge that polarizing our CB range every time turns our hand very face up. To counteract this, we can depolarize our CB range sometimes so we don't give our hand away. Of course, by doing this we will have to face the flop raise a bit more (because checking was done in an effort to minimize facing the flop raise), but as good players we should be able to handle the situation well, especially in position.
- Against calling stations: Players that call wide and don't raise much, are great for depolarized CBing. Take a hand where we raise $T \Gamma$ and the flop comes J72, we can CB for pure value against a calling station. He will peel most all of his pair range on that board, gutshots, etc, giving us more value. Especially on textures that are conducive to peeling, we should look to bet these SDV hands that can get lots of second best hands to continue.
- In good multi way pots: As talked about in "The Multi Way $C B$ " section, betting something like AJ on Q 5 and JJ on K 94 can be good. These are spots where we don't want to check/call or check/raise, but do think fighting for the pot is worthwhile even though we turn our hand into a semi-bluff.


## The Multi Way CB

Continuation betting multi way is always a tough thing to talk about. There are many schools of thought on multi way CBing. Some players will only CB multi way if they have a hand, and others will not change their CB strategy in the slightest. We kind of want our multi way CB strategy to fall in the middle of those. We want to fight for some pots in certain situations, but usually we just want to be playing straight forward.

Like always, we care more about the external variables than things like our hand. We care about who our opponents are, the board texture, and how each of them will respond to a bet. Take a hand where we open raise KQs from MP 1, and the button and SB call. We
see a flop of 974 and the SB checks to us. Regardless of who either of these players are, we are normally just going to check and give up here. The board came horribly, we are not in position, we hit nothing, and we have no reason to believe we are getting a lot of folds on this board. Again, low flops are getting peeled and bluffed often, so we just check and give up here.

Let's take the opposite side of the spectrum and say we have TT instead of KQs, and the flop comes T85. The SB checks to us and it is our option. We want to get a big pot going, and see no reason to check here. Of course, this is all before we look at our opponents. If the button were a very aggressive player who would bet if checked to almost always, then we could consider checking and letting him fire at the pot. However, if both players were calling stations, betting becomes better. If we are unsure of the player types of our opponents, we should just default on betting our big hands and checking our air.

The marginal situations are where multi way pots get interesting; like raising 88 and having the flop come Q74 or having AJ having the flop come KJ5. First, we approach each multi way spot differently. There is a big difference between a three way pot, a four way pot, or a five+ way pot. The fewer the players, the more we want to bet those kinds of spots, and the more players, the more we just want to give up and play straight forward. Secondly, we realize we are playing a hand like 88 on Q74 as more of a semibluff. Ideally we would pick the pot up with the $C B$, but if called, we always have some equity and occasionally the best hand.

Finally, we should ask ourselves what action or actions do we really want to face? Let's take a hand where we open raise JJ from EP, and get callers from MP, the CO, and BB. The flop comes Q94 and the BB checks to us. We don't really want to check here and face a bet. We don't know where we stand against that bet, and the rest of the hand will be increasingly difficult if we $\mathrm{c} / \mathrm{c}$ it. We also don't want to risk the flop getting checked through and letting any of a number of terrible cards fall on the turn. A check also doesn't really encourage super light calls later, and any bluff it encourages isn't one we really want to face. At this point we just need ask ourselves which play we think is best. We should check and pretty much give up if we think a bet is going to get raised too often or that these players hit this flop too often. If we think they would play very straight fit-orfold, and/or that they would float some second best hands and play straight forward for the rest of the hand, then betting is a great option.

Although each individual player approaches multi way pots differently, there are still some common truths about players and their global approach to the situation.

- Nit. Like always, these players are incredibly tight. This is no different in multi way pots and they will tend to float rarely and bluff almost never. If we get into a multi way pot with just nits, we should consider attacking the flop liberally.
- TAG. These players tend to be tight as well in these pots, especially out of position. They peel a bit more liberally in position, and their global bluffing frequency tends to be low from all positions. Because their cold calling range preflop is usually comparable to the nits in small pair density, big flops should be attacked often.
- LAG. By far the toughest player in a multi way pot. They are more sporadic in these pots and will randomly apply pressure. Theyunderstand the tight nature of these pots and will attack our CB more liberally. They will also peel more in position, and a bit more out of position than the TAG would. When these players are in multi way pots with us we should usually play more straight forward and keep most of our bets strictly for value.
- Fish. These players don't understand the dynamic that multi way pots create, and thus they keep their same continuance strategy against a CB. They peel often, bluff randomly, and aren't shy about doing so from out of position either. When these players are in our multi way pots we want to CB pretty much only for value. Although there are some spots where we have a three way pot with a fish and nit where a bluff CB is good, veer to the side of straight forward value bets when fish are in pots.

Notice again that we are simplifying the process of analyzing this CB situation. Instead of thinking of a spot as "we have AQ on a KQ4 flop against a $12 / 7$ and a $42 / 8$ " we can think "we have a SDV hand against a nit and fish" and CB. Again, so much goes into these multi way pots that all we can really talk about is what goes into making a good decision. Make sure we are picking only the best of spots to bluff at (multiple nit or TAG villains), CBing when players will call with worse (big hands against fish), or CBing when a check doesn't accomplish anything (SDV hands against most players). If we are constantly analyzing the information correctly and implementing our analysis optimally, then we will thrive in this odd multi way spot.

## The CB Size

The CB success chart below shows how often a CB size needs to work in order to show a profit. We see that a CB of $50 \%$ pot needs to work at least $33 \%$ of the time to show a profit, and a CB of $70 \%$ pot needs to work at least $41 \%$ of the time to show a profit. The size of our CB is vital to our success. If we are constantly taking break even bets, then we are losing profit if a smaller bet would have gotten the job done.

| CB Size (X\% Of The Pot) | Has To Work At Least X\% |
| :---: | :---: |
| $35 \%$ | $26 \%$ |
| $40 \%$ | $29 \%$ |
| $45 \%$ | $31 \%$ |
| $50 \%$ | $33 \%$ |
| $55 \%$ | $35 \%$ |
| $60 \%$ | $38 \%$ |
| $65 \%$ | $39 \%$ |
| $70 \%$ | $41 \%$ |
| $75 \%$ | $43 \%$ |
| $80 \%$ | $44 \%$ |
| $85 \%$ | $46 \%$ |
| $90 \%$ | $47 \%$ |
| $100 \%$ | $49 \%$ |
| $120 \%$ | $50 \%$ |
| $150 \%$ | $55 \%$ |
| $200 \%$ | $60 \%$ |
|  |  |

## Table 4: Continuation Bet Size

Many books and online resources will suggest using 66\% as a standard CB size. That size has to work at least $39 \%$ of the time to show a profit. While it isn't a bad size by any stretch, we should never just do something because a source tells us to. We should dig into 'why' $66 \%$ is the size that these sources are using. The major reason why $66 \%$ is used as the standard CB size is because it is simple to calculate, it gives us a profitable parlay, and works well in both a value and bluff sense. Remember, a CB can be for value or as a bluff.

But let's think for a moment about how we could change our size more profitably. Say we are bluffing in a very tight game where players are very fit-or-fold postflop. Why should we bet $66 \%$ of the pot if $40 \%$ would get the job done? $66 \%$ of the pot needs to work at least $39 \%$ of the time, while a $40 \%$ of the pot bet only needs to work at least $29 \%$ of the time to show a profit. In a fit-or-fold game, we should use the smaller size when bluffing because we lose less when we are behind and get action, and we make nothing extra if we win.

Whenever we are bluffing to win the pot, we are risking our bet to win the pot. So why risk more if it doesn't do anything for us? By the same token, if we have a strong hand are playing against a fish who never folds, then we should bet as big as he is willing to call with a favorable range. Usually we have a vastly different sizing strategy for a fish than a regular, due to the regular being more cognizant of bet sizes, pot geometry, etc.

Our continuation bet size should be very dynamic. Each CB situation is different. In some spots we are continuation betting into a fish, in others a tight fit-or-fold player. In some spots we have the nuts, and in many more we have air. If we were going to use a static size we should consider something smaller than $66 \%$ given the fit-or-fold dynamic of full ring. Regardless, make sure to keep the exact situation we are facing in mind (our hand, our opponent(s), the board texture, our plan, etc.) and choose a size that works best for this particular hand.

## 12

## Floating And Calling

As people begin understanding that CB ranges are wide, they will naturally begin to float against them more often. A float is effectively calling a bet with an idea on how we will win the pot on later streets. We will also talk about calling flop bets with hands with SDV as well. This chapter will cover peeling considerations, bluff floating, and then value calling.

## The Floating/Calling Considerations

The big thing to keep in mind while floating or calling is that it is done with a plan in mind. We don't just peel for no reason. We either call because we think our hand is best and we know how we are going to win. Or we float with a bluff/semi-bluff and a clear idea on how we are going to attack future cards. Floating tends to work best against players that we have reads on. So floating against an unknown is going to be very hard because we don't have a clear idea on how we can win the pot, nor with what frequency we would win.

These are some things we want to be aware of while considering a float or call:

## - Our opponent is predictable

An opponent that will CB-and-quit without a strong hand is a perfect opponent to float or call against. We have an idea on how they will play the pot out and an idea on how often our peel would work.

- To float or raise?

Many times we would risk the same amount of money if we floated and stabbed the turn as we would if we outright raised the flop. However, when we float, we take the parlay of getting more information from our opponent while also giving them the chance to catch on the turn. This is also where reads on our opponent and their frequencies can help us.

- Double barrelers can be bad

Many players make the mistake of peelingliberally against very aggressive players. Usually when peeling we want to do it against the CB-and-quit player type, as we will have to risk the least amount of money with the most amount of information. Aggressive players will often times double barrel, and make peeling the flop less ideal because we are just going to fold the turn. Peeling against them on the flop only to fold to the turn bet is just burning money, and something we want to avoid doing.

- Equity is our friend

When players first start peeling they often times do so with a range that is too wide: either calling with pairs that are too small, or floating hands with no real equity. Calling with 99 on a J high flop is much better than 33 on a Thigh flop. And floating a gutshot is usually better than floating a pure bluff. When floating we usually like our hand to have a few outs to strong hands (a gutshot, a pair that could catch a winning set, etc) so we can hit and get paid when we are against the strong side of our opponent's range.

## The Bluff Float

Bluff floating flops is very simple mostly because we should really only be doing so in select spots. Like we talked about in the previous section, the big things we care about are our equity and our opponent. If we know our opponent will always CB-and-quit, then we should be floating much more liberally assuming that his CB range is very wide. Again, if he is going to double barrel a wide range, then floating becomes less ideal because of the money necessary to run the play coupled with the level of uncertainty that comes along with it.

Let's look at a very common situation. A nitty 11/6 raises from EP with a 4\% EPPFR, it folds to us on the button and we call with T9s, and we see a HU flop of A76r. He CBs $\$ 4$ into $\$ 7.5$ and the action is on us. If we take a look at a $4 \%$ range we see it is $99+/ \mathrm{AK}$. If we see how that range hits the flop we see it hits TP or better $40 \%$ of the time, and the other $60 \%$ is made up of $99-\mathrm{KK}$. If we think he would CB his whole range now (and usually we can assume that is so when players have very high CB percentages), and we know that he is a CB-and-quit type player, a float here is perfect.


| Statistics | Absolute Excel | Dead cards |
| :---: | :---: | :---: |
| $\checkmark>=$ quads | 0\% | $A h \quad A C A d \quad A s$ |
| $\checkmark$ full house | 0\% | $\mathrm{Ah} ~ \mathrm{Ac} ~ \mathrm{Ad} \mathrm{As}$ |
| $\checkmark$ flush | 0\% | Kh Kc Kd Ks |
| $\checkmark$ straight | 0\% | Kh Kc Kd Ks |
| $\checkmark 3$ of a kind | 7.69\% | Qh Qc Qd Qs |
| $\checkmark$ two pair | 0\% |  |
| $\checkmark$ overpair | 0\% | Jh Jc Jd Js |
| $\checkmark$ top pair | 30.8\% | Th Tc Td Ts |
| pp below tp | 61.5\% | Ih Ic Id Is |
| middle pair | 0\% | 9 h 9 c 9d 9s |
| weak pair | 0\% | 81 |
| ace high | 0\% | 8 h 8 c 8 dd 8 s |
| nothing | 0\% | $7 \mathrm{~h} 7 \mathrm{c} / 7 \mathrm{~d} 7 \mathrm{~s}$ |
| flushdraw | 0\% |  |
| OESD | 0\% | 6h 6c 6d 6 s |
| gutshot | 0\% | 5 h 5 c 5 d 5 s |
| overcards | 0\% |  |
| flushdrawn+pair | 0\% | $4 \mathrm{~h} \quad 4 \mathrm{c} \quad 4 \mathrm{~d}$ |
| OESD+flushdr. | 0\% |  |
| gutsh.+flushdr. | 0\% | 2in |
| OESD+pair | 0\% | $2 \mathrm{~h}, 2 \mathrm{c}, 2 \mathrm{~d} \quad 2 \mathrm{~s}$ |
| gutshot+pair | 0\% |  |
| gutshot+overc. | 0\% |  |
| Range hat hit 38.5\% of the time |  | Clear |

Figure 18: Flopzilla Analysis

We can catch an 8 and get paid in the event that he has a strong hand on the turn. We can also win by stabbing when he checks the turn. We are simply using our positional edge and forcing our opponent to play a very difficult spot. With such definitive boards this play can be very easy against CB-and-quit type players, and we should look to pressure them whenever possible.

Many players will look at the Flopzilla results and ask themselves if they should raise the flop (because only $40 \%$ of his range, at max, would probably continue if we did raise the flop). This is a very valid question to ask, but we have to consider the parlays and logical actions. By raising we are risking, say, $\$ 13$. If we call the CB and bet the turn for $\$ 9$ we are actually risking the same $\$ 13$. However, when we call and bet the turn we do so with more information. We get to see how he reacts to the turn. We get to see if he bets at us with his strong hands and then we never put more money at risk. We also get to take our equity draw for cheap. Maintaining and using our positional edge is something we want to do often, and often times floating is a great way to do that.

Let's look at another hand that comes up fairly often. Say a player opens from MP, we call in the CO with 55 , and see a HU flop of J93. MP bets at us and it's our action. With no information on MP this is a very easy fold. In fact, if we had information that MP was a fish, an unknown, an aggressive double barreler, or a minimal CBer then this is still a very easy fold. Again, the big things we are looking for is a person who CBs a wide range of hands, and plays CB-and-quit postflop. That is all. We can see this in a large FlopCB and small TurnCB percentage. But we also have to look at board texture.

We notice that the A76 board from the first example is a very definitive board texture. Our opponent either has a hand that he likes (AA/AK) or has a few outs (KK or JJ). There are no overcards that can hit the turn that can be double barreled. The J93 board is less definitive. There are lots of overcards that can hit the turn $(\mathrm{Q}, \mathrm{K}, \mathrm{A})$ and hands that we beat now, like AK, have decent equity to improve. Also, if our opponent has a hand like KK, he is unlikely to bet the turn again on the A76 board, but very likely to bet the turn again on the J93 board. We want our opponent to check/fold the turn, not bet again at us (either as a bluff or for value).

We've talked a lot about not floating against aggressive double barrelers. While aggressive double barrelers will have a non-zero percentage of bluffs in their double barrel range, the issue is our exposure. Take a situation where we float the flop with 66 on a Q83 board. The turn comes a 5 and he bets again. Let's look at our options:

- Fold. Calling the flop just to fold the turn a very large percentage of the time is just burning money
- Call. How are we going to win the pot? We have a pure bluff catcher, and do we plan on calling a likely river bet? If so, we are talking about exposing a very large percentage of our stack to call off with a single weak pair.
- Raise. We don't really represent too much as we would probably call a hand like KQ. Thus we rep 88,33 , and very rarely a floated 55 . So we represent very few combinations of hands, and any good hand reader will pick up on that very quickly. Couple that with the fact that we have to expose a very large percentage of our stack with no great idea on how often it will work. Whenever it comes to having big exposure with big uncertainty, it is usually best to pass on the opportunity. But if our opponent would fold a ton of the time versus a raise, then we could consider it if we knew that he could fold hands like $\mathrm{QJ} / \mathrm{KK}$ sometimes/ bluffs/etc. enough of the time.

It should also be noted that floating is much easier in position as opposed to out of position. Being in position we get to see how our opponent reacts to the turn card and we get to close action. Being out of position we allow our opponent to check behind their equity hands. Because of this we usually want to avoid floating out of position unless we have a very good reason to do it. Given all the parameters that make floating a good play, we don't end up doing it all that often. But doing it incorrectly can be a major winrate (WR) killer, and doing it never can make us very exploitable. So make sure to pay attention and take notes on opponents so we can find profitable float opportunities.

## The Value Call

Value calling isn't something that comes up very often. Mostly because the situation necessitates that we flatted a raise with a stronger hand and that the board cooperates. So a situation where we flat TT PF and hit an 8 high board, or flat JJ and hit a Qhigh flop. These situations are fairly rare, but playing them well is important.

The value call usually gets thrown into the "float" term. Because we are often times flatting because our hand is strong enough to have SDV, but weak enough that a raise isn't going to show enough value. For instance, say we flat an EP raise with $Q Q$ from the CO and see a HU flop. He CBs a T85 flop and it is our action.

Let's explore our options:

- Fold. QQ should be ahead of his CB range, plus we have position. Playing QQ to play fit-or-fold IP on a clean flop is usually a bad play.
- Call. A raise doesn't accomplish much, and a fold isn't really good, so our only option left is to call. QQ should be ahead of his PFR/CB range, but a raise just folds out all worse hands and never allows our opponent to make a mistake. It also keeps the pot size small, allowing us to utilize our skill, card, and positional edge later in the hand.
- Raise. A raise doesn't really accomplish anything. We really only get JJ to call us, and JJ isn't even a guaranteed call against a tighter player. We put ourselves in a situation where nothing worse continues, and a hand like AA probably isn't folding. So while our hand strength is strong, it is really only a SDV hand. Often times, TP or slight overpair type hands will fall into this category.

So while we aren't "floating" QQ with the intention of making a bluff later in the hand, we are calling it with intentions of retaining a mistake-rich environment and winning the minimax game. This situation comes up often, especially with the 88-QQ part of our flat call range. Let's look at another situation where the CO steals, we flat from the BB with 99 and see a HU flop of Q74. We check and he bets. Our options, as always, are:

- Fold. Folding is an option against very aggressive barrelers. If we expect to face a double barrel often, and especially when we have no concept of how balanced it is, folding outright would often times be better. As we've talked about many times over, constantly putting in money expecting to get nothing back is going to be a losing play. Couple that with the fact that we would be OOP for the rest of the hand, it would make winning the minimax game extremely difficult.
- Call. If our opponent is the standard CB-and-quit type player, then we should call the flop. We do have to make some decisions on the turn (deciding whether we think he bluffs enough of the time if he bets it), but overall this is a call on the flop with intention of showing down as cheaply as possible. We have a bluff catcher and SDV, so we want to get to showdown cheaply and without hassle.
- Raise. A raise just doesn't accomplish anything. It folds out hands we beat and gets called/raised by hands that beat us. Usually when we have a stronger pair we treat it as SDV, and we don't usually turn SDV hands into bluffs.

Notice again that our decisions are usually bordering on calling, with intentions of folding if the pot starts getting too large. If players tend to only make big pots with big hands, then we want to use these SDV hands to showdown in small pots and fold before the pot gets too big. These SDV hands get very tricky against aggressive opponents, especially ones that are very balanced in their barreling. And if we are ever unsure, we could default on folding the tough spots like $\Pi$ on an A high board or 99 on a J high board without issue, especially OOP. However, as we move into higher and higher stakes, we need to become more proficient at combating these aggressive players, and we do that with reads on their aggression levels and their understanding of things like SDV and polarization.

## 13

Check Raises

As the games continue to get more aggressive postflop, players tend to add in check raises to fight for more pots from OOP. This chapter will talk about combating check raises, as well as check raising ourselves. Facing check raises, and even just making check raises, can be very awkward and we want to make this spot as profitable as possible.

## The Facing Of A Check Raise

Facing a check raise is always a tough situation when we are holding anything but a nuttish hand. A CR allows our opponent to take control of the pot and forces us, in a sense, to define our hand. Fortunately for us many players at FR tend to approach the CR in one of two ways:

- Nuts. Most tight players fit in this category. Their CR range is effectively the nuts, with maybe a bluff here and there. This range is easy to play against, as their CR turns their hand face up. We should really only give this CR action, either by flatting or raising, if we have the nuts, something close to it, or a draw with a good price.
- Aggressive. The aggressive players are tough to play against. They CR more liberally, and it becomes difficult to figure out if they have a big hand this time, or if they are just bluffing. With notes we can start to gauge their weight of bluffs/nuts, but without notes we will just have to hypothesize.

Facing a CR range that is relatively nuttish is simple. We fold unless we have something strong enough that it beats the bulk of his CR range. Whether we 3-bet or flat is based on board texture and how we think our opponent would make the most amount of mistakes. For instance, say we raise to $\$ 3$ at 100 NL with Q J drom the HJ. The SB calls and we see a HU flop of T $\$ 8$. He checks, we CB for $\$ 4$ and he check raises up to $\$ 12$. The board here is very wet and dangerous. Many turn cards (any 6, 7, J, Q, diamond) could kill action and either make our opponent unhappy with his hand, or improve his hand. Because his CR range should be strong, and a decent percentage of bad cards could hit the turn, going for a 3-bet to $\$ 34$ would be a better idea than flatting against this player type.

Now the situation gets odd when we start facing check raises from the aggressive CR range. That person might be doing it with the nuts, draws, or even with pure bluffs. Against these types of check raisers we just need to classify our hand strength and choose the best line with it:

- Bluff. The default play when we have air and face a raise is to just fold. We have a minimal amount invested, and without information, it doesn't make much sense for us to start getting involved in a large pot. However, if we have enough information on an aggressive check raiser, we can sometimes 3-bet the flop ${ }^{11}$ or float and take away the pot on the turn. To do this, we need strong information about our opponent's frequency of CRing, of betting the turn again if called, if he would $\mathrm{c} / \mathrm{f}$ the turn after CRing the flop, etc.
- Semi-bluff. When we have a semi-bluff hand, like a draw, we need to start making some decisions. First, because a CR is threatening a big pot, we need to figure out if we have implied odds (IO) or not. If we do, and are getting a good enough price, then we can consider drawing. We just need to make sure that we think about what our improvement cards are and how those cards effect our profitability. Secondly, we want to think about how to play the draw. We could 3-bet if we have enough fold equity (aka, if the bluff side of his CR range is wide enough), or call if we thought we had enough IO and/or flexibility in winning the pot. Many players make the mistake of either always calling their draws here, or always 3-betting them. We just want to make sure we think about ranges and frequencies before we make an action, so as to ensure that our decision is optimal versus our specific opponent.
- Value. Having value hands always makes life easy. We can 3-bet if our opponent has enough weight to strong hands and would tend to make more mistakes against the 3-bet. Or, we could flat and raise later in the hand if a call would encourage more mistakes and later bets. As a default, raising wet boards is usually going to be the best play. On dry boards with none/only a few bad turn cards, calling to raise later is certainly a valid option.
- SDV. SDV hands become the hardest hand strength to play against the CR. If we call too much in the wrong spots we can really get hurt, and if we fold too much in the wrong spots we can be losing a lot of value. How we play SDV hands when facing a CR is based on the weight of strong hands we assign our opponent, and how we think he would play the rest of the hand.

[^9]For instance, if we have SDV and think his CR range is roughly 50/50, but that he would check the turn when he has air and bet the turn if he has big hands, then we know how we can win the pot and how we can make money here. If we think his CR range is roughly $50 / 50$, but that he would bet every turn regardless whether he has air or strength, it can make playing the rest of the hand very difficult.

Let's look at an example. Say we have AQ and raise to $\$ 1.5$ at 50 NL from MP. The BB calls and we see a HU flop of Q94. He checks, we CB for $\$ 2$ and he check raises to $\$ 6$. Let's explore our options:

- Fold. If we think his CR range is super strong, then we should just fold. There are some players that would only CR with a Q9/99/44 type hand, in which case our AQ is crushed. We might also fold if we think the weight of their CR range is either strong, or if bluffy, will barrel us off the pot often. Many players make the mistake of habitually peeling here and then folding to future barrels. If we know those barrels are coming, then we need to have a plan right now on what we are going to do versus them. If we don't know, or think we would put ourselves in a situation where we are losing minimax, then folding here can be a much better option.
- Call. Against a player who has enough weight towards the bottom of their range, and would play relatively straight forward for the rest of the hand, calling is a fine play. If we think we are way ahead of their CR range and can play the rest of the hand out profitably, then calling here is great.
- Raise. Our hand has a lot of SDV, and a raise would effectively turn our hand into a bluff. However, if the BB were a short stacker, or a very aggressive fish, $A Q$ might shift from SDV to a value hand, making a raise a more valid option.

The great thing about facing a CR is that we are IP for the rest of the hand. So if we do call and play out the turn and/or river, we get to see how our opponent reacts. However, many players take this too far and start peeling the CR liberally and getting themselves in a large pot without much of an idea on how to proceed. As games get more aggressive, peeling check raises is usually more standard, but we need to make sure that we are thinking about the future streets and how we are going to make money. Calling to fold to a $100 \%$ of turn bets is usually a poor idea. Folding to $100 \%$ of check raises, especially in an aggressive dynamic, is usually a poor idea. The important thing when facing a CR
is to have a feel for our opponent. Just consider minimax, and think about how often we expect to win and how much we would win, and then how often we expect to lose and how much we would lose. Take the most profitable line, and if we are unsure, folding sooner is usually better than calling off too many streets as a default.

Let's look at another example. Say there is a limper at 100NL, we raise to $\$ 5$ with AcKc from the button, and it folds around to the limper who calls. The limper is a $52 / 17$ who has been splashing around a lot. The flop comes Jc8d6c. He checks, we CB for \$6, and he check raises up to $\$ 20$. At this point, we have our three options:

- Fold. Even if his CR range was just sets, we would be calling $\$ 14$ to win $\$ 37.5$, giving us 2.7:1 in direct pot odds (not even including the other $\$ 75$ in implied odds giving us a possible $8: 1$ ). He would probably pay off enough of the time to justify drawing, and thus folding isn't really justified.
- Call. If we thought a lot of his CR range was bluffy, then we could call and take the pot away on the turn if he checked. This gives us multiple ways to win the pot. We could catch our draw and get paid against the strong part of his CR range. And we can also take it away the times he is bluffing and shuts down.
- Raise. Raising is an option we could consider taking here. Especially when we start considering fold equity (FE), a 3-bet can be a very valuable play. If we run our equity against a nuttish range that would probably stack off against us ( $\mathrm{JJ} / 88 / 66 / \mathrm{Tc} 9 \mathrm{c} / \mathrm{AJ}$ ), we still have $38 \%$ equity. At this point, it just becomes a math problem. And with an $\$ 81$ effective shove into a $\$ 37.5$ pot with estimated equity of $38 \%$ when called, we would need a fold $16 \%$ of the time to make the shove breakeven. So if we double that to give ourselves a profit buffer, we would need roughly $1 / 3$ of our opponent's range to be bluffs here. If his range becomes $1 / 2$ bluffs, or even larger, then effectively shoving becomes a very profitable play given fold equity. As the variables in the FE calculation change, this effective shove can go from really good to really bad, especially based on stack depth and estimated equity if we got it all in.

This hand shows the importance of FE, especially when we have big draws. This doesn't mean we want to start shoving every single time we have one though. We notice that if we thought the CR range were strong, that flatting become a more valid option because there would be no FE and we could draw with more IO. But if we thought the CR range was wide enough, and we would have enough equity when called, that 3-betting became
a great option. As for the size of the 3-bet, we did say "effective shove" quite a bit. That just means that our 3-bet size commits our stack. So technically we could shove, but we don't want to shove draws and 3 -bet normal with 88 . We don't want to become that predictable against players that can think and care about bet sizes. So while we could shove against a fish (in an effort to maybe even start folding out some Jx type hands), we could also raise up to $\$ 55$ and effectively commit our stack.

One last note about facing check raises. We need to make sure we fully appreciate the representation of a player who check raises in a MW pot. Take a hand like this. We open raise QQ to $\$ 3$ from the CO . A fish calls from the SB and an aggressive regular calls in the BB. The flop comes T75r and they both check to us. We CB for $\$ 6$, the fish calls, the the BB check raises up to $\$ 22$. We know that QQ is well ahead of the fish's range, but what is the BB CRing with? Because this pot is MW, it is even more likely that his range is strong. And because the SB is a fish, and the BB would know this, it is super unlikely that the CR would be weak. He knows the fish is likely to continue against the CR, and thus the CR can't be weak. It is so important that we don't make mistakes in this hand, and usually just fold and let the BB fight with the fish. The BB represented well, and for all intents and purposes, this is now his pot.

## The Bluff Check Raise

Bluff CRing is a great play to add to our playbook. The CR allows the person check raising to take the lead in the hand, and thus puts the PFR on his heels. This play is great in certain situations, but like usual, we want information to really make good check raises a part of our game. Let's look at some considerations for a good CR:

- Board Texture. This should really be of no surprise at all. Board texture allows us to represent different hands, some represent more real hands and others represent bluffs. For instance, we should be aware that check raising on an A or K high board will result in a much different action than check raising on an 8 or 6 high board. While we of course need to always consider our opponents when making check raises, a golden rule is that bluff check raising tends to work best on absolute boards ( $\mathrm{Q}+$ high boards) and value check raising tends to work best on low boards (9 high or lower boards).
- Number Of Opponents. Usually the more opponents there are in a hand, the less likely we want to be to bluff it. It is much easier to get a check raise through a single opponent as opposed to multiple.
- Opponent Player Type. This is the most important part of check raising. When bluff check raising we of course don't want to attack a person who doesn't fold ever. While value check raising, we of course don't want to attack a person who always folds. This ties in to the textures heavily. If we have 77 and the flop is A74, we might not want to check raise a nit because the nit would fold pretty much everything and never make a mistake. But if we are bluffing, and that nit would fold that flop to a CR a ton, then we should heavily consider bluffing at the pot until he adjusts.
- Plan. Our plan for the rest of the hand is vital to our decision of whether or not to check raise. Many people check raise with semi-bluff type hands, and have no concept of a plan in the event they get called. For instance, they call a raise from the BB with 65s. The flop comes 8 h 7 c 2 s and they check raise. But what are they going to do if their opponent comes over the top? Or what if their opponent calls and the turn bricks? Because a check raise increases the pot size so quickly, and bigger pots mean less maneuverability, we need to have a very definitive idea of what we are going to do in all happenings. If we do not, then generally a check raise, especially with a semi-bluff type hand, wouldn't be the best play for us.
- Size. The size of a check raise is more of an art than a science. As with any bluff, our goal is to give ourselves the best price (aka, the smallest size possible) and get the best results (aka, the most amount of folds). If a player would fold to a minCR, then we might consider doing that with a bluff. If he would peel the minCR often but would fold to a 2.5 x CR a large enough percentage of the time, then we might use that size with our bluffs. Our goal is to keep this size small, but also big enough that our bluff CR and value CR sizes don't look totally different against players that care.

When considering a bluff CR we think about these factors, among others. Like, what is our opponent's O-Range and C-Range? Are these two ranges far enough apart to show outright profit here? Would he start taking weak hands and bluffing them? These other factors may make CRing a little odd. Let's look at some basic things by looking at some standard O-Ranges and how they do on certain board textures. We will take a standard O-Range of $22+/ \mathrm{AJ}+/ \mathrm{KQ}$ and look at it on some different boards. We will assume he has a standard C-Range of TP + , and give ourselves a nothing hand like 22. Let's explore for a minute:


Figure 19: A93 Flop

| Hints Off | No-limit |  |  | Starting hands |  |  |  |  |  |  |  |  | No-weight |  |  | 100\% | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA | AKs | AQs | AJs | ATs | A9 |  | 8 s | A7s | A6 |  | A5s | A4s | A3s | A2s |  | Ah | Ac Ad | As |
|  | AKc | KK | KQs | KJs | KTs | K9s |  | 88 | K7s | K6 |  | K5s | K4s | K3s | K2s |  | Kh | Kd | Ks |
|  | Qc | KQc | QQ | Qss | QTs | Q9 |  | 88 | Q7s | Q6 |  | Q5s | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | AJo | KJo | QJo | J | JTs | J98 |  | 8 s | J7s | J6s |  | 15s | J4s | J3s | J2s | - | Jh | Jc Jd | Js |
|  | ATo | KTo | QTo | JTo | TT | T9s |  | 8 | T7s | T6s |  | T5s | T4s | T3s | T2s | - |  | Td | Ts |
|  | A90 | K90 | Q90 | 190 | T9 | 99 |  | 8 s | 97s | 965 |  | 95s | 94 s | 93s | 92s | - | 9h | 9 c 9d | 9 |
|  | A80 | K80 | Q80 | 180 | T80 | 980 |  | 38 | 875 | 86 |  | 85s | 84s | 83s | 82 s |  | 8 h | 8 c 8d | 85 |
|  | A70 | K70 | Q70 | J70 | T70 | 970 | 87 | 70 | 77 | 765 |  | 75s | 74 s | 73s | 72 s | - |  |  |  |
|  | A60 | K60 | Q60 | J60 | T60 | 960 |  | 60 | 760 | 66 |  | 65s | 645 | 63 s | 62 s | - | 6 h | 6 c 6 d | 6 s |
|  | A50 | K50 | Q50 | J50 | T50 | 950 |  | 50 | 750 | 650 |  | 55 | 54s | 53s | 52s | - |  |  |  |
|  | A40 | K40 | Q4o | J40 | T40 | 940 |  | 40 | 740 | 640 |  | 540 | 44 | 43s | 42 s |  |  | 5 c |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 h | 4 c 4 d | 4 s |
|  | А 30 |  | Q30 |  |  | 930 |  |  |  |  |  |  |  | 33 | 32s |  | 3h | 3c 3d | 3 s |
|  | A20 | K20 | Q20 | 120 | T20 | 920 |  | 20 | 720 | 620 |  | 520 | 420 | 320 | 22 |  |  | 2 c 2d | 2 s |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10.7\% |  |  |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  | Poc |  |  |  | dw |  |  |  |  |  |  | ear |  |  | Random |  |



Figure 20: KT5 Flop


Figure 21: Q97 Flop

| Hints 0 ff | No-limit |  |  | Starting hands |  |  |  |  |  |  |  |  | No-weight |  |  | 100\% | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA | AKs | AQs | AJs | AT |  | A9s | A8s | A7s | A6 |  | A5s | A4s | A3s | A2s |  | $\mathrm{Ah} ~ \mathrm{Ac} \mathrm{Ad}$ |  | As |
|  | AKc | kK | KQs | KJs | KT |  | K9s | K8s | K7s | K6 |  | K5s | K4s | K3s | K2s |  | Kh | Kc Kd | Ks |
|  | AQC | KQc | QQ | QIs | QT |  | Q9s | Q8s | Q7s | Q6 |  | Q5s | Q4s | Q3s | Q2s |  | Qh Qc Qd |  | Qs |
|  | AJo | KJo | QJo | II | JTs |  | 198 | J8s | J7s | J6s |  | 158 | J4s | J3s | J 2 s |  | Jh | Jc | Is |
|  | ATo | KTo | QTo | JTo | TT |  | T9s | T8s | T7s | T6 |  | T5s | T4s | T3s | T2s |  | Th Tc Td |  | Ts |
|  | A90 | K90 | Q90 | 190 | T9 |  | 99 | 98s | 975 | 968 |  | 95s | 94s | 93s | 92s |  | 9 h | 9 c 9d | 9 s |
|  | A80 | K80 | Q80 | J80 | T80 |  | 980 | 88 | 875 | 86 |  | 85s | 84s | 83s | 82 s |  | 8 h | 8c 8d | 8 s |
|  | A70 | K70 | Q70 | J70 | T70 |  | 970 | 870 | 77 | 765 |  | 75s | 74s | 73s | 72 |  | 7 h | 7 c 7 d | 7 s |
|  | A60 | K60 | Q60 | 160 | T60 |  | 960 | 860 | 760 | 66 |  | 65s | 64s | 63 s | 62 s |  |  |  | 65 |
|  | A50 | K50 | Q50 | J50 | T50 |  | 950 | 850 | 750 | 650 |  | 55 | 54s | 53s | 52 s | - | 6 h |  | 5 s |
|  | A40 | K40 | Q4o | J40 | T40 |  | 940 | 840 | 740 | 640 |  | 540 | 44 | 43 s | 42 s |  | 5 h | 5 c 5 d |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 h | 4 c 4 d | 48 |
|  | A30 | K30 | Q30 | J30 | T30 |  | 930 | 830 | 730 | 630 |  | 530 | 430 | 33 | 32 s |  | 3 h | 3c 3d | 3 s |
|  | A20 | K20 | Q20 | J20 | T20 |  | 920 | 820 | 720 | 620 |  | 520 | 420 | 320 | 22 |  |  |  |  |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10.7\% | 2 c 2 d |  | 2 s |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  |  |  |  |  | dw |  |  |  |  |  | Clea | ar |  |  | Random |  |



Figure 22: J63 Flop


Figure 23: T84 Flop

We can see that a flop with a broadway combos ( $\mathrm{AK}, \mathrm{KQ}$, etc.) hits the villain's range hard. As the flop high card gets lower, it makes it harder for the villain to have a strong hand that can continue. Now, this doesn't mean we want to CR every single board with a T or 9 on it. Because not every opponent will have that wide of an O-Range. Let's use a tighter O -Range from EP , say a range of $55+/ \mathrm{AQ}+$ and run it on some boards:


Statistics

| $\checkmark>=$ quads | 0\% |
| :---: | :---: |
| $\checkmark$ full house | 0\% |
| $\checkmark$ flush | 0\% |
| $\checkmark$ straight | 0\% |
| $\checkmark 3$ of a kind | 7.69\% |
| $\checkmark$ two pair | 0\% |
| $\checkmark$ overpair | 0\% |
| $\checkmark$ top pair | 30.8\% |
| pp below tp | 30.8\% |
| middle pair | 0\% |
| weak pair | 30.8\% |
| ace high | 0\% |
| nothing | 0\% |
| flushdraw | 0\% |
| OESD | 0\% |
| gutshot | 0\% |
| overcards | 0\% |
| flushdrawn+pair | 0\% |
| OESD+flushdr. | 0\% |
| gutsh.+flushdr. | 0\% |
| OESD+pair | 0\% |
| gutshot+pair | 0\% |
| gutshot+overc. | 0\% |

Range hat hit $\mathbf{3 8 . 5 \%}$ of the time

## Dead cards



|  | No-limit |  |  | Starting hands |  |  |  |  |  |  |  |  | No-weight |  |  | 100\% | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA | AKs | AQs | AJs | ATs | A9 | A8 |  | A7s | A6s |  | 5 | A4s | A3s | A2s |  | Ah | $\mathrm{Ac} A \mathrm{Ad}$ | As |
|  | AKc | KK | KQs | KJs | KTs | К9 | K8 |  | K7s | K6s | K | 5 | K4s | K3s | K2s |  | Kh | Kd | Ks |
|  | AQc | KQc | QQ | QIs | QTs | Q9 | Q8 |  | Q7s | Q6s | Q 5 | 5 | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | AJo | KJo | Qjo | J | JTs | 19s | J8 |  | J7s | J6s | 15 | 15 | J4s | J3s | J2s |  | , | Jc Jd | Js |
|  | ATo | KTo | QTo | JTo | TT | T9 | T8 |  | 17s | T6s | T5 | 5 s | T4s | T3s | T2s |  |  | Td | Ts |
|  | A90 | K90 | Q90 | 190 | T9 | 99 | 98 |  | 97s | 96s |  | 5 | 94s | 93s | 92s |  | 9h | 9 c 9d | 9 s |
|  | A80 | K80 | Q80 | J80 | T80 | 980 | 88 |  | 87s | 868 |  | 5 | 84s | 83 s | 82 s |  | 8 h | 8c 8d | 8 s |
|  | A70 | K70 | Q70 | J70 | T70 | 970 | 87 |  | 77 | 76 s |  | 5 s | 74s | 73s | 72 s |  | \%h | 7 c 7 d | 7 s |
|  | A60 | K60 | Q60 | J60 | T60 | 960 | 86 |  | 760 | 66 |  | 5 s | 64 s | 63 s | 62 s |  | 5 | 6 c 6d | 6 s |
|  | A50 | K50 | Q50 | 150 | T50 | 950 | 85 |  | 750 | 650 |  | 55 | 54s | 53s | 52s | - |  |  |  |
|  | A40 | K40 | Q4o | J40 | T40 | 940 | 84 |  | 740 | 640 |  | 40 | 44 | 43s | 42 s |  |  | 5c 5d | 5 s |
|  | A30 | K30 | Q30 | J30 | T30 | 930 | 83 |  | 730 | 630 |  | 30 | 430 | 33 | 32s |  | 4 h | 4c) 4 d | 4 s |
|  |  |  | Q20 | 12 | T20 | 92 |  |  | 720 | 620 |  |  | 42 |  |  |  |  | 3c) 3d | 3 s |
|  |  |  |  |  | 120 | 20 |  |  | 72 | 620 |  |  | 420 | 22 |  |  | 2 h | 2 c 2d | s |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6.94\% |  |  |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  | Pocket |  | Broadway |  |  |  | Suited |  |  | Clear |  |  |  | Random |  |  |



Figure 25: KT5 Flop

| Hints Off | No-limit |  |  | Starting hands |  |  |  |  |  |  |  | No-weight |  |  | 100\% | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA | AKs | AQs | AJs | ATs | A9s | A8 |  | A7s | A6s | A5s | A4s | A3s | A2s |  | Ah | Ac Ad | As |
|  | AKc | KK | KQs | KJs | KTs | K9s | K8 |  | K7s | K6s | K5s | K4s | K3s | K2s | 9 | Kh | Kc Kd | Ks |
|  | Qc | KQc | QQ | QJs | QTs | Q9s | Q8 |  | Q7s | Q6s | Q5s | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | AJo | KJo | Qjo | JI | JTs | J9s | J8s |  | J7s | J6s | 15s | J4s | J3s | J2s | - | Jh | Jc Jd | Js |
|  | ATo | KTo | QTo | JTo | TT | T9s | T8 |  | 17s | T6s | T5s | T4s | T3s | T2s | - |  | Td | Ts |
|  | A90 | K90 | Q90 | 190 | T9 | 99 | 98 |  | 97s | 96s | 95 s | 94 s | 93s | 92s | - | 9 h | c 9d | 95 |
|  | A80 | K80 | Q80 | 180 | T80 | 980 | 88 |  | 87s | 86 s | 85s | 84s | 835 | 82 s |  | 8 h | 8c 8d | 8 s |
|  | A70 | K70 | Q70 | J70 | T7o | 970 | 87 |  | 77 | 76s | 75s | 74 s | 73s | 72 s | - |  |  |  |
|  | A60 | K60 | Q60 | 160 | T60 | 960 | 860 |  | 760 | 66 | 65s | 645 | 63 s | 62 s | - | 7 h | 7 c | 7 s |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - | 6 h | 6 c 6 d | 6 s |
|  | A50 | K50 | Q50 | 150 | T50 | 950 | 85 |  | 750 | 650 | 55 | 54s | 53s | 52s | - | 5 h | 5c 5d | 5 s |
|  | A40 | K40 | Q40 | 140 | T40 | 940 | 84 |  | 740 | 640 | 540 | 44 | 43s | 42s |  |  |  | 4 |
|  | A30 | K30 | Q30 | J30 | T30 | 930 | 83 |  | 730 | 630 | 530 | 430 | 33 | 32s |  |  | 4 c | 45 |
|  | A20 | K20 | Q20 | 120 | T20 | 920 | 82 |  | 72 | 620 | 520 | 420 | 320 | 22 |  | 3 h | 3c 3d | 3 s |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 h | 2 c 2d | 2 s |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6.94\% |  |  |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  | Pock | ket |  | oad |  |  |  | uited |  | Cle | ear |  |  | Random |  |



Figure 26: Q97 Flop


Figure 27: J63 Flop


Figure 28: T84 Flop

Now we see that because the O-Range has many fewer broadway combos (AJ, KQ, etc.) that the high card on board drastically changes how often the range has hit. One thing we might notice is that K high boards, against that range, are actually very favorable for us (as they make hands like QQ/JJ uncomfortable, and brick AQ combos). We want to have a very clear understanding on how basic ranges hit basic boards so we can quickly estimate in real-time if a bluff would get enough folds. Given the fact that we are CRing, we usually need to risk a decent amount of money to pick up the pot.

| CR Size $(Z x)$ | BE\% |
| :---: | :---: |
| $2.00 x$ | $44.3 \%$ |
| $2.25 x$ | $47.2 \%$ |
| $2.50 x$ | $49.8 \%$ |
| $2.75 x$ | $52.2 \%$ |
| $3.00 x$ | $54.4 \%$ |
| $3.25 x$ | $56.4 \%$ |
| $3.50 x$ | $58.2 \%$ |
| $3.75 x$ | $59.9 \%$ |
| $4.00 x$ | $61.4 \$$ |
| $4.25 x$ | $62.8 \%$ |
| $4.50 x$ | $64.1 \%$ |
| $4.75 x$ | $65.4 \%$ |
| $5.00 x$ | $66.5 \%$ |

Table 5: Check Raise BE\% (Static versus 2/3PSB CB)

While it isn't surprising that a minCR has to work much less often than a $4 x \operatorname{CR}$ to breakeven, it is still important to remember. But what we might notice is that most sizes that we would logically use would have to work between $50 \%-60 \%$ to breakeven. Meaning we would need to solicit at least that many folds from our opponent. This is why we need to have such a crystal clear idea on what our opponent's O-Range is and also how often he would fold to the CR. Some players won't fold just because we CR them. They might either bluff 3-bet (continuing with hands we needed to fold), or peel more liberally (with second pairs, etc.).

