

Introduction to the Theory & Practice of Poker

Lecture #3

January 15, 2020

Some logistics

- Marketing campaign is a bust
 - No Instagram posts, nobody trying
 - Automatic entry to live tournament contest is canceled
- Hopkins WiFi network seems incompatible with PokerStars at times
- Remember to win cash game trophy
 - Only add chips 5 times after original 50k
 - You can play in poker tables outside of the class ones
 - But you all need 6 hours in our clubs at a minimum
- We have about 203 students in the clubs
 - And 232 registered students
- Movie tonight “All In – The Poker Movie” in Bloomberg 272, 7:30 pm
- We are having a PokerStars tournament (dry run) Saturday night 8pm
 - You will need 20k in chips
 - We are expecting 3-5 inches of snow, so you’ll be stuck inside anyway
 - This is totally optional, but all students registered in class Clubs will be invited

Quick advice based on last night's play

- When opening a pot
 - i.e. first to enter
 - Come in for a 3 BB raise
 - There is a handy button on the screen
 - Limping is not a good strategy
- When betting anytime after the flop
 - Tend to bet around half the pot
 - There is a handy button on the screen
- When raising someone (3 betting)
 - Tend to raise approx. 3 times their bet
- Add chips when you get low to stay at table max
 - There is a setting to auto add to the table max
- Keep the chat friendly

Gyldenra VII - 50/100 Play Money - No Limit Hold'em - Logged In as AviRubin

Table ▾ Add Chips Lobby

Pot: 350

POKER STARS
PLAY MONEY TABLE

AviRubin 9,900
STETHAM198609 6,462
HeiberHirsch 4,759
Wade Rivers 9,283
gaterbate48 24,384
twinlion 9,828
Alex_2121212 Sitting Out
peppertree1 9,400
hacksaw77268 6,877

100 100 100 100 100 50 25 100 100

Sit out next hand
 Sit out next big blind
 Fold to any bet

Chat Hands Notes Stats Info

Dealer: HeiberHirsch has a pair of Threes
 Dealer: Hand #208184230449: gaterbate48 wins pot (24,484) with two pair, Kings and Threes
 Dealer: AviRubin, it's your turn. You have 8 seconds to act

Min 3 BB Pot Max

200

Check Raise To 200

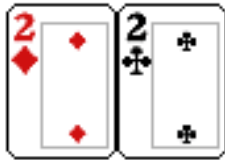
Poker riddles

Easy riddle – we'll do this in class

- What two HoldEm starting hands are 100% guaranteed to always flop at least one overcard no matter what?

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More interesting riddle

- Straightforward answer – no joke

Looking back on the hand afterwards, you had the absolute nuts on the flop and the absolute nuts on the turn. On the river, you could not win or even chop.

To answer correctly: Describe your hand, the flop, the turn, and the river and prove that you solved the riddle. The conditions must be true for every possible set of opponents.

- Hint: Every part of the riddle matters. There is only one possible correct answer.
- Prize: Automatic entry into live tournament at my house on Jan 23 for first complete and correct answer. You will also present the solution to the class the next day.
- Rules:
 - No google, no talking to anyone about it, complete it on your own
 - If you are already familiar with this riddle, you are not eligible
 - Email me: rubin@jhu.edu the answer
 - You only get one attempt, so make it a good one

Starting hand selection

Starting hands

- Starting ranges vary
 - Unopened pot
 - Raised pot
 - 3-bet pot
 - 4-bet pot
- Opening types
 - Limp
 - Raise
 - 3,4-bet
- Hand selection criteria
 - Position, stack size, opened or unopened pot, strength of cards
 - Aggressiveness of table, opponents, table image



Annie Duke

- WSOP bracelet winner
 - Omaha hi/low 8/OB
- 1994 WSOP – breakout year
 - First 2 events, 14th & 5th place; 26th in the Main Event
- In 2010 won the NBC National heads-up tournament
 - Beat Eric Seidel in the final match
- Also starred in the Celebrity Apprentice (2nd place)
- Lots of educational poker material and online courses
- Famous brother, poker pro Howard Lederer (The Professor)



Annie Duke on starting hands



Analyzing starting hand decisions

What Annie Duke got right

- Position is very important
- Action in front of you
- Player tendencies
 - Aggressive
 - Passive
 - Likely to 3-bet you light?
- Identified types of hands
 - Premium, solid, speculative

What Annie Duke got wrong

- She did not mention stack sizes!
- This is critical
- Suited cards go up in value when deep stacked
- Small pairs go up in value when deep stacked
- Position is more important when deep stacked
- Premium cards go DOWN in value when deep stacked

Don't fall into the woulda coulda trap

- Many times you will be undecided about a hand pre-flop
- You will end up folding
- You would have made a monster hand
- You will kick yourself
- You might curse
 - Depending on your personality and how upset you are
- You will tell yourself not to fold that hand next time

- This is a trap! Don't be results oriented.
 - A good decision might look bad
 - But the math does not lie – law of big numbers
- Bad players fool themselves into thinking their correct decision was wrong
- Also – Life Pro Tip: Nobody cares what you folded!