For instance, say we are playing against a player who can hand read fairly well. He raises from EP, we call from the BB with XX, and we see a HU flop of A86. We check, he CBs, and we CR. Let's think about that for a minute:

- What would we actually CR here for value?

We might CR 88 and 66 for value here (assuming that we didn't donk the flop or call the CB /donk the turn.). But past that, we wouldn't rarely flat AK PF, so we don't really have an A in our hand, except maybe a very odd A8s/A6s. So technically our CR range here is polarized, and probably bottom-side weighted.

- Would he CB his entire range?

Some players would CB their entire range here, and others might start checking behind hands like QQ or KK . If he would CB his entire range, it can drastically change how often he has a hand that could continue here than if he would only CB a polarized range.

- How bottom-side weighted is our range?

Our CR range being bottom-side weighted isn't necessarily bad, assuming it isn't totally skewed. For instance, say we would CR all combos of 88 and 66, and also a few combos of bluffs (turning 22 or 55 into a bluff rather than peeling it). This isn't nearly as bad as having all combos of 88 and 66, and CRing everything else so that our range has $3 x$ as many bluffs as value hands. Then our being bottom-side weighted, against a good hand reader, can really hurt us.

- Does he care?

Just because a player can hand read well doesn't mean he will actually put that information to use. If he could read our CR as very weak, but would still fold to it, it still means his C-Range might be tight enough to make for a good CR. But if he does care, and will start 3-betting or peeling the flop more liberally, then his C-Range contorts greatly, making this a possible disaster of a CR.

The issue with CRing is that our range is usually very polarized. We understand SDV and thus wouldn't oftentimes turn a hand like TT on a Q84 board into a bluff. We also usually don't have enough in our CC range to really represent hitting boards. Our CC range is usually pocket pairs, and thus it makes it hard for us to represent well on a single or double broadway card board (*hint: think about how this relates to other TAGs/nits
that use similar strategies). This is why we usually can't do a lot of bluff CRing against good hand readers. Those players can often times sniff it out for what it is, a bluff, and won't be folding enough of the time for us to really show profit.

Our ideal players to attack like this are players who have wide O-Ranges (CB range), tight C-Ranges (maybe TP+, maybe set+, etc.), and won't shift hands from their weak range to their C-Range (by either bluff3-betting or peeling). And because we don't bluff fish, we really only do this against TAGs and LAGs who can't hand read well and/or have the O-Range/C-Range disparity that we like. While these spots don't arise all that often, they are super favorable for us if we take advantage of them and allow ourselves to win pots without hitting sets.

## The Value Check Raise

While chapter 15 covers playing big hands on the flop, we'll first look at CRing them here. There are two major times we CR with value hands:

## - We flop a set

There are times when we setmine, hit a set, and are OOP. We might consider CRing (assuming a donk or c/c-donk line isn't ideal) if we know a player would CB the flop liberally and the check could trap more money in the pot. Chapter 15 talks about the consideration of donking rather than going for the CR.

- A big hand with a tricky check

There are times when we might raise PF, hit big on the flop, and check with intentions of soliciting a bet. We might CR here if we need to get a big pot going when another line, like CB flop or call flop/CR turn, isn't great.

The big thing we need to do when we consider a value CR is to ensure that our hand is actually a value hand. Many players make the mistake of raising AK PF, and then CRing it in a HU pot on an AT9 board. The problem is that not many worse hands can/will continue, and thus a CR just turns our hand into a bluff. We would be better off check/ calling or CBing ourselves if that's the case. A value hand is one where we could make the CR and have second best hands continue a large percentage of the time. If they wouldn't, then another line is usually best.

Let's go over CRing sets first. Say there is a raise to $\$ .75$ at 25 NL from EP, a call from the CO , and we call from the BB with $6 \mathbf{~}$. The flop comes Q 65 . We check, the PFR bets $\$ 1.75$, and the CO folds. The action is back to us. Let's explore our options:

- Fold. We have a set, we aren't going to fold here.
- Call. Calling is an option if we think a CR would get him to fold out hands like AA/KK/AQ, etc. However, because he CB into a MW pot, it is more likely that is O-Range is strong, and thus more of it has a higher chance of continuing versus a CR. A call here isn't bad, but it might not be ideal if he would make mistakes versus the CR.
- Raise. At this point we would just need to think about his O-Range and how he would continue if we were to CR. If he would fold hands like AA or KK, then his only C-Range is QQ and 55. So against a range like that we might be better off just calling and either trying to CR the turn, or donking ourselves. But if he would call a little more liberally with AA/ KK type hands on the flop, then a CR can be a great play to get a big pot going and get him stuck to it.

Like usual, our action is based on how our opponent would react to it. A CR is the default play here, as it gives us the chance to make a big pot against a hand that might overvalue itself, and a c/c-donk or $\mathrm{c} / \mathrm{c}-\mathrm{c} / \mathrm{r}$ play is usually done with more information on our opponent. While we do run the risk of him folding JJ or Q sometimes, we give ourselves a bigger chance to make an AI pot with our very strong holding. As for the size of our CR, we need to think about pot geometry. If we CR up to $\$ 5$ and he calls, that makes the pot roughly $\$ 13$ and leaves roughly $\$ 19$ back in the stacks.

This makes getting stacks in very easy ( $\$ 7$ on the turn and $\$ 12$ on the river). If there were more depth in the effective stacks, then we might consider a larger CR , or making much bigger bets on the turn/river to get the most amount of money in the pot (assuming of course he would continue versus those bet sizes with a favorable hand range). The big thing to remember with the size is that if we want stacks, we need to ensure that he calls the initial bets. So we don't want to CR so big that he can't continue favorably. We also don't want to go so small that we don't allow ourselves to create the pot size that we want. Usually a CR between 2.5 x - 3.5 x is the standard, but again, we need to think about what the size accomplishes.

The other time we might consider a flop CR is when we are being tricky with a big hand. Say we open to $\$ 3$ with $\mathrm{T} \gg$ from the CO and we see a HU flop with the button. The flop comes J 8 $\mathbf{~ 7 ~} \mathbf{4}$ and it is our action. Let's explore our options:

- Check. Going for a CR here is based entirely around our opponent. If he might not peel this flop liberally, and would bet this a ton of the time, then going for a CR can be a great line. However, we do need information to take this line. If we don't know if our opponent would bet in this spot super often, then defaulting on making a CB would be better. But if we know that a check would really encourage that mistake-rich environment, then checking can be a very profitable line.
- Bet. The default line would be to bet here. We have a big hand and we would like to make the biggest pot possible. While a CR would technically create a bigger pot than a normal "we CB and he calls" line would, we can't always rely on getting a CR in. If we don't think we can make a CR a large percentage of the time, then we should just bet here.

Again, the default line with a big hand as the PFR is just to bet it out ourselves. But if a good situation arises with an opponent who has to bet when checked to, or might make a mistake because they view our CR as bluffy, a CR can be a nice mix up play. We should take notes to find out if we can make certain plays in the future, but we can also use our HUD. For instance, if in that $\mathrm{T} \geqslant 9$ hand our opponent had a very large FoldvCB\% and large FlopBet\%, then that might actually push us towards checking to them. With better information we can take more exploitative lines, and really maximize pure value on all of our hands.

## 14

Playing 3-bet Pots Postflop

Many players feel they struggle the most once a 3-bet pot goes postflop. They are tricky spots, often times with odd SPRs, that can make or break a WR very easily. Because not every possible 3-bet spot can be talked about, this section will try to breakdown some of the more common spots, many of which can be extrapolated to figure out the optimal play in situations which we don't cover in this chapter.

## The 3-Bet Pot Mentality

The way in which we process information in 3-bet pots is crucial to our success in them. We effectively look at a handful of things, and then plot our line from there:

- Did our opponent flat our 3-bet? If so, with what hands would he normally do that with? What hands do we rep here?
- Did we flat a 3-bet? If so, with what hands would he have 3-bet us with? What hands do we rep here?
- What kind of hand strength do we have? SDV, bluff, semi-bluff, value?
- What kind of texture are we dealing with?
- Is our opponent the kind to CB-n-quit?
- Does he play fit-or-fold postflop?
- What is our goal here? (To get stacks in? To showdown? To stab and hopefully pick the pot up?)
- What kind of player is our opponent?
- Are we IP or OOP?
- What kind of SPR are we dealing with?

Some of these can be answered very easily. "Do we have a bluff hand on the flop vs a player who would only call our 3-bet with a strong hand?" Ifyes, then bluffing is probably bad, and thus we check and cut our losses. "Do we have a nuttish hand vs a player that never folds postflop in 3-bet pots?" If so, then we bet. "Do we have SDV and a bet would never get called by a worse hand now?" If yes, then maybe we consider checking more often.

## The Setmine 3-Bet Pot

A normal situation where we might flat a 3-bet is when we raise from EP/MP, face a 3-bet, and call with a pair to setmine with good odds. However, many players peel the CB too liberally, minimize earnings when ahead, and/or call the initial 3-bet badly. Remember, the reason why we would flat the 3-bet preflop, especially from OOP, is because we think our opponent would only 3-bet super strong, and that there are lots of IO because of it.

So take this situation where we open 3 x with 77 from MP, an $11 / 7$ with a 3 b : $2 \%$ 3-bets to 9 x from the button, and we call. The flop comes 973 . This is a great spot to go for a CR because an $11 / 7$ isn't going to check back AA/KK type hands here, he is going to bet them for value because it is a 3-bet pot and he caught a low flop. But the situation is different if the board came A76. Many players make the mistake of checking this flop, when a donk bet would almost always be a better play.


Figure 29 (a): QQ+/AK on A76


Figure 29 (b): QQ+/AK on A76 (Results)

Donking here is great because a 2\% 3-bet range is super tight. 2\% is actually just AA/KK and some QQ/AK. If we run it through flopzilla (with a $50 \%$ weight on $A K o$ ) we see that he will hit top set about $13 \%$ of the time, TP $33 \%$, and under pairs about $55 \%$. Lets run through some logical happenings:

If we check and he has X he probably does Y :

- AA: bets for value
- AK: bets for value
- KK: checks to pot control
- QQ: checks to pot control

If we bet and he has X he probably does Y :

- AA: calls it sometimes and raises it sometimes
- AK: calls it sometimes and raises it sometimes. Never folding the flop though
- KK: probably calls it at least once
- QQ: probably calls it at least once

We see that donking gets us action almost always, while checking only gets us action sometimes. These kinds of situations may not arise all that often, but playing them optimally when they do will greatly benefit our bottom line.

There is also the odd spot of flatting a 3 b with a hand that flops a relatively strong pair. Take a spot where we open raise $T T$ from the button, the SB 3-bets us, and we call. The SB is a TAG with a resteal of $9 \%$. The flop comes J73 and he bets $60 \%$ pot. This is usually a standard spot to call, use our position and skill edge later in the hand, and win the minimax game. However, if we expect this player to double barrel the turn often, we need to make a decision on the flop if we are going to get sticky with our single pair or if we should just fold now before we get blown off our hand later. This spot can be very difficult when OOP against an aggressive opponent, which is why we usually 4-bet or fold PF rather than call.

## The Small SPR 3-Bet Pot

The great thing about small SPR pots is that we use a strong range in them. Because we were well aware of SPR creation preflop, we should have used an appropriate range that makes this spot relatively easy. If we are constantly finding ourselves in this situation with a bad hand range, we need to reconsider our preflop strategy versus smaller stack sizes.

There are three main happenings in these spots. We either maintain a very strong hand, we miss the flop completely, or we get into the awkward SDV situation. Let's talk about them in order:

## - The strong hand

Take a situation at 100 NL where a $\$ 40$ stack open raises to $\$ 4$, we 3-bet KK to $\$ 12$ on the button, and he calls. The flop is J83 and he checks to us. The pot is currently $\$ 25.5$ and we have $\$ 28$ in the effective stack,
for a $\sim 1$ SPR pot. Pretty much as long as we never fold, we are fine. Our line is totally based on creating the most mistake-rich environment. If our opponent makes a lot of betting mistakes, then we can consider checking here and giving him a chance to bluff the flop. If our opponent makes a lot of calling mistakes, then we should consider making a sticky bet for something like $\$ 13$ and getting him to call us down liberally. These situations are easy for us as we never fold and can always default on betting them, especially from OOP, if we aren't sure what to do.

## - The missed AK-type hand

In this hand we are at 50NL with AK. An unknown shorter stack open raises from MP to $\$ 1.5$, we 3 -bet to $\$ 5$, and he calls. The flop is T32 and he checks to us. The pot is $\$ 10.75$. Let's look at this from the most important piece of information: the SPR:

- There is .8 SPR. Say there is $\$ 8.5$ left in the effective stack. With such a small SPR we can simply look at some basic factors, like estimated equity if we get called and pot size, we can use a fold equity (FE) calculator ${ }^{12}$ to figure out if shoving is good or bad. When figuring out our estimated equity in these smaller SPR pots we can usually just assume we will have about $24 \%$ equity (this is running AK against a range of mostly pairs, the occasional nut hand that has us drawing dead, and a few draws). If we punch all this into a FE calculator we see that villain only needs to fold $15 \%$ of the time for our shove to breakeven.

If we look at a normal shortstack calling range versus our 3 b and assign something like $88+/ \mathrm{AJ}+/ \mathrm{KQ}$, we see he only hits the flop with a pair or better about $43 \%$ of the time. This means we should expect a fold from him about $57 \%$ of the time. So our shove needs to work $15 \%$, we expect it to work about $57 \%$, and thus we make a really nice profit everytime we shove here. Even if give villain a tighter range of $T+/ A Q+$ when he calls preflop, he is still missing the flop about $50 \%$ of the time. This often times seems very counter intuitive to players, to just shove AK without a pair, but as we see with FE and a small SPR, it can be a very lucrative play.

- There is 1 SPR. Say there is $\$ 10.75$ left in the effective stack. If we run the same numbers through a FE calculator (expecting $24 \%$ equity if we get called), we see we need a fold $22 \%$ of the time breakeven. Assuming that our opponent's range is about the same when he calls us preflop, we are still showing a really nice profit by making this shove. Even against the tighter $\Pi+$ / $A Q+$ range we are still happy with our shove. The big thing to remember is that unpaired boardway combos $(A Q, A K, K Q$, etc.) make up so many extra combos than pair ranges (both pocket pairs and also pairs that hit the flop due to discounting). So at 1 SPR, we should shove this flop and enjoy the profit that comes with it.
- There is $\mathbf{1 . 5}$ SPR. Say there is $\$ 16$ left in the effective stack. If we run the same numbers through a FE calculator (expecting 24\% equity if we get called), we see we need a fold $35 \%$ of the time to breakeven. This still isn't terrible. Even against the tight range we still have some profitable buffer in the shove, and we are still happy with our buffer against the wider 88+/AJ+/KQ range. But we notice a massive jump in necessary folds from the 1 SPR pot. This begs the question "could we have created a smaller SPR pot preflop to make this ship a bit more profitable?" Had we 3-bet a pinch larger PF, say to $\$ 6.25$, it would have created a smaller SPR pot on the flop that would make for a more profitable shove. If we could create that same SPR, while not changing his C-Range versus the 3-bet, we should consider doing so. But if by creating that smaller SPR we change the hands he calls with, and thus the way he hits the flop, we could be doing ourselves a major disservice.
- There is $\mathbf{2}$ SPR. Say there is $\$ 22$ left in the effective stack. If we run the same numbers through a FE calculator (expecting 24\% equity if we get called), we see we need a fold $45 \%$ of the time to breakeven. This is just barely profitable against the tighter range of $\Pi T+/ A Q+$, and doesn't offer a lot of buffer even against the looser range. Creating a 2 SPR pot with hands like AK, that will either miss often, or TT, that will face a lot of overcard boards, is usually something we would want to avoid. And again, this brings us back to preflop. Could we have created a better SPR?

Could we have 3-bet bigger, while maintaining favorable ranges, and made a smaller SPR? Or, could we have 3-bet smaller and created a larger SPR that allows us more flexibility? Again, these small SPR pots are very visible from PF, so we need to be thinking about them as soon as we think about our 3-bet size (or if we even want to 3-bet). This SPR work, with FE and such, is something we want to do off the table, so that it is automatically internalized when we play these situations in real-time.

Also, this spot never comes up the other way around. We would never open raise, face a 3-bet, and then flat with AK in a pot with this kind of SPR. We would either 4-bet preflop, or fold if we thought the 3-bet range was really that strong. The same thing usually with a hand like $\Pi$, or AQ. When facing a 3-bet preflop we decide right then and there if we are happy with our hand (and commit), or not happy with our hand (and fold) when small SPR pots are threatened.

## - The SDV situation

When we have a strong hand that turns into SDV, it can create an awkward spot in a small SPR pot. While we might consider a hand like AQ on an A98 flop SDV with a deeper SPR, we would consider that value in shallow SPR pots. So this section will focus on things like KK on an A high board, or QQon a Khigh board. These awkward spots happen at higher frequencies as our pair gets smaller and smaller preflop.

Let's look at an example. Say the button opens, we 3-bet QQ, and he calls. The flop comes A86. Let's break this down by SPR:

- Less than 1 SPR. At this SPR we should probably just shove. Even though we usually only have 2 outs when we are called, we do get called by second best hands on occasion. Villains will sometimes call things like JJ or 99, and of course we never expect him to fold hands like AK or 88 . We only need him to fold about $1 / 4$ of the time for a purely breakeven shove, and usually when we get involved in a spot like this with QQwe expect him to be making mistakes with pieces of his range. We are never folding this spot anyway, and checking can create many awkward and possibly -EV situations. Checking to let him shove isn't a terrible option, but often times they make a mistake to the shove here, and shoving keeps us from facing very odd turn decisions.
- 1 SPR. At this SPR we should consider check/feeling. Now, a big goal of mine when I started writing this book was to avoid saying things like "check/soul-read" or "check/feel." However, this is one of those odd situations that necessitate it. We need to feel how quickly our opponent bets, the size of it, and put together a plan. There are times against bad opponents that we just check/raise with value in mind. There are times against certain opponents when we just check/fold because the board smashes his calling range and he wouldn't bet as a bluff. If we defaulted on check/shoving against bad players and check/ folding against tight players we would do just fine here. Again, there is no "always right" answer here because the situation is so dependent on feel and our opponent.
- 1.5+ SPR. At this SPR we should be doing a lot of check/ feeling. A bet would just allow our opponent to play too closely to perfect, and always check/raising or check/folding would be too exploitable. Again, we need to feel out our opponent's timing, sizing, and put it all together with his range and betting tendencies with different hand strengths. At this SPR we are forced to play poker, and again, to think about whether we could have created a different SPR preflop. Usually, as a good player, we prefer to either size (assuming it doesn't tweak our opponent's range unfavorably) so we create automatic decisions (small SPR) or maneuverability (deeper SPR). Also, at something like 1.5 SPR we usually want to avoid check/call the flop then check/fold the turn. It isn't to say that the line is never valid, but usually check/call with intentions of stacking off later is better than check/call with intentions of folding later.

Again, this is one of the tougher spots that comes up in our postflop game. Often times it is avoidable preflop, either by sizing our betting or choosing a different line (like flatting rather than 3-betting and creating a tough SPR against a tough range of hands). Just make sure to think about FE, their range PF and postflop, the board texture, and the validity of each line. Over time these situations get easier. Just make sure that we do a lot of the math work off the table, so that when we face this situation it is simple, profitable, and automatic.

## The Resteal Pot

Playing resteal pots can be tricky because we use such a funky range at times. This section will focus mostly on the times that we restole and were called. We don't do a lot of flat calling versus resteals in our game, so it isn't a situation that arises very often. Players tend to be too extreme in these pots. They either CB them too liberally, or they CB them too rarely. Our goal is to explore some situations and talk about what makes a good play in these pots.

In this first hand we have 85 s in the BB. It folds to the button who opens to 3 x , the SB folds, and we 3-bet to 10 x . The button is a $15 / 13$ with an ATS of $36 \%$ and Foldv3b of $70 \%$. He ends up calling and we see a HU flop of K75 with 20.5x in the pot. We have our two choices as usual, we can check or bet. Let's explore both of them:

- Check. We check because we are thinking that he won't fold to a CB very often. We are effectively giving up, as going for a c/c here with bottom pair is usually a pretty bad play. If we think he either hits the flop too much, will float too liberally, or will raise us too often, then checking is very valid. Like we've mentioned before, when we bluff we want to take potshot bluffs. When postflop goes badly (either a bad villain, bad board, etc.) we can just consider the 3-bet to be the potshot, and can cut our loss at that. But something to consider is that 3-betting preflop OOP with not many ways to win the pot (either outright PF, with a CB, etc.) can be a very losing endeavor with these weak hands.
- Bet. By betting we are assuming that we are going to be able to pick up the pot right now. We assume that he missed the flop enough, won't fight us often, and will push the fold button. We did catch a pair, but our pair is so low and weak that it doesn't really change our decision at all. If we look at a calling range of say $66-\mathrm{JJ}, \mathrm{AJ}-\mathrm{AQ}, \mathrm{KJ}-\mathrm{KQ}$, we see he hit the flop about $56 \%$ of the time. Even if he floats every pair $88+$, we still make a fair amount of profit with a $1 / 2$ pot bet. If he calls, we can make a decision on the turn, usually just giving up (again, we like to take potshot bluffs). Another barrel here would often times be risking about $1 / 2$ of our stack to run a very exposed and uncertain bluff.


Figure 30: Flopzilla Analysis

The big factors swaying our decision are our opponent and his range, board texture, how his range hit that board, his likelihood of fighting us (floating or raising), etc. Another thing to consider is what we represent. Now, we only need to care about what we represent against players that can and do hand read. Against a straight forward and/or bad player it doesn't matter. But against a good player who can hand read well, we can't CB all of our bluffs here and check all of our AK type hands. Our CB range would be too weighted towards bluffs, and he would outplay us every time, especially with position.

The simple way to combat a good player is to either change our 3-bet range or change our CB range. Changing our 3-bet range and making it a pinch stronger preflop is never going to be a massive leak. Especially if our opponent thinks that we 3-bet very liberally (maybe by checking his HUD stats on us), when we decide to only use a strong range against him from OOP, we make our life a lot more profitable. We can handle his 4-betting, avoid tougher spots, and allow ourselves to hit stronger postflop. Again, think about what we represent while making these plays. If we are super polarized in our CB range here, then any good opponent is going to punish us for it. However, we can remain polarized against bad hand readers and just play straight forward.

Let's look at another example. Say the CO opens to $2.5 x$ and we 3-bet KK from the SB to 9x. The CO calls and we see a HU flop. Say the CO is an A-Fish running 29/17 with an ATS of 55\% over 60 hands. The flop comes J86. Let's look at our options:

- Check. If we think checking would induce a ton of bets from our opponent, then checking is certainly a good option. There are times when we could go for a check/call, or even check/raise, if we knew how our opponent would react to it. As a default, checking is probably not going to be best given the propensity for players to peel with position.
- Bet. Betting is the default option here. Our opponent just called our 3-bet and probably has a relatively wide range considering he is on the fishier side of the spectrum. Now, we don't have a massive sample size on him, and we probably don't have a ton of information on how he handles these 3 -bet pots. But, we do have a strong hand, lots of second best hands can and will call, and we can handle a raise sometimes. Betting something like $1 / 2$ of a pot-sized bet (PSB) to $2 / 3$ 's of a PSB is the standard and very valuable in situations like these.

If we had something like JT (though we normally wouldn't considering the opponent), we could easily consider checking. We have a SDV hand and are very interested in winning the minimax game. But when we have a stronger pair like KK here, it starts to look more like a value hand, especially as our opponent gets fishier and fishier. It should
also be noted that just because we bet the flop with KK doesn't mean we abandon all hand reading skills go for a "bet/bet/shove" line every time. We still need to keep in mind pot size thresholds, and ensure that we are creating a pot size that our opponent will continue with enough second best hands to make it worthwhile.

Let's look at one last example here. Say the button is a TAG with a $32 \%$ ATS and $80 \%$ Foldv3-bet. He steals, we 3-bet J6s from the SB and he calls. We assign him a range of $88+/ \mathrm{AQ}+/ \mathrm{KQ}$. Let's look at a few different flop types to see how often he hits:


Statistics

| $\checkmark>=$ quads | 0\% |
| :---: | :---: |
| $\checkmark$ full house | 0\% |
| $\checkmark$ flush | 0\% |
| $\checkmark$ straight | 0\% |
| $\checkmark 3$ of a kind | 12.9\% |
| $\checkmark$ two pair | 0\% |
| $\checkmark$ overpair | 0\% |
| $\checkmark$ top pair | 34.3\% |
| $\checkmark$ pp below tp | 30.0\% |
| middle pair | 0\% |
| weak pair | 0\% |
| ace high | 0\% |
| nothing | 22.9\% |
| flushdraw | 4.29\% |
| OESD | 0\% |
| gutshot | 0\% |
| overcards | 0\% |
| flushdrawn+pair | 2.86\% |
| OESD+flushdr. | 0\% |
| gutsh.+flushdr. | 0\% |
| OESD+pair | 0\% |
| gutshot+pair | 0\% |
| gutshot+overc. | 0\% |

Range hat hit $77.1 \%$ of the time

Dead cards


Clear

Figure 31: $\mathbf{8 8}+/ A Q+/ K Q+$ on $A 98$

| Hints Off | No-limit |  |  | Starting hands |  |  |  |  |  |  |  | No weight 1 |  |  |  |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA | ${ }^{\text {aKs }}$ | AQs | AJs | ATs |  | 19 s | Ass | A7s | A6s | A5s | A 4 | As A3s | 35 A | A2s | 50\% | Ah | Ac Ad | As |
|  | АКс | kK | $\mathrm{KQs}^{\text {S }}$ | KJs | KTs |  | ks K | K8s | K7s | K6s | K5s | K4 | 4s K3s | 3 K | K2s | $\bigcirc$ | Kh | Kd | Ks |
|  | AOc | KOc | QQ | QIs | QTs |  | Q9s | Q8s | Q7s | Q6s | Q5s | Q4s | 4s Q3s. | 3 S Q | Q2s |  | Qh | Qc Qd | A |
|  | ${ }^{\text {AJo }}$ | Kıo | OJo | II | JTs |  | 9s | J8s | J7s | J6s | 15 s | J4s | $\mathrm{s}^{\text {J3s }}$ | 13 s | 12 s |  | Jh | Jc Id |  |
|  | ATo | Kтo | QTo | ग\% | TT |  | 198 1 | T8s | T7s | T6s | T5s | T4s | $\mathrm{s}^{\text {T3s }}$ | 3s T | T2s |  |  |  |  |
|  |  |  |  |  |  |  |  | 8s | \% | dos | 13s |  |  |  |  |  | Th | Tc Td | Ts |
|  | A90 | K90 | Q90 | 190 | 19 |  | 99 | 985 | 97. | 968 | 958 | 945 | 9 93s | S |  | 9 | 9 h | 9 cc 9 d | 95 |
|  | A80 | K80 | Q80 | 180 | T80 |  | so | 88 | 875 | 865 | 855 | 845 | S 835 |  | 82 |  | 8 sh | $8 \mathrm{cc} 8 \mathrm{8d}$ | 85 |
|  | A70 | K70 | Q70 | 570 | T70 |  | 708 | 870 | 77 | 76 s | 75 s | 74 s | s 73s | 357 | 72 |  |  | 7 cc 7 |  |
|  | A60 | K60 | Q60 | 160 | T60 |  | 968 | 860 | 760 | 66 | 65 s | 645 | s 63s | 356 | 62 |  |  |  |  |
|  | A50 | K50 | Q50 | 150 | T50 |  | 50 | 850 | 750 | 650 | 55 | 54 s | s 53s |  | 52 s | - | 6 h | 6061 | 68 |
|  | A40 |  | O40 | 140 |  |  |  |  |  | 640 | 540 | 44 |  |  | 52 s |  | 5 h | $5 \mathrm{5c}$ 5d | 55 |
|  | A40 |  | Q40 | 140 | T40 |  | 408 | 840 | 740 | 640 | 540 | 44 |  |  | 42 s |  | 4 h | 4c) 4 d | 45 |
|  | A30 | K30 | Q30 | 130 | T30 |  | 308 | 830 | 730 | 630 | 530 | 430 | - 33 | 3 | ${ }^{325}$ |  | 3h | 3c 3d |  |
|  | A20 | K20 | Q20 | 120 | T20 |  | 208 | 820 | 720 | 620 | 520 | 420 | 320 | 32 | 22 |  |  |  |  |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6.79\% |  | $2 \mathrm{c} 2 \mathrm{2d}$ |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| switch |  | All |  | Pock | cket |  |  | adw |  |  | uited |  |  | Clear |  |  |  | Random |  |



Figure 32: $\mathbf{8 8 +} / \mathbf{A Q}+/ \mathbf{K Q}+$ on $\mathbf{K T 7}$

| Hints Off | Nolimit |  |  | Starting hands |  |  |  |  |  |  |  | No weight |  |  |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | AJs |  |  |  |  |  | Ags | A5s |  | s A3s |  | 50\% | Ah | Ac Ad | As |
|  | AK. | кK K | KQS | KJs | KTs | K9s | K88 |  | K7s K | K6s | K5s |  | ks K3s | K2s |  | Kh | Kc Kd | Ks |
|  |  | KQc | QQ | Qs | QTs | Q9s | Q85 |  | 27s | Q6s | Q5s |  | , Q3s | Q2s |  | Qh | Qc) Qd | Qs |
|  | Alo | Kıo | Ojo | J | ITs | 19s | 185 | J J7s | 7 s | J6s | 155 | J4s | ${ }^{\text {J3s }}$ | 12 s |  | Jh | Jc Jd |  |
|  | ATo K | ктo | QTo | JTo | TT | T9s | T8s | T3s T7s | 75 T | T6s | T5s | T4s | T3s | T2s |  |  | Tc |  |
|  | A90 K | K90 | Q90 | 190 | т9 | 99 | 985 | Ss 975 | 759 | 968 | 95s | 945 | s 93s | 92 s | 9 |  |  |  |
|  | A80 K | K80 $\mathrm{Q}^{2}$ | Q80 | 180 | T80 | 980 | 88 | 875 | 37 s 8 | 865 | 85s | 845 | 83s | 825 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | 76 | 75s |  |  |  |  | 8 h | 8 c 8d | ss |
|  | A70 | K70 | Q70 | 170 | T\%o | 970 | 870 | - 71 |  | 76 s | 755 | 748 | S 738 |  |  | 7 h | 7678 | 75 |
|  | A60 K | K60 | Q60 | 160 | T60 | 960 | 860 |  | 606 | 66 | 65 s | 648 | 63s | 62 s |  | 6 h | 6c 6d | 65 |
|  | A50 K | K50 | Q50 | 150 | T50 | 950 | 850 |  | 50 6 | 650 | 55 | 548 | 53s | 52 s |  |  |  |  |
|  | A40 K |  | Q40 | 140 | T40 | 940 | 840 |  | 406 | 640 | 540 | 44 | 43s | 42 s |  |  | $5 \mathrm{c} 5 \mathrm{5d}$ | 55 |
|  | A30 |  | Q30 | 130 | T30 | 930 | 830 |  |  | 640 | 530 | 43 | 435 | 425 |  | 4 h | 4 c 4 dd | 45 |
|  | A30 |  | Q30 | 130 | T30 | 930 | 830 |  |  | 630 | 530 | 430 | ${ }^{3} 3$ | 325 |  | 3h | 3 c 3d |  |
|  | A20 | K20 | Q20 | 120 | T20 | 920 | 820 | - 720 | 206 | 620 | 520 | 420 | 320 | 22 |  |  |  |  |
| Store | $9.79 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 c |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  |  | ket |  | dw | dv |  |  |  |  |  | ear |  |  | Random |  |

Statistics

| $\checkmark>=$ quads | 0\% |
| :---: | :---: |
| $\checkmark$ full house | 0\% |
| $\checkmark$ flush | 0\% |
| $\checkmark$ straight | 0\% |
| $\checkmark 3$ of a kind | 3.95\% |
| $\checkmark$ two pair | 0\% |
| $\checkmark$ overpair | 15.8\% |
| $\checkmark$ top pair | 31.6\% |
| $\checkmark \mathrm{pp}$ below tp | 27.6\% |
| middle pair | 0\% |
| weak pair | 0\% |
| ace high | 21.1\% |
| nothing | 0\% |
| flushdraw | 3.95\% |
| OESD | 0\% |
| gutshot | 0\% |
| overcards | 21.1\% |
| flushdrawn+pair | \| $2.63 \%$ |
| OESD+flushdr. | 0\% |
| gutsh.+flushdr. | 0\% |
| OESD+pair | 0\% |
| gutshot+pair | 0\% |
| gutshot+overc. | 0\% |

Range hat hit $78.9 \%$ of the time

Dead cards


| Hints Off | Nolin |  |  |  | Star | arti | ting | g h | han | nd |  |  |  | Weic | ight |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ${ }^{\text {AKs }}$ | $\mathrm{AQS}^{\text {che }}$ | AJs | ATs | TS A9 | 19 s A | A8s | A7s | A6s | A5 |  |  | A3s |  | 50\% | Ah | Ac Ad | As |
|  | AK | кк | KQs | KJs | KTs | Ts K9 | K9s K | K8s | K7s | K6s | K5 |  | K4s K | K3s | K2s |  | Kh | Kc Kd | Ks |
|  | AOc | KQc | QQ | QIs | QTs | Ts Q9 | 29s Q | Q8s | Q7s | Q6s | Q5 |  | 24s Q | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | Alo | Kıo | O10 | IJ | JTs | Is ${ }^{\text {I9 }}$ | 198 J8 | J8s | J7s | J6s | 155 |  | 14 s J | 13s | 12 s |  | Jh | Jc dd |  |
|  | ATo K | KTo | QTo | गто | TT | T9 | T9s Ts | T8s | T7s | T6s | T5s |  | T4s T | T3s | T2s |  | Th | Tc |  |
|  | A90 | K90 | Q90 | 190 | T9 | 99 | 99 | 985 | 97s | 96 | 95 |  | 94s 938 | 93s | 925 | 9 | 1 |  | 95 |
|  |  |  |  |  |  |  |  |  |  | 865 |  |  |  | 835 |  |  | 91 | 9 c 9 d | 95 |
|  | A80 | K80 | Q80 | 180 | T80 | So 980 | 80 | 88 | 875 | 865 | 858 |  | 84s 8 | 835 | 825 |  | 8 sh | 8 cc 8 sd | 85 |
|  | A70 | K70 | Q70 | 570 | T70 | 70970 | 970 87 | 870 | 77 | 76 s | 758 |  | 748 | 73 s | 725 |  | 7h | $76)$ | 7 s |
|  | A60 | K60 | Q60 | 160 | T60 | 60 960 | 600 86 | 860 | 760 | 66 | 65s |  | 64 s 6 | 63 s | ${ }^{625}$ |  | 6 h | 6061 | 68 |
|  | A50 | K50 | Q50 | 150 | T50 | 50950 | 950 85 | 850 | 750 | 650 | 55 |  | 54 s | 53 s | 52 s |  | 6 | 60 | 68 |
|  | A40 | K40 | Q40 | 140 | T40 | 40 940 | 40840 | 840 | 740 | 640 | 540 |  | 4443 | 43 s | 42s |  | 5 L | 5 c 5 | 55 |
|  | A40 | K40 | Q40 | 140 | 140 | (30 940 | 4084 | 840 | 740 | 640 | 530 |  | 44 | 435 | 425 |  | $4 \mathrm{4b}$ | 4c) 4 d |  |
|  | A30 | K30 | Q30 | 130 | T30 | 30 930 | 33083 | 830 | ${ }^{730}$ | 630 | 530 |  | 430 | 33 | 32 s |  | 3 h | 3c 3d | 38 |
|  | A20 | K20 | Q20 | 120 | T20 | 20920 | 2082 | 820 | 720 | 620 | 520 |  | 12032 | 320 | 22 |  |  |  |  |
| Store | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6.79\% |  |  | 28 |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  |  | cket |  |  | ad |  |  | ed |  |  | Clea | ar |  |  | Random |  |



Figure 34: $\mathbf{P 8 8}+/ A Q+/ K Q+$ on $\mathbf{J 8 4}$

| Hints 0 | Novimit |  |  | tartin | ng h | han | nds |  | Now |  |  | Flop |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | An AK | ${ }^{\mathrm{KKs}}$ AOS | Als | ATs A9s | Ass A | A7s Acs | A6s A5 | ${ }^{155}$ Ats | 45 A3s |  |  |  | Ac |  |  |
|  | KR | KK, KOS | KJs | KTs K9s | Kss K | K7s Kes | K6s K5 | ${ }^{55 s}$ K4s | ${ }^{4 s} \mathrm{~K} 3 \mathrm{~s}$ |  |  | Kn | Kc |  |  |
|  | Ko | ne eo | Ofs | QTs Q9s | Soss Q | Q7s Q $\mathrm{Q}^{\text {cos }}$ | Q6s Q5 | C5s $\mathrm{Q}^{4}$ | ${ }^{\text {4s }}$ Q 3s |  |  | Qh | Q 0 |  | Qs |
|  | ${ }^{\text {AJO }} \mathrm{KJ}$ | KJo Ojo | II |  | I8s 5 | J7s J60 | $\mathrm{I}_{65} 158$ | ${ }_{5 s}{ }^{\text {H/s }}$ | ${ }_{\text {4s }} \mathrm{Jss}$ |  |  | Jih | 1 J |  |  |
|  | Ато кт | кто ето | [To | TT ${ }^{\text {Tos }}$ | Tss T | T7s Tes | T6s Tss | ${ }^{55}$ T4s | ${ }_{45}$ T3s |  |  |  |  |  |  |
|  | A90 K9 | k90 090 | 150 | T9 9 | 98s 9 | 97896 | 965958 | 55 945 | ${ }^{45} 998$ |  | 9 |  |  |  |  |
|  | A80 K88 | K80 Q8o | 180 | T80 980 | ${ }^{88} 8$ | ${ }_{875}^{86}$ | 86585 | -55 845 | 45 83s |  |  |  | 9 |  |  |
|  |  | K70 Q70 |  | 170970 | ¢870 7 | 7776 | $765^{758}$ | ${ }^{55} 745$ | 74 73s |  |  | 8 sh | 8 c | 8 |  |
|  |  |  | 160 | 160960 | \% 860 | 7606 | ${ }_{66} 658$ | ${ }_{\text {cos }}^{55} 645$ |  |  |  | 76 | T0 | T | 78 |
|  |  | K00 60 | 160 | 100960 | \% | 250 | 60 65 | 5056 6 |  |  |  | 6 | 6 | 6 | 6 |
|  |  | K50 Q50 | 150 | T50 950 | \% 850 | ${ }^{750} 65$ | 65055 | 55.545 | ${ }^{45} 5{ }^{538}$ |  |  | 5 | 5 | 5 | sors |
|  | ${ }^{\text {A40 }} \mathrm{K}$ | K40 Q40 | 140 | T40 940 | ${ }^{\circ} 880$ | 740640 | 640540 | 404 | ${ }^{44} 438$ |  |  | 4 4 | 4 4 | $4 \mathrm{4d}$ |  |
|  |  | K30 Q30 | ${ }^{130}$ | T30 930 | 50, 830 | ${ }^{730} 66$ | 6350530 | 30 430 | ${ }^{430} 33$ |  |  |  |  |  |  |
|  | A20 K20 | K20 Q20 | 120 | T20 920 | 82827 | 7206 | 620520 | 20.420 | 120320 |  |  |  |  |  |  |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Delite | O |  |  |  |  |  |  |  |  |  |  |  |  | ear |  |
| switch |  |  | cke | ket | Broadwa | va | ited |  |  |  |  |  | Rand | dom |  |



Figure 35: $\mathbf{8 8}+/ A Q+/ K Q+$ on $\mathbf{T 3 3}$


Figure 36: 88+/AQ+/KQ+ on 975

Notice that because his range has such a large number of broadway combos he hits Axx, Kxx, and Qxx flops at a high frequency. However, if we look at a board like a Jxx or Txx we see that he misses them more than half of the time, making for a possibly profitable CB. But remember that just because he "missed" the flop doesn't necessarily mean he will fold to a CB , especially IP. If we think he plays straight forward, then a simple Flopzilla analysis can lean us towards or away from a CB. But if we think he peels at higher frequencies, or bluff raises flops a decent amount of the time, then we should usually just consider our 3-bet the potshot, and not waste our time with bluff CBing.

## The Tricky 3-Bet Pot

There are times when we get a little tricky preflop and flat a 3-bet with something like AA or KK in an effort to keep our opponent's range wide and mistake-rich. However, these postflop spots can get awkward very quickly given the reverse parlay that often times comes up. Let's look at an example where we open AA from EP, a LAG 3-bets from the button with a $6 \%$-bet, and we decide to flat call. The flop comes T $\$ 3 *$, we check, and he bets. If we look at our options:

- Fold. We called PF to allow our opponent to make mistakes. We are not folding yet.
- Call. This is an OK option, but how are we going to play the rest of the hand out? Are we going to $c / c$ the turn again? Are we going to CR the turn? Are we expecting him to bet the turn or check behind a lot? Often times calling is the best play here (we played our hand passive preflop so we would let our opponent make aggressive mistakes). But calling puts us in a really bad reverse parlay, especially if our opponent would play the turn very well. We put ourselves in a spot where we can always get out maximized, while he can almost always minimize his losers. This is the type of situation we want to avoid whenever possible, so the call against a good player can be fairly bad for us.
- Raise. Going for the CR against a good player effectively allows him to play perfectly. He will stack off well, fold well when behind, and rarely makes mistakes. If we are against a bad player who stacks off poorly, then a CR can be a great play here. But against better players, it just allows them to play perfectly and, again, puts us on the bad side of the reverse parlay.

So being that no option is great, does that mean that we don't want to sometimes play tricky and flat a hand like AA PF to a 3-bet? Not really. It just means that we need to be selective and aware of the kind of opponent we are doing it against. Against a good postflop player, flatting preflop just won't accomplish all that much. If he keeps folding to our 4-bet PF, we should consider 4-betting that situation as a bluff as well. But against a bad postflop player who would overvalue single pairs and/or bluff a lot when they face weakness, a flat preflop can be awesome with the intentions of usually check/calling down. Or, if we know that they will overvalue pairs like QQon 9 high boards, then we can go for the CR on the flop to get stacks in. Our plan of either check/ calling down or going for a CR somewhere is dependent on what range we put them on and how we think they would play that range. If their range is bluffy, then let them bluff. If their range is TT-QQ type hands, then go for CRs on boards they would stack that range off on.

My big suggestion would be that if you are confused whether or not to call or 4-bet that situation preflop, lean on the side of 4-betting. Players, especially in the micros, tend to make more mistakes versus the 4-bet on average, so abuse it. Save the tricky flat call for situations that are against perfect opponents in perfect spots.

## The AK 3-Bet Pot

Playing AK in a 3 -bet pot can be relatively difficult. We will miss the flop about $2 / 3$ of the time, and even when we hit that other $1 / 3$, it can still make for some awkward situations. Let's look at both situations.

Hitting with AK usually creates a WAWB situation. Let's look at a spot where MP1 open raises, we 3-bet AK from the CO, he calls and we go HU to an AT7 flop. If we give our opponent a range of $99+/ A Q+$ we see this:

- Against $99 / \mathrm{JJ} / \mathrm{QQ} / \mathrm{KK} / \mathrm{AQ}$. We are way ahead. Our opponent is drawing to 2-3 outs, and we are crushing this part of his range.
- Against TГ/AA. We are way behind. We pretty much are drawing dead and are getting crushed by this part of his range.
- Against AK. We chop.

If we pull out Flopzilla we see he has $\mathrm{T} / \mathrm{AA}$ part of his range about $10 \%$ of the time, and has the part of the range that we crush or chop against the other $90 \%$.


Statistics

| $\checkmark>=$ quads | 0\% |
| :---: | :---: |
| $\checkmark$ full house | 0\% |
| $\checkmark$ flush | 0\% |
| $\checkmark$ straight | 0\% |
| $\checkmark 3$ of a kind | 10.3\% |
| $\checkmark$ two pair | 0\% |
| $\checkmark$ overpair | 0\% |
| $\checkmark$ top pair | 35.9\% |
| pp below tp | 38.5\% |
| middle pair | 0\% |
| weak pair | 15.4\% |
| ace high | 0\% |
| nothing | 0\% |
| flushdraw | 0\% |
| OESD | 0\% |
| gutshot | 0\% |
| overcards | 0\% |
| flushdrawn+pair | 0\% |
| OESD+flushdr. | 0\% |
| gutsh.+flushdr. | 0\% |
| OESD+pair | 0\% |
| gutshot+pair | 0\% |
| gutshot+overc. | 0\% |

Range hat hit 46.2\% of the time

Dead cards


Figure 37: 99+/AQ+ on AT7

Let's say he checks to us and we think about our actions here:

- Bet. Most people instinctively go to bet here. We caught a strong hand, and our first thought with a strong hand is to fire a bet out there. But, what happens if we bet? He probably folds most of the range that we crush (the 99/QQ) part of the range. He never folds the part of the range that crushes us (TT/AA). So a bet really only gets action from better hands, hardly ever action from worse, and allows our opponent to play pretty close to perfect.
- Check. A check can be a great idea, especially when the bet doesn't accomplish anything. The check can allow our opponent to turn hands into bluffs on the turn, feel comfortable and call our turn bet, and minimize loss when we are crushed by the top side of his range. Of course, if our opponent would call things like 99 or JJ to the CB, then we can go for a bet here, but usually a check is a very valid option. It keeps the pot size smaller and more manageable, creates a mistake-rich environment, and avoids the always awkward flop CR (when we are uncertain on how to optimally handle it).

So checking is a very good play here. We allow our opponent to make mistakes and also minimize our own loss when we are behind (also remember that players tend to make many more mistakes in smaller pots than larger pots). When these spots come up in 3-bet pots we really need to ensure that our bets and checks are solid. Making mistakes in 3-bet pots can destroy our WR. If we always ask ourselves what our bets accomplish we can keep ourselves out of trouble. Just bet for value when lots of second best hands are continuing, and check when a bet doesn't accomplish much and a check creates a mistake-rich environment.

Whiffing with AK is always a soul-crushing experience. For one, it happens about $2 / 3$ of the time. And two, given the boards that come with missing AK, it can be hard to make enough bluffs. Let's take the same example as before where we 3-bet AK from the button and their Callv3bet range is $99+/ \mathrm{AQ}+$. But this time, let's say the flop is Th9d5h. He checks and it is our option. Let's check his range:

| Hints Off | Nolim |  |  |  | Star | tin | ng | h | han | nd |  |  | Nowe | ight |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\mathrm{AQs}^{\text {A }}$ | AJs | ATs |  |  |  | A7s | A6s |  | A4s | s A3s |  | 50\% | Ah | Ac Ad | As |
|  | AKc K |  | KQs | KJs | KTs | K9s | K8 |  | K7s | K6s | K5s | K4s | ¢ K3s | K2s |  | Kh | Kc Kd | Ks |
|  | AQc K |  | QQ | ols | QTs | Q9s | Q8 |  | Q7s | Q6s | Q5s | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | Alo K | Kıo | O10 | J | $\mathrm{jTs}^{\text {d }}$ | J9s | 185 |  | 17s | J6s | 15 s | 14s | $\mathrm{J}_{3}$ | 12 s |  | Jh | Jc J | Is |
|  | ATo K | ктo | QTo 1 | JTo | TT | T9s | T8 |  | 17 s | T6s | T5s | T4s | T3s | T2s |  |  | Tc |  |
|  | A90 K | K90 | Q90 | 190 | T9 | 99 | 985 |  | 975 | 968 | 95s | 94s | S 938 | 92 s | 9 | 9 h | ${ }^{5}$ |  |
|  | A80 K | K80 | Q80 | 180 | T80 | 980 | 88 |  | 875 | 865 | 85s | 845 | 838 | 82 s |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8 sh | 8 cc 8 d | 85 |
|  | A70 K |  | Q70 | J70 | 17\% | 970 | 870 |  | 71 | 768 | 758 | 748 | f 738 |  |  | 7 h | $7 \mathrm{c} 7 \mathrm{7d}$ | 7 7 |
|  | A60 K | K60 | Q60 | 160 | T60 | 960 | 860 |  | 760 | 66 | 65s | 645 | ¢ 638 | 62 s |  | 6 h | 6c 6d | 68 |
|  | A50 K | K50 | Q50 | 150 | T50 | 950 | 850 |  | 750 | 650 | 55 | 54s | 538 | 52 s |  |  |  |  |
|  | A40 K | K40 | Q40 | 140 | T40 | 940 | 840 |  | 740 | 640 | 540 | 44 | 43s | 42 s |  |  | 5 5 5 |  |
|  | A30 K | K30 | Q30 | 130 | T30 | 930 | 830 |  | 730 | 630 | 530 | 430 | 33 | 32 s |  | 4 h | $4 \mathrm{4c} 4 \mathrm{4d}$ | 4 s |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 h | 3c 3d | 35 |
|  |  |  |  | 120 | T20 | 920 | 820 |  | 720 | 620 | 520 | 420 | 320 | 22 |  |  |  |  |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5.13\% |  |  |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  | Pock | ket |  | d |  |  |  | uited |  |  | ear |  |  | Random |  |

Statistics

| $\checkmark>=$ quads | 0\% |
| :---: | :---: |
| $\checkmark$ full house | 0\% |
| $\checkmark$ flush | 0\% |
| $\checkmark$ straight | 0\% |
| $\checkmark$ of a kind | 13.3\% |
| $\checkmark$ two pair | 0\% |
| $\checkmark$ overpair | 40.0\% |
| $\checkmark$ top pair | 0\% |
| pp below tp | 0\% |
| middle pair | 0\% |
| weak pair | 0\% |
| ace high | 46.7\% |
| nothing | 0\% |
| flushdraw | 4.44\% |
| OESD | 0\% |
| gutshot | 0\% |
| overcards | 46.7\% |

flushdrawn+pair 0\%
OESD+flushdr. 0\%
gutsh.+flushdr. 0\%
OESD+pair 0\%
gutshot+pair 0\%
gutshot+overc. $0 \%$

Dead cards


Figure 38: 99+/AQ+ on T95

- Against 99+. This hits about 53\% of the time (by either hitting sets or over pairs). We don't really expect players to fold any of this range. Most players don't call preflop with a hand like JJ just to fold to a low flop.
- Against AQ+. This misses about $47 \%$ of the time. We can probably expect most of this range to fold to a $C B$.

If we think that our opponent will fold the range that misses, bluff super rarely, and only continue with $99+$, then a $1 / 2$ PSB is profitable. Because we just have AK unimproved, and we have no real hand, all we care about is getting folds enough of the time show a profit with a CB. Of course, we do have some equity if we get called, but if we can make profitable potshot stabs at these boards, we should take them if our opponent plays fit-or-fold and misses enough of the time.

However, let's say our opponent's range is a bit different when he flats our 3-bet PF. Say he calls with $T \Gamma+$ AK. Now let's check out his range:


Figure 39 (a): $\mathbf{T 1}+/$ AK on $\mathbf{T 9 5}$


Figure 39 (b): TT+/AK on T95 (Results)

- Against $\mathbf{T \Gamma}+$. This hits about $70 \%$ of the time (by either hitting sets or over pairs). Again, we don't really expect this part of the range to fold if we CB .
- Against AK. This misses about 30\% of the time. We can expect this would probably fold to the $C B$.

Now if we make a $1 / 2$ PSB it needs to work at least $33 \%$ of the time to show profit. However, we see that he only folds, assuming no percentage of bluffs, $30 \%$ of the time. This would be a less ideal CB unless he were folding hands like JJ and QQ, or if a double/ triple barrel could show profit. We just don't expect to get enough folds to show a profit here. Part of being a good player is knowing when to cut our losses on our losing hands. Remember our motto in FR is to potshot bluffs and VB well. Sometimes our 3-bet is the potshot, especially when the subsequent $C B$ spot is a bad one. If we think the $C B$ spot is good then we can potshot the CB, but it is really based on his Callv3bet range versus the board texture and the normalcy of his postflop actions. Just because a CB would be good in a black and white sense (he misses enough of the time to show a profit by bluffing) doesn't mean it would be good if he turns missed hands into bluffs. This is where reads come into play.

A few more notes on this spot. First is position. Being IP always makes life easier. We can close action, see how they react, and make more optimal plays. However, OOP there is nothing wrong with checking AK on a K87, same as IP. If a bet wouldn't accomplish anything, then checking and going into a check/call flop feel turn/river is totally acceptable. Of course, we will have to use a bit of hand/action reading in that spot to ensure that we don't put ourselves on the bad side of the minimax game.

Being OOP is actually a little harder when we miss the flop as well. Because players are more likely to peel IP than OOP, a stab with AK can be less valuable because our opponent's C-Range gets wider. So if we 3-bet an MP raise from the SB with AK , go HU , catch a J86 flop, and think a bet wouldn't get enough folds, a check is best. However, if a player plays fit-or-fold still, and misses enough of the time, then going for the potshot CB can be fine. If we are unsure, defaulting on check/folding when we miss from OOP is usually a good idea.

Another note is making the bluff CB with thoughts of the turn. Say we 3-bet a steal with $A K$ from the SB, he calls from the button and we see a HU flop of T43. If we think he calls/peels the flop a lot but would only continue versus a double barrel with an AT+ type hand, then we could consider double barreling here. But in order to do this we need a lot of information:

- His Callv3bet range is wide
- His CallvCB range here is wide
- He only continues versus the TurnCB with small range of hands

The big issue is that we rarely get this information. This situation comes up fairly rarely, and probably comes up even less against us specifically. If we have the information, then we can make a nice profit by double barreling, especially on cards like a Q or J. If we don't, we are risking a lot of money with a lot of uncertainty. Again, whenever we are increasing our exposure with increased uncertainty, we usually want to default of avoiding that play. But if we know the above factors are true, then a double barrel can be a great play as a bluff.

The last note is on turn/river play. Usually when we bet with AK we do so in either a bluff or a SDV type way. We either miss the flop and want folds (aka, bluff) or we hit the flop with TPTK and have SDV/value. Let's look at two spots:

- With 90bb effective, Frank raises from the CO, we 3-bet AK from the button, and Frank calls. Frank calls 3-bets a little wider than most and is a little bluffy postflop. The flop comes K95. He checks and we check
behind. The turn comes a 4 and he bets $2 / 3$ PSB. We call, the river comes a T, and he bets $2 / 3$ PSB again. We call and expect to be good. We took a line that allowed him to make mistakes. We also created a 2 street pot, a pot size that we are usually very comfortable with a TPTK SDV hand. If we lose to TT or QJ, it happens. But more often than not we expect to see something like KQ or 77 show up here. Had Frank checked the turn we could have gone for a bet/bet line (with heavy consideration of folding to a raise). Our flop check effectively "deleted" a street and made for a very simple 2 street hand.
- With 130 bb effective, Charles raises from MP, we 3-bet AK from the SB, and Charles calls. Charles plays relatively fit-or-fold postflop. The flop comes J76. We decide to CB and Charles calls. The turn is an A. While a bet here with something 98 or KQ could be great, betting again with AK doesn't accomplish anything. He folds all the hands that we beat, and never folds a hand that beats us. Because of that, and assuming that we don't need to be balanced here, checking is the best play. So we check, and Charles checks behind. The river is a 4 and we bet for $1 / 3 \mathrm{PSB}$. Charles tanks and calls with QQ. We notice we created the same 2 street pot size with a TPTK SDV type hand, and allowed our opponent to make mistakes. We will talk more about that smaller bet sizing in the turn/river chapters.

This section is very long for a reason. AK makes up a large part of our 3-bet range (even if our 3-bet range is just $\mathrm{QQ}+/ \mathrm{AK}$, AK makes up $\sim 45 \%$ of that range). However, we can also extrapolate from this how to play hands like AQ or KQ when we 3-bet them. Of course, we would always prefer to be IP when we have these kinds of hands, as it should lessen our opponent's peel range when we bluff, and allow us to win the minimax game more easily.

It should also be noted that we don't want to check AK on a Kxx board every single time. Not only will it turn our CB range face up in that situation, it can also lose value. If our opponent would call with worse hands, we should heavily consider betting the flop. If our opponent would make mistakes versus our bet, we should consider betting the flop. If our opponent is a good player who can read well, we want to mix up our betting and checking so we don't become transparent. We need to consider ranges (thinking about how depth can make calling ranges tighter or looser), and make assumptions about our opponent's mistake-propensities given the board texture. Overall, if we just ask ourselves what a bet would accomplish and think about how to create the most mistake-rich environment possible, we make our job much easier.

## The Big Pair In A 3-bet Pot

A lot of our range, especially when 3-betting for value, is comprised of big value pairs. While we are often in a smaller SPR pot, it can still be difficult to play these situations correctly. This section will talk about big pairs both as as overpairs and as second pairs. Playing these spots well is crucial to our WR, as misplaying the top part of our range can brutalize our bottom line.

Let's first talk about playing second pairs, as they are usually the easiest to play assuming that we take a correct line on the flop. Take a hand where MP1 opens to $\$ 3$ and it folds to us with KK. We 3-bet for to \$10, MP1 calls, and we see a HU flop. Let's look at a few different situations:

## - We are OOP on an AXXr flop

Most players curse the heavens when the A hits the flop, but an A is going to flop about $22.5 \% \%$ of the time, so it's not a very rare occurrence. Because this type of situation happens so often, we need to ensure that we are playing it as well as possible. Let's explore our options:

- Bet: A bet effectively turns our hand into a bluff. We would bet the A high flop a large percentage of the time with a bluff in an attempt to solicit folds, but it is a little different when we have an actual strong hand with a lot of SDV. The bet lets our opponent consider folding things like QQ and JJ, and also let's him really exploit his positional edge if he chooses to float us. Betting creates a situation where we allow our opponent to play relatively close to perfect, and generally puts us on the bad side of minimax.
- Check: A check allows our opponent to make mistakes. It allows him to bluff, it allows him to feel more confident with hands like QQ and TT later in the hand, and minimizes our own loss in the hand. If we check, our normal line is to check/call the flop and then check/feel the turn. While most players feel they are turning their hand face up by taking this line with a hand like KK or QQ , we can and should considering taking this line with a hand like AK and Ax as well. If we check and our opponent checks behind, then we can consider betting the turn if we think he would call it with worse pairs enough of the time. If we think they wouldn't make calling mistakes, then we can just try to get to SD and induce a bluff here and there along the way.


## - We are IP on an AXXr flop

Because we have position this spot is much easier. We can close action, get to SD quicker and at prices we tend to dictate, and have more control over the situation as a whole. Like usual, we have two options on the flop:

- Bet. Similar to when we were OOP, the bet usually doesn't accomplish very much. A bet just creates a larger pot size in a pot where our main goal is to keep the pot very controlled. We have a good SDV hand, a bad board, and our goal is usually to keep this pot manageable and smaller in size.
- Check. A check here, again, allows our opponent to make more mistakes than a bet usually would. It lets our opponent consider bluffing the turn, gets us one street closer to SD, and instills more comfort to our opponent's second best hands. If we check behind, our normal plan is to call a turn bet and feel the river out. If we check and he checks to us on the turn, we usually want to consider betting for value and then decide on the river if he would call a second bet with enough second best hands to warrant a bet. If not, we can check behind and be happy with the pot size/situation we've created.

The other side of these situations is when our big pair is an overpair on the flop. Here, the options can be a bit trickier than just defaulting on taking a SDV line. Let's look at a few different hands and see what goes into this type of decision making.

Say there is a raise to $\$ 1.5$ from EP. We 3-bet AA to $\$ 5$ and only the original raiser calls. Here are a few different situations:

## - We are OOP and see a T73r flop

This is a great flop for us if our opponent will only call 3-bets with a range of $T+$. If our opponent is the type to call a 3-bet with a range of $22+/ \mathrm{AK}$ then we are against a set $12.5 \%$ of the time, overpairs $26 \%$, and the rest of the range is junk pairs and whiffed AK. Let's explore our options:



Figure 40: $\boldsymbol{T}+$ on $\boldsymbol{T} 73$

- Bet. Against most players this is a great board to CB. Most players are going to peel hands like $Q Q$ and JJ here very liberally, given the board is safe and whiffed AK. This means there is a lot of direct value in going for a bet. If he calls, we just need to feel out the turn card. If the card is a K and we don't think he would call with worse hands, then we can check to induce bluffs now and/or light calls on the river. If the turn card is a 5 and we think he would call with second best hands again, then we should bet as big as he would call.

Just because we are usually considering betting multiple streets, doesn't necessarily mean we want to get our stack in the middle though. There is a massive difference between a player calling bets in these pots and going for raises. If we do get raised at any point, we just need to ask ourselves if he would ever raise this with hands we beat. For instance, say we bet the flop for $\$ 6$ and he raises us. If we think he would never do this with a bluff, then we should just bet/fold. If we think he is the type of player to overvalue a hand like QQ or JJ here, then we might be more apt to consider stacking it off at some point in the hand. If we are unsure, we should just assume that tight players will rarely bluff in these spots and looser players are more likely to misunderstand SDV.

- Check. Against players who wouldn't peel pairs, for one reason or another, a check can be good to induce bluffs or more liberal calls later in the hand. While players like this are usually fairly rare, it is important that we either take adjusted lines or go for bet/fold lines.


## - We are OOP and see a KT8r flop

This flop is much different. Now there is a big card on board which hits the AK part of his range (assuming that he would have flatted the 3-bet with it), but should scare some of his smaller pairs (QQ/JJ/99/etc.). Due to the texture being much different, our line changes a bit as well.

- Bet. Betting on this board is still a good idea against players that would call with many second best hands often. Because we are OOP, and our opponent is IP, they may increase their calling
frequency which makes betting a good play. So against calling stations we might consider going for a bet here. However, against players that would only continue versus this bet with hands that beat us, a check could easily become the best line.

Say we do bet for $\$ 6.5$ and our opponent calls. Our action on the turn is based on how we feel he would make the most amount of mistakes. If the turn card comes a 3 and we think that he would call another street with weak hands, then we could bet. If it comes a 3 and we think he would make more betting mistakes than calling mistakes, then we might check and induce a bet. Whether we check/raise or check/call after that is based on how we think he would react to it. If he would give favorable action to the CR, then do that. If not, then check/ call and feel out the river. The most awkward spot is when the turn is a big card, like a K or a Q. On these cards, we usually check and induce action rather than bet, as a bet won't usually solicit favorable action. Whether we check/ call on those cards is based on our opponent's bet size, and frequency of bluffing versus VBing on that particular card. Just because it is a 3-bet pot doesn't necessitate that we stack off every time.

- Check. Different broadway boards can drastically alter which actions are best. For instance, as the high card on flop gets lower, it makes betting versus a continuing overpair range more favorable. But as that high card gets higher, especially against players who wouldn't continue versus it with second pair type hands, checking becomes a better option. The check should induce bluffs and lighter calls later, while also minimizing loss when we are behind. Yes, it gives our opponent a free card to improve, but we take the parlay that we make more when he misses than we would lose when he hits.

Say we check and our opponent bets. Our usual action would be to call and then check/feel the turn. If our opponent fires another bet, especially a big one, when it is unlikely that he would ever take that line with a weak hand, then we might consider check/ folding. However, we do need to consider combinations. Because we have AA, it means that at most he would have 6 combos of

AK in his range, and there are 3 combos of each set. So if we think he would value AK heavily, and that AK is in his flatv3-bet range, then it makes check/calling a better play. However, if he would check SDV type hands behind, and only bet that turn with sets or better, then we might check/fold the turn. It is rare that we would be in this situation against such a tight opponent, but it does happen from time to time and ensuring that we win the minimax game here is vital to our success in 3-bet pots with these big pairs.

## - We are IP and see a 983 r flop

When we are IP we get the privilege of flexibility. We can take free cards and really exploit our positional advantage whenever we wish. On low boards we usually have to proceed with caution. While they are usually great boards against players who tend to overvalue second best overpairs, they can get tricky when we face raises. Let's explore our options:

- Bet. Betting is great when our opponent checks to us and would call with many second best hands. These boards are great against players who would call PF with a very tight range of $\Pi+(\sim 3.5 \%)$. These boards allow that range to maintain overpairs, which usually want to peel at least a street on low flops. However, as our opponent's flatv3-bet range starts to include more over cards combos ( $\mathrm{AK}, \mathrm{AQ}, \mathrm{KQ}$, etc.), the less good these boards can be as a lot of his range is folding versus a bet.

Say we do bet for $\$ 6.5$ and he calls. How we play the turn is dependent on our opponent and the turn texture. If the turn is a $K$ and we don't think he would ever call a bet with a second best hand, then we might check behind to induce lighter calls on the river. If we thought he were a calling station who would continue with any pair, then we should bet for value. If the turn came really dry, like a 3, we might bet again if we thought he would continue favorably. If we didn't think he would continue in that pot size without a boat, then we might just check and induce lighter calls on the river. We notice that our decision on the turn/ river is really based on our opponent and how he would tend to continue versus the turn card and his calling frequencies.

- Check. Checking is an option in special spots. Say we thought that he would fold everything but a set here, then we might consider a check. A check does get us one street closer to SD, and might induce some bluffs, lighter bets, or lighter calls later in the hand. Running into players like this is very rare. Most players, if they are going to call a 3-bet, are doing so with a range that they feel is strong and thus would peel this flop. But if we run into the kind of player who is just set mining in this spot, then we might 3-bet him more liberally PF and small CB a lot of flops (assuming that a check wouldn't make us any value in any way later in the hand).


## - We are IP and see a K94 flop

Again, being IP gives us added flexibility, and we should use that to maneuver ourselves profitably to SD. These boards are different because they hit the big card range of our opponent (assuming that he calls those kinds of hands versus a 3-bet, which a Callv3bet larger than 20\% will usually hint at), and brick more of the small pairs. We need to consider combos in these situations. If we have AA, it makes it harder for our opponent to have hands like AK here. If we had KK and our the board came Qxx, it makes it harder for our opponent to have hands like KQ. Let's explore our options:

- Bet. If we think that our opponent is going to call with second best hands here, like TT-QQ, then a bet is going to be great here. He continues with hands like that, AK and KQ if he has them, and gives us lots of direct value. If we thought that he might fold hands like TT-QQ if we bet, then we might consider taking a different line to ensure we get value from that part of his range as well.

Say we bet $\$ 6.5$ and he calls. Our action on the turn is based on how he would react to it and his C-Range on the flop. If he would only call the flop CB with things like AK, then we should just keep betting if he would keep calling it (as most players aren't likely to fold AK in a 3-bet pot once they catch TP). If we thought that he would peel the flop with $\Pi \Gamma-Q Q$ and $A K$, and then peel the turn with it, we should keep betting for value (around $1 / 2 \mathrm{PSB}$ should keep him continuing). If we weren't sure, then checking
behind the turn and inducing bets/calls on the river is usually the default. There is no reason to make a large pot if we don't know if it's good. However, if we know it is good and favorable, then bet as large as he would call.

- Check. Against an opponent who wouldn't continue favorably versus a bet, we could just check here in an effort to induce and minimize loss. A bet, against a player like that, would just turn our hand into a bluff, and would be something we would want to do with JTs, not with AA. If we were to check, our standard line would be to call the turn bet and feel the river. If he checked the turn, then we would bet if we thought he would call favorably, or check again if we think the turn bet wouldn't accomplish anything.

Playing these spots is usually quite easy with regards to range. Most good players rarely flat 3-bets, especially from OOP, so we don't usually have to make these postflop decisions against difficult opponents. We usually get postflop in these spots against players who are setmining in a 3-bet pot, fish who call too liberally against 3-bets IP and OOP, or against players who peel too liberally PF IP. Once we can adequately put our opponent on a range of hands and logical actions with those hands, our line selection is simple. Bet if we think they continue with second best hands, check if we think we might be behind a lot, check if we think our bet doesn't accomplish anything, or check if we think a bet is useless while a check might induce favorable action later in the hand.

## The Squeezed Pot

Squeezed pots usually don't come up all that often, but knowing how to handle them can help the overall profitability of the play. Let's look at two spots that usually come up:

MP1 is a $17 / 15$ with a Foldv3bet of $72 \%$ and opens for $3 x$. The CO is $12 / 10$ and calls the raise. We are on the button with Ad5d and squeeze to 12 x . It folds around and the CO calls. The flop comes off and he checks to us. Let's look at some flops against his logical $22-\mathrm{QQ}$ calling range:


Figure 41: 22-QQ on KT8

| Hints 0 | Nolir | limit |  |  | Star | rtin | ing | g ha | han | nds |  |  | Nowei | eight |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA | AKs | AQs | AJs | ATs | A9s | 9s A8 | A8s A7 | A7s A | Abs | A5s | A4s | A3s |  | 50\% |  | Ac Ad | As |
|  | АКс | KK | KQs | KJs | KTs | K9s | 988 | K85 K7 | K7s K | K6s | K5s | K4s | K3s |  |  | Kh | Kc Kd | Ks |
|  | AQc | KQc | QQ | OIs | QTs | Q9s | Q Q | Q8s Q7 | Q7s Q | Q6s | Q5s | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | Alo | Kıo | Oo | IJ | JTs | J9s | 188 | 85 J7s | 17s Jos | J6s | 15s | J4s | J3s | 12s |  | Jh | Jc |  |
|  | ATo | Кто | QTo | गто | IT | T9s | T88 | 185175 | 17s $\mathrm{T}^{\text {d }}$ | T6s | T5s | T4s | T3s | T2s |  |  |  |  |
|  |  |  |  | 190 | T9 |  |  | 885 975 | 97 s 9 | 968 | 95s | 94s |  |  |  | Th | Tc Td | Ts |
|  |  |  | Q90 | 190 | 19 |  |  | 885 |  | 965 | 95s | 94s | 93s |  | 9 | 9 h | 9 cc 9 |  |
|  | A80 | K80 | Q80 | 180 | T80 | 980 | so | 87, | 87s 8 | 865 | 85s | 845 | 83s | 825 |  | 8 sh | 8 c 8d | 88 |
|  | A70 | K70 | Q70 | 770 | T70 | 970 | - 870 | 870 | 77 | 76s | 75s | 74s | 73 s | 72 s |  | 7 h | 7 c 7 d |  |
|  | A60 | K60 | Q60 | J60 | T60 | 960 | So 860 | 860760 | 760 | 66 | 65 s | 648 | 63 s | 62 s |  |  | I |  |
|  | A50 | K50 | Q50 | 150 | T50 | 950 | O5 850 | 850750 | 7506 | 650 | 55 | 54s | 53s | 52 s |  |  |  |  |
|  |  |  | Q40 | 140 | T40 | 940 | \% 840 | 840740 | 7406 | 640 | 540 | 44 | 43 s | 42s |  | 5 h | 5 c 5 d | 55 |
|  | A40 |  |  |  |  |  |  |  |  |  |  |  |  | 42 |  | 4 h | 4c) 4 d | ds |
|  | A30 | K30 | Q30 | 130 | T30 | 930 | O 830 | 830 | 7306 | 630 | 530 | 430 | $33$ | 32 s |  |  |  |  |
|  | A20 |  | Q20 | 120 | T20 | 920 | 20 820 | 820720 | 720 | 620 | 520 | 420 | 320 | 22 |  |  | 3 c 3 c | 35 |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4.98\% | d | 2 c 2 d | 25 |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  |  | ket |  |  | adway |  |  |  |  |  | ear |  |  | Random |  |

Statistics

| $\checkmark>=$ quads | 0\% |
| :---: | :---: |
| $\checkmark$ full house | 0\% |
| $\checkmark$ flush | 0\% |
| $\checkmark$ straight | 0\% |
| $\checkmark 3$ of a kind | 16.7\% |
| $\checkmark$ two pair | 0\% |
| $\checkmark$ overpair | 33.3\% |
| $\checkmark$ top pair | 0\% |
| pp below tp | 11.1\% |
| middle pair | 0\% |
| weak pair | 38.9\% |
| ace high | 0\% |
| nothing | 0\% |
| flushdraw | 0\% |
| OESD | 0\% |
| gutshot | 0\% |
| overcards | 0\% |
| flushdrawn+pair | 0\% |
| OESD+flushdr. | 0\% |
| gutsh.+flushdr. | 0\% |
| OESD+pair | 0\% |
| gutshot+pair | 0\% |
| gutshot+overc. | 0\% |

Range hat hit 50.0\% of the time

Dead cards


Figure 42: 22-QQ on 973



Figure 43: 22-QQ on J54

We can see that broadway card boards are bad for his range. Even just a single broadway card flop tends to miss him completely assuming he only continues versus the CB with an overpair or better. Of course, sometimes he will call a hand like 99 on a J high flop, but it usually won't be the standard action of a 12/10 type player who plays this postflop spot fairly fit-or-fold, especially from OOP. And even if we add a $15 \%$ call buffer to every "overpair or better" C-Range on a broadway board, we are getting plenty enough folds to show profit. Couple that with the fact that broadway boards look like they should hit our 3-bet range, and these become good flops to attack.

However, when boards get lower things start looking worse for us. On the three low card boards he is hitting an overpair or better about $50 \%$ of the time on a 9 high board, and the number just increases as the high card gets lower. At this point bluffing is usually futile. We don't expect to get folds enough of the time on average and also represent very little. At this point we should just consider our 3-bet the potshot bluff, and cut our losses. Of course, we could always improve on the turn, but the CB itself on these boards just won't do much more than set our money on fire. However, if we know the player would call the flop with a massive percentage of their range and only continue on the turn with a set or better, we could CB and double barrel bluff. But again, we need information for that play to be worthwhile.

The other spot that comes up often is when we squeeze with a big hand and go postflop. Let's take a spot where a 14 / 10 raises from EP to $3 x$ x, MP1 calls who is $43 / 9$, and we squeeze KK from the CO. Only MP1 calls and we see a HU flop where he checks to us. At this point putting MP1 on a range is very difficult. He clearly falls in the P-Fish category and probably has a wide range. We will have to decipher his postflop actions to more accurately put him on a range. Usually his massive gap in VPIP and PFR, plus the fact that he has flat called twice preflop, means we can assume any aggressive actions will indicate a strong hand.

Let's look at a few boards that could flop:

- J96. There are plenty of hands that this player could call on this board. Hands like QJ, T9, or 88. P-Fish are notorious for calling too often and with too wide of ranges postflop. If he check/raises us we have a decision. But, would a passive player really check/raise light? Of course he would sometimes, but does he do it enough to warrant getting involved in that large of a pot? If we think not, then there is nothing wrong with bet/ folding here. Our goal against these P-Fish is pretty much to VB and fold non-nuttish hands when they put pressure on us.
- A87. What does a bet here accomplish? Sure he probably calls things like 98,76 , and 65 , but he also has a fair chunk of Ax hands in his range that beat us. We could check here, which opens up his calling and betting range on the turn and river, while minimizing loss against the Ax part of his range. By checking we also don't have to worry about facing the CR which can put us in a very odd spot.
- 733. This is a board that a P-Fish loves. He usually calls a very wide range with everything from 44 to AJ. We should certainly bet here and start building the pot. If he check/raises we have a decision, but there aren't many hands that he can have that beat us.

Pretty much our plan is this: bet if the board is good, and check if our hand became SDV (aka, on an overcard board). Of course, this is against a P-Fish and our line could change against different player types. However, this is often times how big hands happen against most players. From OOP we might check a little more often to induce bets, especially if we think our CB would get raised and we don't know how to optimally handle it. Simply put, when in a 3-bet pot we figure out if our hand is a bluff, SDV, or value. We VB value hands if we can, try to get SDV hands to SD, and bluff bluffs if we can get enough folds to justify it. Poker is easy, right?


$$
\begin{gathered}
\text { Playing Big } \\
\text { Hands On The } \\
\text { Flop }
\end{gathered}
$$

There are times, although seemingly rare, that we flop a big hand. Being that a lot of our winrate (WR) comes from maximizing our monetary gain on our winners, playing these hands optimally is incredibly important. As with anything in poker, being in position will make this much easier, but we don't always get that luxury. So this chapter will talk about things like when to CR versus donk, bet sizing, and general plans for hands.

## The Big Hand Considerations

We have talked a lot in this book already about considerations for different plays. Because the goal of this book is to equip you with the ability to come to an optimal play, it is important that we know what goes into getting to that decision. If we can come up with answers to these basic questions we can often times get to a correct answer very quickly. Here are some things we want to consider while deciding how to play these hands:

## - Our opponent

As obvious as this will sound, every opponent plays differently. We need to remember that just because we do X versus player A, doesn't mean X will be the best line against player $B$. This is even more important when talking about our lines with big hands. Many beginners don't allow opponents to make the mistakes they are the most prone to making. If a player has a large propensity to double barrel as a bluff, then why are we mindlessly raising our flopped sets? If a player has a large propensity to call flop raises with overpairs and fold to turn bets, why are we sizing our flop raise so small? It may seem obvious, but every play we make should be unique to the situation at hand.

## - Their range

Like always, we are focused on ranges. However, there are times when we might raise the flop knowing that our opponent might not have hit it often. We are taking the parlay that we make a lot more money at a lower frequency than making less money at a higher frequency. We can run simple $\$ E V$ equations to check which line is best.

## - Board texture

In general it is going to be better to play faster on wet boards and more acceptable to play slower on dry boards. On a board like QJ9, with QJ we rarely want to flat call. Whereas if we had $\mathrm{Q} J$ on a Q 44 board we might be
much more inclined to flat and consider raising later in the hand. This is for a couple reasons:

- Scare cards. Scare cards don't just scare us, but they can scare our opponent. Take the QJ on QJ9. Any 8, T, K, A is a potential scare card. Even a Q or J could be a scare card to our opponent. When there are lots of these scare cards that could, and would probably, hinder good action, we usually want to consider raising sooner rather than later. Even a situation where we have 88 on an 873 board can make for a good flop raise, as slight over pairs like 99 or JJ should feel most comfortable before straight fillers or over cards hit the turn.
- Mistake potential. This couples slightly with the scare cards, but many players have a higher mistake potential on the flop than on future streets. A player with a flush draw (FD) is more likely to stack it off on a flop than most turns because their draws have more equity with two cards to come versus only one. Plus, they might brick the turn and decide they aren't getting a good price and fold.
- What we rep. Like anything that involves hand reading, we only care about this against players that can think. Against a fish we don't need to worry too much about what we represent. As a fish only looks at their cards and thinks about their hands strengths in an absolute manner. However, against thinking players, we need to consider what we represent. For instance, say we have 66 and the board comes 762, raising might look like we have a set. In poker, representing the hand that we have is usually not something that we want to do. We would probably flat that flop with $T \Gamma$ or float with a hand like 54 . So a raise here is most likely a set. Where as if we raised 66 on an A65 board it might look like we are attacking the A high board (as we would flat a hand like AQ). This section could ramble on about balancing and such, but just think about what we represent, and whether or not we want to represent that.
- Relative position. When considering different lines we want to consider relative position. Relative position is our position based on the preflop raiser and other players in the hand. Because our goal with big hands is to make the most amount of money, we like situations that put more money in the pot. Let's look at a spot that should help us visualize this.


Figure 44: Relative position visualization

Here we have bad relative position to the PFR. If it gets checked to him and he bets, we can CR, but it probably closes out hands from the fish in between. However, we have decent relative position overall due to the fish. If we were to donk out here, we give the fish a chance to come along and create a bigger pot size in the event the PFR raises. Even if the PFR folds to the donk bet we stand a better chance of getting more money in the pot in the long run.

- MW versus HU

We play our big hands much differently in MW versus HU pots. In MW pots we heavily focus both on relative position and ensuring that we exploit the times that we can "sandwich" callers. In HU pots we really focus on exploiting the tendencies of the player we are against. Like usual, being IP will make everything much easier in a HU pot, whereas in MW pots relative position to everyone is very important.

- Elasticity

How elastic our opponents are can change our bet sizing significantly. If we are in a HU pot with a set and trying to stack our opponent's AA, we might have to finesse an elastic player. If that same opponent was inelastic, then we could simply make bigger sizes right from the beginning. Remember that our goal with big hands is to maximize value. Sometimes if we threaten a player's stack, especially an elastic player, they shut down. So against players like that our best bet might be to aim for a slightly smaller pot. Of course bet sizing is very situation and opponent specific, but keep in mind that while getting stacks is good, it isn't always going to be feasible.

## - Pot Geometry

When players start out they tend to use too small of sizes when they raise. While this isn't in and of itself a leak, it can hinder our possible winnings if we do it in incorrect spots. Let's take a situation where we have 99. We called a $\$ 3$ raise from the SB and saw a HU flop on T94. We check, he bets $\$ 5$ and it is our action. Let's look at a few different CR sizes:

- $\quad$ CR to $\$ 10$ : if our opponent calls the pot will be $\$ 27$. If we bet $\$ 18$ on the turn and $\$ 45$ (into $\$ 63$ ) on the river we make a total pot size of $\$ 153$.
- $\quad$ CR to $\mathbf{\$ 1 3}$ : if our opponent calls the pot will be $\$ 33$. if we bet $\$ 22$ on the turn and $\$ 58$ (into $\$ 77$ ) on the river we make a total pot size of $\$ 193$.
- CR to $\mathbf{\$ 1 5}$ : if our opponent calls the pot will be $\$ 37$. if we bet $\$ 25$ on the turn and $\$ 63$ (into $\$ 87$ ) on the river we make a total pot size of $\$ 213$.

Again, we notice that different CR sizes make very different pot sizes by the time we get to SD. This information in a vacuum is useless though. We need to think about our opponents and how they would react to this initial size, while also considering possible actions later in the hand. For instance, if we think this player would always fold AA to a CR to $\$ 15$ but that he is very likely to call it for $\$ 10$, then $\$ 10$ can be a better CR size. While it won't easily allow for us to get stacks in the middle, it at least allows us to trap him into possibly making bigger mistakes later. Remember that, in order to get someone to make a big mistake later, we need them to make the initial mistake.

## The Donk

A donk bet is simply a bet that is made into the preflop aggressor. Donk betting is always an interesting topic. Some players swear by it, and others scoff at those who use it. Donk betting is a great bet to have in our tool kit, but understanding the optimal spots to use it can sometimes be confusing. So let's talk about a few situations and where we might use or avoid it.

A fish limps from EP, another limps behind from MP, and the button raises to $\$ 3$ at 50 NL . We call with 77 from the BB and both fish call as well. The flop is J75. Let's look at our options:

- Check. We could check here. But if we think about logical happenings:
- We check and it gets checked through. We have almost no chance of getting stacks in the middle.
- We check and a fish bets. This will happen sometimes and a CR will probably get us good value.
- We check and the button bets. A CR would pretty much blow the fish out of the hand. A call here might trap some callers and dead money, but it becomes a finesse situation on the turn/river.

> Also, the button probably doesn't do much light betting here, so it won't happen at a high frequency (unless his opening range is super strong).

- Donk. A donk can be a great play here. Let's look at some logical happenings:
- We donk and a fish calls (everyone else folds). This is great. We can pretty much bet all the way down and have a decent chance at getting a big pot, if not getting stacks in the middle.
- We donk, a fish calls, the button raises. This is also great. Now we have a decent chance at getting multiple stacks in the middle.
- We donk and everyone folds. This will happen sometimes, but it just means nobody had anything and we probably weren't making any money anyway.

We see in a spot where there are calling stations in between us and the PFR that donking can be a great play. Let's look at another situation that comes up often. Say UTG is a TAG who raises to $\$ 1.5$ at 50 NL . A fish calls from MP, an unknown calls from the button, and we call from the SB with 44 . The flop comes 964 . Let's look at our possible options:

- Check. We could check here. Let's think about logical happenings:
- We check and the PFR bets and someone else calls. This should happen a fairly large percentage of the time. Most players who raise preflop from EP should have strong ranges on this board, and we should expect a bet often from the PFR. This check allows for a possible trapped caller, allowing more players to get "stuck" to the pot.
- We check, the PFR checks, and someone else bets. This should happen a decent percentage of the time that the PFR checks. This board should hit a flat call range, and sometimes fish bluff stupidly on low boards. Again, this gives chances for dead money to get in the pot.
- We check and everyone checks. This will happen sometimes, but probably won't be the standard result. While it sucks and makes getting stacks in the middle incredibly difficult, if possible
at all, it will happen from time to time.
- Donk. A donk is an OK play here. Let's look at some logical happenings:
- We donk and the PFR raises. Lots of times the PFR won't want to call and let other players come along for "cheap." This action will probably blow out the fish and unknown. While we do get stacks from the PFR sometimes, we lose the chance of the even bigger pot.
- We donk, the PFR folds, and a fish calls. This is of course a good happening, but the PFR will be getting involved often because his strong range should have hit this board a large percentage of the time. This line will probably get us paid well, but again, it won't happen all that often.
- We donk and everyone folds. This will happen sometimes, but it just means nobody had anything and we probably weren't making any money anyway.

Both plays are valid here, but the check should get us paid more often. Again, pay attention to where the dead money is sandwiched. It should also be noted that donking sets every time would be very exploitable to opponents that are paying attention. This doesn't necessarily mean we wouldn't still want to donk in good spots with sets, it just means we want to be aware of how face up we make ourselves against players that can hand read. We can also use this information against our opponents. There are times when regs donk in an MW pot and we can fold over pairs (or call the flop purely for implied odds) against players that only donk sets in these situations.

## The Big 3-Bet Hand

Hitting big in 3-bet pots can sometimes be odd (given the way that ranges continue in these pots). Let's look at a few examples of the spots that come up the most often (and again, most every spot can be extrapolated from these examples).

At 100 NL the button steals to $\$ 3$ and we resteal to $\$ 10$ with J8dd. He calls and we see a HU flop. Let's look at a few big flops we could smash:

- Ts9h7s. Like always, we want to think about our opponent. If we think he flats a resteal with a very strong range, say $\mathrm{T}+$ and some AK , then we should probably just bet this all the way down. He won't be folding any of his pairs, a CR might scare him, and this board could get ugly in a hurry. Remember that just because a spade on the turn doesn't scare us, doesn't mean it wouldn't scare him. Same with an 8 , J, or similar card.

If we think that he flats preflop with a range that would bluff more often, we can consider a check/call, check/raise, or even a smaller bet to try and induce a bluff. Both actions are valid against this kind of player, and again, it boils down to our reads on our opponent's frequencies. If we don't have any reads, defaulting on betting our big hands is the standard play.

- Kd7d5d. While the K on the board is a scary card to our opponent, it is still a very wet and dangerous board. Most players tend to play very fast on monotone flops. So if we bet, and our opponent has a K, we should probably expect that stacks are going in the middle very quickly. However, whether we CB or check is again dependent on our opponent and his frequencies. If he would make more calling/drawing mistakes, then a bet is great. If he would bluff/bet like every part of his range, then checking is great.

The high card is important. A K high monotone flop is much different than a 9 high monotone flop. On the lower board we can expect aggressive players to stack in overcard+FD combos more liberally. On the K high board they don't tend to feel as comfortable with AxQd as they would on the 9 high board. Because of this, expect players to play a 9 d 7 d 4 d or Td 4 d 3 d flop much faster.

- 883. There is no better feeling that restealing and flopping trips. The paired board makes opponents do silly things, and our hand strength is usually totally hidden. Again, how will our opponent make more mistakes? As a default, betting is still the best play. Many players will float these boards very liberally, and call with more pairs due to the safety the flop offers. The interesting part of the play is on the turn.

What we do on the turn is the important part, and also dependent on what we think of our opponent. If we think he is a tricky and aggressive player who would float the flop a little more liberally, going for a check/ call on the turn (with intentions of letting him bluff the river) is great. If we think he would only call the flop with comfortable pairs, then we should bet again and set it up so that we can shove the river. If we don't know, just assume they will probably make more calling mistakes and bet the turn again (as we see they like calling given they called the 3-bet and the flop bet already). If the turn comes a scary card, like an A or K, that could scare most of their range, then we can use a small bet size or check and try to induce bluffs now or lighter calls on the river.

While some of this section might be a little frustrating (getting the answer "use reads on our opponent" can be frustrating when you don't have good reads), defaulting on betting when we hit big is always going to be fine. While it might not be optimal to the exact situation, we can't make optimal decisions without reads and good range analysis. These are things we get in time, both with experience and volume.

Let's look at another 3-bet situation that comes up, when we 3-bet a big hand and smash the flop.

MP open raises to $\$ .75$ at 25NL, we 3-bet AA from the CO to $\$ 2.5$ and only MP calls. The flop is A98 and he checks to us. Let's break this down by player type:

- Nit/TAG. This board totally whiffed them. They might have hit 88/99 sometimes (assuming they even flatted that preflop versus our 3-bet), they might have AK (although there are very few combos of it), and more often than not they have things like JJ or KK. A bet probably doesn't induce anything, not even a comfortable call from QQ , so a bet is pretty useless. A check might induce a bet on the turn, or maybe a more comfortable call with JJ or QQ. While 3-betting and smashing the flop is always good, it sometimes sucks when we hit it so hard that there
are so few combos of hands that could possibly pay us off.
- LAG/A-Fish. This board probably misses them, though they do have some more AQ/AJ type hands in their possible Flatv3bet range. Because they are more apt to make betting mistakes than calling mistakes, a check on the flop to induce some bets later in the hand can be good. It also makes our hand look like a scared QQ or KK, looking for a cheap SD, so we can sometimes induce bets on the both the turn and river.
- P-Fish/Unknown. While this board probably misses them, they are a little more apt to make calling mistakes. We could consider making a small bet on the flop. This bet can get looked up a bit wider (because smaller bets are more comfortable), and can help with pot geometry later in the hand. While checking the flop is also fine, the small bet is another option that has some validity. Again, smashing the flop makes extraction difficult at times, and all we can do is make the best play given the information that we have.

Now catching top set on an ace-high board is a little different than catching JJ on a jack-high flop. Because more pairs will naturally feel comfortable on a smaller high card board, betting becomes better and better. The same as checking usually becomes better as the high card gets bigger and bigger. Of course, these are just basic default lines. Whenever we have information we should use that to create optimal lines as default lines are just for situations where we are at an information deficit.

Let's look at one last spot in these situations. Say we raise to $\$ 3$ with JJ from the CO. The button 3-bets us to $\$ 10$ and we flat call. A few different flops comes off:

- J63. Like always, we care about ranges. If our opponent probably 3-bet us with a very strong range of $\mathrm{QQ}+/ \mathrm{AK}$, then he maintained an overpair about $50 \%$ of the time. Because it is a 3-bet pot we can expect most opponents, at 100 bb or less, are going to stack those off by default. Going for a CR here would be standard. Let him CB with his overpairs, but also let him CB with his whiffed AK (about 48\% of his range). This allows us a good chance at maximizing from the entirety of his range. If for some reason he is the kind of player that would check a hand like KK behind, then we could donk here, but we would need a lot of information to make that a standard action against him.



Figure 45: QQ+/AK on J63

If our opponent were the type to 3-bet lighter IP, then we might be looking at a range of $\mathrm{QQ}+/ \mathrm{AK}$ and some bluff hands. We talked earlier in the book about "blind spots" and this is a perfect example. We don't know if 33 would be in that bluff range, 54 , or 84 s , we just know it is non-premium. If we look at Flopzilla we see this:


Figure 46: QQ+/AK/air on J63

We see his overpair range just shrunk from $50 \%$ down to $32 \%$ This range shrinks more and more as his bluff range gets wider and wider. Because of this, we can assume he would probably want to CB this board with his bluff range, and thus we face a bet from him often. But extraction is going to be harder as his bluff range gets wider because less and less hands are able to continue in a big pot. Against players like this, we might check/ call the flop and donk the turn if we think they wouldn't double barrel their bluffs. We might check/ call the flop and check the turn if we think they would double barrel their bluffs often. We might check/small raise the flop if we think it would be interpreted as bluffy and induce some good action. As a default, going for a CR is fine. We would want to take the inducing lines if we knew what we were inducing. Otherwise, attacking his strong hands (which still makes up a sizable percentage of his range), is usually best without information on how he would play the weak part of his range. Again, the default with our big hands is to start making the biggest pot possible.

- QJ7. If we bring the tight $\mathrm{QQ}+$ /AK range back to flopzilla we see this:


Figure 47 (a): QQ+/AK on QJ7


Figure 47 (b): QQ+/AK on QJ7 (Results)

We see this time that there is a $10 \%$ range that beats us (QQ for a higher set), and about $40 \%$ of his range is overpairs. He will probably CB his AK using the scary board and his equity to try and pick the pot up. Against this range a CR is usually the standard line. We should get his stack about a third of the time, lose about $10 \%$ and pick up his CB a very large percent of the time. A check/call can make for lots of odd spots on the turn, including bad cards like the T that fills straight draws and cards that improve/scare his overpairs (A, K, Q, etc). Again, we could consider donking against players that would raise it with their entire range or players that might check KK behind, but information is necessary for that play.

Now, if we bring the bluffy range back we see this:



Figure 48: QQ+/AK/air on QJ7

We notice that only $5.5 \%$ of the range beats us, and his overpair range drops to almost $22 \%$. Now almost $70 \%$ of his range has whiffed. Checking becomes the best play here as we need to let him continue with his bluff hands, which dominate his range. But is this a good board to go for a check/call or a check/raise? Well most villain's don't tend to run complicated bluffs on these types of boards, assuming that once a player calls the flop here, in the pot size that is created, they aren't folding. Because of this, he is relatively unlikely to bluff again, and a check/call line doesn't really encourage further mistakes from his bluff range.

While it's unfortunate that a CR only gets action from about 28\% of his range, the other part of the range just doesn't bluff enough of the time go for the check/call. Because the value side of his range could feel uncomfortable on certain turn cards (again, the K , the A when he has KK, the T or Q , etc.), a CR to attack the $22 \%$ of his range that we beat is probably best. If our opponent would double barrel here a ton with his bluffs, then we could check/call, check/raise turn. But again, we usually don't have enough information to go for that kind of line.

- AJ9. These flops, the definitive A high or K high flops, are always interesting when we talk about our lines on them. Let's bring out Flopzilla first:

| Hints 0 | Nolime |  |  | tarti | ting | hand | ds |  | Noweght |  | Flop |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathrm{Ks}_{\text {ARS }}$ | A/s AT | ATs ${ }^{\text {as }}$ | Ass Ass | 175 A6 | 165158 | Ss As | 45435125 |  |  |  |  |  |
|  | АКС «к | K K0. | кјs кт | KTs K9 | K9s Kss | K7s K6 | K6s K5s | Kts | ${ }_{4 s} \mathrm{~K} 3 \mathrm{~s}$ K2s |  |  | Kc | Kd | Ks |
|  | AQC KQ | Qc @o | ofs QT | QTs $\mathrm{QP}^{\text {c }}$ | Q9s Qss | Q7s ${ }^{\text {Q6 }}$ | Q6s Q5s | Q4s | 4s Q3s Q2s |  |  | Q |  |  |
|  | AlO KJo | \%o ejo | II ITs | TTs ${ }^{\text {P98 }}$ | 198 188 | J7s 168 | ${ }_{565} 158$ | Its |  |  | J17 |  |  |  |
|  | Ато кто | то ето | [70 71 | TT T98 | T9s Tss | T7s T6. | ${ }^{\text {T6S }}$ Tss | T4s | T4s T3s T2s |  | Th | T0 |  |  |
|  | А90 K90 | 190 890 | 190 т9 | T9 99 | 99 98s | 97596 | 96s 95s | 94s | 445 935 928 | 9 |  |  |  |  |
|  | A80 K80 |  | 1880 | T80 980 | 98088 | 86 | 86s 85s | 845 | 4s |  |  |  |  |  |
|  |  |  |  |  |  | 77 7 -6 | S60 5 |  | ( |  |  | 8 | 8 d | 88 |
|  | A70 K70 | 700 070 | 17017 | T70 970 | 970870 | 77.768 | ${ }^{665} 75 \mathrm{~s}$ | 74s | $7{ }^{4} 5735$ |  | 76 | 7 | 7 | 78 |
|  | ${ }^{\text {A60 K60 }}$ | $16000^{60}$ | 160116 | 160960 | 960880 | 7606 | 6665 | 648 | ds |  |  | 60 | 6 |  |
|  | ${ }^{\text {A50 K50 }}$ | ${ }^{50} 0.050$ | 150 T5 | T50 950 | 950850 | 75065 | 650 55 | 545 | 4s ${ }^{535} 525$ |  |  | 50 |  |  |
|  | ${ }_{40} 40 \mathrm{~K} 40$ | ${ }^{40} \mathrm{Q} 40$ | 140140 | T40 940 | 940840 | 740640 | 540540 | 4 | 443582 |  |  |  |  |  |
|  | ${ }^{\text {A30 K }} \mathrm{K} 3$ | K30 Q30 | ${ }^{130} \mathrm{~T}^{\text {T3 }}$ | T30 930 | 930830 | 730630 | ${ }^{330} 535$ | 430 | 530 33 328 |  |  | 40 | 4 |  |
|  | 1220 K 20 | K20 Q20 | 120 T20 | T20 920 | 920820 | 720.620 | 520520 | 420 | 20 320 |  |  | 30 |  |  |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pelete |  |  |  |  |  |  |  |  |  |  |  |  | ar |  |
| witch |  |  | Pocket | ket | w |  |  |  | Clear |  |  |  | ndom |  |

Statistics

| > $=$ quads | $0 \%$ |
| :--- | :--- |
| $\checkmark$ full house | $0 \%$ |
| flush | $0 \%$ |
| straight | $0 \%$ |
| 3 of a kind | $11.1 \%$ |
| two pair | $0 \%$ |
| overpair | $0 \%$ |
| top pair | $44.4 \%$ |
| pp below tp | $44.4 \%$ |
| middle pair <br> weak pair | $0 \%$ |
| ace high | $0 \%$ |
| nothing | $0 \%$ |
| flushdraw | $0 \%$ |
| OESD | $0 \%$ |
| gutshot | $0 \%$ |
| overcards | $0 \%$ |
|  |  |
| flushdrawn+pair | $0 \%$ |
| OESD+flushdr. | $0 \%$ |
| gutsh.+flushdr. | $0 \%$ |
| OESD+pair | $0 \%$ |
| gutshot+pair | $0 \%$ |
| gutshot+overc. | $0 \%$ |

Range hat hit 55.6\% of the time

Dead cards


Clear

Figure 49: QQ+/AK on AJ9

We see here that about $44 \%$ of his range is top pair, and about $11 \%$ of his range beats us (with AA). We can usually expect that most players, at 100 bb or less effective stacks, are not going to be folding TP in a 3-bet pot. Because of this, we are in a great spot with such a strong hand. But our line here is interesting:

- Check. A check isn't a terrible play, but is he going to bet the entirety of his range? If he understands SDV, probably not. He will check hands like KK or QQbehind in an effort to get to SD ASAP. So he bets when he has AK or AA, and that is probably about it. But is the check bad? Will the check induce him to call the turn with KK, and maybe a small river bet with the same hand? If so, a turn check has some validity. We allow ourselves to make maximum value against AK and KK (assuming he bets $A K$ ), which is of course a good thing.

The bad part of checking is when he starts checking AK behind on the flop. The more often he does that, the worse checking the flop becomes. At that point we only get 2 streets of maximum value from AK , maximum 2 smaller streets of value from $\mathrm{KK} / \mathrm{QQ}$, and lose the most against AA. This is not a great parlay for us, and would veer us away from checking the flop.

- Donk. A donk here can be a great play. If our opponent would check behind things like AK or KK, then a bet here is mandatory to maximize value from the largest part of his range, the AK . Yes, we might lose KK and QQ sometimes with this bet, but we almost never lose AK on the flop or later. Because checking to collect the standard CB can lose value on these definitive flop textures, we should consider donking our strong hands a little more often.

Things start to get a little different as his range starts getting more bluffs in it. And this is where blind spots can become tricky. If a villain tends to use hands like A4s or A5o our play can be much different than if he uses a hand like 54 o or T6s. Let's use a blind spot of low hands:

| Hints Off | Nolimit |  |  | Starting hands |  |  |  |  |  |  |  |  | Noweight |  |  | 1 | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | AJs |  | ATs A9 | A9s | Ass | A7s | A6s |  | 15 A | A4s | A3s |  | 50\% |  | Ac Ad | As |
|  | АКс |  |  | KJs |  | KTs K | K9s | K8s | K7s | K6s |  | K5 K | K4s | K3s | K2s |  | Kh | Kc Kd | Ks |
|  | AQc | KQc | QQ | Q/s |  | Ts Q | Q95 | Q8s | Q7s | Q6s |  | 25 Q | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | AJo | Kјo | QJo | J |  | Ts I9 | 198 | J88 | J7s | J6s |  | 5s J4 | J4s | J3s | 12s |  | Jh | Id | 15 |
|  | ATo | KTo Q $^{\text {d }}$ | QTo | गто |  | T T | T9s | T8s | T7s | T6s |  | 5s Th | T4s | T3s | T2s |  | Th | Tc Td | Ts |
|  | A90 | K90 | Q90 | 190 | T9 | T9 99 | 99 | 985 | 97s | 968 | 95s | 5s 944 | 945 | 935 | 925 | 9 | 9 h | 9 cc 9 d |  |
|  | A80 K | K80 | Q80 | 180 |  | 80 98 | 980 | 88 | 87s | 865 | 85s | 85s 84 | 8458 | 83s | 82 s |  | 8 h | 8 cc 8 |  |
|  | A70 | K70 | Q70 | 170 | T70 | 70 970 | 9708 | 870 | 77 | 76 s | 75s | 75s 74s | 748 | 73 s | 725 |  |  |  |  |
|  |  |  |  | 160 |  |  |  | 860 | 760 | 66 |  |  | 64 s | 63 s | 62 s |  | 7 h | 7 c 7 d | 7 s |
|  | A60 |  |  | 160 |  | 60 |  | 860 | 760 | 60 |  | 65s 64 | 645 | 63s | 625 |  | 6 b | 6c 6d | 68 |
|  | ${ }^{\text {A } 50}$ | K50 | Q50 | 150 | T50 | 5095 | 9508 | 850 | 750 | 650 | 55 | 55 | 545 | 53s | 52 s |  | 5 L | 5 c 5 d | 5 s |
|  | A40 | K40 | Q40 | 140 | T40 | 4094 | 940 | 840 | 740 | 640 | 540 | 40 | 44 | 43 s | 42 s |  |  |  | 5 |
|  | A30 | K30 | Q30 | 130 |  | 3093 | 9308 | 830 | 730 | 630 | 530 | 33043 | 430 | 33 | 32s |  | 4 h | $4 \mathrm{c} 4 \mathrm{4d}$ | 45 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 h | 3 c 3 d | 35 |
|  | A20 | K20 | Q20 | 120 |  | 20920 | 920 | 820 | 720 | 620 |  | 20 | 420 |  | 22 |  | 2 h | 2 c 2d | 2 s |
| Store | 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4.37\% |  |  |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  |  | ocket |  |  |  |  |  |  |  |  |  | ar |  |  | Random |  |



Figure 50: $Q Q+/ A K / a i r$ on $A J 9$

Now we see his top set range drops to about 6\% and his top pair range drops to about $24 \%$. A lot his range now lies in air, at roughly $47 \%$. Let's look at our two options:

- Check. This allows our opponent to throw out a CB with the air part of his range. He can continue with his bluffs and we can allow ourselves to maximize versus that part of his range. Whether we check/call or CR is dependent on his turn actions and CB range. If we think he would continue his bluffs a large percentage of the time, then check/call the flop and check the turn is a good line. However, we most likely have no idea how he would continue with his bluffs, but we can assume that most players will not keep betting once we check/call this flop (as it is very definitive).
- Donk. A donk here doesn't allow his bluffs to continue. It does still get direct value from AK, although there is still the chance he sometimes folds out KK and QQ. We would donk if the value lost from him checking AK behind wasn't made up from the value of collecting the CB from his air and residual calls from $\mathrm{KK} / \mathrm{QQ}$ later in the hand.

Our line here can be slightly confusing. If we donk out for $\$ 12$, we almost always stack off the AK part of his range ( $23 \%$ of his range), which counts for a lot of value. We sometimes get two streets from hands like KK or QQ , which counts for some value as well. The issue is that we lose value from the bluff part of his range, and always stack off versus the AA (6\%) part of his range. However, if we would only expect to win the CB (thinking he wouldn't bluff the turn if we check/called the flop), we wouldn't make enough extra value to counteract the times we don't get stacks from AK. Because of this, our default line should actually be to donk out here, unless the bluff side of his range contorts his range so much that checking to collect the CB becomes more valuable. But if he would also bet AK on the flop, rather than checking it behind, it can make going for a CR even more valuable as we collect bets from the bluffs and still get stacks from the AK part of his range.

## The Limped Pot

In limped pots we always have a lot of maneuverability. Usually we have a massive depth and lots of play, so it makes our decisions less clear cut. We always think about ranges, but often times we have to infer more from actions due to the depth of range in a limped pot. Limped pots usually involve us getting cheap plays from the blinds, limping behind fish with speculative hands, or limping behind weak players with speculative hands. Because we almost never open limp, these spots are almost always MW, which amplify the confusion in them. Let's look at a few situations that come up often.

Say there is a limp from an unknown in EP at 25 NL , we decide to limp behind with our 33, and the blinds both come along. We see a flop of Js4s3c. Everyone checks to us and it is our action. Our options as always are:

- Check. A check will keep this pot very small, give free cards to draws, and keep us from getting max value (especially from a pot geometry point of view).
- Bet. A bet should get calls from lots of second best hands like Jx hands and draws. When we catch a big hand in limped pots we should usually be betting as a default.

So we bet for $\$ .75$, and everyone but the BB folds. The turn is a 6 d and the BB checks to us. The action is on us:

- Check. A check assumes that we are behind a very large percentage of the time.
- Bet. We should be good here a ton of the time. Sure, we will be behind to 52 or 66 occasionally, but not enough of the time to warrant us checking behind. We should bet to get value from the Jx hands that should still feel comfortable, flush draws, 65 type hands, etc.

We bet the turn for $\$ 2$ and the BB calls. The river is a T and the BB checks to us. The action is on us:

- Check. Again, if we think we are really behind a lot, then we can consider checking behind.
- Bet. A bet should still get lots of action from second best hands. The T isn't an over card so it shouldn't scare the Jx hands from calling, and so we can consider a little bigger of a bet. If he check/raises us we can make a decision, but default betting on such a clean card is a necessity.

We bet the river for $\$ 4.75$ and he calls with KJ. Notice we made bigger bets throughout the hand in order to make the pot as large as possible. We also notice that defaulting on betting was pretty much the standard. When we flop big hands we usually want to start exploding the pot. We can make decisions when the board gets funky and/or our opponents make odd actions, but defaulting on betting with these hands is standard.

In this hand we have Ad6d at 100 NL . There are two full stacked limpers to us on the button, and we limp behind, and the blinds come along as well. The flop is QdJd5d. The SB bets out for $\$ 3$. Let's look at a few things to consider:

## - If no one calls

If everyone folds back to us we have more flexibility. There are fewer cards that can hit the turn that can be problematic (a flush card scaring a smaller flush, a board pair card, etc.). What we would do here is really based on the SB. If we know the SB would only donk big hands here, then we should more heavily consider raising. We don't want to let another diamond come off that might scare QJ or 55 or a small flush. We also don't want to call and have him go into check/call mode with those hands, which would severely hinder how big of a pot we could make. However, if we know that the SB is aggressive and might bet the turn again regardless, then calling here to raise later in the hand is totally acceptable.

## - If we get a caller

Getting just a single caller is odd. While we could consider flat calling and raising later in the hand (or playing it more cautiously if the board pairs), a raise here is also fine. Even just a small raise, up to $\$ 8.5$, would be acceptable. We could flat if we think they would both make a lot of mistakes on the turn (on clean cards). The issue with this is that $36 \%$ of the time we are going to get a "bad" card on the turn (any $\mathrm{Q}, \mathrm{J}, 5$, or diamond). Because of this, defaulting on raising here is usually best. This gives us the best chance to make the most from sets, two pairs that don't want to fold on the flop, sticky flush draws, and baby flushes.

## - If we get multiple callers

Getting multiple callers makes raising a necessity. Many players seem interested, so let's make them pay while they feel the most comfortable. As a default, when we flop big hands and the action starts going MW, we should be raising. There is no reason to give free cards to hands that would happily pay us now.

Not surprising, our default action when we catch these big hands is to get the pot size growing as quickly as possible. That isn't to say that slow playing is never appropriate, it's just that we should slow play only in the best of situations. Sometimes stacking a small percentage of a player's range is much better than getting two small bets a larger percentage of the time. We just need to use the reads that we have, feel out the current texture, consider future texture, and usually heavily consider betting or raising.

## The Normal Pot

Let's talk about the times that we hit big in a standard HU situation. The two of the major times this happens is when we open raise and when we flat call a raise PF. These situations, because there is no chance of it going MW, become much more reliant on reads and exploiting our opponent's tendencies. So let's look at our first spot:

Say we raise with to $\$ 1.57 \mathrm{~s} 7 \mathrm{~d}$ from MP1 at 50NL. The CO calls us and we see a HU flop. The CO is a TAG with a propensity to call CBs IP. He has a 3-bet of 3\% and a fairly average FoldvCB of 55\%. The flop comes 9 h 7 c 5 d . Let's consider our options:

- Check. Checking is an option if we think our opponent would make a lot of betting mistakes. We could check with the intention of CRing or going for a check/call and CR turn line. However, when the board comes with this kind of texture, where there are cards that can 4 straight (or 4 flush on monotone boards), we should veer away from checking and giving the board a chance to get really ugly.
- CB. A CB is usually going to be best. As a default, we have a big hand and thus want to bet and get the pot growing. Also, this opponent has a tendency to call CBs more liberally. This is great as we can expect him to probably bet the turn a lot of the time as a high CallvCB percentage from a better player usually denotes increased floating frequencies. So we can take a CB flop and, at times, a CR turn line.

We CB here for $\$ 2$. Let's look at some logical happenings:

- CO Raises. If the CO raises we just need to ask ourselves one quick question, "Does he only raise with big hands, or does he bluff this board a lot?" If he only raises big hands then we should raise to get a big pot going while the board is as safe as possible. We don't want to let an 8 come off and slow him down, or let an A come off and do the same. If
he bluffs a lot, then we can consider calling and letting him make betting mistakes. Of course, we do acknowledge that sometimes he will catch an improvement card or scare card. So if we aren't sure how he raises this spot, we could just default on 3-betting here and taking a note.
- CO Calls + Brick. If the turn card is some sort of 2 or 4 type card, we just need to ask ourselves how the CO would handle this card. If we think he calls the flop with a range that wants to float-and-stab, then we can check and let him do that. If we think he calls the flop with a SDV type range, then we can bet again as the brick means nothing and he will probably call the turn again while the board remains "safest." As a default, betting here again is perfectly fine. But if we know he would always bet if we checked, then checking becomes a very valid option.
- CO Calls + Big Card. If the turn card is some sort of A or Qtype card, we just need to ask ourselves how the CO would handle this card. If we think our opponent is really floaty, then checking and letting him bet is great. We also need to consider what we represent here when our opponent is the hand reading type. Because an ace on the turn is such a great barrel card (we might bluff KQ using the A as a scare card, turn 22 into a bluff, etc.) a check can start to turn our hand face up as a SDV hand, or a big hand trying to induce a bluff. Rarely will we have to worry about this type of dynamic in the micro and small games, but it is something to consider as we move up and play against more competent opponents.
- CO Calls + Straight Filler. If the turn card is an 8 or 6 , putting the 4 straight on board, we need to be careful. A check here usually becomes best. If our opponent was floating and was going to bluff, this is the perfect card for him. If our opponent has a SDV hand he will usually just check it behind. And a bet just doesn't really get called by many, if any, worse hands. A plan of check/calling the turn and check/soul-reading the river is great. It allows us to take a price with IO when we are behind, and induce bluffs when we are ahead. Of course, if we check/call the turn, and brick/face a big bet on the river we have a decision. But at that point is boils down to "would our opponent make the river bet without the straight?" Ifhe is capable of bluffing it, we might call. If he never really bluffs like this, then we can consider folding the river.

With information our decisions become easier and easier. If our opponent is the type that will stab when we check, then we should consider checking with our big hands. If our opponent is the type to call a lot when we bet, then we should consider betting with our big hands. If we aren't sure, then we should consider betting as a default. Don't complicate these situations by taking fancy play syndrome (FPS) lines. Just play straight forward or use lines that exploit our opponent's tendencies and mistake propensities.

Let's look at another example. In this hand UTG raises to $\$ 3$ at 100 NL and we are the only caller in the BB with 55 . UTG is a nit with an EPPFR of $4 \%$ and CB of $71 \%$ over 2 K hands. Let's look at some flops and consider some different plays:

- A95. On this very dry A high board we see that his range is about $15 \%$ better sets and about $30 \% \mathrm{AK}$. The rest of his range is strong under pairs (TT or QQtype hands).

| Hints Off | Nolimit |  |  | Starting hands |  |  |  |  |  |  |  |  | No weight |  |  | 50\% | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA | AKs | AQs | AJs | ATs | A9 |  | A8s | A7s |  | 68 | A5s | A4s | A3s | A2s |  |  | Ac | As |
|  | AKc | KK | KQs | KJs | KTs | К9 |  | K8s | K7s | K6 | 6 s | K5s | K4s | K3s | K2s | - | Kh | Kc Kd | Ks |
|  | AQc | KQc | QQ | QJs | QTs | Q9 |  | Q8s | Q7s | Q6 | 6 s | Q5s | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | AJo | KJo | Qjo | IJ | JTs | 19s |  | J8s | J7s | J6s | 6s | J5s | J4s | J3s | J2s | - | Jh | Jc Jd | Js |
|  | ATo | КТо | QTo | JTo | TT | T9 |  | T8s | T7s | T6 | 6 s | T5s | T4s | T3s | T2s |  | Th | Tc Td | Ts |
|  | A90 | K90 | Q90 | 190 | T9 | 99 |  | 988 | 97s | 96 | 65 | 95s | 94s | 93s | 92s | $9$ |  | 9 c 9d | 9 |
|  | A80 | K80 | Q80 | J80 | T80 | 980 |  | 88 | 87s | 86 | 6 s | 85s | 84s | 83 s | 82 s |  | 8h | 8 c 8d | 8 s |
|  | A70 | K70 | Q70 | J70 | T70 | 970 |  | 870 | 77 | 76 |  | 75s | 74s | 73s | 72s |  | 7 h | 7 c 7 d | 7 s |
|  | A60 | K60 | Q60 | J60 | T60 | 96 |  | 860 | 760 | 66 |  | 65 s | 64 s | 63 s | 62 s | - | 6 h | 6 c 6d | 68 |
|  | A50 | K50 | Q50 | J50 | T50 | 950 |  | 850 | 750 | 65 |  | 55 | 54s | 53 s | 52s | - |  |  |  |
|  | A40 | K40 | Q4o | J40 | T40 | 940 |  | 840 | 740 | 640 |  | 540 | 44 | 43s | 42s |  |  |  |  |
|  | A30 | K30 | Q30 | J30 | T30 | 930 |  | 830 | 730 | 630 |  | 530 | 430 | 33 | 32s |  | 4 h | 4 c 4 d | 45 |
|  | A20 | K20 | Q20 | J20 | T20 | 920 |  | 820 | 720 | 620 |  | 520 | 420 | 320 | 22 |  | 3h | 3c 3d | 3 s |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 h | 2 c 2 d | 2 s |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  | Poc |  |  |  | adv |  |  |  | ited |  |  | ear |  |  | Random |  |

Statistics

| $\checkmark>=$ quads | 0\% |
| :---: | :---: |
| $\checkmark$ full house | 0\% |
| $\checkmark$ flush | 0\% |
| $\checkmark$ straight | 0\% |
| $\checkmark 3$ of a kind | 14.3\% |
| $\checkmark$ two pair | 0\% |
| $\checkmark$ overpair | 0\% |
| $\checkmark$ top pair | 28.6\% |
| pp below tp | 57.1\% |
| middle pair | 0\% |
| weak pair | 0\% |
| ace high | 0\% |
| nothing | 0\% |
| $\checkmark$ flushdraw | 0\% |
| OESD | 0\% |
| gutshot | 0\% |
| overcards | 0\% |
| flushdrawn+pair | 0\% |
| OESD+flushdr. | 0\% |
| gutsh.+flushdr. | 0\% |
| OESD+pair | 0\% |
| gutshot+pair | 0\% |
| gutshot+overc. | 0\% |

Range hat hit 42.9\% of the time

Dead cards


Figure 51: 99+/AK on A95

If we consider our plays right now we see:

- Check. This will probably get a bet from the AA/AK/99 part of his range, and probably a check behind by things like QQ or KK. If we go for a CR we might end up losing AK at some point (if not to the initial CR, possibly to the turn bet or river bet). If our opponent always stacked off TP in these situations, then going for a CR is great (as we make a stack about $30 \%$, and lose a stack about $15 \%$ ). The check also gives free cards to the JJ and KK type hands, although a checked through flop could encourage a light call, or possibly two, later in the hand. It is tough to know exactly how any opponent will react with that part of his range later on as the situation arises rarely.
- Donk. Donking is an interesting option here. What makes a donk good here is when he calls with hands like KK or JJ to it (for at least a street). However, against a donk he probably doesn't raise AK type hands, so we never really stack that hand, which makes up a large percentage of his range. Yes, we get 3 streets of value against $A K$, but we miss the chance at the full stack. Against a player that wouldn't stack AK versus a CR though, the donk becomes much better, especially if AK starts checking the flop behind sometimes.

The important factorshere are how our opponent reacts to the flop (Does he check SDV hands behind? Does he bet AK? Does he think AK is the nuts here?) and what logical actions he would take. Understanding how often he hits the board is very helpful, as it can help us put percentages and values to entire lines. If we think our opponent views AK as SDV and almost never gets involved in an AI pot with it, then donking becomes better. As our opponent starts overvaluing AK and betting the flop with it, the checking lines becomes more valid.

- J53. On this very dry J high board we see how our opponent hits the flop. We see he has a better set about $6 \%$ of the time, and an over pair about $36 \%$ of the time. A large percentage of his range is whiffed AK.

| Hints 0 Off | Nolimit |  |  | Starting hands |  |  |  |  |  |  |  |  | No weight |  |  |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hints | AA A | ${ }^{\text {AKS }}$ A |  | AJs | ATs | A9 | 95 | Ass | A7s | A6s |  |  | As | A3s | $\mathrm{A}_{2} \mathrm{~S}$ | 50\% | Ah | Ac Ad | As |
|  | AKc |  | KQs | KJs | KTs | K9 | 9 K | K8s | K7s | K6s |  | K5s | K4s | K3s | K2s |  | Kh | Kc Kd | Ks |
|  | AQc K |  | QQ | Qls | QTs | Q9 |  | Q8s | Q7s | Q6s |  | 25 | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | AJo K | Kјo Q | QJo | J | JTs | ${ }^{98}$ | s | J8s | J7s | J6s |  | 55 | J4s | ${ }^{3} \mathrm{~s}$ | $\mathrm{J} 2^{5}$ |  |  | Jc Jd |  |
|  | ATo K | ктo Q | QTo | JT0 | TT | T9: | 9s | T8s | T7s | T6s |  | T5s | T4s | T3s | T2s |  | Th | Tc |  |
|  | A90 K | K90 Q | Q90 | 190 | T9 | 9 | 9 | 988 | 97s | 965 |  | 55 | 94 s | 93s | 92 s | 9 |  | , |  |
|  | A80 K | K80 Q | Q80 | 180 | T80 | 980 |  | 88 | 875 | 865 |  | 85s | 84s | 83 s | 825 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8 sh | 8 cc 8 d | 85 |
|  | A70 K | K70 Q | Q70 | 170 | T70 | 970 | o 8 | 870 | 77 | 76 s |  | 55 | 74s | 73 s | 72 s |  |  | 7 Td |  |
|  | A60 K | K60 $\mathrm{Q}^{2}$ | Q60 | 160 | T60 | 960 | So 88 | 860 | 760 | 66 |  | 65 | 64 s | 63 s | 62 s |  |  | 7 |  |
|  |  |  |  |  |  |  |  |  | 750 |  |  |  |  | 53 s | 52 |  | 6 h | (6) 6d | 68 |
|  | A50 |  |  | 150 | T50 |  |  | 850 | 750 | 650 |  |  | 545 | 53 s | 52 s |  | 5 5 | $5 \mathrm{5d}$ |  |
|  | A40 K | K40 | Q40 | 140 | T40 | 940 | 40 8 | 840 | 740 | 640 |  | 40 | 44 | 43 s | 42 s |  | 4 h | 4c 4d | 45 |
|  | A30 K | K30 | Q30 | 130 | T30 | 930 | 308 | 830 | 730 | 630 |  | 30. | 430 | 33 | 32 s |  |  |  | 45 |
|  | A20 K | K20 Q |  | 120 | T20 | 920 | 208 | 820 | 720 | 620 |  |  | 420 | 320 | 22 |  | 3 h | 3 d | 35 |
|  | 9 3.92\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 h | $2 \mathrm{cc} 2 \mathrm{2d}$ | 2 s |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Delete |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Swith |  | All |  |  |  |  |  | oadw |  |  | ted |  |  |  | ear |  |  | Random |  |



Figure 52: 99+/AK on J53

Let's check our options:

- Check. If we expect that our opponent will CB his over pairs, sets, and whiffed AK hands, then a check should solicit a bet about $75 \%$ of the time. If we think he would CB his baby pairs like 99 or TT, then he is CBing 100\% of the time. This gets us direct value a large percentage of the time, as we make the most from the whiffed AK hands (as a donk would probably get folds from that part of his range). How we react if we check and he bets is based on how he values hands. If he will stack off over pairs, or at the very least call the CR and get involved in a bigger pot size, then we should CR for pure value. If we think he folds things like QQ or AA to a CR, then it loses a lot of value. Instead of CRing against a player like that we could check/call and donk the turn, or even check/call and check the turn if he would bet over pairs again on the turn (assuming the turn card is a low one).
- Donk. If we expect that our opponent will check behind over pairs often, donking becomes a better idea. However, the big reason why checking is so outright profitable is that we get the bet from whiffed AK that we usually couldn't get by donking. If we donk large the entire hand, we can create a final pot size around 150 bb , which isn't bad at all, especially if a CR would scare our opponent from getting involved. Of course, that 150bb pot assumes our opponent never finds the fold button and that bad cards don't come that scare him off.

As the high card on the board gets lower and lower, our actions get more focused around our opponent's valuation of over pairs. If he is comfortable stacking them off, or at the very least getting involved in large pot sizes with them, then CRing becomes more and more valid. If he begins folding them a large percentage of the time versus a $C R$, then check/call becomes more valid. If he might check them behind rather than CB them, donking becomes more valid even though we lose the outright value of the whiffed AK CB. Again, information helps us create the optimal line and exploit our opponents better.

- KQ5. This board becomes a bit different. Now we have two broadway cards on board as opposed to a single one. While there is a difference in texture between $\mathrm{KQx}, \mathrm{AJx}, \mathrm{KTx}$, etc., the underlying principles are relatively similar. Let's see how his range hits this board:



Figure 53: 99+/AK on KQ5

We see he is hitting a set about $14 \%$ of the time, an over pair about $14 \%$ of the time, and TP about $28 \%$ of the time. Let's consider our actions like we always do:

- Check. When there are multiple broadway cards on board most opponents start turning a hand like 99 or JJ into a bluff here, just disregarding the SDV it may or may not have. Because of this, we can probably expect a bluff CB more often, so about $43 \%$ of the time. He will probably CBAA as well. However, the really important piece of the puzzle is how he handles AK here. If he would check it behind, then we start missing some serious value given how often he has that part of his range. If he would bet AK, AA, and the whiffed JJ and 99 hands, then checking here is great as he will bet a large percentage of the time. If he starts checking AK and AA type hands behind on the flop, then we might consider donking as we would only get 2 streets of value maximum from these hands (he checks the flop behind and we donk the turn and river).
- Donk. Donking isn't a terrible choice here. Yes, we probably don't get calls from hands like JJ or 99, hands that would probably CB if we checked. But we would really only get a few big blinds of value from them in the first place. If our opponent is very likely to check AK or AA behind, then donking can be great. We give ourselves a serious chance of getting 3 streets of value, and don't have to worry about him possibly folding them to a CR. A CR on this board might seem scary and start folding out more single pair hands, which makes CRing here a less valuable action.

Getting aggressive and CRing these two broadway card boards usually scares most opponents, especially tighter ones. This leaves some room for bluffing, but makes CRing for value less of an option. Because of this, donking can be very valuable. We give ourselves an extra street (the flop) to get the pot geometry working in our favor, and most tight players are not willing to fold strong SDV hands to donk bets. While the math does get a bit different on an AJx or QTx board, the concept still applies when we consider how our opponent would react to the CR and also how they would possibly call down if we started donking.
755. While flopping quads is a little extravigant, an 885 or 335 flop would play relatively similarly. We see on this 755 flop that our opponent has an overpair about $70 \%$ of the time, and the rest of the range is pretty much whiffed AK.



Figure 54: 99+/AK on 755

## Let's check out our options:

- Check. Whether we check or not is very much based on how our opponent would CB this board. Most opponents will CB all of their big pairs (in this case our opponent really only has big pairs with such a strong range PF ). Some opponents will CB the whiffed AK part of their range, which only gives us more and more value the more often they do it. So we should expect a CB about $75 \%$ of the time. The great thing about these board textures, especially with lower cards, is that over pairs tend to feel the most comfortable. There are fewer ways to make boats/ quads given the fact that the board is paired, and the overall player pool tends to overvalue their own pairs on these textures. Because of that, a CR can be very valuable. The board couldn't be safer for a big pair, and we can get our opponent feeling very stuck to this pot quickly.
- Donk. Donking becomes a very valuable option when our opponent would raise the bulk of his pair range. If our opponent would flat a hand like KK here, the donk becomes much less valuable unless we go for some kind of donk flop, CR turn line. Rather than go for some super creative line, which also allows bad cards to pop (cards that improve our opponent or scare them), we should usually take a more straight forward approach.

On a board like this the important factors are our opponent's CB frequencies and how he values overpairs. If he would always CB his pairs and give liberal action to the CR, then we should go for the CR. If he would start checking pairs like $\Pi$ or JJ behind on the flop, then donking becomes the best way to get 3 streets of value. But what if he would always stack off QQ+ and not always 99-JJ? This just becomes a simple math problem:

Assumptions: He would CB 99-AA only and always for $\$ 4$. He would always stack off $\mathrm{QQ}+$ now and never 99-JJ. If he has AK we never make anything (obviously this isn't always true as he could check behind AK, improve on the turn, and pay off. We will just make this assumption to make the math easier and more focused on the pair part of range) We will also just ignore the rake and dead small blind.
$\$ E V=0.69[(0.5 \cdot \$ 4)+((0.5 \cdot 0.99 \cdot \$ 103)-(0.5 \cdot 0.01 \cdot \$ 97))]-0.31 \cdot \$ 0$
$\$ 1.38+\$ 35.17-\$ 0.33-0=+\$ 36.22$
The math on this would also change as the board went from 755 to something like 885 or 665 . When we have quads our opponent has almost no equity, even with a hand like AA. But on a board like 885 , an over pair would have almost $17 \%$ equity. If we took the same assumptions (where he would fold 99-JJ, and stack off QQ+ always) we see this:

Assumptions: He would CB 99-AA only and always for $\$ 4$. He would always stack off $\mathrm{QQ}+$ now and never 99-JJ. Again we'll just assume that if he has AK we never make anything.
$\$ E V=0.69[(0.5 \cdot \$ 4)+((0.5 \cdot 0.83 \cdot \$ 103)-(0.5 \cdot 0.17 \cdot \$ 97))]-0.31 \cdot \$ 0$
$\$ 1.38+\$ 29.5-\$ 5.7-0=+\$ 25.18$
While this situation would still have a lot of value, it is important that we understand how equity changes versus commitment ranges effect the $\$ E V$ of a play. That doesn't mean that we need to take another line (given the parameters we have laid out). Just make sure to think about basic equities and frequencies when making plays and creating lines.
(A quick note: these $\$ E V$ equations are worst case scenarios. $\$ E V$ goes up as hands like JJ make mistakes, when we take into account AK paying off on a K turn, etc.)

So, with all of the above in mind, we should be able to come up with an optimal decision when we flop a big hand. In MW pots we play straight forward and usually raise our big hands right away. In MW pots we stay focused on relative position and take lines that exploit sandwiching callers. In 3-bet pots we focus on board textures and what our opponent's C-Range would be in a 3-bet pot. Because we have a smaller SPR we can sometimes play a bit slower because getting our stack in the middle is very feasible in just two streets. And in HU pots we really pay attention to board textures and our opponent's ranges and tendencies. Because the SPR is usually so much deeper, getting stacks in can sometimes be difficult. Just focus on making the most money possible as often as possible. Sometimes getting $65 \%$ of their stack is the best we can do. Focus, exploit, manipulate, and win.

## 16

## Flop <br> Adjustments

Now we can talk about a few leftover flop play topics: the HUD stats that are useful, different stat correlations, and little plays that happen less often, like handling donk bets. While most of this could have been extrapolated from what we've already discussed, here we'll clarify certain topics while exploring some new details.

## The Postflop HUD Stats

- FlopCB. The CB stat lets us know how often our opponents are CBing the flop. If they CB at a higher frequency, then we can assume that they CB wider pieces of their ranges. There are some players that have very small $C B$ frequencies, and these are people that tend to only $C B$ their strong hands and check their weak hands. Just looking at a $C B$ frequency won't tell us if they are "CB-and-quit" type players, but it can help us visualize their CB range more accurately. Remember that the CB stat looks at an aggregate of HU pots and also MW pots, and that people tend to CB less in MW pots than HU pots. (A high FlopCB would be higher than $80 \%$, and a low FlopCB would be less than 60\%)
- FoldvCB. This stat tells us how often our opponent folds facing a CB. Higher numbers indicate that a player is playing more fit-orfold, and very low numbers indicate liberal peeling. We can use this stat while considering preflop plays (like isolating), and plan plays around good sample sizes. Remember that this number also looks at HU pots and MW pots in a combined way. There is also a specific stat for FoldvCBin3betPot, and we should use that when appropriate, remembering that it can take a massive sample size for this stat to be meaningful. (A high FoldvCB would be higher than $70 \%$, and a low FoldvCB would be less than 40\%)
- CR. The CR stat lets us know how often our opponent is check-raising the flop. This can be helpful if we have a hand strength that doesn't face a CR well. Against players with high CR percentages we might have to be prepared to continue a little more liberally versus the CR. However, just because a player has a higher CR percentage, doesn't mean that they will run massive bluffs postflop. It might just mean that they CR-and-quit as a bluff sometimes, and only continue on the turn or river with value hands. Players that CR often can be difficult, but we can also check behind the flop with SDV hands or pay attention to their turn/ river tendencies to create plays that work well against them. (A high CR would be more than $16 \%$, and a low CR would be less than $7 \%$ )
- FoldvCR. This lets us know how often a player folds versus a CR. Because CRing can be an action that happens more rarely in FR, it can take a very long time for this stat to have enough samples to be meaningful. If a player has a very large FoldvCR we should consider CRing them more often and picking up their CB. However, in this case we would want to look at numerous variables. Does this player have a high CB number? (aka, is their O-Range wide enough?) Is this player CBing into an MW or HU pot? Is this the correct type of board texture to attack and create enough folds on? Is this player a hand reader? (If so, am I repping anything?) While the FoldvCR stat is useful, it is often times necessary to consider a wider array of variables before going for the CR. (A high FoldvCR would be more than 75\%, and a low FoldvCR would be less than 40\%)
- Donk. A donk bet is a bet that is made into the aggressor. So if we steal, the SB calls, and the SB bets the flop into us, it is considered a donk. Knowing how often a player donks can helpful. If a player rarely does it then we can assume their donk range is probably made with big hands and big equity hands (draws and such). Players that donk often can be difficult to play against, and usually it comes down to postflop reads, the value of our own hand, and the board texture. It should also be noted that good players tend to only donk strong into MW pots, especially MW pots with fish and good relative positions.
- TurnCB. Knowing how often a player raises PF, CBs the flop, and then bets again on the turn can be very helpful. It can let us know iffloating is good (a high flopCB and low TurnCB) or pretty bad (low flopCB and high turnCB). Once we get used to this stat it can help us visualize if a player is taking a lot of bet/bet/X lines with SDV hands, or going for more bet/check/X lines with them. (A high TurnCB would be higher than $75 \%$, and a low TurnCB would be less than $30 \%$. The average range varies heavily based on play style. Tight players will be able to turn CB for value more often than players who raise more liberally PF )
- FoldvTurnCB. This lets us know how often a player folds versus a TurnCB. If a player has a high FoldvTurnCB we can usually assume that they only continue from the turn onwards with super strong hands. A low number here lets us know that our opponent might call more liberally against double barrels. This number really needs to be looked at from a big picture point of view to be very helpful. A big or small number
here, by itself, doesn't tell us too much. But coupled with things like FoldvFlopCB and a player's river call win \% (RCW) we can get some really good ideas on how to exploit this person.
- WTSD. This stat lets us know how often a player went to showdown. A player with a large WTSD is not one we usually want to be bluffing, rather we would want to VB him relentlessly. Again, this needs to be looked at in a big picture sense. A nit might have a higher WTSD, but that is because his PF range is strong and thus will retain strong hands postflop that can more comfortably get to SD. A fish might have a high WTSD, but that's because he continues too liberally to get there. (A high WTSD would be more than $30 \%$, and a low WTSD would be less than 20\%)
- W\$@SD. This stat lets us know how often a player wins money when they get to showdown. A player with a very small $\mathrm{W} \$ @$ SD usually gets to SD with bad hands, either by bluffing or calling. A high W\$@SD can tell us that a player might only get to SD with the strongest of hands. This, looked at in a big picture sense, might lead us to believe that we can try bluffing them early in the hand more liberally because they only want to showdown nuttish hands. (A high W\$@SD would be more than 59\%, and a low W\$@SD would be less than 45\%)
- RCW. This is a player's river call win \%. Effectively it tells us how often they win the pot if they call a river bet. A low RCW might lead us to believe that we can VB them liberally and should avoid river bluffs against them. A high RCW might lead us to believe that we can bluff them early in a hand, because when they get to the river by calling they are usually very strong. A high RCW might also mean that they take a lot of inducing lines, which is usually the case from good opponents. (A high RCW would be more than $50 \%$, and a low RCW would be less than 35\%)

Of course, we only have so much room on our HUD when we are playing. And some stats need massive samples before they are any sort of helpful. We need to choose HUD stats that we understand and have use for. So if we are playing very tight and focused on VBing, then we might consider using stats like RCW and W\$@SD. If we are playing a very LAG game, focused on double barreling and bluffing, then we might consider stats like FoldvTurnCB and FoldvCR. Stats are personal and should fit well in the games and styles that we are playing. Of course, most of these stats are available in the pop up, but our actual HUD should be built with our style and meaningfulness in mind.

## The Postflop HUD Stat Correlations

We talked in the PF section about HUD stat correlations, and there are some specific HUD correlations that we can use in our postflop game. While often times we do need a bigger sample size to really utilize them (as postflop situations always happen more rarely than preflop situations), they can be extremely helpful in selecting optimal lines. The more help we can get in creating lines that more specifically exploit our opponent, the better off we will be.

## - FoldvFlopCB and FoldvTurnCB

This correlation can help us decide whether or not we are going to double barrel. A player with a low FoldvFlopCB and high FoldvTurnCB can tell us that this player calls the CB a lot, and gives up on the turn without having a nuttish hand. This information can help us plan our hand and line. We might CB more of our range with intentions of double barreling against a player who calls the flop and folds the turn often. We sometimes see a player that has a high FoldvFlopCB and low FoldvTurnCB, but this shouldn't shock us too much. This player, once they call the flop CB , are usually going to try and SD , because their flop C-Range is so strong.

## - FlopCB and TurnCB

This correlation can help us see how often our opponent is going to double barrel. A high FlopCB and high TurnCB indicates that this player is betting both streets often. This is most helpful when considering whether to float or value call. If we are trying to call a hand like 88 on a 9 high flop, but see he CBs the flop and turn at a very high frequency, then we know getting to SD for cheap will be difficult.

We can also use this with stats like "FoldvTurnBet". Say a player has a high FlopCB, low turnCB, and high FoldvTurnBet. This player would be awesome to float against. We know he is going to CB often, not going to bet the turn often, and will play the turn very straight forward. Of course, we need big samples with these stats because board textures and how they play against their own opponents will skew these numbers one way or the other. Taking notes on how opponents play against us in these spots is usually the best way to create lines against them.

## - WTSD and W\$@SD

This correlation lets us visualize how this opponent gets to SD, and with what frequency. Our favorite opponent is one with a very high WTSD and very lowW\$@SD. This person makes a lot of postflop mistakes, and should be heavily exploited with our strong hands. This person is also pretty bad to bluff because they don't mind getting to SD with lighter holdings.

Certain players might look odd here. For instance, a nit might have a high WTSD and high W\$@SD. This shouldn't shock us given that they use a really strong range at all times, and when they get to SD (which they will be able to to more often given their PF hand range) they will be winning it more often. We also need to consider the bigger picture when considering players like good LAGs. These players might sometimes have a very small WTSD and a relatively low W\$@SD. This is because they run a lot of pot shot bluffs that usually allow them to get to SD often in small pots, and usually with unimproved hands. So while this correlation might make them look like a fish, we need to consider the big picture and figure out why it might only look that way.

## - 3-Bet and CBwhen3bet

This correlation is great when considering our lines in 3-bet pots. A player with a large 3-bet and low CBwhen 3bet is someone we may consider floating liberally postflop. A large 3-bet means that their 3-bet range is wide, and usually weaker. A low CBwhen3bet might indicate a player that is only CBing when their hand is strong (and we know a wide 3-bet range won't hit strong on the flop all that often). A player like this can be floated postflop in position and bet into when they check on the flop. Of course, this correlation needs massive samples to be useful. And again, just because he has odd looking numbers here doesn't mean that he will generally approach us in the same manner. Notes and experience with this player should supersede this stat correlation in smaller samples.

## - Callv3bet and FoldvCBin3betPot

This correlation can be helpful and assist us as early in a hand as PF. Just because a player has a high Callv3bet doesn't necessarily mean we can't light 3-bet them. If they have a high FoldvCBin3betPot, we can 3-bet and $C B$ with a positive expectation. Although these players are rare, they do exist and should be punished until they adjust.


#### Abstract

The standard is to see a player with a small Callv3bet and small FoldvCBin3betPot. This makes sense as the player will only continue versus a 3-bet with a strong range, and thus won't be folding to a CB with it. Against players like this we should be less apt to bluff CB if our resteals get called. Like always, take notes on how a player is reacting in these spots against us. They can help us frame our own future frequencies, so much that we might change our 3-bet range against them.


## The Free Play Pots

There are the rare times when we are in the BB, it gets limped to us, and we check with our weak hand. Lot of players pass on a lot of the profit potential of this situation by playing it too passively postflop. These pots are perfect for taking little pot shots with equity. Most other players have no will to fight against a bettor, and thus we should look to add these little pots to our win rate whenever possible.

Take a situation where MP2 limps, the SB completes, and we check the BB with T8o. The flop comes 762 and the SB checks to us. We should try to pick this pot up by taking a little $1 / 2-2 / 3$ PSB. We have equity in the pot, the SB probably doesn't have much (deduced from his check), and we just assume that MP2 will fold enough to make it profitable. If we get called or raised we can play poker, but stabbing is much better than just checking the flop and giving our opponents chances to bet at the pot themselves or letting them hit the turn and get stuck to the pot. (Ofcourse, if the games are playing very aggressively and opponents are attacking these little pots, then allowing our opponents to make betting mistakes might be the best line)

The same thing can be said for the times we have something like Q6s in that same situation on a K64 or As8s3d board. We picked up equity, we don't mind picking the pot up right here, and there is no reason to let anyone else have this pot. This does get a little different when the number of players in the pot gets higher and higher though. For instance, in a three person pot we can stab more liberally than a five person pot. The fewer players there are to get through, the more we should fire with our equity in these free play pots. The more players there are to get through, the more often we are just check/folding without big draws or very strong hands.

## The Draw

Although most books have an extensive chapter on draws, for us draws don't comprise much of our postflop range. The most probable ways we catch draws are when we open raise from EP/MP and catch a NFD, when we steal and catch a draw, or when we resteal and catch some sort of draw. We are rarely calling with suited connectors and such hands, so it's not often that we catch these draws in the first place.

The big things to consider when we are drawing, or considering drawing, are:

## - $\quad$ Stack sizes

The smaller the effective stacks are, the more willing we should be to commit or fold on the flop. The larger the effective stacks are, the more flexibility we have, and thus we usually veer away from risking our entire stack on draw equity. This is why draws, like a NFD, in a 3-bet pot are usually happily committed on the flop.

- Are there really implied odds?

When we consider drawing we need to ask ourselves if there are really IO here. Often times, there aren't massive IO. Maybe we only get paid when we improve and our opponent has a set. Maybe our opponent folds that set sometimes when we hit, in which case the value of our draw is relatively bad. Against players that are unlikely to pay off without the nuts, draws usually go down in value, unless the draw is super hidden (like a 75 on a 963). Against players that overvalue single pairs, regardless of how the board turns out, the value of draws goes way up.

- What are our improvement cards?

So many players forget to think about what their improvement cards are when drawing. More importantly, is what do our improvement cards do to the board? Let's look at a few situations:

- We have 66 on a 457 board. Our improvement cards, assuming we are behind, are any 3,6 , or 8 . These cards all put 4 card straights on the board. Not many players, even total fish, are likely to pay off on that kind of board. So the value of our draw is pretty useless given we will be able to extract hardly anything extra if we improve.
- We have $\mathrm{A} \$ 9 \star$ on a $\mathrm{J} \$ 7>5$ \& board. Our improvement cards are any A or diamond. The A is a scare card which will probably give us the best hand, but won't be great for getting paid off. Any diamond is usually good, but the K and Q could easily act as scare cards as well. We need to consider every improvement card to really evaluate the true value of our draw.
- We have $9 \therefore 8 \div$ on a $7 \downarrow 6 \downarrow 2 \vee$ board. Our improvement cards are any T, 5 , and possibly 9 or 8 . All of these cards are relatively safe given the board texture, but we need to consider suits. Sometimes catching the T or 5 will be bad. And sometimes catching TP will give us a second best hand. This isn't to say that drawing here is bad, just that we need to be aware of how valuable our draws actually are when looking at future cards.


## - Is there flexibility?

Say we have 8 . We call a very tight UTG raise from the button and see a HU flop of A 63 . UTG bets and we call. Here we have some flexibility. Let's look at ranges (assuming UTG has a tight 88+/AK range PF , and CBs the entire range on this flop):


Statistics

| full house | $0 \%$ |
| :--- | :--- | :--- |
| flush | $0 \%$ |
| straight | $0 \%$ |
| 3 of a kind | $0 \%$ |
| two pair | $6.25 \%$ |
| overpair | $0 \%$ |
| top pair | $0 \%$ |
| pp below tp | $25.0 \%$ |
| middle pair | $08.8 \%$ |
| weak pair | $0 \%$ |
| ace high | $0 \%$ |
| nothing | $0 \%$ |
| flushdraw | $0 \%$ |
| OESD | $0 \%$ |
| gutshot | $0 \%$ |
| overcards | $0 \%$ |
| flushdrawn+pair | $0 \%$ |
| OESD+flushdr. | $0 \%$ |
| gutsh.+flushdr. | $0 \%$ |
| OESD+pair | $0 \%$ |
| gutshot+pair | $0 \%$ |
| gutshot+overc. | $0 \%$ |

Range hat hit 31.2\% of the time

Dead cards


Clear

Figure 55: 88+/AK on A65

- $\mathbf{8 8}-\mathrm{KK}=$ will probably $\mathrm{c} / \mathrm{f}$ the turn. It might sometimes $\mathrm{c} / \mathrm{c}$, or improve and bet again, but overall this part of the range usually isn't too willing to get involved in a large pot OOP. This is $69 \%$ of his range.
- $\quad \mathbf{A K} / \mathbf{A A}=$ very comfortable, even if the flush fills up. This is $31 \%$ of his range.

Let's assume that only AA and an improved set would bet the turn (about $10 \%$ of the time). This means he would be checking about $90 \%$ of the time (this assumes he checks AK and doesn't bluff turns). If that be the case, then when he checks, only about $50 \%$ of his range would call a bet (assumes he never folds AK and only folds 88 -KK half the time). This is a pretty worst case scenario, and we are still picking the pot up $45 \%$ of the time on the turn with a decent ROI. This didn't even account for the times when we improve to our flush, just that we have bluff flexibility along with our draw value.

These situations arise often. Just because we are drawing doesn't mean we shouldn't look for other ways to add value to our hand. We can do that by bluffing later, semibluffing, picking up more outs, etc. We use reads on our opponent, their hand range versus the board texture, and the ways they tend to act on the turn and river.

While draws can seem very tricky, often times they are relatively simple to play. By simply considering the texture, our opponent, and turn cards, we can usually come up with an optimal line. Remember though, that as IOs get lower and lower, we should usually consider giving up on draws earlier. We also need to consider if a raise on the flop is worthwhile. If we think a raise would often times face a 3-bet on the flop, then flatting our draws would usually keep the line simpler with non-shallow stack sizes. Also remember that drawing from OOP is usually a problematic endeavor. It will be very hard to take free cards, extract value, and minimize loss. So be cognizant of these factors when considering lines with draws.

## The Facing Of A Donk Bet

Donk bets usually throw people off. They are odd, they break up the normal flow of a hand, and can be a bit confusing. But if we just ask ourselves some basic questions, we can usually get to a correct answer on how to handle these bets.

## - Who donked?

As always, we handle each opponent differently. If a tight player, who only donks sets, donks at us, we have an idea what he has. If an A-Fish donks at us, we can assign a much wider range of hands. Usually tight players donk the flop with very definitive hands (big draws, sets, two pairs, or single pairs in special situations), and loose players are more sporadic. If we notice that a reg is starting to donk more often into us, then we can consider floating/raising them more liberally, but again, that is a play that needs information to become valid.

- How did they donk?

Did they donk into an MW pot? Did they donk in a HU pot? The tighter a player is and the more players in the pot, usually the stronger their hand is. Loose players of course don't care as much; they just donk when they feel it is appropriate.

## - What size did they use?

Because we usually don't have many reads on a player's donking strategy, we need to infer strength from things like timing, board texture, and sizing. If a fish donks at us for pot, we can usually infer that he has something he deems as strong. This isn't to say that a small bet is never a big hand, nor that a PSB is never a bluff, just that we don't usually want to attack the big bet (for reasons of exposure, expected strength, etc). Unless we know that a player donks big with bluffs, we usually want to just give it respect (and take notes so we can more optimally handle the situation in the future).

## - What kind of hand do we have?

Because we are always IP when a player donks into us, we have more flexibility. But, our hand strength is still one of the major determinants of our actions facing a donk bet. Let's review them by hand strength:

- Bluff. When we have a bluff hand we can always get away for cheap. We didn't even have to risk a CB , which is nice (we would always rather outright lose to a donk than have to fold to a CR). When we have a bluff hand, we usually want to raise or fold. We can raise if we think they would fold enough, and we can fold if we think their donk range is too strong. We could also consider floating and stabbing the turn, but we usually want to only do this
with information, as a donk range should usually be relatively strong (a fish donking a pair, or an A high board, etc.) and not as willing to fold on the turn
- Value. Value hands are the easiest. We can raise if we think they will continue enough of the time. Or we can flat if we think they are bluffing a lot and raise later in the hand. As a default, if we have a value hand, raising is just fine. But as we get more information about our opponent's donk range, we can make more optimal plays.
- SDV. With SDV we usually shift our hand into the call or fold range. Say we raise $A Q$ from MP, the SB calls and we see a HU flop of $\mathrm{Q} J 4$. If the SB donks, we should usually just call here. It is rare we will get action from worse hands if we raise, and a flat can induce worse hands to continue betting. We sometimes consider odd hands SDV in this situation. Say we steal with KQ , the SB calls, and the flop comes T94 and we face a $1 / 3$ PSB. We have a good amount of equity here, are getting a good price, and thus we can call (especially considering that we have position and the added flexibility on the turn and river). We might occasionally fold a SDV hand, but usually only in bigger pots. Say the SB steals, we 3 -bet QQ and he flats. The flop comes AT9 and he donks for pot. We probably won't be able to get to SD cheaply or comfortably, so folding now is a very valid option.

While annoying, facing donk bets is relatively simple. What do we know about their donking range and frequencies, and how does that relate to our hand and the board texture? Also, we shouldn't get frustrated when opponents donk at us. For one, it saves us the bluff CB against a range that probably wasn't going to fold often anyway. Two, when we have a hand it puts an extra bet in the pot. And three, we are in position! We have the flexibility to make whatever plays we want and with more correct information.

## The Depth

We already talked about depth in Chapter 14 with regards to SPR, but here are some additional considerations. When we think about our line in any hand, stack sizes greatly influence our line. Depth can make stacking off TPTK a great play or a disastrous play, and knowing when it is good or bad is imperative to our postflop success.

Let's first start talking about shorter stacked play. There are a few different shorter stack sizes that we tend to deal with:

## - $\quad$ Short stackers

These players have stacks sizes between 1 and 20bb on average. If they auto reload to this stack size, they often times have a strategy specifically designed for that depth.

- Cappers

These players have stacks sizes around 40 bbs . The good ones tend to be aggressive PF with their 3-betting and stack threatening, but the bad ones can be very sporadic. In a single raised pot the SPR on the flop can be very awkward.

- Auto donks

These players have stack sizes around 60bbs. They tend to use the "auto buy-in" option on the poker client, hence the name. The SPR situations in single raised pots are a little deeper than pots with cappers, but they can still get awkward very quickly.

- The non-reloader

These players have stack sizes around 80 bbs . They tend not to reload after buying in for something deeper, and thus are usually not the toughest of opponents. The postflop play in single raised pots is usually similar to that of 100 bb players, but we do allocate for a bit more mistakeproneness.

It should be obvious that the shorter a stack size is, the less maneuverability we have postflop and the closer we are to commitment when playing a pot. It doesn't mean that we abandon all reads and other information to make folds when we are behind, it just means that we need to proceed with caution when entering pots with these players. Because it takes fewer bets to get smaller stacks in the middle, we need to position ourselves to not threaten our own stacks with hands we don't want to commit.

Let's look at an example. Say at 100 NL we raise to $\$ 3$ with AQ from MP and only the button calls us. He has 30 bb left, making a roughly 4 SPR pot. The flop comes Q87 and we CB for $\$ 5$. Let's look at a few logical happenings:

## - He raises to $\mathbf{\$ 1 5}$

Any raise he makes effectively threatens his stack, which means that he shouldn't be bluffing here. While some shorter stacks will raise/fold here, most are comfortable with their hand once they raise. At this point it just becomes a math problem. There are 6 combos of sets ( 3 of 88 and

3 of 77). If he has a $Q x$ hand, there are 8 combos of each (so 8 combos of $\mathrm{KQ}, 8$ of QJ , etc.). Because the combos of Qx type hands tend to so heavily out weigh his combos of hands that beat us, stacking off here is usually the standard thing to do.

- He shoves

The same as a raise to $\$ 15$ as both plays effectively commit his stack. The shove also has a tendency to be a bit bluffier as our opponent might do so in an effort to collect the big (relative to his stack size) pot.

- $\quad \mathrm{He}$ calls

If he calls it makes for a $\$ 17$ pot on the turn with $\$ 25$ left. We are effectively committed and just need to decide which line to take on the turn. If he tends to bet a lot when checked to, then we can check and commit when he bets. If he tends to make more calling mistakes, then we should bet again (something like $\$ 8$ sets up river shoves nicely). If we are unsure, we can just default on betting to ensure that we get his stack every time (as the turn getting checked through makes getting stacks very difficult).

We see that all options lead to getting our stack in the middle, and this would be true if the effective stacks were smaller as well.

Things start to change, however, as the effective stacks get deeper. Say our opponent had 55bb left on the flop. At this point we might take a different line. We might check to induce sometimes, because the added depth of stack gives us more flexibility. Our default would usually be to CB for value, but facing the raise becomes a different story. Now we might start folding or calling versus the raise as the stacks get deeper and deeper. This is for a few reasons:

- More depth changes minimax

The deeper the stacks are, the less we want to stack off single pairs. The shallower the stacks are, the more often we take TP and over pairs to the felt. Coupled with that, the deeper the stacks are the more we can lose when we are behind. If stacks are shallow, we can't lose all that much more in a given hand. But as stacks get deeper, it can put us in a situation where we win very little when ahead, and can lose much more when we are behind.

This is why we are always more likely to fold a TP type hand versus a flop raise from a full stacked player than a short stack player. The deeper stacks create situations where the mistake of creating too big of a pot can have dire consequences, but folding a little more often wouldn't hurt us nearly as bad. We need to be cognizant of stack sizes as they can drastically change our plan in a hand. Everything from betting versus checking to stacking off versus folding is deeply effected by stack depth.

- More depth changes their ranges

A player with more money should usually be given more respect than a player with less money as a default. A player who has an edge usually wants the most amount of money in front of them at all times. Because of this, as a player's stack size gets smaller, we can usually assume they are more mistake-prone, which becomes very visible in their action and ranges, both preflop and postflop.

For instance, a good player with a deeper stack will usually play a better range of hands preflop, both when open raising and when cold calling. Dumber players will tend to call too many hands preflop and also cold call hands that a better player would 3-bet or fold (like KJo, ATs, etc.). Good players also have an innate understanding of minimax and tend to take more SDV lines with hands like TP postflop. Dumber players tend to commit more liberally with things like TP, second pair, and draws. We need to keep this in mind as it changes both a bad player's O-Range and C-Range in a very dramatic way.

- More depth changes our stack off ranges

As stack sizes get deeper our average tendency is to stack off with a tighter and tighter range. Against a 300 bb effective stack we might only stack off the literal nut, whereas we might stack off top pair with a medium kicker (TPMK) versus a 25 bb effective stack. Because a raise from a deeper stacked opponent threatens more money, thus forcing us to have a bigger hand to normally continue, we want to be very selective with the hands that we continue with against them. However, against shorter stacked opponents, we tend to stack off TP and big draws much more liberally on the flop.

It should also be noted that the shorter an opponent's stack is, the more definitive of a plan we need to have. We have much less flexibility in the hand, and thus drawing or
making more complicated plays is usually a poor decision. When betting or raising into these shorter stacks we need to know exactly what we are going to do when raised. Are we betting here because we want to stack off? Are we betting here as a bluff? If so, will he fold enough given his ranges? Is check/calling here an option? So long as we ask ourselves these questions, playing against these opponents becomes very simple.

On the other side of the coin, we do sometimes play versus opponents with deeper stacks. Usually we just want to acknowledge that we have a lot more flexibility in these pots. We can consider running bigger bluff lines due to our opponent being relatively far from commitment. However, we need to understand that tighter players with big stacks tend to protect that stack for dear life. If they start getting very active in a very large pot, it might be time to consider making some hero folds.

We tend to play against shorter stacks much more often than very deep stacked opponents. While SPR is important and can help us plan hands out, thinking about depth now and for the rest of the hand can make our lives easier. We want to always check what the effective stacks are and think about the pot sizes we are creating. If they are favorable, then we should make our play. If not, we should consider other lines. Overall, playing for pure value against shorter stacks is great, and playing tightly against bigger effective stacks without big hands is great as well.

## The Future

Once the flop action is over, and assuming we still have cards, we are half way done with our decision making! However, because of pot geometry, the decisions on the turn and river are incredibly important given how costly mistakes can be.

As we get closer to showdown our hand strength becomes more and more absolute. Our hand strength shifts from semi-bluff to either a bluff or value/SDV. Our SDV hands might push closer towards bluffs (if the board gets really bad), value (if we improve), or even retain their SDV. Bluff hands might improve to SDV or value hands on occasion. And value hands can also get pushed towards SDV or bluff, again, totally dependent on how the board pans out and how our opponent reacts to it all.

When thinking about the rest of the hand we want to consider some things:

## - Is this pot size favorable?

While we are on the flop we don't know exactly what the pot size will be by the river, but we can make an educated guess. If we are OOP against an aggressive bettor, we can logically assume we are heading towards a relatively large final pot size. If we are OOP against a passive bettor, we can logically assume that we are only heading towards a large final pot size if he has a nuttish hand. If we are IP and made a CB that got called, we will usually dictate the final pot size. We may be able to check back the turn which makes the hand a simple two street hand. Or we can bet the turn again which threatens a larger final pot size to our opponent. We should always make sure that we are considering the pot size we are venturing into and ensure that our hand strength lines up with the pot size which will be created.

## - What are possible turn/river cards?

A major leak among most players is in hands that go like this: 2 limps from MP, the SB completes and we check the BB with 84 s . The flop comes 875 and we c/c a bet. In doing this, how are we going to get to SD? Our improvement cards are terrible, we are OOP, and most every card that hits the turn is either an overcard or bad card. We need to make sure, especially from OOP, that we are considering the cards that can come on the turn and that we have an idea on how to handle them. Especially when we think we are going to face future bets, there is no reason to call this kind of hand on the flop because there is so little chance we can get to SD in a pot size this hand does well in.

## - Do we have flexibility?

As we've talked about a lot in this chapter, flexibility helps us a ton. Having multiple ways to win a pot is always a great thing, especially with bluff and semi-bluffhands. However, flexibility is really useful IP, and not so much OOP. From OOP we would have to introduce donking into the flow of the hand, whereas IP we can simply stab or double barrel. The more ways that we can win pots with low risk at high frequencies, the better our strategy will be. And again, this all boils down to position. This is why we always think about logical happenings from PF, and choose a range of hands that allows us to have solid and profitable spots later in the hand.

## - Can we handle pressure?

Somewhat related to flexibility, is can we handle more pressure? If we are OOP and expecting to face more bets later in the hand, do we really want to call the flop bet? If we are IP and faced a CR, can we handle a turn barrel? If we raise a draw on the flop, can we handle a 3-bet? We always need to be aware of pressure, even if it happens rarely. Before we raise a bet we want to ask ourselves what we will do if we get re-raised. Before we bet, we should ask ourselves what we will do if we get raised. While this isn't as important when we are bluffing (because we bluff when we expect the folding frequency is high enough to be profitable), it becomes extremely important with value, SDV, and semi-bluff hands. If we expect pressure now, or later, we might consider taking different lines. Often times these lines include a lot of check and/or folding when we think about minimax.

- Minimax

Again, minimax is that game theory decision focusing on minimizing loss and maximizing value. We have talked a lot about minimax so far, and it gets exponentially important as we think about the turn and river. We have also discussed the "reverse parlay," which is effectively the same thing as minimax. If we are in a situation where we never make anything more when we are ahead, but always lose more when we are behind, we are getting crushed in the minimax game. It is important that we not only focus on staying away from being on the bad side of minimax, but that we focus on being on the good side of it as well. If we call TT on a 9 high board knowing that we never pay off another bet when behind, but we occasionally get a VB when we are ahead, then we are doing well in the minimax game. It does get a bit odd when we consider our opponent's range as being less black and white (VB or c/f only), but it can be one of the more important factors, especially as raises start going into the pot.

Poker is effectively chess, but with cards instead of pieces. We need to be thinking moves ahead in order to get better and to create lines that are more optimal. While this can be very complicated at first, especially for players who have never considered thinking about river lines while on the flop, it gets easier in time. With experience, and after we've seen the same kind of spots over and over, planning and executing becomes more efficient and effective. Just keep working through lines, thinking about possible happenings, and asking yourself what your plays accomplish.

Barreling

Barreling is a bluff bet made on the turn or river. It is an important part of our game as it gives us extra ways to win pots with weak hands. Because our average hand strength is usually not very strong postflop, being able to use the board and our opponent's frequencies will help us pick up extra money.

## The Barrel Texture

When considering barreling we are usually looking at a few things. Of course we look at our opponent's range (if we are on the turn, what they have after the flop action is completed), but we also look at the board texture to see how their range is doing. In doing this we can see if their O-Range and C-Range would be far enough apart that a barrel could show profit. However, there is more to it than just the basic math.

When looking at textures we need to make sure that we are using textures that are logically strong for us and weak for our opponent. Let's take a hand where we open XX from MP. The SB, a TAG, calls and we see a HU flop of 763 . He checks, we CB, and he calls. The turn is a K and he checks again. If we bet here, we either are representing that we hit the K , or that we already had a strong hand. The K is a believable card and acts as a scare card to our opponent.

Say in this hand that we had JT. The K would be a much better card to bet in general than a 3. A 3 doesn't improve our perceived range and doesn't look very believable to our opponent (This is why we might bet this turn card with AA for value, but not with JT as a bluff.)

There are a few different kinds of turn/river textures that we tend to deal with:

## - Overcards

These are cards that make new top pairs available, for example, a Q turn on a T72 flop, or an A river on a T883 board. These are usually good cards to represent because they apply pressure to what is now second pair, and usually look like they hit the PFR's range.

- Bricks

These are cards that don't really change the board at all, such as a 3 on a QJ7 board or a 6 on an AJT4 board. These are usually bad cards to bluff on because we can't represent hitting them well.

- Board pairs

These are cards that pair the board, for example, a Q on a Q73 or a 5 on a K635 board. A board pair tends to make it harder for our opponent to have stronger hands as it reduces combinations.

- Draw fillers

These are cards that fill draws. A 7d on an Ad6c4d board fills a flush draw while a 9 on a 8TJ3 board fills a straight draw. These cards are often times scary to our opponent, assuming of course that they themselves didn't just improve.

- Through cards

These are cards that are less than the top card, and higher than the lowest card, such as a 9 on a Q75 or a K on an AJ54. These cards are usually not the best to bluff on as they don't provide much pressure.

While these kinds of turn/river cards can certainly overlap (a draw filler that is an overcard, a through card that is also a brick, etc.), these categorizations get us thinking about cards that are either good to represent and bluff on, or terrible to. They can also help us plan hands. If we think about CBing with intentions of double barreling, we should think about how often a good barrel card will hit the turn/river.

## The Bluff Double Barrel

As a player begins to improve they become interested in improving their double barrel game. A double barrel is simply a situation where we raise PF, CB the flop, and then bet the turn again. This section will talk about the bluff double barrel, as the value turn bet is covered in Chapter 18.

This play gives us extra ways to win the pot. Since we will usually not have super strong hands by the time we get to the turn (especially as our PF range gets wider and wider), we like having extra ways to pick up pots. Part of being able to bluff double barrel well is being able to choose the right opponents, textures, and sizes.

## - Opponent

Our opponent is by far and away the most important piece of the puzzle here. If our opponent is a player that doesn't like pushing the fold button, then we shouldn't really be bluffing him, regardless of the texture. This means trying to bluff double barrel against P-Fish, A-Fish, and unknowns
isn't usually going to be great. Of course, if we knew that our opponent in a certain hand was a P-Fish that would fold to the turn bluff, then we could run it. But often times fish aren't players we want to be running more expensive bluffs against.

Our ideal opponents to bluff like this are players that can think, to an extent. For instance, a player that can look at a turn card and say "that could have hit my opponent and makes me not feel comfortable with now second pair" is great. But it can become ugly when our opponent can look at a turn card and say "that card makes his betting range very polarized and I understand how to play that kind of situation well."

- Texture

Because we are bluffing, we like textures that are good to bluff on. So cards that create folding pressure on our opponent are great for us. We usually want to veer away from cards like bricks and through cards, unless our opponent would peel the flop and fold a lot versus the turn bet. Against players that can think about our range we need to think about how our range logically hits that board. If we raised from EP and never have KQ in that range, then trying to rep the straight on an AT7J board can get ugly.

- $\quad$ Sizing

Many players mess up the sizing of double barrels a ton. In an ideal world our size with our bluffs would look exactly like the size of our VBs. And because the opponents we are usually going to be bluff barreling into can think, it is even more important that we don't make our sizing telling of our intentions. Because we are bluffing, we want to give ourselves the best price while soliciting the most folds. Usually our size is going to fit right in the $50 \%-75 \%$ PSB range, but we should bet the most + EV size whenever possible.

Let's take a standard hand. We open AQ from MP, our opponent calls in the CO, and we see a HU flop of T73. We CB and he calls. The turn is a K and it is our action. Let's explore our options:

- Check. If a bet wouldn't solicit enough folds, then checking is the default play. So if the CO were a fish, our standard line would just be to check and hope we get a free card. However, against a more logical
opponent, the K is a scare card and could be worth a double barrel.
- Bet. A bet could be great. We just need to ask ourselves a few things:
- What is the O-Range? As usual, our plays boil down to ranges. So if our opponent would only call the flop CB with hands like $\Pi / 77 / 33$, it is pretty safe to say that he wouldn't be folding to a double barrel. But we also need to go back to PF and build a logical range. Let's say this opponent would call PF with 22$\mathrm{QQ} / \mathrm{AJ} / \mathrm{KQ} / 65$ s-QJs. And we think he would call the flop CB with $33-\mathrm{QQ} / 76 \mathrm{~s}-\mathrm{JTs}$. This is the starting point of every hand that we play.
- What is the C-Range? While knowing the O-Range is helpful, we want to think about what he would logically continue with if we bet the turn. Given the range we assigned we can see that the K doesn't improve his range at all. At this point we just have to start making some assumptions about his range. Let's look at the Flopzilla analysis. If he would only continue versus a turn bet with sets or better, then we would get a fold $86 \%$ of the time. If he would always continue with sets and draws, then we would get a fold $74 \%$ of the time. The tricky part is whether he would fold JJ/ QQ type hands. But even if he never folds them, we still get folds $60 \%$ of the time.



Figure 56: Double barrel on T73K

- Does our bet look real? If our opponent looked at our bet and said "well, it's unlikely he would bet AK here because it has SDV and I wouldn't call with a second best hand. And it is unlikely he has JT or QQ for the same reason, then his betting range must be sets and air, with a large weight towards air" then we might not bet. However, against most opponents that are base level thinkers, the K is a scare card that should solicit folds and make our bet look "real". How real a bet appears is relative and based on our opponent's ability to think about things like polarization and SDV.

Like usual, we notice that our play is heavily influenced by our opponent's O-Range and C-Range. If the two ranges are very close together, it can make a bluff very unprofitable (because we won't get enough folds to show profit). If the two ranges are very far apart, we can have a very profitable bluffing opportunity (because we will be getting folds more often and can show solid profit). And for our size here, we just want to bet big enough that it shows we are serious, small enough so that we give ourselves a good price, and in a size-range that it looks like a VB size. Thinking back to sizes, we remember that:

- $\quad 1 / 2$ PSB: Needs to work at least $33 \%$ of the time to show profit.
- $2 / 3$ PSB: Needs to work at least $40 \%$ of the time to show profit.
- $\quad \mathbf{1}$ PSB: Needs to work at least $50 \%$ of the time to show profit.

So if a $1 / 2 \mathrm{PSB}$ would get a fold as often as a $2 / 3 \mathrm{PSB}$, we should make the $1 / 2 \mathrm{PSB}$. Of course, the smaller the size of the bet the larger the C-Range usually becomes. We always need to be thinking about selecting a size that keeps the C-Range favorable for us.

This entire section is also the basis behind good triple barreling as well. We just think about how O-Ranges and C-Ranges changed (based on board texture, bet size, etc.) throughout a hand. If our bluff could solicit enough folds, then we can consider taking it. If our bluff couldn't get enough folds outright, then we cut our losses and don't bet unless we could make a profitable blufflater in the hand.

## The Semi-Bluff Double Barrel

There are times when we have a draw, or picked up extra equity, and we need to decide whether to double barrel or check. This decision can be quite difficult, but if we break it down, the decision gets simplified. Our goal in this situation is to figure out what a check accomplishes, what a bet accomplishes, and which of those should be more profitable. Let's talk about some of our considerations:

## - Will we get folds?

Because we still don't have a hand (this section is not talking about having AhQh on an As7h9h3c board), folds are always appreciated. We just need to think about O-Range vs C-Range and ask ourselves if a bet would get enough folds to show an outright profit. We also want to keep the turn texture in mind. If the turn is a scary card that should solicit more folds, then we might consider betting it more often. If it is a brick that would allow our opponent to feel very comfortable, we probably can't get enough folds to justify betting it for outright profit.

- Are we IP or OOP?

Draws are always easier to play IP versus OOP. IP we can just decide to check behind and take our draw for cheap. But OOP, a check might induce bets that make taking our draw cheaply nearly impossible. As a default, we can check behind our draws and semi-bluffs IP. OOP, it becomes a game of figuring out if our bet would create enough folds and favorable situations.

## - Do we have flexibility?

Whenever we are drawing, or considering running blufflines, we always want to consider flexibility. If we have extra ways of winning the pot, either by improving or having bluff cards, we can make a good play even better. When drawing, especially from OOP, it is always nice to have cards other than just our draw fillers that we can win on. Either overcards that we can bluff on, or fillers of other draws that we can represent.

This play can be very easy on certain textures. Say it folds around to us in the SB with 9 s 7 s . We steal and the BB calls. The flop is Th 6 s 2 s . We CB and he calls. The turn is a Qh . Against a player who won't call with weak pairs, this can be a great spot to fire a bet. If we give him an O-Range of $22-\mathrm{QQ} / \mathrm{T} 9 \mathrm{~s} / \mathrm{JTs} / 76 \mathrm{~s} / 65 \mathrm{~s}$, and think he would only continue with Tx or better, we have him folding about $58 \%$ of the time. Even if we made a PSB we still get enough folds to show an outright profit.

| Hints Off | Nolii | limit |  |  | Star | rti | ing | g h | han | nds |  |  | Nowel | eight |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AA | AKs | AQs | AJs | ATs |  | 9 A A | Ass A | A7s | A6s | A5s | A4s | A3s |  | 50\% |  | Ac Ad | As |
|  | АКс | KK | KQs | KJs | KTs | S K9s | 9s K 8 | K8s K | K7s | K6s | K5s | K4s | K3s | K2s |  | Kh | Kc Kd | Ks |
|  | AQc | KQc | QQ | Qs | QTs | S9s | 9s Q8 | Q8s Q | Q7s | Q6s | Q5s | Q4s | Q3s | Q2s |  |  | Qc Qd | Qs |
|  | Alo | Kıo | Qo | J | JTs | I9s | 9s 18 | 188 | J7s | J6s | 15s | J4s | J3s | 12s |  |  | Jc |  |
|  | ATo | кто | QTo | गто | TT |  | 95 T8 | T85 T7 | T7s | T6s | T5s | T4s | T3s | T2s |  |  |  | s |
|  | A90 | К90 | Q90 | 190 | T9 |  | 98 | 98s 97 | 975 | 965 | 95s | 94s | 935 | 92s | 0 |  |  |  |
|  | A80 | K80 | Q80 | 180 | T8o | 980 | so |  |  |  |  |  | 83 |  |  | 9 h | 9 c 9 d | 95 |
|  |  |  | (88) |  |  | ¢ | 8 | ¢ | 8 s | 365 | 8ss | 84s | sos |  |  | 8 sh | 8 cc 8 dd | 8s |
|  | A70 | K70 | Q70 | 770 | T7\% | 970 | 7087 | 870 | 77 | 768 | 75s | 74s | 73s | 72s |  | 7h | 7 c 7 d | 75 |
|  | A60 | K60 | Q60 | 160 | T60 | 960 | ${ }_{60} 86$ | 86076 | 760 | 66 | 65 s | 645 | ${ }_{635}$ | 62s |  |  | $6 \mathrm{6d}$ |  |
|  | A50 | K50 | Q50 | 150 | T50 | 950 | 50 85 | 850750 | 750 | 650 | 55 | 54s | 53s | 52 s |  |  |  |  |
|  | A40 | K40 | Q40 | J40 | T40 | 940 | 40 84 | 840740 | 740 | 640 | 540 | 44 | 43 s | 42s |  | 5 b | 5 c 5d | 5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 L | 4 c 4 dd | 485 |
|  | ${ }^{\text {A30 }}$ | K30 | Q30 | 130 | T30 | 9090 | 30 83 | 83073 | 730 | 630 | 530 | 430 | $033$ | 32 s |  | 3h | 3 c 3d |  |
|  | A20 | K20 | Q20 | 120 | T20 | 920 | 2082 | 82072 | 720 | 620 | 520 | 420 | 320 | 22 |  |  |  |  |
| Store | $\bigcirc$ |  |  |  |  |  |  |  |  |  |  |  |  |  | 6.18\% |  | 2 d |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  |  | ket |  |  | adway |  |  | uited |  |  | ear |  |  | Random |  |

Statistics

| $\checkmark>=$ quads | 0\% |
| :---: | :---: |
| $\checkmark$ full house | 0\% |
| $\checkmark$ flush | 0\% |
| $\checkmark$ straight | 0\% |
| $\checkmark 3$ of a kind | 20.30 |
| $\checkmark$ two pair | 0\% |
| $\checkmark$ overpair | 0\% |
| $\checkmark$ top pair | 0\% |
| $\checkmark$ pp below tp | 10.2\% |
| middle pair | 8.47\% |
| weak pair | 61.0\% |
| ace high | 0\% |
| nothing | 0\% |
| $\checkmark$ flushdraw | 5.08\% |
| $\checkmark$ OESD | 0\% |
| gutshot | 0\% |
| overcards | 0\% |
| $\checkmark$ flushdrawn+pair | 5.08\% |
| $\checkmark$ OESD+flushdr. | 0\% |
| gutsh.+flushdr. | 0\% |
| OESD+pair | 0\% |
| gutshot+pair | 0\% |
| gutshot+overc. | 0\% |

Range hat hit 42.4\% of the time

Dead cards


Figure 57: Double barrel on T62Q

Even if we thought he continued to the turn bet with a range of $77+$ we are still getting folds $48 \%$ of the time, which makes a $1 / 2$ PSB very profitable. The bet also acts as a blocker and allows us to choose the price for our draw, rather than checking and letting him bet a number that might offer us less than ideal odds. And the bet also folds out enough hands that we can show outright profit. While it does suck when we get raised, we just make a math decision there and call if we are getting good odds, and fold if we aren't. (It should be noted that there is a fringe benefit in getting a call and having a bigger pot size on the river when we improve).

However, not every spot will be quite so simple. Let's take a situation where we raise with AhTh from the CO, and the SB calls. The flop comes Jh7s4c. He checks, we CB, and he calls. The turn is a 4 h and he checks again. At this point we can check or bet, so let's explore our options:

- Check. If we thought a bet wouldn't get enough folds, or might even get check raised a lot, then checking is a very valid option. There is nothing wrong with taking our draw for cheap, especially IP when we don't have a great idea on how well a bet would work.
- Bet. Let's say his O-Range is $44-\mathrm{QQ} / \mathrm{JT}+/ 87 \mathrm{~s} / 76 \mathrm{~s} / 54 \mathrm{~s}$. If he continues with $88+$, then we are only getting folds about $25 \%$ of the time here. Even with a $1 / 2 \mathrm{PSB}$ we show an outright loss. Now, if he would continue with TP+, then he is folding $50 \%$ of the time, which makes a bet more attractive. But if we do bet, we are certainly getting check raised sometimes (by 54, 44, 77, etc.) and will be unable to take our draw for cheap.

| Hints Off | Nolim |  |  |  | Star | rtin | ng | g h | han | nd |  |  | Noweil | İght |  | Flop |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | A/s |  | A9s |  |  | A7s | A6s | A5s | A4s | A3s |  | 50\% |  | Ac Ad | As |
|  | АКс | кк K | KQs | KJs | KTs | K9s |  | K8s K | K7s | K6s | K5s | K4s | K3s | K2s |  | Kh | Kc Kd | Ks |
|  | AQc K |  | QQ | Qjs | QTs | Q9s |  | 28s Q | Q7s | Q6s | Q5s | Q4s | Q3s | Q2s |  | Qh | Qc Qd | Qs |
|  | Alo K | KJo | Ojo | J | $\mathrm{JTs}^{\text {T }}$ | 19s |  | Js | J7s | J6s | 15 s | 14s | Js | 12 s |  |  | Jc Jd | Js |
|  | ATo K | ктo | QTo | ITo | TT | T9s |  | T8s T | T7s | T6s | T5s | T4s | T3s | T2s |  | Th | Tc Td |  |
|  | A90 | K90 | Q90 | 190 | T9 | 99 |  | 9859 | 97s | 968 | 95s | 94s | 93s | 92 s | 9 | 9 h | 9 c 9d | 9 s |
|  | A80 K | K80 | Q8o | 180 | T80 | 980 |  | 888 | 87 s | 868 | ${ }^{855}$ | 84 s | 83 s | 82 s |  | 8 h | 8 cc 8d |  |
|  | A70 | K70 | Q70 | 700 | T70 | 970 |  | 870 | 77 | 768 | 75s | 74s | 73 s | 72 |  |  |  |  |
|  | A60 K | K60 | Q60 | 160 | T60 | 960 |  | 86076 | 760 | 66 | 65s | 64s | 63 s | 62 s |  | 7 h | $7 \mathrm{c}) 7 \mathrm{~d}$ |  |
|  |  |  |  |  |  |  |  |  |  | 65 |  | 5 |  |  |  | 6 h | 6c 6d | 65 |
|  | A50 |  |  | 150 | T50 | 950 |  |  | 750 | 650 | 55 | 54s | 53 s | 52 s |  | 5 h | 5 c 5d | 55 |
|  | A40 K | K40 O | Q40 | 140 | T40 | 940 |  | 3407 | 740 | 640 | 540 | 44 | 43 s | 42 s |  |  |  |  |
|  | A30 K | K30 | Q30 | 130 | T30 | 930 |  | 8307 | 730 | 630 | 530 | 430 | 33 | 32s |  |  | 4 d | 45 |
|  | A20 | K20 |  | 120 | T20 | 920 |  | 8207 | 720 | 620 | 520 | 420 | 320 | 22 |  | 3 h | 3c) 3d | 35 |
| Store |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 h | 2 c 2 d | 2 s |
|  | 9 |  |  |  |  |  |  |  |  |  |  |  |  |  | 6.18\% |  |  |  |
| Delete | 0\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Clear |  |
| Switch |  | All |  |  | ket |  |  |  |  |  | uited |  |  | ear |  |  | Random |  |



Figure 58: Double barrel on J744

At this point it just becomes a math problem. If we bet and he continues with $88+$, then we take an outright loss and thus should probably check (without reads that we could profitably triple barrel). If we bet and he continues with TP+, then we are probably getting check raised about $30 \%$ of the time and will be unable to take a cheap draw often. If we check, we miss the chance of possibly folding out better hands and keep the pot smaller in the event that we hit.

If we check, which is the usual default play here, we can catch our draw for cheap and either induce a bet on the river (because we checked the turn), or induce a lighter call. We can also improve to our T or A and possibly have the best hand as well. In order to bet, we really want to have a good idea on how often he will fold to our bet. If we are unsure, or think he will continue too often versus a bet, then checking behind and drawing is perfectly fine. But if we know that a bet will get enough folds and not a lot of check raises, then betting is perfectly fine. Again, our play is totally based around our opponent, the turn card, their range, our image, and how they would continue versus our bet.

## The Delay CB

There are times when a flop CB might not be the best play, and we can consider using a delay CB instead. A delay CB is simply a situation where we are the PFR, we check the flop, and bet later in the hand in an effort to pick the pot up. This play can be great against players that would mess around with our flop CB, but would play much more straight forward against a bet later on the turn or river. Let's look at some things we'd want to consider when using this play:

- Our opponent would mess with our flop CB.

A player who keeps CRing our CBs, or keeps peeling and stabbing later, can be a great opponent to consider the delay CB against. If our flop CB just wouldn't show enough profit to justify making it, then we shouldn't force it. We can just take the delay CB line instead, assuming of course that it looks real and would solicit enough folds.

- The line/turn looks real

We need to make sure that either the turn card is believable, or that the line itself is believable. If the flop comes Axx and we would always CB QQ, sets, and AJ, then a delay CB doesn't look very real. But if our opponent knows that we would check those hands behind sometimes,
especially the QQand AJ type hands, then the delay $C B$ can look very real. We can also use believable turn cards. If the board comes 853 and we check behind, any J+ on the turn can look very real for our hand.

A perfect example of this would be this hand. We raise with AsJs from the HJ. The SB calls and we see a HU flop of T84. He checks and we decide to check behind. The board looks like it should have hit his range a decent amount, and he is also notorious for CRing a large percentage of the time. Because we don't expect a CB to show an outright profit, we just decide to check behind and play the turn out.

The turn comes a $Q$ and he checks to us. We've picked up some equity with that card, and it is a very believable card for our range. We probably wouldn't have CB a hand like KQ or QJ on the flop against this opponent, so representing a pair of queens is very believable given our flop check. This is actually a great spot to bet for a normal CB size of $1 / 2$ PSB to $2 / 3$ PSB in order to try to pick the pot up if we think he folds enough of the time. If he calls, we always have outs, but we should expect folds a fairly large amount of the time given our play.

This isn't a play we tend to make all that often. Because we need information on our opponent (that he is aggressive against flop CBs), we usually don't do this against unknowns or players that fold versus flop CBs often. However, this is a great play to have in our play book so we can take advantage of players who play flops too aggressively and play very straight forward if they "whiff" their flop CR opportunity.

## Value Betting

While many players believe that poker is all about bluffing, solid players would argue that poker is all about value betting better than your opponents. If we are able to pinch out extra value when we have the best hand, and fold a few times when we are behind, we should be making some great profit. This chapter will look at the many kinds of value betting situations that arise.

## The Fat VB

We make a "fat value bet" when we expect many worse hands to call. This is done strictly for value because we feel our hand is super strong and that our opponent has a calling range that is very favorable for us, for example, with the nuts: say QQ on a QJ63r board. Or on the river with AJ on a KT4Q3r board. But we can also bet for fat value with nuttish hands like 99 on an A9853, where, while we are beat by some hands, his calling range is still wide and favorable. While ending up with the nuts is a rarity, there are many other times when we have the effective nuts and we should fat VB .

When we get into a spot where we are considering a fat VB we need to considering the following:

## - Our opponent's range

As always, our opponent's range is the basis of most of our decision making, especially postflop. If we can appropriately visualize our opponent's range, we can see how often they have a hand that could continue versus our bet. If we don't have the nuts, and our opponent's range doesn't have many hands that would continue versus a bet, we might have a thin VB or bluff hand rather than a fat VB. We could also take lines that induce if their range is too wide and they have a propensity to bluff. Ultimately, we just need to pay attention so that we have an idea of what their range is and how it hits the board.

## - Our actual hand strength

With fat VBing we almost always have a nuttish hand. Either the actual nuts, or something super strong, like a set or so, that is beaten by so few combinations of hands our opponent might have. Often times SDV hands can fall into a fat VB category if our opponent has a major propensity to call lightly, or if the pot is smaller in size (and thus our opponent's range is wider and more willing to call). Hand strengths are relative, and that is why we care about our opponent's range versus the board.

- Our VB size: The VB size here is a total art form. We will run through a few examples though so we can see how to get to a great bet size. We also need to consider elasticity and board texture heavily. There are times when we have the nuts, but made by a bad card for the board, that would severely alter our bet size. And there are times when we might look to bet pot, or even bigger than the pot, against inelastic players.

Let's look at an example. Say we raise 88 to $\$ 3$ from EP. The BB is the only caller and we see a HU flop of 833 . He checks to us, we bet $\$ 4$ and he calls. We assign him a range of $33-Q Q$ with that call. The turn is a 5 and he checks to us again. If we look at how he hits this board we see:


Figure 59 (a): 33-QQ on $\mathbf{8 5 3 3}$

Statistics

| $\checkmark>=q u a d s$ | 2.17\% |
| :---: | :---: |
| $\checkmark$ full house | 6.52\% |
| $\checkmark$ flush | 0\% |
| $\checkmark$ straight | 0\% |
| $\checkmark 3$ of a kind | 0\% |
| $\checkmark$ two pair | 0\% |
| $\checkmark$ overpair | 52.2\% |
| top pair | 0\% |
| pp below tp | 26.1\% |
| middle pair | 0\% |
| weak pair | 13.0\% |
| ace high | 0\% |
| nothing | 0\% |
| $\checkmark$ flushdraw | 0\% |
| $\checkmark$ OESD | 0\% |
| gutshot | 0\% |
| overcards | 0\% |
| $\checkmark$ flushdrawn+pair | 0\% |
| $\checkmark$ OESD+flushdr. | 0\% |
| gutsh.+flushdr. | 0\% |
| OESD+pair | 0\% |
| gutshot+pair | 0\% |
| gutshot+overc. | 0\% |

Range hat hit $\mathbf{6 0 . 9 \%}$ of the time

Dead cards


Clear

Figure 59 (b): 33-QQ on 8533 (Results)

So, he has quads about $2 \%$, a boat about $6.5 \%$, and an overpair (99-QQ) about $52 \%$ of the time. Now we just need to ask ourselves some questions and then select a line:

## - Is he a calling station?

If the $B B$ is a calling station, and we think he would call with all pairs, even ones like 66 and 77 , then betting again is a simple decision. He will call with almost $100 \%$ of his range, and we beat pretty much everything. However, if this opponent were not a calling station, it changes things a little bit. If he would fold $T T$ or $Q Q$ sometimes to a bet, that fact can drastically change the line that we want to take.

## - What continues versus a bet?

If the BB would fold everything but 55 and 33 to a bet, then a bet might not be the best play here. However, most players will call their pairs more liberally if they are getting decent pot odds. If the BB would call our bet with $99-\mathrm{QQ} / 55 / 33$, then we should be betting as much as he would call
this range with. If the BB is more elastic, then we might need to select a smaller size to ensure he continues with the second best hands like $\Pi \Gamma$ and QQ.

## - Which size is best?

The golden rule of bet sizing is "bet the most +EV amount." Of course, on the river it is easier because we don't have to consider our opponent drawing out on us or setting up future streets. As for the bet on this turn, we should bet what he will call that sets up the best river action. For instance, if we bet $\$ 9$ on the turn (giving our opponent 2.5:1 outright), we can probably get a $\$ 24$ bet on the river (giving our opponent 2.3:1 outright).

That bet sizing isn't bad at all. But if our opponent were very inelastic and would call the 99-QQ range for any number, we should really consider making two bigger bets, like $\$ 12$ on the turn and $\$ 32$ on the river. If he were very elastic, we should consider betting smaller, especially if a bigger size would get him to fold things like $\Pi$ or $Q Q$ sometimes. Against such an elastic player we could even bet $\$ 8$ on the turn and go for a smaller $\$ 17$ bet on the river. Our size is totally based on how our opponent would react to it, and thinking about complete maximization. Remember, we cannot get a river bet unless our opponent calls our turn bet.

We see that the big factors to consider in this spot are the elasticity of our opponent and the bet sizing. If we were OOP then we would also have to consider whether to go for a VB or to check and induce. But IP with a nuttish hand, we simply run through some simple questions and select a line. If we are confused, we should just bet the standard $2 / 3$ PSB amount. We have a big hand, we want to make a big pot, and the size is safe and "normal." It's when we have information, like their elasticity or range contortion, that we start making more specific sizes and actions to create more exploitative action against that particular opponent.

Let's look at another example. Say we open AcQc to $\$ 3$ from the HJ, the BUT calls, and we see a HU flop of KhTc3d. We CB $\$ 4$ and the BUT calls. At this point let's say he calls with a range of $33 / \mathrm{KT}-\mathrm{KQ} / \mathrm{JT}-\mathrm{AT} / \mathrm{TT}-\mathrm{QQ}$. The entirety of these VBing, and bluffing, conversations are based around the range we put a player on. If we pull up Flopzilla we see he hits like this:


Figure 60: Big Range on KT3

On the turn we catch a very nice Jd . At this point if we look at how his range hits versus that card we see:


Figure 61: Big Range on KT3J

Even if we just look at the part of his range that is 2pair or better, he has that about $48 \%$ of the time. Of course, he would probably continue with the $\mathrm{KQ}, \mathrm{QJ}$ part of his range as well, which just gives us more and more value. In fact, if we look at his range with 2 pr or better and OESDs, we see he hits this board about $89 \%$ of the time, which is massive. So we certainly have a situation with fat value as we have a nuttish hand (the literal nuts at the moment) and he has a range that will continue a large percentage of the time if we bet.

Now comes the important question: what do we want to bet? At this point we need to consider a few things:

## - How often will he continue?

We see from Flopzilla that he is hitting that turn card pretty hard. He makes lots of two pair hands, sets, and some straight draws as well. At this point we just need to ask ourselves how often he would continue if we bet. If he would continue with all of his range versus a big bet, then we should make the biggest bet possible that he would continue against. But, most players aren't totally brain dead, so we don't want to make a PSB against a player who would realize that we would only do that with a hand like AQ or KK here. Against this player we need to select an action (and size if we bet here) that blends in with our normal strategy.

- Pot geometry

In an ideal world we could just start firing off big bets in an effort to get him to put in a large amount of money and create the largest pot size possible. If he were a calling station who is very inelastic, then we would want to heavily consider larger sizes. If he were a normal elastic player, then we would just want to choose the largest size that blends in with our normal betting strategy. So if we would fire $\$ 10$ with $T \Gamma$ and bluffs here, we would want to use that number here as well. While it always sucks not being able to get our entire stack in with the nuts, we need to remember that our goal is to take the most $+\$$ EV line when VBing.

## - Is betting the best play?

This is something we always want to ask ourselves. Would checking induce better action? Is he a calling station who would rather call than bet? If we were to check here, would he bet his entire range? Would we be able to CR and create a larger pot size? Would I only bet the nuts again on the turn and would a check be read as weak/SDV? Against
players who would always bet if checked to, checking to induce a bet could be a great play here. Always consider our opponent and how he makes mistakes, especially when we are OOP.

What we see here is that, especially from OOP, there are times when checking can be a great play to induce better action. However, against players that make many more calling than betting mistakes, we should just look to bet/bet/bet at sizes they would call/call/ call. If we are ever confused or don't have information to lead us another way, betting outright with the nuts will never be a bad play. However, if we have information, we can take a more exploitative line against our opponents.

Let's look at one more example. Say we have $T \Gamma$ in the CO and call a $\$ 2$ raise from EP. We see a HU flop of J76 and he CBs $\$ 2.5$. We call and see a 2 on the turn which he checks. We check behind to get to SD as cheaply as possible. The river is a T and he bets $\$ 6.5$. At this point we have to do some thinking:

## - We have the third nut

It is always to important to double check the board and our hand. We have the third nut on the river as we lose to 98 and JJ. But does this player raise 98 from EP? If not, then we only lose to JJ, which has 3 combos. Would he always bet JJ on the turn in an effort to build the pot? If so, then maybe he has even less combos, if any, of hands that beat us in his range.

- What would he bet like this?

As usual, we need to build his range. He might take this line with a hand like $Q Q+$ trying to induce on the turn. He might turn $A K$ into a bluff and try to stab the river. He might take it with a hand like AJ trying to pot control. He might have a 66/77 type hand that was getting tricky on the turn. If we don't think he can have a Jx in his range (other than JJ ) due to raising from EP , then we know his range is more solid on pairs and sets. The better the player is the more strong this bet will be in general, as this line isn't a great bluffline.

- What would he call if we raised?

If we raised, would he call with anything? If so, how elastic is he? If we think a MR might get called by his entire range, but a shove would only get called by sets, it becomes a math problem. If we think he would always stack off the big pairs, then shoving here becomes a great play.

## - What size should we use?

Let's doing a few $\$ E V$ equations to see which bet size is best:

- Assumptions: We raise to $\$ 19$. He calls $60 \%$, folds $35 \%$, we lose the rest of our stack $5 \%$ of the time:
$\$ E V=0.60(\$ 19+\$ 9.75)+0.35(\$ 6.5+\$ 9.75)-0.05 \cdot \$ 45.5=\$ 20.66$
- Assumptions: We raise to $\$ 23$. He calls $50 \%$ of the time, folds $40 \%$, and we lose the rest of our stack $10 \%$ of the time:

$$
\$ E V=0.50(\$ 23+\$ 9.75)+0.40(\$ 6.5+\$ 9.75)-0.10 \cdot \$ 45.5=\$ 18.32
$$

- Assumptions: We shove. He calls 30\% of the time, folds 55\%, and we lose the rest of our stack $15 \%$ of the time:

$$
\$ E V=0.30(\$ 45.5+\$ 9.75)+0.55(\$ 6.5+\$ 9.75)-0.15 \cdot \$ 45.5=\$ 18.68
$$

Our size in these situations is all about the frequencies at which we can expect action. There are times when we might get called less often, but we make so much extra money when we win that it becomes worth it. Here is a simple example. Say we have the nuts and are considering two actions, either raising $3 x$ or shoving. $3 x$ would get called $50 \%$ of the time, and shoving would get called $20 \%$ of the time. The pot is $\$ 20$, his bet is $\$ 10$, and we have $\$ 100$ left in our stack.

$$
\begin{array}{ll}
\cdot & \$ E V=0.5 \cdot \$ 50+0.5 \cdot \$ 30=\$ 40 \\
\cdot & \$ E V=0.2 \cdot \$ 120+0.8 \cdot \$ 30=\$ 48
\end{array}
$$

Again, our size should be based on our opponent and their expected frequencies. While it is technically + EV to shove every time we have the nuts, it might not be optimal. But never considering making overbet shoves can be a leak, especially in situations where our opponents would call it enough of the time to make the shove better. Bet sizing is a great way to add extra value to our bottom line, and can really hurt us if we do it poorly.

Fat VBs are crucial to our success. Making sure that we take optimal lines with our big hands and make the most amount of money possible can be the difference between a great WR and breaking even. Again, consider bet sizing, their range, their logical calling frequencies, and their elasticity. If we are able to put it all together, we can easily maximize the value of our strong hands.

## The Thin VB

A "thin VB" is the opposite of a fat VB. When we make a thin VB we do so usually without a nuttish hand, in a situation where more of our opponent's calling range is strong. So a situation where we bet KK on an A8722 is a perfect example. Unlike a fat VB where we expect to be way ahead of our opponent's calling range, we only expect to be ahead of some of our opponent's calling range. One thing we have to remember when value betting is that we have to be ahead of at least $50 \%$ of our opponent's calling range to justify making the bet. Let's look at a few examples:

Take a situation where the button opens to $\$ 6$ at 200NL, we 3-bet QQ to $\$ 20$, and he calls. The flop comes 854 . We bet $\$ 26$ and he calls. The turn is an A, we check and he checks. The river is a 4 and we think about our options:

- Check. If we thought that nothing worse would call us if we bet, then a check would be the best play. Against tight players who would fold everything due to the $A$ on the turn, checking is a fine option.
- Bet. Against players who would call hands like 99 or JJ here, a bet is great. The thing we have to remember is that if we bet, we need to be ahead of at least $50 \%$ of his calling range. So if we were to bet something like $\$ 72$ here, and he would fold everything but hands that beat us, then it's not a good bet. If a $\$ 42$ bet would get looked up by more second best hands than hands that beat us, then $\$ 42$ can be a good bet size.

Let's look at another situation. Say we raise with Ad4d from the CO and only the BB calls. We see a HU flop of AJ3. He checks, we bet, and he calls. The turn is a 9 , he checks and we check behind. The river is an 8 and he checks to us. Let's explore our options:

- Check. Against tight opponents who would never call here with worse, a bet is relatively useless. Remember, when we bet we do so because worse hands continue or better hands fold.
- Bet. Against players that would call with Q or $\Pi T$ type hands, a bet here is great. However, we don't have much of a kicker, so we have to remember that most every Ax hand beats us. At this point though, it all becomes a hand and action reading exercise. If our opponent would bet the river with 2 pr, then we can take hands like $\mathrm{AJ} / \mathrm{A} 9 / \mathrm{A} 8 / \mathrm{A} 3$ out of his range. So the hands that beat us are $A Q / A T$ and of course we chop with A7s/A6s/A5s/A2s (betting and getting folds from chopping hands is
better than checking and splitting with chopping hands). If we look at logical Jx hands he could have KJ/QJ/JT. He could occasionally have a hands like $\Pi / 77 / 66$ as well. So at this point, the hands that we beat outweigh the hands that beats us, leaning us closer to a bet. If he would bet every A on the river in an attempt to VB us, that would mean his river check range is full of the Jx and worse pairs combos, and none of the Ax combos. If that is the case, we should certainly bet, assuming that he would call a river bet with Jx or worse pairs.

If we think and extrapolate from this for a moment, we see that VBing against players that have more of a calling station tendency with second best hands is best. When it comes to thin VBing, it is very important that we think about the possible hands in their range, and then ensure that if we bet, enough of the second best hands would continue. Our bet sizing is very important in this. Remember that large sizes tend to get action from a smaller and stronger range, and smaller sizes tend to get action from a bigger and weaker range. So if we are looking to thin VB, we might consider using smaller sizes, like half pot or even smaller. We will talk more about this later in this chapter, but it is very important to consider if we are going to put the bet out there.

Also in thinking about this, we notice that tight players are usually not players we want to be doing a lot of thin VBing against. They tend to continue stronger when they get to the turn and river, so unless we took lines that really allow them to feel comfortable and encourage lighter calls, we usually veer away from thin VBing them. We also might not want to thin VB players that might start check raising us on the river (assuming that we won't call the $C R$ ). If a player might shift a hand from their calling range into their $C R$ range because our bet size looks bluffy and they want to attack the big pot, we are better off checking behind or possibly selecting a different size.

The best players to attack with thin VBing are calling stations, especially fish. Because their ranges are wider (they peel flops and turns more liberally), they often have a range that is large enough to consider thin VBing. We just need to make sure that we think about their range versus the board texture, and choose sizes that make us enough money while not contorting their range unfavorably. If we are ever confused while IP about whether or not we should thin VB, checking behind is the safer play. But OOP it can be a bit more difficult. The blocking bet section of this chapter will cover those spots in a bit more detail.

## The Best Hand That Checks

There are times when we have the best hand and decide to check. This is actually where many players tend to mess up postflop. They take a hand with SDV and confuse it for a hand with pure value. Or they bet so thinly that they don't get enough second best calls to justify making the bet in the first place. Often times in FR we check the logical best hand for a few reasons:

- Pot control. Controlling the pot size is very important. Many times players continue more liberally in small pots versus larger pots. So creating these smaller pots tends to keep our opponents making more mistakes, either by betting or calling. We pot control in situations where we think a large pot wouldn't be very advantageous, and when our hand strength might not fare as profitably in a bloated pot.
- Induce worse calls. Most players are ingrained to think that a check means weakness. Because of this, a check would often times instill more comfort in our opponent's weaker pairs. Of course, this does give them a free chance to improve to a better hand, but all plays come with some risk. We just need to consider the $\$ E V$ of our play and ensure we are winning the minimax game in the long run.
- Induce bluffs. Keeping in mind that checks tend to imply weakness, a check can also solicit some extra bluffs. If our opponent were floating the flop, a check allows them a chance to stab at the pot on the turn. It also gives our opponent the chance to turn a hand into a bluff by betting a pair that he may feel has no real SDV. Especially against aggressive players who tend to make many more betting mistakes than calling mistakes, checking to induce bluffs is a very valid option.
- Nothing worse continues. Whenever we are considering making a bet we always want to ask ourselves what the bet actually accomplishes. If we ask ourselves that question and the answer is "well nothing worse continues and nothing better folds," our bet probably isn't very useful. In a hand where we feel we have value, or SDV, if nothing worse continues to our bet then checking often times becomes a better play.

Let's look at a hand that comes up often. We raise with AK from MP, the SB calls, and we go HU to a flop of J95. He checks, we think that a CB would get enough folds, and we make a CB for $\$ 2$. He calls and the turn comes an A . He checks to us. Let's explore our options:

- Bet. f we bet we want to ask ourselves what it accomplishes. Well if our opponent has a hand like TT or 77 he is probably going to fold. If we has a hand like QJ or JT he might call sometimes, but a tight player is probably going to fold it facing this line (we raised PF, CB, and now bet again on a card that looks like it should hit our range). If our opponent has a hand like 99 or AJ he is of course never folding. So nothing worse really comes along, and nothing better ever folds. A bet doesn't accomplish much against a standard player. Against a calling station we could consider betting for value, but that is because he is very likely to continue with many second best hands.
- Check. A check here keeps the pot size fairly small (and aims for a nice 2 street play, a standard pot size creation with a single pair in FR). It also encourages bluffs (lets him turn a hand like 66 into a bluff on the river), encourages worse bets (maybe he goes for a river VB with KJ ), and encourages lighter calls (he might check/call the river with QJ or JT type hands that he wouldn't call with on the turn).

Now, if our opponent were the type to call the turn bet with QJ or T9 every time, then we might just bet. Our hand, against that player type, shifts from SDV to pure value. Whereas against a more normal opponent, who would play more straight forward against a bet on the A, we should consider checking to induce and also minimize loss against the hands that beat us. If we do check behind, our normal plan on the river is to call a bet if he fires into us, or bet ourselves if he checks to us. Again, we aimed for two streets of value, and our turn check helped make that easier to accomplish.

It should also be noted that by checking the turn we are giving a free card. So we give our opponent a free chances to spike a set with a floated 88 , or a chance to improve with a QJ type hand. While it is always painful to have that happen, we have to remember that it only happens a small percentage of the time. The other large percentage of the time, the time when he doesn't improve on the river, we usually make more money. This doesn't mean we would always want to check the turn behind (say there is a 3 flush out there and our opponent would call many second best hands if we bet), just that we should consider it in spots when a check induces a lot of mistakes, while a bet would allow him play closer to perfect.

Let's look at another situation. Say we raise KK from EP, the CO calls, and we see a HU flop of 975 . We CB for $\$ 4$ and he calls. The turn is a K. Let's explore our options:

- Bet. If our opponent would never make a mistake if we bet here, then a bet doesn't really accomplish anything. If he would fold 88 or T9 if we bet, then we are only getting action from sets and very aggressive float bluffs.
- Check. A check would probably induce a bet from most all of his range. His float range would certainly take advantage of our weakness on a scare card. His value range would bet in order to create a larger pot. So while a bet would allow him to play relatively perfect, a check should induce a lot of confusion and betting from him.

The default line would usually be to bet this turn again. We have a big hand, and even though a large percentage of his range can't continue, we want the range that can/ would continue to lose the most amount possible. But against players that can't help themselves but to bet when checked to, this is a great spot to go for a check and induce some bluffs and bets.

Let's take another situation that happens with SDV hands. Say a player opens from MP to $\$ .75$ and we call on the button with JJ. We see a HU flop of Q86 and he CBs into us for $\$ 1$. We call because we think JJ is ahead of his range often enough and we have SDV that we can use. The turn is a 3 and he checks to us. Let's explore our options:

- Bet. A bet probably doesn't get looked up very often by second best hands. We probably get a hand like 99 or $\Pi$ to call sometimes, but an AQ or KQ hand is never folding and would often times check to induce bets. A bet really doesn't accomplish much other than lose us the most amount of money when we are behind, and makes us nothing extra when we are ahead.
- Check. A check here utilizes our SDV and keeps the pot size small. If a bet doesn't accomplish anything (aka, he doesn't call with many second best hands), then checking is usually going to be the best option. Yes, this gives free cards to hands like 44 or AK, but we are interested in taking the most +EV lines.

So we check behind the turn. Let's explore a few river cards and actions:

- The river is an $\mathbf{A}$ and he bets $\mathbf{\$ 2 . 5}$

At this point the board is Q863A. While he could be using the A as a scare card to bluff us, we can't know for sure. If he would only bet the A with TP or better, then this is an easy fold for us. If he would bluff a
large percentage of the time on a scare card, then we can consider calling sometimes. If we don't know, defaulting to folding our hand is perfectly fine. We aren't getting a great price, and unless the game is playing really aggressively, odds are that we aren't getting bluffed enough of the time here.

- The river is a 5 and he checks to us

At this point the board is Q8635. He checked the turn and now river, so we probably have the best hand. If he has something like KQ or AQ he would probably VB the river, unless he thought we were bluffy (but then why wouldn't we have bet the turn?). So he probably has a whiffed hand that he wouldn't call a bet with, or a hand with some SDV like 98, 88 , or $\Pi$. If we thought he would call those hands a large percentage of the time, then betting like $1 / 2$ PSB is great for value. If we thought he would never call with a worse hand if we bet, then we should just check and preserve our SDV.

- The river is a K and he checks to us

At this point the board is Q863K. He checked the turn and now the river, so we probably have the best hand. However, if we bet, do any worse hands continue? He probably folds $\Pi$ and 99 because there are two over cards on board now. So his only call range is probably beating us most all of the time. Because of this, and the fact that we have SDV, a check behind here is usually best, despite the fact that we usually expect to win at showdown.

- The river is a J and he bets $\mathbf{\$ 2 . 5}$

At this point the board is Q863J. Of course, at this point our hand shifts from SDV to pure value. We have the best hand and there are surely some AQ type hands in his range that would probably call a raise. A raise up to $\$ 7.25$ should probably get enough second best hands to continue, and his bet should imply he either has a hand which he feels has some strength $(K Q, A Q$, etc $)$ or simply a bluff.

The important thing to remember when we have a strong hand is that it isn't always worth a bet. Sometimes a bet would allow our opponent play too perfectly and wouldn't allow our opponent to make any mistakes. Other times a bet wouldn't get called by enough second best hands to really justify making the bet in the first place. When we are playing we need to remember to ask ourselves what our bets accomplish, especially with SDV hands.

## The Blocking Bet

A "blocking" bet is one made from OOP in an effort to prevent problematic bets from a player IP. We can use this bet in situations where we don't feel comfortable checking and facing a large bet and when we feel our opponent has many worse hands in his range. Let's review some things that would make for a good blocking bet:

- Our opponent has worse hands in his range

As always, our plays boil down to ranges. If our opponent has many second best hands in his range, and we think he might call those if we bet, a blocking bet can be great. We give ourselves a chance to make more value from our hands while negating some of our positionaldisadvantage.

- Our opponent might easily bet a large amount

A big part of the reason why we use a blocking bet is to avoid facing a larger bet that we are uncomfortable with. Take a situation where we are on the river with AK . The board is Ah 7 c 5 cTs 4 c . We might not feel comfortable facing a big river bet, and thus going for a c/c line could get us into trouble.

- We have a hand with some value

Take that same AK on the Ah7c5cTs4c board. We certainly beat some hands (88-QQ, AJ/AQ, 76, etc.), and of course we do lose to some (54, KcQc , etc.). So a bet does accomplish getting called by some worse hands, while ensuring that we lose less when we are against the strong part of his range. A blocking bet can be a great way to get on the good side of the minimax game from OOP.

When considering a blocking bet we need to think about the line we have taken, our opponent's range, and his logical actions if we bet or check. Let's look at a situation with JJ. We raise to $\$ 3$ from EP and get called by the CO. We see a HU flop of K95 and check to him. He checks behind and we see a 3 on the turn. We bet for $\$ 4$ and he calls. The river is a 3 and the action is on us. Let's consider our options:

- Check. If we thought that a check could encourage a lot of bluffs, then we could consider check/calling. If we thought his turn call meant we were never ahead, then we would want to check/fold the river.
- Bet. Betting the river should get us some value (hands like 98, TT, 88 sometimes, etc.). We will also be behind sometimes to a hand like KQ , 43 s , etc. So a bet can help us maximize gain (get value from hands he might otherwise check behind), and minimize loss (we lose less if we bet less than he would bet if he VB a hand that beat us).

So rather than $\mathrm{c} / \mathrm{c}$ for something like $\$ 11$, we could blocking bet the river for $\$ 7$. For one, the $\$ 7$ bet should get looked up by a wider range of pairs because the size is around $1 / 2$ PSB. Also, the $\$ 7$ will lose us much less than check/calling $\$ 11$ and running into KJ. In situations where a bet could get good action, $\mathrm{ac} / \mathrm{c}$ is harsh, and we plan on normally bet/folding, blocking can be a great idea.

Blocking bets are great to do in situations where we know a player has a calling range that is favorable, and when we aren't really sure if his bet range (if we check to him) would be favorable to us. Blocking allows us to control the bet size which keeps us in control of the pot size that gets created. Let's look at another situation. Say we open raise to $\$ 1.25$ with T 7 s from the CO. The button calls, as does the BB , and we see a three way flop of Qd 7 c 6 d . The BB checks, we CB for $\$ 2.75$ and only the button calls. The turn is a 2 s and we both check. The river is a Td. Let's check out our options:

- Check. If he didn't bet the turn as a bluff, he probably isn't going to bluff now. So a check just lets him check all of his SDV hands behind and allows him to VB as large as he wants when he has a hand like QT or a flush.
- Bet. We probably have the best hand a fair amount of the time. We have a middle two pair type hand, but the Tc did fill up the flush draw and the 98 draw. A bet gives him a chance to call with his SDV hands, which is good for us as we beat his logical SDV hands. A bet also sets the price of how much we want to put in the pot.

We bet here for $\$ 4.5$ trying to get the call from Qx hands, and maybe a crying call from something like JJ or T9. Blocking here should give us value, minimize loss when he has the part of his range that beats us, and allow us to take the most $+\$$ EV line. We can visualize it like this:

- We check:
- He checks behind. With his SDV hands that might have called a bet
- He bets. The bet will usually bet bigger with his value hands (flushes, 98, QT, etc.)
- He bluffs: We don't know how often he would bluff, as it's not very logical given his turn action
- We bet:
- He folds his trash. We win the pot from a range that wouldn't have given us any money anyway
- He calls his SDV hands sometimes. We win the pot from a range that might have checked behind.
- He raises his nuts. We fold and lose less than we would have had we check/ called a large bet size

Blocking bets are best made against players that won't read it for what it is. Against thinking players that won't hesitate to shift a hand from their trash/SDV range into their bluff range, a blocking bet can be a bit odd. However, against them we can make "false blocks." Take a hand where we have AQ and raise to $\$ 6$ from MP. A solid TAG calls from the button and we see a HU flop of QQ3. We CB for $\$ 8$ and he calls. The turn is a 5 and we check to induce. He ends up checking behind. The river is a J and we bet for $\$ 12$. The bet might get bluff raised a bit more, might get called a bit more, and overall gives us a better chance to maximize against him.

This bet can help us do many things, and should often times be considered when OOP. They are great against fish and players that will love the smaller price. However, this doesn't mean that we never want to check and induce bluffs. If we know that an opponent will bluff a ton and we are comfortable with check/calling it, then we can still take that line. The block is versatile and helps us in spots where we aren't entirely sure about their bluffing range. Make sure to keep an eye out for these situations while playing, as they can greatly help our bottom line.

## The Bets And Their Sizes

This section is going to talk about bet sizing. Because bet sizing can drastically alter our WR, we need to constantly be focused on maximizing our value. There are many different sizes we can use while playing NLHE, and which option we chose is based on a large range of factors:

## - Elasticity

The elasticity of our opponent can change our sizing strategy very quickly. If we know that an opponent is very elastic, then we will usually be making smaller bets. As our hand strength gets further from the nuts, we size smaller and smaller on average against elastic callers. However, against inelastic callers we can size more directly to our hand strength. The size of our bet won't alter their decision to call/raise/fold, so we should just bet as large as possible with our nuttish hands.

It is also important to remember that some players are elastic, but become inelastic with certain hand strengths. Take a spot where we have 99 on an A963A board. If our opponent is normally elastic, but very inelastic with trips or better, then we could consider making a very large bet on the river to exploit him. As a default we should assume that most players are elastic, but take notes if we notice any inelastic tendencies.

## - Possible Calling Range

As always, we need to think about ranges. Whenever we bet, unless we have the nuts, we need to make sure we beat at least $50 \%$ of our opponent's calling range. Of course, by the time we get to the river we should have a decent idea on our opponent's range, and be able to figure out if a bet would show profit against him. If so, then we can bet, if not, then we might just check behind and take our SDV.

- Action Contortion

Bet sizes are always a funny thing. If a size is too large, then we tend to only get action from very strong hands. If a size is too large against a thinking player, they tend to think that we are very polarized. If a size is too small, it tends to get called a very large percentage of the time. If a size is too small, it tends to increase a thinking player's chance of shifting hands from their folding range into their raising range. This is why a play like the "false block" can work well against players that do this. Overall,
we need to think about how our opponent will react to the bet size that we are considering.

- Our Hand

Of course, even though most all of our decisions are based around our opponent and their actions, we do need to look at our own hand. Does our hand have value or SDV? Did our hand have SDV on the turn, but given the subsequent action change into a bluff or value? Appropriately classifying our hand strength is the basis of VBing, so we need to make sure we are doing it well.

- Number of Players

The number of players left in the pot can help us figure out our bet sizing. There are times when there are two opponents in the pot on the river and we select a size that might get called by both of them. This might net us more money than making a larger bet and getting either one or no calls. While it is usually rare for pots to go MW all the way to the river, it is important that we are considering maximizing the entire situation.

- \$EV

We always want to maximize our value, and we can do that by doing basic $\$ E V$ calculations. Doing these calculations in real-time is difficult, so we want to familiarize ourselves with them off the table so that we can visualize our plays better in real-time. Here is the basic $\$ E V$ formula:

- $\quad \$ E V=(\%$ win $\cdot \$$ win $)-(\%$ lose $\cdot \$$ lost $)$

Let's take a situation where we have the nuts and there is $\$ 50$ in the pot with $\$ 175$ left in our stacks. Let's consider a few different bet sizes. Say a bet size of $\$ 50$ would get called $15 \%$ of the time. A bet of $\$ 25$ would get called $45 \%$ of the time. And a bet of $\$ 15$ would get called $80 \%$ of the time. Here is the $\$ E V$ of each play:

- $\quad \$ E V=0.15(\$ 50+\$ 50)-\$ 0=\$ 15$
- $\quad \$ E V=0.45(\$ 50+\$ 25)-\$ 0=\$ 33.75$
- $\quad \$ E V=0.80(\$ 50+\$ 15)-\$ 0=\$ 52$

So we notice that making the small bet, in this case, yields a better return than the other bets given the frequencies we assigned. But the second that any of the frequencies they call at changes, the entire $\$ E V$ of the play is different. And of course this math is always
easier when we have the nuts and nothing can beat us, so the loss section of the formula is $\$ 0$. But let's visualize the $\$ E V$ of a different play. Say there is $\$ 50$ in the pot and still $\$ 175$ behind. In this hand we have a thin VB situation and plan on folding if we get raised. We will say that a bet of $\$ 50$ would get a fold $80 \%$ of the time, a worse call $10 \%$, and a better call or raise $10 \%$. A bet of $\$ 25$ would get a fold $50 \%$ of the time, a worse call $30 \%$, and a better call or raise $20 \%$. A bet of $\$ 15$ would get a fold $35 \%$ of the time, a worse call $35 \%$, and a better call or raised $30 \%$. Here are the $\$ E V s$ of each play:

- $\quad \$ E V=0.80 \cdot \$ 50+0.10(\$ 50+\$ 50)-0.10 \cdot \$ 50=\$ 45$
- $\quad \$ E V=0.50 \cdot \$ 50+0.30(\$ 50+\$ 25)-0.20 \cdot \$ 25=\$ 42.5$
- $\quad \$ E V=0.35 \cdot \$ 50+0.35(\$ 50+\$ 15)-0.30 \cdot \$ 15=\$ 35.75$

We can run $\$ E V$ calculations all day and figure out optimal bet sizing, assuming we know our opponent's frequencies. Figuring out these frequencies can seem very difficult. But if we are creating his range correctly, and consider how he would logically act with certain parts of his range, we can get a decent idea on the $\$ E V$ of our bets.

In considering these factors, think about how an opponent would react to our size. There are times when we can use very small sizes to encourage more favorable action. If we are playing against a player who might not call favorably if we bet $80 \% \mathrm{PSB}$, but would call favorably at $25 \% \mathrm{PSB}$, we can consider the smaller bet. Of course, if we don't want to face the raise, we just need to know that he is the type of player to only increase his calling frequency based on smaller sizes, and not his bluffing frequency. Many calling stations and P-Fish tend to fall into this category, and we can use these smaller sizes for thinner VB , assuming that the conditions are favorable for us.

The stronger our hand is, the more value we will want to get from it. But we have to remember that sometimes getting the most value doesn't mean making the biggest bet that gets called hardly ever. It means that we maximize our $\$ E V$ on the bet. So if a smaller bet yields a better $\$ E V$ than a shove, we should make the smaller bet. Our entire goal in poker is to maximize our $\$ E V$ at all times, so we need to keep the $\$ E V$ formula fresh in our minds at all times. Bet sizing is an art form, but if we think about the math behind it, we can easily improve this vital skill.

Turn/River
Adjustments

Now we'll cover some plays and details that didn't fit well into the other turn and river chapters. While some of this could have been extrapolated, this chapter aims to give more backing to things like sizes, board reading, and thought processes.

## The Sticky Bets

This concept goes hand in hand with pot geometry and planning. Say we have a spot where we have 99 on a board of A943. We have $\$ 40$ left in the effective stack with $\$ 42$ in the pot. Many players, for one reason or another, would shove here. But what about making two smaller bets instead?

If we bet something like $\$ 20$ here and the last $\$ 20$ on the river, we have created a much 'stickier' situation for our opponent than just going for one big bet. Think about how you would react in this situation. You might not like facing a big bet, but you are most certainly more comfortable facing multiple small bets. When facing multiple small bets it suddenly doesn't feel so bad psychologically even though it is the same amount of money.

We can think of our opponents as consumers of our product, wherein our product is the hand strength that we are selling. Some basic ideas we can recognize from everyday marketing include:

- Many small purchases feel better psychologically than few big purchases
- Bigger prices tell people that a product is more valuable
- Smaller prices tell people that a product is less valuable

Poker has lots of these "consumer purchasing" truths in it, and we can use these truths to our advantage. Remember to make bet sizes that are appropriate for the situation and are in line with the plan for the hand. And consider times to make stickier bets. If a bigger bet will get called rarely, but a slightly smaller bet will get called a ton (especially earlier in a hand when we can trap someone in with a weaker holding to pay off more later), it is sometimes best to make the smaller bet if we want calls on later streets.

## The Timing Tells

Any extra information we can extract can be useful, and people are often times very careless with their timing tells. A timing tell is a tell based up on how quickly a player acts. While this of course is player dependent, and can change based on things like how many tables a player is playing, there are some things we want to consider:

## - What timing have they used in the past?

This is by far the most important piece to the puzzle as it establishes a baseline of normal actions. If a player always acts quickly, and then suddenly acts slowly, a red flag has been raised. While this doesn't necessarily tell us anything about their hand, if they act quickly with big hands, and slowly with bluffs, we can use that information. If they tend to call SDV hands quickly and spend more time thinking about their big hands, then we have information we can use. Always remember that timing tells help us understand how much time they need to process information, but it is relative to the individual player and their standard timing with certain hands and actions.

## - The "Hollywood"

Many fish still use this tactic, and even regs will use it occasionally. The "Hollywood" is when a player takes a very long time with a nut hand in an effort to make us think he has a tough decision. The only thing they forget is that they usually end up raising after timing down so much, which turns their range face up. When a fishy player, especially a P-Fish, times down a lot and then raises, they almost always have a super strong hand.

## - The slow reg decision

Regulars are always funny when it comes to timing. Think about how you react when you make a decision. If you are playing lots of tables and have a big hand, especially postflop, you tend to pay more attention to that table. Because of this, you tend to act a little quicker with hands that are stronger, because you know that the situation is important and you already have a plan for it. Now, regs tend to do this as well. But when regs are thinking about making a play, they tend to be a little slower because they are checking HUD stats and such to see if a play is good. For instance, say they open the button, we 3-bet from the blinds, and they spend a little time before making a 4-bet. This is often indicative of them checking stats to see if they can get away with a play, because if
they had a hand like AA that was an automatic 4-bet, they would usually act a bit faster.

## - Our own timing

While we should always be looking for these tells in our opponents, we also need to be aware of our own timing. Like we talked about earlier, regs have a tendency to act faster with their easy hands, and slower when they are looking up different stats and thinking about running bluffs. We do not want to fall into this trap and ideally would want all of our VBs and bluffs to look so similar that we don't give any information away. Especially PF, and when considering a play like a squeeze or a light 4-bet, we usually want to act faster rather than slower. This is why we want to check out information before action evens comes to us. There are times when we steal and we should know right away if we are going to 4-bet or not; we should have already checked their stats and figured out our plan. This keeps our actions looking more real and will make us harder to play against if we take similar time with different hand strengths.

## The Good/Bad Card

There are times when we catch a good card that is bad for the texture of the board. These situations come up a fair amount of the time, and it is important that we recognize them and take appropriate lines. Let's look at an example. Say we raise with AcJc from the CO. The button calls and we see a HU flop of 8 c 7 c 3 h . We CB and he calls. The turn is a Kc and the action is on us.

This is a perfect example of a good/bad card. It is great for our hand as it made us a big hand (or in this case, the nuts), but is a pretty bad card for the board. It is an over card, it filled a flush draw, and looks like it would have logically hit our range if we bet it again. A bet here would very often not get us paid unless our opponent has a strong 2 pr or better type hand.

We need to plan ahead for these kinds of cards, especially when we are considering drawing. Of course, in this situation with the nut flush we are very happy with our hand. But say we had Td9d on a 6d5d3h flop. Any flush card is bad for the board as it fills a flush and also puts either a 4 straight or over card on the turn or river. When we are thinking about drawing we need to consider how many of our improvement cards would be good/bad cards, and understand that they are often times relatively bad for getting maximum value out of our hand when we hit.

## The Bad/Good Card

There are also times when we catch a card this is bad for our hand, but good for bluffing on. These occasional situations are important to understand so we can give ourselves extra ways to win pots. Let's take a situation where we have $A Q$ and raise from MP. The CO calls and we see a HU flop of T 84. We CB and he calls. The turn is a K and the action is on us.

This is a perfect example of a bad/good card. It is bad for us, in that it didn't improve our hand. But it is good for us in that we can use it to get some extra folds. All we have at this point is a big draw, but certainly not a very big hand. The card gave us some extra equity with the gutshot, but we still wouldn't mind if our opponent folded right here, as we will brick the river often enough.

Thinking about these cards is important when we are considering running double barrel bluffs and such. Boards like K84 or A98 don't offer many cards that we can use to scare our opponent on the turn/river. But a board like T 87 or 863 offer many. Considering how many of these cards can come off can give us extra ways to win pots when we are floating or betting with intentions of double barreling.

## The Love Of A Pair

While playing pairs, especially SDV pairs like 99-QQ, is an important skill, the line to take can usually be extrapolated from what we've discussed in previous chapters. But we've yet to specifically discuss pair value and when pairs are best folded or best called down.

When considering a call down with a pair, or any call, we need to consider our opponent's range versus the board texture. While QQ is a very strong hand, there are times when we fold it to two barrels from a tight player. There are also times when we call it down against spastic opponents. Let's look at a couple of examples:

Say MP opens to $\$ 3$ at 100 NL , we call in the CO with QQ , the BB calls as well and we see a MW flop of 56 . BB checks, MP bets $\$ 4$, we call and the BB folds. We see a 5 on the turn and he bets into us for $\$ 8.5$. Let's explore our options:

- Raise. If our opponent wouldn't continue with worse hands, a raise just turns our hand into a bluff.
- Call. Against an aggressive player who would barrel bluffs and SDV hands like AJ or 98 into us, a call can be a great play. If this player bets wider, we should also be prepared to call rivers more often as well, because they would probably incorrectly bet those too. Against tight players who would only bet the turn again with AA or JJ type hands, a call would just be burning money. Usually tight players will only bet the turn again with big hands, which puts QQat the bottom of our plausible C-Range.
- Fold. Against players who would only bet the turn with a range of $\mathrm{KK}+$ / sets+, a fold would be best. Again, part of being a good player is knowing when to fold when we are behind. If we can fold sometimes when we are behind, and our opponent doesn't have that discipline, we are going to crush them in the long run.

Let's take another situation. Say we raise to $\$ 5$ with KT from the CO at 200NL. The SB calls and we see a HU flop of T92. He checks, we CB for $\$ 7$, and he calls. The turn comes a Q , he checks and we check behind. The river is a 7 and he bets for $\$ 12$. Let's explore our options:

- Raise. We have a lot of SDV and a raise just turns our hand into a bluff that represents nothing.
- Call. Against most players this is a standard spot to call. We checked the turn to utilize our SDV, pot control, and induce because a bet wouldn't accomplish much. We are getting an OK price, the pot is positional, and we have 2nd pair with SDV.
- Fold. Against a player who would never bluff here, we could fold. So if a tighter player would never bet here without a Q or 22 type hand, we should just fold and give it up.

If we think about both examples, we noticed that against looser players we valued these SDV pairs more. But against tighter players, or those that don't bluff, these SDV pairs were usually too weak to give action with given the strength of their betting range. This is very standard and goes along with our normal FR thought process. A tight player won't usually get involved in a larger pot without a stronger hand, and against a dumber player we need to be prepared to sometimes call them a little more liberally.

## The Balancing Act

Most players, as they begin to improve and think about their hands on a deeper level, become obsessed with the concept of balance. The thought of their game becoming exploitable is painful, and thus they work on creating unexploitable strategies. While this isn't bad, it just usually isn't very necessary. Let's talk about balancing and when/ how to use it.

When a strategy is balanced, it means that it is "unexploitable." And many players try to ensure that their 3-bet ranges, 4-bet ranges, CB ranges, double barrel ranges, etc. are all balanced. They try to make it so their actions don't turn their hand face up. There are a couple issues with balance though:

- Our opponent needs to care

Because a bad player, or a player who thinks on a very basic level, doesn't think about ranges, we don't need to balance against them. In fact, balancing is usually a great way to burn money against bad players. We should play straight forward against players that cannot think about our ranges and what our actions indicate.

- We need to know their actions/frequencies

An issue that arises when a player starts balancing is that they think so much about their own range that they forget about their opponent's range. But there are times when we know our opponent's strategy and take totally unbalanced lines anyway. For instance, if a player would only 3-bet us with KK+, we shouldn't 4-bet anything but AA against them. This would make our 4-bet range against them very unbalanced, but it is still the best strategy if our initial assumptions are correct. If a player is very unbalanced in their approach (always making $X$ action with $Y$ hand), then we should just use that information to play totally perfectly, even if it makes us "unbalanced."

Especially at the micro and small stakes, we don't tend to find many players that can think about ranges and the meanings of actions. Because of this, playing a totally straight forward game is usually fine. But when a good player starts fighting against us, we might have to change our strategy a bit. Here is a perfect example. Say we are playing and player BIGBALLER15 keeps 3-betting us. Pretty much whenever we open-raise, he is right there 3-betting us. He is playing very loose and aggressive. We have a few options against him:

## - Tighten up our open-raise range

What if we changed our open-raise range to only a range that we wanted to value 4-bet? This would be very unexploitable for us, assuming that he doesn't catch on and stop 3-betting us because he realizes our range got stronger. This option is cheap, easy, and keeps us on the good side of minimax. It also injects lots of value into our value open-range which is perfect.

- 4-Bet liberally

Another option is to start shifting more hands from our "foldv3bet range" into our "4-bet bluff range." If he is literally 3-betting every single hand then it is almost impossible for him to have a monster every time he does it. Because of this, we could start 4-betting more liberally and picking up his 3-bet. However, in order to do this well, we would need information on how he reacts to 4-bets. Does he only 5-bet the nuts? Does he 5-bet his whole range? Does he flat call 4-bets? These are all things that we probably wouldn't have a lot of information on, and making mistakes in bigger 4-bet pots can be disastrous to our win rate. While 4-betting light can certainly be a valid strategy, we usually want more information before we start implementing such an exposed strategy.

- Keep raise/folding

While such an approach probably seems silly, many players actively choose this strategy in real-time. They refuse to adjust and would keep feeding money to BIGBALLER15. This is usually the last option we would want to choose in this dynamic.

Now neither of these strategies is very balanced. One of them tightens us up to the point of having only nuttish hands that we can feel comfortable with versus his range. The other has us making a large percentage of 4-bets. They are are extremes, and are relatively far from being balanced. Being balanced would involve creating a range that could 4-bet him X\% of the time, fold Y\%, and flat $\mathrm{Z} \%$, all without making our range face-up.

An important thing when playing is appearing balanced. If a player thinks that we are balanced, it means he will be making mistakes against us if we contort our range correctly. Take a situation where we are on the flop with XX. We steal PF, see a HU flop of K73, and our opponent checks to us. If we would check the flop behind with hands like $\mathrm{KT} / \mathrm{KJ} / \mathrm{QQ} / \mathrm{TT}$, and only CB with hands like 77/54/A9/etc., then our CB range isn't very balanced at all. There are so many more combos of air than combos of nuttish
hands, that our betting range is actually very face up. By that same token, our checking range is also very face up. However, is this a bad thing?

If our opponent couldn't care less, and would continue making mistakes, we can continue on with our strategy. It is when our opponent begins to figure out that our check is done with SDV hands and a bet is polarized that we need to adjust and "balance." But we don't necessarily need to balance in the game theory sense. We just need to adjust until we figure out how our opponent is adjusting. If he starts CRing every CB because he thinks we are betting light, then we can create an optimal strategy. If he starts floating every single CB from OOP, then we can create an optimal strategy. When we have information that we can use against our opponent to create exploitative plays, we should always use it. We should never balance for the sake of balancing. We should balance because we are in a situation and against a player that necessitates balancing as the optimal play.

## The Leveling Game

Many players consider this aspect of the game "real poker." Leveling is what creates the cool plays we see on TV, and is very usable in every poker game. Leveling is about which plane of thought process a player is on. Here are the basic levels in poker:

- Level 0: I am not thinking
- Level 1: What do I have?
- Level 2: What does my opponent have?
- Level 3: What does my opponent think I have?
- Level 4: What does my opponent think that I think that they have?
- Level 5: What does my opponent think that I think that they think that I have?

Most beginning players are somewhere on level 0 or level 1 . They are unable to think about their opponent's range or what their opponent's actions mean. These are very easy players to play against. We can play totally straight forward against them and use our $A B C$ poker strategy. Our play gets interesting when we start playing against players on higher levels.

One of the best ways to win the leveling game is to remain one step above our opponent. Being too many levels above our opponent will have us making plays that are unnecessary against a particular villain (which creates FPS). If we are playing against a calling station on level 1 , we just need to be on level 2 . We shouldn't run complex bluffs on them because they will not understand what we are representing and we will just be burning money.

As we move up and grind into higher levels, we will eventually start running into players that can and will think on higher levels. There are two major ways to combat them:

- Think a level over them: This can be very tricky, especially against players that are playing on level 4 and 5. It will be hard to figure out when they are adjusting, and will make our life pretty difficult. It will often times result in having to risk a lot of money in more uncertain situations (as that opponent would be able to make more correct plays against us).
- Think two levels under them: If we can figure out which level they are playing on, playing two levels under them is relatively simple. It actually bringsus back to playing more ABC poker, which exposes less of our stack and puts us in fewer situations where we could make really expensive and bad mistakes. Now if we are just one level under our opponent, they will crush us. But if we can constantly stay two levels underneath them, we can make some serious money with relative ease.

At this point we can really see how balancing and leveling go hand in hand. Take a PF situation where a player steals from the CO and it folds to us in the BB . If our opponent is on level 3 and thinks we can think that high, he probably thinks "OK, this player understands that I am stealing. I thus expect him to resteal me more liberally, which means I am prepared to increase my 4-bet \% to combat that." So because he thinks we are balanced to an extent in our restealing frequency, we can actually play more straight forward. We could actually make it so our resteal range is purely for value (only hands we would stack off preflop with). Or, we could try to jump up a level and resteal/5b shove our entire range thinking that his 4 b range is wide enough. Which option is easier and safer? The option that has us only 3-betting for value? Or the option that has us risking our entire stack with only a hazy idea as to how correct it is?

What if after time we figured out that our opponent was adjusting and starting to fold to most of our 3-bets? This means we could use that information to start 3-betting more of our range until he adjusts. Then we just need to figure out if he is adjusting by stealing less, steal/4-betting more, steal/defending more, or not adjusting at all. All
of these things are very easy to see, and they are things we should be taking notes on. While this kind of dynamic doesn't happen often, it can put us a helpful step ahead of our opponent. A default way to handle this situation is to play tighter at first, take the information we have, take notes on how they respond when we use our strong range (is he folding? 4-bet/folding? 4-bet/stacking? Etc.), and then adjust to how they are responding.

## The Hero Fold

A "hero fold" is a big, in the relative sense, fold. Usually folding trips and flushes tend to fall in this category. Being able to hero fold well can be a very important part of our game. If we are able to fold sometimes in spots where our opponent never could, then we will crush that situation versus him in the long run. Let's first explore what goes into making a hero fold:

## - Our Opponent

Certain opponents are more apt to bluff than others. When we are considering a hero fold we usually do so against players that don't have large bluff ranges. So if we have a strong hand, but are facing a bet from a player that has no real bluff frequency, we have a spot where we can consider making a big fold.

- Board Texture:

The texture of the board is crucial when considering anything. If the texture allows for many second best hands to bet into us and valuetown themselves, then hero folding becomes less of an option. But if we are on a board that is more definitive, and our opponent has a minimal bluff range, a fold could be in order.

## - Polarized Weight

The weight of polarization is important. Say we are on the river and our opponent bets $\$ 42$ into a $\$ 54$ pot. We are getting 2.3:1 on the river, and we would need at least $30 \%$ of our opponent's range to be worse hands in order for us to call. If we don't see our opponent having that big of a bluff range on the river, then we can fold. When considering weighted polarization we need to think about how polarized they are (will they bet SDV hands because they misunderstand SDV? Or will they only bet with bluffs and the nuts?), their bluff range (do they have one? Or do they have a big enough one?), and what price we are getting.

- History

With history a hand can shift from a call to a fold very quickly when facing a bet. If we called a big bet in a previous hand against them with a second best hand, it is somewhat unlikely they will make a big bet the next time with a weak holding. Because of this, if we see the big bet, we can lean more towards folding than calling. Usually we don't have enough history to use it in such a straightforward manner, but we should take notes on how particular villains have played with us in the past so we can make better decisions in the future.

Let's look at an example. Say a nit opens to $\$ 2.5$ in MP, a super fish calls in the CO, and we call on the button with 5 d 4 d . We see a three way pot of Jd7d2c. MP bets $\$ 5$, the CO calls, and we call. The turn is a 5 h . MP checks, the CO bets $\$ 12$, we call and MP calls. The river is a Td. MP bets for $\$ 48$ and the CO folds. Let's think about a few things:

- MP is a nit

Being a nit it is very unlikely that he would bluff, especially like this. He has a fish behind him, plus it is a MW pot, so he'll be rarely making a big bluff.

## - MP's range

Because we don't think he would bet this is a bluff, he must have a strong hand. The most logical holdings are something like AdKd, KdQd, or AdQd. If he had JJ he probably would have bet the turn (ifhe checked, it is rare that he would ever just $c / c$ ), and if he had $T \Gamma$ it is unlikely that he would bet the river this large. While there aren't many combos of hands that beat us, it is unlikely that he would take this line with a hand that we beat.

## - River math

On the river we are calling $\$ 48$ to win $\$ 108$, giving us 2.25:1. This means we need at least $30 \%$ of his range to be bluffs. If our analysis suggests that he has almost no bluff range, and that he wouldn't bet a hand like JJ or $\Pi$ like this, then this is looking like a great spot to hero fold our small flush.

Let's take another situation. Say we are in the SB with 43 o and it folds around to us. The BB is a very nitty player and we steal for $\$ .75$. The BB calls and we see a HU flop of 844 . $\mathrm{We} \mathrm{CB} \$ 1$ and the BB calls. The turn is a 6 and we bet for $\$ 2.75$ and he calls. The river is a 9 and we bet for $\$ 6$. The BB shoves for another $\$ 14.5$ on top. Let's explore what we know:

## - $\quad B B$ is a nit

Being a nit, it is very unlikely that he would bluff. While this is a positional pot, nits are still notorious for not risking their entire stacks on bluffs, especially when their opponent seems very comfortable with their hand.

- BB's range

When the BB flats our raise PF it is very likely he is doing so with some of his pair range and some broadway combos. But after he calls not only the CB , but also the turn bet, it is rare that his range is anything but strength. He probably calls the turn with boats and some floating strong pairs like 99-QQ. However, most of that is SDV, and nits rarely turn a hand with SDV into a bluff postflop. Because of that, his shove range on the river becomes very polarized, and top-side weighted if we think that he wouldn't do it with hands like QQ, TT, or 77 .

- River math

On the river we are calling $\$ 14.5$ to win $\$ 39.5$, giving us 2.7:1. This means that we need at least $27 \%$ of his range to be bluffs. If our analysis suggests that he wouldn't shove a hand like JJ or TT here, then folding becomes a great option.

Hero folds should be done more against nits and players with minimal, if any, bluff ranges. It's the definitiveness of their actions that allows making big folds to become easier and profitable. However, if we are against players with big bluff ranges when we are getting a good price, then making hero folds becomes less ideal. Everything is relative, and we need to pay attention to if players bluff and also how they bluff. Make sure to look for spots where we can dump second best hands and lose the least when we are surely behind.

## The Hero Call

Lots of players love the concept of hero calls. Making that big call on the river with second pair and scooping a big pot is always a good feeling. However, we don't often times put ourselves in that situation, and thus we don't get many opportunities to do so. A hero call is simply a call made with a less than nuttish hand facing strong action. Let's look at what goes into a hero call:

## - Our Opponent

As we know, certain players are more likely to make big bluffs, and others are far from it. For instance, we almost never hero call a nit because their range doesn't tend to have enough bluffs in it. And even if their range did have bluffs in it, only rarely would they pull the trigger and run the bluff. We also don't want to get in the habit of hero calling P-Fish and unknowns, as P-Fish tend to make more calling mistakes than bluffing mistakes, and we need information to hero call.

Our ideal player to consider hero calling against would be an aggressive opponent who has shown the capability of running big bluffs. Players who understand SDV and polarization are usually perfect to consider hero calling, because their betting range on the river becomes more polarized. And if the weight of their polarization gets too bottom-side weighted, we can call a bit wider than we might normally.

## - Board Texture

Very definitive textures are usually better candidates to hero call on. Boards like 4 straights, 4 flushes, A high, Khigh, etc. These boards polarize a good player's betting range, and then it just becomes a weighting exercise. Low boards, like 96343 are usually pretty bad for hero calling because a player can easily be VBing a hand like TT or K9, making a hero call with something like A high really bad.

## - Range Reading

Like always, we need to think about ranges. Does our opponent have the ability to have better hands? Or would he have 3-bet those types of hands preflop? And when considering range reading against better players, we want to think about what we represent as well. A good player might just attack us because he thinks we will fold enough of the time.

- How Did We Get Here?

Whenever we are considering making a hero call we want to consider the entire line. Say we get to a spot on the river where an opponent bets pot on an AJK3Q board. Did he really get to the river with a T in his hand? In a hand where we checked down to the river, the chances are higher that he has a T than if we bet the flop and turn. Again, we want to think about the entire hand's actions and logical ranges before we consider making big calls like this.

Effectively we are looking for a spot where our opponent's actions don't line up with the hand he is representing, on a board that is definitive, in a spot where we know he has a large enough bluff range, and we have something with SDV. In an essence, this spot doesn't come up all that often. But let's look at a spot where it might. Take a hand where we raise with TdTs from MP. The button (a solid TAG) calls and we see a HU flop of $A \diamond K \downarrow$. We CB for $\$ 4$ and he calls. The turn is a $6 \downarrow$. We bet again as a semi-bluff for $\$ 11$, and he calls. The river is a 4 and we check to him. He bets the river for $\$ 30$. Let's look at a few things:

- The Board is Definitive

The board has a 4 flush on it, so it is very definitive.

- Our Opponent

He is a solid TAG who we know can run bluffs if he feels it is good spot.

- His Line

He really can't have many hands that beat us. He could have the Q or $J \diamond$, but they would have to be made with hands like $Q \subset$ x or $J \diamond J x$, as it is unlikely that a good TAG is going to flat AQ or KJ type hands from the button. His line looks like a double float type hand, or a hand with some SDV that he is turning into a bluff because he feels bluffing it is more valuable than checking behind. Being a good TAG means his bet on the river should be very polarized as he would usually check strong SDV hands behind ( 33 or $8 \checkmark$ type hands) and only bet nuts/bluff type hands.

- Our Hand

We have some SDV (the third nut in this situation is really only a bluff catcher after we check it), so our hand strength fits right into hero call territory.

On the river we are calling $\$ 30$ to win $\$ 67.5$, getting a little better than $2: 1$. As long as we think at least $1 / 3$ of our opponent's range is bluffs, we can make this call. Of course, we need information to do so. This is why we heavily focus on the board texture, his line, his bluff frequencies, etc. Again, these situations don't come up all that often, but when they do we can pick them off with information.

## The "OMG I'm Confused" Line:

A lot of this book, postflop especially, mentioned default lines in passing. The reason that default lines were not heavily discussed is that my goal for this book was to keep it as timeless as possible. I didn't want to put in default lines that work today, but might not work tomorrow. The entire goal was to talk about the composition of good plays so that you knew what information to look for and how to use it. This section will talk a little about default lines to an extent, just so we have a basic idea when we get confused in a hand.

Let's just list some of the basic questions we want to ask ourselves during a hand:

- What would happen if we bet?

Because we will usually have the aggressive lead in a hand (we don't do much flat calling or calling of 3-bets, etc.), we usually are the decider of whether or not a bet goes in, at least on the flop. Because of this, we want to ask ourselves what would happen if we bet. Do we expect a lot of folds or calls? Do we expect to get raised a lot? What actions would we ideally like and at what frequencies do we expect them?

- What is my hand strength?

As always, we want to fully understand the strength of our hand. As a default, if we have a value hand, we should just bet (we can consider trickier lines with information). If we have a SDV hand, we should aim for a street or two of value, and take lines that allow for that. If we have a bluff hand, we should bluff if we expect enough folds and give up if we don't. If we have a semi-bluff hand, we should usually bet if we expect enough folds and not many raises.

- What is his range?

What does our opponent logically have? Of course, this necessitates information which can usually be gleaned from HUD stats. Even if we don't have enough stats to put someone on a definitive range PF, we can still decipher range from their actions. While it will never be exact, we could assume that players are strong when they raise. If we default folded weakish hands against raises, we wouldn't make a massive mistake against players in information-less situations.

## - How did he logically hit the board?

This ties in heavily with our opponent's range. Of course, if we do not know our opponent's range, then it will be difficult to figure out how they hit the board. But if we spend some time with Flopzilla we can see how basic ranges hit different boards. The default ranges we can use are a setmining range $(22-\mathrm{QQ})$, the $18 \%$ range (all pairs, and all double broadway (AT, KJ, QJ, etc.) hands), and the $22 \%$ range (all pairs, all double broadways, suited connectors, and some other suited hands like Axs and Q9s). Just becoming familiar with how different logical ranges hit flops can help us quickly visualize how a villain logically hit the board.

When we are IP, confusion is always easier to handle. Essentially we can always check back and just go on to the next street. An important part of confusion is our default action. Many players, when confused, default on betting. In FR, checking should often times be the default action when we are confused. Why would we want to make a bigger pot that will only create more confusion? Our goal when we are confused should be to keep the pot size smaller and more controlled, not to bloat the pot and make it even more difficult.

From OOP it can be much harder. Because checking every time we are confused can encourage our opponent to bet more liberally. However, checking is still a fine default line when confused. We don't want to be running big expensive bluffs when we don't know how they will work. And we don't want to find ourselves betting and creating pot sizes that are too large with SDV hands.

Of course, poker is about more than just our hand strength, but it's the basis of our actions. Here are some basic default lines I use:

- Preflop. If I have a big hand ( $\mathrm{KK}+$ ) I 3-bet as a default. If I have AK and expect a lot of folds, I 3-bet as a default. If I have a small pair versus a strong range with minimal squeezers behind me, I setmine as a default with correct odds. I do not cold call other hands as a default. Against shorter stacks I will default stack off $\mathrm{QQ}+/$ AK in a $H U$ pot preflop.
- Flop. IfI miss and expect at least $50 \%$ folds, I CB as a default with bluffs. If I have a value hand I will bet it. If I have a SDV hand (QQ on Axx), I will check as a default if the pair is jacks or better. If I have a SDV hand smaller than a pair of jacks, I will bet as a default. If I have definitive SDV
(AJ on an A87 or KQ on a K64) I will check ifI think I am getting raised too often and don't have a plan versus the raise. If I have a definitive SDV hand I will check if I think the check will create a very mistake-rich environment and that a bet wouldn't be quite as +EV . If I have a value hand (set or better) I am raising as a default. If I have a no information, I will only CR for value as a default. As a default, I will not float and will only peel pairs that are relatively strong.
- Turn. As a default I will not bluff. If I have SDV IP and the board has few bad river cards, I will check behind. If I have SDV IP and the board is very wet, I will bet the turn and check the river as a default. If I have a value hand I will bet it as a default. As a default I will only give raises action with very strong hands. If I am confused, then I check as a default.
- River. As a default I will not bluff. If I have SDV IP and don't think a bet gets called by a lot of worse hands, then I check behind as a default. If I have SDV OOP and don't think a bet gets called by a lot of worse hands, then I check as a default. I only call with a SDV hand ifI think my hand is best a lot of the time as a default. I will VB my value hands as a default, IP or OOP. I will fold to raises from passive players without nuttish hands as a default. If I am confused, then I check as a default.

Again, information trumps default lines every time. If we know a player will do this or that, or wouldn't do this or that, then we use that information to take better and more exploitative lines. In general, our goal when confused is to showdown as cheaply as possibly. We don't want to make bigger pots without big hands or big information. So if we keep that mantra, we should stay out of a lot of the trouble that other poker players encounter.


In certain circles creative lines are either often times not discussed, or are discussed and focused on too much. For fun, we'll touch on the topic here, but keep in mind that a good understanding of all of the concepts talked about earlier will be imperative to creating the sorts of lines discussed here.

First off, what are creative lines? Creative lines are lines that are "outside the box." They attack odd or special parameters and veer away from the default lines that we might normally use in a situation. Being able to create new lines isn't the most important skill in the world, but it will allow us to stay ahead of our opponents and adjust more correctly to various situations. Herein we will talk about some things to look for when creating lines ourselves, and some lines I have created or seen that are, in my opinion, awesome examples of creative plays.

## - Global lines

When we consider lines, we either look at specific lines or global lines. Global lines look at the parameters of a global entity. For instance, if a level on a particular site, players do X , we can do Y to more accurately combat them. We care about global lines because they can shape things like our entire preflop strategy, our entire CB strategy, and even our turn and river lines. Understanding global lines will keep us focusing on big strategic aspects of our game as opposed to a singular play against a particular opponent.

## - Specific lines

Specific lines focus on particular players or particular situations. So while a global line might focus on our overall 3-bet strategy, a specific line might focus on our 3-betting against one player. Or maybe we change our CB strategy on a particular board against a particular villain. These lines are usually created when we do analysis on a particular player and dissect his weaknesses for future exploitation.

## - How "XXX" plays

Overtime we notice that certain player types tend to trend and do certain things all at the same time. TAGs might all start aggressively restealing, and LAGs might start increasing their 4-bets. Fish might start check/ MRing more liberally, and nits might start open limping small pairs. If we pay attention to how the different player types are playing, we can start forming ideas on exploiting whatever action they are tending to take.

## - How pools play

Pools of players tend to play similarly as well. Fish are always in a "monkey see, monkey do" mode, which makes our lives easier. If we see the TAGs are more aggressively restealing, and overtime fish start doing the same, we know that we should expect resteals more often and need to adjust to play closer to optimal. If fish start getting aggressed upon more often, then they will start aggressing back because they think that's how one should play.

There is always a "trickle down" in the poker community. It is very common for a video to get released on a training site, have a play start being used by those that watched it, the fish see it and try it, and before we know it, everyone is doing whatever play the pro on the video did. The same with articles. On the 2 p 2 micro-full ring forum there is a concept of the week (COTW), and oftentimes the play discussed there will be heavily used by players, the fish will see it and start using it, and then everyone plays differently. Being ahead of "group-think pools" is vital to staying ahead of the game.

There are plenty of other things to consider as well, but these are the basic building blocks of line creation. We always start with the parameters that we have available, and then we start focusing on the exploitation of the strategies being used. Let's look at a few of my favorite adjustments from the last year or so.

## The EP Steal

One of my favorite plays is the EP steal. I noticed that the games were giving lots of respect to raises from EP. Players weren't 3-betting liberally, were really only calling with a setmining range, and were playing pretty set-or-jet postflop. This gave me somethings to think about:

- I can pick up the pot PF

This is great. Low risk (risking $3 x-4 x$ ) investments for solid profit plays are always something I appreciate.

## - I can pick up the pot postflop

This is even better. If someone is going to call PF and fold to my CB about $80 \%$ of the time (he hits his set+ about $12.5 \%$ and we give some float allocation for things like T on an 8 high flop), I can make some real money. Again, low variance, and even at worst my risk is $3 x-4 x$ PF and a $1 / 2$ PSB CB $(4 x-6 x)$ for a 10x max risk. And if my plan goes awry and I go

MW, I can always abort the CB plan if it doesn't look like a good spot (because let's face it, not every spot will go perfectly every time).

- If I get 3-bet

If I get 3-bet I know I am against the nut part of somebody's range, so I can take IO if I have the right hand against the right player with the right price, or just fold and lose $3 \mathrm{x}-4 \mathrm{x}$. I can't complain about being able to play perfectly with minimal downside and massive upside potential.

Because of this I needed to choose a range of hands to use. I didn't want to do it at $100 \%$ because my VPIP/PFR would get too high and players might treat me as a fish and start approaching me differently. So I decided to use my normal range of $77+/ \mathrm{AQ}+$, and add all broadway combos, suited connectors, and suited gappers. This gave me a range of hands that could catch winning TP hands, and hands that could cooler my opponents (having 86s on a 975 board versus 55, etc.).

As soon as pots started going MW more, players started floating flops more liberally IP, and players started 3-betting EP raises more liberally, the play went away and I went back to my standard EP range and actions. Plays like this don't stay around forever, but when favorable parameters present themselves, there is no reason why we shouldn't attack and exploit them.

## The LRR

A LRR is a limp/reraise, and there was a point when the games were getting very aggressive with isolating limpers. It seemed that every TAG was going out of their way to isolate every player that was limping at their table. If these TAGs, who tend to take up the most amount of seats on a table, were all doing this, there seemed to be some opportunity. Also, the LRR at that time was usually considered to be a KK+ type hand getting tricky. So I decided to consider open limping and reraising if I got isolated from a TAG. Here are some things I considered:

## - If I did it, how much would I have to risk?

The average situation would be a limper, a TAG isolation to $5 x$, and then action back to the limper. This would mean to run the play I would have to LRR to about 14 x . My original risk would be 1 x (the limp) and then $14 x$ total (the LRR) if I got isolated.

- How often would it logically work?

Well if a TAG used a wide range to isolate, say $22+/$ ATB, then he is using an $18 \%$ range. Some TAGs would isolate tighter, some looser, so $18 \%$ seemed like a nice even number to work with. Because a LRR was usually viewed as KK or AA trying to get tricky, an isolator would react in one of two ways:

- Fold everything but $\mathrm{QQ}+/ \mathrm{AK} . \mathrm{QQ}+$ /AK makes up 2.6\% of hands. So $2.6 / 18=14 \%$, so we would expect a fold from him about $86 \%$ of the time. We probably wouldn't be able to win postflop with a CB every time, but we gave ourselves a great range to get paid against if he called our LRR PF and we hit.
- Call all pairs to setmine. If he called with $22+/ A K$, that makes up $7.1 \%$ of hands. So $7.1 / 18=40 \%$, so only $60 \%$ of his range is folding preflop to the LRR. We would probably be able to fold out a lot of his hands with good CB , so we give ourselves added ways of winning the pot.

So we have two logical happenings if we get isolated. We either win it often outright, or we give ourselves a chance to win it outright and get some extra profit from the CB. If we just looked at the play from a purely "if we get folds we win, if we get action we lose" point of view, we see that versus the range that folds a ton:

$$
\$ E V=0.86(5 b b+1.5 b b+1 b b)-0.14 \cdot 13 b b=4.6 b b
$$

This is a great ROI for our hand, even though it is greatly simplified and doesn't take into consideration getting paid if we hit postflop versus a strong range, changing our LRR size, etc. All we see is that it makes a better ROI than the standard raise or fold line would.

## - If I did open limp, would it seem odd?

This was a big factor. When I create a new play I want to make sure that it blends in with my normal actions and doesn't stand out or raise an eyebrow from players that are paying attention. I ultimately came to the conclusion that TAGs (in this game condition) weren't paying enough attention to who the limper actually was, only that there was a limper and then a 3-bet back to them.

After I ran through the math I started to consider the hand range I would use for this. I decided that I would select hands that would do best if they flatted my 3-bet and I had to play postflop. I also had to select a range of hands that would do well if I didn't get isolated and had to play postflop in a limped pot (because remember, not every play will go according to plan). Because of this I decided to use a range of suited connectors, suited gappers, and some small pairs. I actually almost never used KK+ because I didn't want to represent the hand I actually held, unless I thought a particular player would make big mistakes against it.

There were quite a few things to consider with this play. It became more of a math problem due to the risk and the assumed C-Ranges. This was a great play until TAGs started to pay attention to who the limpers actually were and either limp behind or isolated larger with a less favorable range (forcing me to have to risk an even larger chunk of money to LRR). This play was able to work for awhile, but once the TAGs adjusted it wasn't looking great. By the time the fish started isolating more (again, that "monkey see, monkey do" effect), the play was useless because fish don't fold and it defeated the purpose of trying to inject value into a less valuable part of my range.

## The EP/MP 3-Bet

There was once a time when players began to think and understand things. Almost overnight players began to understand how strong or weak perceived ranges were. However, players were unable to think a step further, which left an opportunity on the table.

Many TAG players were using a standard opening range of $22+/ \mathrm{AQ}+/ \mathrm{KQ}$ from EP , and a slightly wider range from MP. They also understood that 3-bets versus a player who opened from EP or MP were usually with strong hands. Because of this, they were more apt to fold preflop versus a 3-bet, esp from OOP, given the perceived strength of the 3-bettor. This left some serious opportunity to those willing to do some simple math and risk a little money. Let's explore some things I considered:

## - What logical range are TAGs raising with?

The average TAG range was looking like $22+/ \mathrm{AQ}+/ \mathrm{KQ}$. That is $9.5 \%$ of hands. We'll just use that as a baseline (of course sometimes it will be wider, especially from MP, but it makes the math simpler).

- What would they logically continue with versus a 3-bet?

Players would usually combat the 3-bet in one of two ways. Only continue with strong hands ( $\mathrm{QQ}+/ \mathrm{AK}$ ), or setmine and continue with 22+/AK.

- $\mathrm{QQ}+/ \mathrm{AK}=73 \%$ folds
- $22+/ \mathrm{AK}=25 \%$ folds

We know that $25 \%$ folds is nowhere near enough, outright, to justify making 3-bets. But if they called with $22+/$ AK, understanding that my represented range is very strong, they were doing so to play "fit-or-fold" on the flop. So I had a chance of picking the pot up outright, or picking the pot up on the flop if they tried to setmine too often preflop versus my 3-bet. Of course, if I saw that a player had a Foldv3-bet of $85 \%$ from EP or MP, then I would 3-bet them every time until I thought they adjusted.

- Would they 4-bet or flat call?

Of course we would prefer if they always flatted versus 4-betting. If they were only continuing with the $\mathrm{QQ}+/ \mathrm{AK}$ range, by 4-betting or folding, then we wouldn't care as much because the 3-bet is outright profitable. But overall we would prefer if they flatted so we could hit a flop and play poker from there.

- My hand range?

Because my range is perceived as super strong, I could use any two cards here. Again, I liked having either some equity (so suited connectors, suited gappers, suited trash, etc) or blocking hands were great. Having a hand like K7s or A4o was great as I blocked out the number of big hand combos he could continue with.

Against players that were only continuing with the very top of their range, I would just 3-bet anything from LP (assuming there were no fish behind me). This allowed me to turn a lot of hands that should be losers in my database (760, A4s, K90, etc.) into winning hands. When the game became aware of how liberally aggressive TAGs and LAGs were 3-betting these situations, players started adjusting their EP/MP ranges (making them stronger and cutting out smaller pairs and such) and also 4-betting some of the bottom of their range. While this play still works in certain games and against certain players, it's not nearly as profitable as it used to be.

## The Special CB

There are times when a CB can do great or terrible things for us. This is actually a play I still use from time to time, when the parameters are correct for it. I'll show an example. A TAG player raises from MP, I 3-bet KK on the button, and just the TAG calls. He checks on a flop of A94. Here, with certain information, I can breakaway from my default line of checking back to induce/minimize.

If I know that the player wouldn't make a mistake if I checked here, then my check isn't all that great. Say he would never call a CB here with QQ or TT, and that he would never c/c later in the hand with unimproved pairs. Effectively, he would never pay me anything unless he sucks out, or he already has me beat. In this situation the \$EV equation would like like this:

$$
\$ E V=X \cdot \$ 0-Y \cdot \$ Z
$$

Essentially, a check will put me on the bad side of the minimax game. I make nothing when I am ahead, and lose the most when I am behind (or get sucked out on). In this situation I would rather CB and pick up the pot than check. I close out his equity and take my pot, rather than just giving free cards when giving those free cards create no extra gain for me. Again, the CB breaks away from the default line of checking there to induce. While it isn't a revolutionary play, it was created due to thinking about the situation, possible future situations, and weighing the $\$ E V$ of each line.

## The Massive ISO

There was a time when nits and TAGs were doing a lot of open limping with small pairs in an effort to setmine for cheap. When they would limp/call they tended to play fairly "set-or-jet" on the flop, which made for a very profitable opportunity. Here are some things I would consider:

- What are they open limping with?

They were pretty much using two types of hands, small pairs and suited connectors. They wanted to get into the pot for cheap so they would limp and try to create a MW pot.

- Will they continue versus $\$ \mathbf{X}$ size?

At this point in the game, many players were thinking that bigger sizes PF meant bigger hands. So if they saw a big isolation raise, they thought it
was a hand that would offer them a lot in IO. The finesse of this situation was finding an isolation size that maximized overall \$EV. If they would limp/call for 5bb, would they do it for 7bb? What about 9bb? Where did the calling stop and the folding begin?

- How will they handle postflop?

Because they were limp/calling, especially from OOP, they were unlikely to get very aggressive postflop. They were tending to play very "set-or-jet" on the flop, so they would only continue with sets and fold whiffed setmines. On average they were just check/folding flops about $80 \%$ of the time.

- Will they continue versus $\mathbf{\$ X} \mathbf{C B}$ ?

The sizing here is the crux of the whole play. Sure we could isolate for 4 bb PF and CB for 7 bb , but why not other sizes? If they are playing so fit-or-fold on the flop, why do I need to make a $2 / 3$ PSB? Why couldn't I use a $1 / 2$ PSB? Why not a $2 / 5$ PSB? How big could I go preflop, and small could I go on the flop, so that I could risk the least for the most profitable line? Of course there becomes a point when a CB could be too small (same as the isolation size could get to a point where it is too big), but so long as we keep it reasonable, we should see great results.

At this point it became a total balancing act. Because I knew how he would react preflop (to an extent) and how he would react on the flop (to an extent), I knew I had the makings of a big play. So I simply ran through some math with the assumptions that my ISO always got called, he folded $80 \%$ of the time to a CB, and I never hit a hand nor made money if he called the CB . I tried running the play if I used a 6 bb isolation and then a 6 bb CB . This was netting me about 3.6 bb /isolation, which is a great ROI. But then I tried an 8 bb isolation and 7 bb CB . This was netting me about $4.6 \mathrm{bb} /$ isolation. This is massive!

I kept playing with the numbers until I had numbers that I liked. I ended up choosing a 7 bb isolation and 6bb CB (for a 4.2 bb /isolation ROI) because I felt those numbers would work the best without putting me in too much trouble. As for my hand selection, I didn't need any. The play is outright profitable considering the parameters of that player type and the table. I could technically turn a 4.2 bb return on any hand that I had in that situation. Of course, this play didn't last more than a few months. Eventually nits and TAGs realized what was going on and started open raising rather than open limping with pairs. But, it was an amazingly profitable play while it was available.

## The Back-Raise

There once was a man who wrote a very solid article on squeezing. This article was read by many, internalized by many, and just as importantly, used by many. It created a window of time when squeezing become the most popular play ever. Because of this, the TAGs and LAGs that had read this article began squeezing at super high frequencies. Of course, if a lot of players are doing one particular thing, it has to leave room for opportunity. So I decided to consider putting some extra back-raises into my play book. A back-raise is simply a spot where you call a raise, and then 4-bet over a 3-bet.

## - What frequency are they squeezing at?

Some players were starting to squeeze as high as $40 \%$ of the time. They were looking for every squeeze opportunity that didn't have a fish involved, and they would run it aggressively.

## - With what are they squeezing?

If they are squeezing at such high frequencies it is unlikely that their range could possibly be very strong. This means that a large percentage of their squeeze range was going to be air.

- What would they put me on?

Because I would be back-raising into thinking players, I would need to consider what I represent. If I just called the open-raise it looks like I probably have a setmining hand, so a paired range 22-QQ. Because of this, I am effectively "turning my hand face-up." This gives them room to shove as a bluff in an effort to get me to fold my 44, or shove their "value" hands like AQ or TT because the pot was so massive and they thought there might be FE.

This left opportunities to bluff, but also massive opportunities for value. What about instead of 3-betting AA or KK myself, I just called and let one of the TAGs behind me squeeze? I give him the chance to put in a ton of money badly, make a lot of mistakes, and let others possibly misinterpret the information allowing for a possibly huge pot. Say he is squeezing at $30 \%$, and squeezes up to 14 bb . That means I give myself a chance to make an outright extra 4.2 bb per aggressive squeezer behind me (before I even consider things like him bluff shipping his stack over my back-raise, him using a bigger size, him squeezing me more liberally, him overvaluing TT, etc.). This also doesn't even include the times that a player squeezes and then the original raiser calls.

Of course, by flatting the open-raise here I did run the risk of the pot going very MW, or going HU with the original raiser and playing a much deeper SPR pot. However, every play comes with risk, so I just adjusted and played whatever situation would arise. This play was super profitable as long as it lasted (which wasn't long sadly). It took advantage of a group-think idea that was executed without a plan on facing a back-raise. These kinds of plays are actually readily available if you pay attention to the latest strategic articles and videos released amongst the poker communities.

## The Draw And CR

In exploring the resteal and CB part of my game, I noticed a few things that lead me to this play. For one, I was getting my resteals called a bit more liberally, lowering my success rate from something like $80 \%$ to $70 \%$. I also noticed that players were starting to peel flops a little more liberally (not folding TT religiously on a Q high board, calling AK high sometimes, etc.). Because of this I started to stop CBing every time with my whiffed hands and noticed that my opponents almost always bet when I checked to them.

I was trying to figure out how to use all of this information, as it is a lot to process. In doing that, I noticed that most of my resteal range at the time was suited stuff, especially suited junk like 8 d 4 d and Ac5c. I also noticed that when I caught a FD with these hands it was incredibly difficult to play well. If I CB and they peeled, I was in a very tough spot on the turn when I bricked my draw. If I checked the flop rather than CB they would bet a ton of the time at me. Then a light bulb went off, what if I started to check/raise FDs rather than CB them?

Take a normal spot where where the BUT opened for $\$ 3$, I 3-bet to $\$ 10$ with 7 h 5 h , and he called. The flop is Th6d2h. I looked at my options:

- Bet. If I bet I was expecting to get called often. I would only improve on the turn about $18 \%$ of the time, making for a very difficult spot $82 \%$ of the time when I bricked. I could bet the flop and bet the turn, but I had no idea if that play would be profitable without information on how he would respond to turn bets (does he get sticky with a hand like JJ or 99? Does he ever bluff turns? Etc.)
- Check. If I checked I could expect a bet almost always. Check/folding all of this equity seemed silly, and check/calling would make the turn really difficult to play without initiative and still bricking about $82 \%$ of
the time. So if I were to check I would have to either check/call a small bet (which probably wasn't happening often), check/fold to a massive bet which didn't offer direct pot odds, or check/raise.

I ran the math on a check/shove I saw that with $35 \%$ estimated equity I would need a fold from my opponent $29 \%$ of the time to breakeven. When I looked at how often a logical flatting range of $99+/ \mathrm{AQ}+$ hits this board, it's about $41 \%$. So he misses about $60 \%$ of the time (I think his O-Range is the whole $99+/ A Q+$ range because I think he would CB his whole range if I check to him), meaning I make snap profit on my ship. But what if I made a smaller CR which would blend in with the times I had a real hand? Maybe I could do a CR up to like $\$ 33$ ? This would do a lot of things.

First, it would give me a CR range. Usually in these spots I would just check/fold or bet/feel. So having a CR range gives me a chance to veer away from my standard lines. Two, however he reacts is great for me. If he folds, I made snap profit and I know I have a possible bluffing opportunity I can use in the future. If he calls, I know he isn't folding to this CR and thus I should CR these spots in the future with big pairs and other nuttish hands. If he shoves, I get to see what his stack off range is which will let me play this spot more perfectly in the future. No matter what the outcome is, I get information that will help me later against this opponent. Plus, there is no better feeling than getting it AI versus $Q Q$ here and spiking the flush!

## The Database Adjustment

Our database ( DB ) is a goldmine of data. Not only do we have information on our opponents, but just as importantly we have information on ourselves. We should be continuously going through our DB to see how certain actions and lines are profiting for us. Here are some things I like to check in the DB:

- How are parts of my range performing from different positions?
Because preflop is so important, I check a ton of PF things when looking through my DB. I run filters to see how certain parts of my range are performing. How is $\mathrm{AJ} / \mathrm{AQ}$ doing from MP? Is it positive? If not, why? Was it variance or am I misplaying hands? Am I getting 3-bet too liberally to justify opening it in the first place? I do the same thing with things like 22-66, 77-99, 54s-JTs, etc. to see if I should delete things from my opening range. I have no problem tightening up when I can see that X or Y isn't making me money.
- How am I performing from the blinds?

While blind win rates are supposed to be negative, I want to make sure that my loss rates are not too negative. Most players tend to leak horribly from the blinds, either from not restealing enough, not stealing from the SB enough, SB completion ranges, etc. Keeping our blind loss rates at a minimum is imperative to our success.

- How are my big hands faring?

I like to isolate for individual hands and see how profitable they are. If QQ hands are negative, or KK hands are breaking even, I might have some leaks in my game. I would run through a bunch of hands and see what is going on. I would control the DB for variance, but certainly check hands to make sure my line selection is optimal. If things look wrong, I post hands that I have questions on or also reconsider the lines that I have been taking.

- How profitable am I when I call raises?

Running simple filters like "did cold call = true" can be very helpful. If I see I am overall negative when cold calling, I want to see which parts of my range are creating that. Was it variance? Was it running low on hitting sets? Or was it something like the IO in my game are sinking? If my cold calling is losing me money, then I should just stop doing it until I improve postflop. This would be especially so if no part of my cold call range is positive.

- How profitable are my 3-bets?

A simple filter like "did 3-bet = true" can be great to check out how profitable my 3-betting is. I like to run this filter and then control for different parts of my range. I want to see how my AK is performing when I 3-bet, and how I am doing when I 3-bet trash. If I see red somewhere then I want to figure out why. It is important to note that we need bigger and bigger samples to get a lot of reliability from more specific stats like 3-betting with specific hands.

- How profitable am I when I call a 3-bet?

Many players show major losses when they flat call a 3-bet. It is hard to show profit here for the average person. This is a big part of the reason why I suggested not doing much flatting of 3-bets earlier in the book. However, a lot of players panic because they don't want to be exploitable
here. Technically if they have a Foldv3-bet that is higher than $67 \%$, they are exploitable as they are folding enough that any person can show an outright profit by 3-betting them with ATC (so long as their sizing isn't terrible). If you are scared of this, go read the "The Balancing Act" section of chapter 19 .

## - How profitable am I when I 4-bet?

I like to check out how my 4-betting is doing, especially when I am 4-betting more aggressively. Ilike to control for various parts of my range, more specifically my AK, trash, and $\mathrm{KK}+$ parts. I like to see green in all of them, but if I see losses, I might need to reconsider how aggressively I am 4-betting them. If players are folding versus all of my 4-bets when I have $\mathrm{KK}+$, I might consider flatting their 3-bets occasionally just to keep them in with a wider range. If my trash is losing money when I am 4-betting it, then I might not be picking the best of spots or a player might be adjusting by 5-bet shoving on me more liberally. Should that be the case, I can just shift my 4-bet range against him to pure value until he adjusts.

## - How are my CBs faring?

I always want to see how my CBs are doing. Am I showing a lot of profit here or not? I like to check my CBsuccess stat to see if my CBs are outright profitable with some buffer. Overall I check this to make sure that I am not missing CBs (aka, CBing too little), or CBing so much that I am losing money with them. I will also check this with certain parts of my range. For instance, I might run a filter for the times that I raised 2266 from EP and CB the flop. I want to see if that play is showing profit, or if I need to reconsider either the CB or opening it in the first place.

## - Am I double barreling enough?

Many players don't pay enough attention to their turn play. While it is difficult to check this, I want to see if I am turn betting enough of the time. If I am CBing the flop and check/folding the turn too often in good double barrel spots, I need to know that. If I am missing turn VBs by checking to induce in less than ideal situations, I need to know that as well. I can usually get a feel for my turn play by running through hands after each session, but it never hurts to take a second look.

## - How well am I calling rivers?

I love cleaning up my river play. If I am making too many river calls I like to know that. If I am taking losses then I need to consider taking different lines. Maybe I could have bluff raised the river or folded against a range that was too strong for me to call against. But players also go the other extreme. If I am calling rivers too well, it might mean that I am missing VBs on the turn. While my turn check may have induced a bluff, he might have had a range that would have called me on the turn and considered a crying call on the river. I know this section is vague, but that's only due to the complexities of turn/river plays from a general standpoint.

- Can I add or delete things?

One of my favorite things to do over the last few months has been to totally revamp a players profitability by strictly adding and deleting things to/from their game. For instance, I love going through a sample for 100 K hands, seeing that raising $22-66$ from X position is bad and deleting it entirely from their range. Or seeing that someone is losing a ton while flatting 3-bets, so I just tell them to stop flatting 3-bets almost always and either 4-bet or fold. Or redesigning an entire PF raising range because a certain range is getting killed in a specific game condition. The difficult things actually becomes adding. Usually it best to add slowly, reevaluate the performance of the added range after 20 K hands, and then continue adding or deleting as you see fit.

Just from exploring my DB I can see what is going on. I can see how certain plays of mine are performing, and make adjustments based upon that. If I see that my 3-bets are working at sick success rates, then I might consider 3-betting more liberally until the game adjusts. If I see that I am getting 3-bet a ton, then I might adjust my opening range or decide to start 4-betting more liberally. If I see that my CBs are working at a very high frequency, I might consider using a smaller size or CBing a little more often.

My DB is the source of creative line composition. I see how things are performing and adjust based upon that. We can use our DB to see what the average player pool is comprised of (which player type dominates the tables the most), see how those players play, and create exploitative lines. Our DB has perfect information recollection and we should look to use it whenever possible to improve our lines and overall profitability.

## The Lines Of The Future

The lines of tomorrow are on you to create. Think about what players are doing, and create exploitative plays. And while this works in the global sense (exploiting a player pool), also consider creating plays that attack an individual player. If you see that a player is always doing $X$, then counter it with a play that takes advantage of that. If you see a player is constantly 3-betting and check/folding if he misses, we can consider countering him by flatting more hands IP. If you see that a player is constantly CBing and then check/folding turns without nuttish hands, then look to float and stab more liberally.

Again, creative line composition isn't the most essential skill set. Having your fundamentals totally nailed down is much more important. But being able to find exploitative qualities in a player or in a game, and being able to attack them, is a great way to add some extra profit to your bottom line. Just make sure you are constantly evaluating any plays (using the DB is a good idea for this) and adjust as the game adjusts. Some plays will be usable for long periods of time, and others will not; it's just based on your games and how they react. Just keep grinding and adjusting, and you will do just fine in this wonderful game called poker.


End Game

This chapter will wrap up the book. I hate when a poker book just ends abruptly and doesn't really conclude all of the information just talked about. So this chapter will try to highlight some of things we have talked about and wish you luck on your way to the tables.

There are a few very important things to note about this book. In case you didn't realize it, the PF section made up the biggest part of the book in terms of words written. Then flop play, and turn/river play made up the least in terms of words written. This was very much intentional. Because poker is very linear, it is so important that we start a hand well. Using an incorrect range, or making an incorrect play, can be the initial step in a disastrous fall.

This is why we focused so much on preflop play and making sure that we were selecting solid ranges, sizes, and plays. This sets up the rest of the hand, and should keep us out of trouble and keep us focusing on good spots. The flop section is so big because we see more flops than turns/rivers, and again, making flop mistakes can make for very difficult and possibly -EV play later in the hand. The turn/river chapters were lumped together because they are so tightly related, and just thinking about whether we are in a VB or bluff mode should point us in the right direction at any time.

If we also think about where the density of words are, we notice that VBing is about twice as large as the barreling section. This is because VBing is so much more important, especially at the micros. If we go back to the mindset section in chapter 9 we see:
"Use a solid hand range and position, value bet winners within reason, and only take good potshot bluffs."

This is why we focus so much on ensuring that our VB game is very strong. Knowing when our hand is actually value versus SDV, or even a bluff, helps us frame our hand and create a line around it. Bluffing is easy. Bet if we think we can get enough folds. In micro and small games many players call too much, which makes bluffing difficult and usually not very profitable. So we choose hand ranges preflop that allow us to catch stronger hands postflop and VB when we can.

The rest of our strategy is just thinking about ranges. Building an O-Range, constructing a logical C-Range, and selecting lines that exploit the gap, or lack thereof, between the two. Remember that we can use different sizes to keep a C-Range wider or smaller. These sizing details are crucial for our long term success, and improving in this skill will help us create favorable situations. While the contortion of range can be confusing, if we
just pay attention to how certain players are responding to sizes, we can more correctly select our betting strategy.

While most of this book talked about the parameters that go into certain plays, most any play not directly mentioned can be extrapolated. Thinking about making a CR on the turn can easily be extrapolated from the CR chapter and the VB/Bluff chapter. Thinking about making a hero fold can be extrapolated from the VB chapter and the hero folding section. Most everything we could possibly need has been written or covered to some degree. The biggest things not mentioned were psychological things like tilt control and bank roll management. But those are things that are written about, by people much more knowledgeable than myself, in various other places. This book is about decision making on the table, off-table strategy creation, and extrapolated thought processes on a wide range of strategic topics.

Again, the big thesis of this book is to think. Think about our strategy, think about ranges, think about details, and create the best lines possible. By simply asking ourselves what a play would accomplish, we can veer away from common pitfalls with relative ease. Poker is as simple as we make it, and playing a solid and straight forward game will keep us profitable most of the time. Remember all this when you get on the tables. Reread sections as you need to, but go play and focus on good decision making. Adjust as need be, VB well, and keep pots smaller when you are confused. Hopefully after reading all of this you are able to crush your game, move to higher levels, and launch well into your poker journey. Good luck out there, and happy grinding!

## Glossary

$3 B=3$-bet, or a reraise
$4 B=4$-bet, or a reraise of a 3-bet
$5 B=5$-bet, or a reraise of a 4-bet
$\mathrm{AI}=\mathrm{All}$ in
Air $=$ A bluff hand
ATB = Any two broadway cards
ATC = Any two cards
Back-raise $=$ When a player calls an open-raise and then 4-bets a 3-bet Bink $=$ To hit something
Bluff $=A$ bet made expecting better hands to fold
Brick $=A$ card that changes the board very little. Or to miss
BRM = Bankroll Management
Broadway Card = Any T, J, Q, K, or A. (Comes from the term "broadway straight", which is a T-A straight)
$\mathrm{Bx}=$ broadway and a non-broadway card
C-Range $=$ Continuance $/$ Continuation range
C/C = Check/call
C/F = Check/fold
$\mathrm{C} /$ Shove $=$ Check $/$ Go all in
$\mathrm{CB}=$ Continuation bet
$\mathrm{CO}=$ Cutoff, or the position directly to the right of the button
Contort/Contortion $=$ To change or bend
$\mathrm{CR}=$ Check raise
$\mathrm{DB}=$ Database
Elastic $=$ Describes a player who would give more or less action depending on the bet size
Elasticity = Refers to how elastic, or inelastic, a player is
EP = Early position
$\mathrm{EV}=$ Expected value
FD = Flush draw
Fit-or-fold = When a player folds if he missed the flop and calls/raises if he hit it FPS = Fancy Play Syndrome (aka, making complex plays for no reason)
$\mathrm{HJ}=$ Hijack, or the position directly to the right of the CO
$\mathrm{HU}=$ Heads up
HUD = A Headsup Display, which is used to show stats and other useful data on the table in real-time

Inelastic $=$ Describes a player who would give action at the same frequency, regardless of the bet size
IO = Implied odds
IP = In position
LAG = A loose/aggressive player
LP = Late position
$\mathrm{MinCR}=\mathrm{A}$ minimum check raise
Minimax $=$ A game theory decision that focuses on minimizing loss and maximizing gain
Monotone = All of the same suit
MP = Middle position
$\mathrm{MR}=\mathrm{A}$ minimum raise
MW = Multi way
NFD = Nut flush draw
Nit = A very tight player
Nuttish = A hand that isn't quite the nuts, but is almost certainly the best hand
O-Range $=$ Original range
OESD = Open ended straight draw
OOP = Out of position
Open $/$ Open-Raise $=$ The first raise in a pot with no limpers
Peel $=$ To call and play the next street
PF = Preflop
PFR $=$ Preflop raise statistic. Or the preflop raiser
Potshot Bluff = A bluff that exposes very little of our stack and has a high success frequency
PSB $=$ Pot-sized bet
Resteal $=$ To reraise $/ 3$-bet a steal
Reverse Parlay = A situation where a player loses the most when behind, and wins very little when ahead. This is effectively a situation where a player gets crushed in the minimax game.

ROI $=$ Return on investment
RIO $=$ Reverse implied odds
SC = Suited connector
SDV = Showdown value
Set-or-jet = When a player folds if he missed his set on the flop, or calls/raises if he hits it SG = Suited gapper
Ship/Ship It = Go all in
SPR = Stack to pot ratio
TAG = A tight/aggressive player
TPTK = Top pair with top kicker
TPMK = Top pair with a medium kicker
$\mathrm{VB}=$ Value Bet. A bet made expecting second best hands to continue
VPIP $=$ Voluntarily put money in pot statistic
WAWB = A way ahead/ way behind situation
Wheel Card = Any A, 2, 3, 4, or 5. (Comes from the term "wheel", which is an A-5 straight)
$\mathrm{WL}=$ A weak-loose player
$\mathrm{WR}=\mathrm{Win}$ rate
$\mathrm{WT}=$ A weak-tight player
$\mathrm{XXXr}=$ A rainbow (no flush draw) board


[^0]:    ${ }^{1}$ This is talked about in more detail in chapter 14

[^1]:    ${ }^{2}$ Pot geometry is effectively considering what each bet put, or not put, into the pot does to the final pot size. This is discussed in more detail in chapter 9 .

[^2]:    ${ }^{3}$ Just a quick alternative line comment: we could also go for a check here with KK. We know he won't give us action hardly ever unless we are behind, but he might call a street later if we check now. It is a very valid line, and one we can consider taking if we know our check will encourage good action.

[^3]:    ${ }^{4}$ A bigpart of the reason why we don't want to 4-bet too large is that it commits us to the pot unfavorably. If we 4 -bet so large that we are getting 2:1 versus the 5-bet shove, we would actually be priced in to call with a hand as weak as 22 knowing our opponent has $Q Q+/ A K$.

[^4]:    ${ }^{5}$ It should be noted though that programs like PokerStove tend to favor Broadway combos before pairs, which isn't exactly true when we look at a player's actual ranges.

[^5]:    ${ }^{6}$ We can use filters in our HUD software to only show stats after X number of hands and/or samples. This is a great way to ensure we only see stats when they are usable and more reliable.

[^6]:    ${ }^{7}$ Placing TT here is a bit arbitrary. But against a more liberal flop C-Range, TT can have SDV versus worse pairs and/or draws. Lower pairs, like 77-99, become bluffs due to them pushing more combos towards pairs that beat them and also their lessened equity against drawing hands like KT.

[^7]:    ${ }^{8}$ It should be noted that if our opponent is calling with lots of second best hands, a CB with K9 is still good. Checking becomes more valid when our opponent starts to play closer to perfect against a bet.
    ${ }^{9}$ The C-Range changes a bit as we take our hole cards into consideration

[^8]:    ${ }^{10}$ We can still CB here for balancing purposes from time to time and to get outright value from hands like 99-JJ/98/87/etc. that peel us. We never want to ALWAYS take the same action and become exploitable against players that are paying attention.

[^9]:    ${ }^{11}$ Against aggressive players it is generally better to small 3bet rather than call. Because they will usually follow the turn up with more aggression, calling the flop often times leaves us folding to the inevitable turn bet.