When entering a pot

- I advocate always coming in for a 3x raise in unopened pot
 - Sometimes more in lower stakes games.
 - E.g. 1-3 game, typical first bet is \$12 or \$15
 - Sometimes less (e.g. 2.5x) in tournaments
- Dan Harrington argues for mixing it up
 - E.g. 70% raise, 30% limp
 - I disagree (but he's a world champion world-class pro)
- Reason for raising
 - You fold out the riff raff
 - You build a pot with hands you want to play
 - You can disguise the strength of your hand (same action regardless)



RAISE
JUST DO IT.

Big Pairs

- AA, KK, QQ
- Tend to win lots of small pots and lose big ones
- You probably have best hand
 - So raise and push the action
 - Raise or re-raise from any position
 - Goal is to get heads up
 - If you go 5 to the flop with AA, you are less than 50% to win
- Scenario: You have QQ on the button with 150 BB effective stacks.
 - It goes raise, re-raise, re-raise and then it's your turn. What do you do?
 - What if it goes raise, then you re-raise, then it gets re-re-raised and back to you?
- What if you have KK in these scenarios?

Big pairs

- Should you ever open limp?
 - Definitely no with QQ or KK
 - Unless you are at table full of maniacs
- What about open-limp or calling with AA?
 - I like a raise better
 - Unless someone is consistently raising the limpers
- How much to raise?
 - Typically 3 big blinds (more in lower stakes)
 - Re-raises 3x the previous bet
 - Example: UTG raises to \$12 in a 1-3 game. You re-raise to \$36.

Medium pairs

- 66-JJ, deep/medium stacks
- In early position
 - these are playable
 - Open with a 3x raise
 - 50% of the time, call one bet if raised behind you
 - Depending on the player (fold to tighter player)
 - If it is 4-bet, you should fold
- Middle position
 - Same, but call a raise 80% of the time
- Late position
 - Same but always call one raise
 - If original raiser is loose/wild you can consider 3-betting
- If stacks are shallow (e.g. 20-30 BB)
 - A lot less playable
 - Why are you playing shallow??

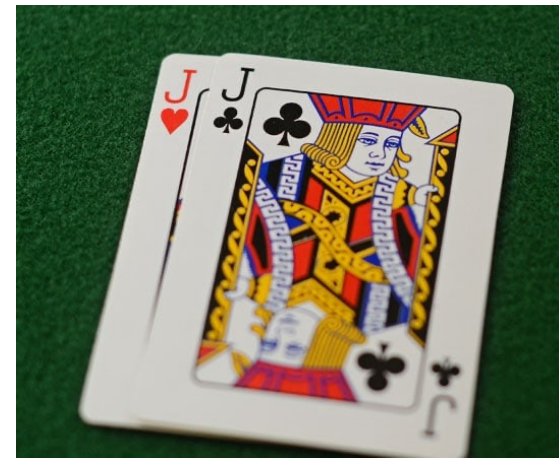


Medium pairs

- A great scenario
 - Say there is an early position raise followed by several callers
 - Now you call for implied odds
 - If you hit your set, you have lots of players who might stay in
- Bad scenario
 - An early position raise is followed by a re-raise
 - Get out while you still can – fold!

How to play pocket jacks

- Challenging because probably ahead pre-flop
- But flop will often bring an overcard
- Considered one of the hardest hands to play
- Old saying “There are 5 ways to play pocket jacks”
 - “And none of them are correct”
- Sometimes safer to play like a small pair
 - But you will not be maximizing your equity



Daniel Negreanu

- 6 WSOP bracelets
 - WSOP player of the year in 2004 & 2013
 - Only 2-time winner
- 2 WPT titles
 - 2004-2005 WPT player of the year
- Nickname: kid poker
- Over \$42M in lifetime tournament winnings
- Ridiculous hand reading skills
- Considered by many to be the greatest poker player ever



Daniel Negreanu on pocket jacks



Small pairs

- 22-55, deep stacked
- Don't play them with shallow stacks
- In a weak game against weak players
 - You can play them for one raise
- In strong game against good players
 - Only play in late position, and fold if you miss your set on the flop

Small pairs

- Warning in super deep stack games
 - Against strong players
 - Good players will not lose a huge stack without a monster hand
 - You have big negative implied odds if you hit a set
 - Can lose to bigger set, straight, flush
 - Hard for you to fold your little set
- Against weak players, not a concern

Big Slick

- AK
- Pretty looking hand
- Plays great short stacked
 - Get it in!
- Deep stack, it's a drawing hand
- Top pair top kicker will usually lose if pot gets huge
- Usually ahead on the flop heads up
 - Opponent will miss 70% of the time, and will only have a pair 1 in 17 times
 - But remember, you have 8-9 opponents at a full table, any one of them could have pair
- When you hit the flop, opponent will usually feel they are beat



Big Slick

- Most valuable for domination
- You DOMINATE a hand
 - When you share a card in common
 - Example: AK dominates AJ
 - He has to hit his J
 - If you both miss, you will probably win
- With AK, you want calls from weaker Aces pre-flop
 - Don't scare them away with 3-bets and 4-bets
- AK against a pair is just under 50%
 - Against QQ it is 43% to win
 - Against 22 it is 47% to win



Big Slick

- Against QJo, AK is 64% to win
- Against T7o, AK is also 64% to win
- Against 67s, AK is 58% to win
- Against 34s, AK is 60% to win
- Domination:
 - Against AJo, AK is 74% to win
 - Against A3o, AK is also 74% to win
 - Against KQo, AK is 70% to win
- Danger:
 - Against AA, 7% to win
 - Against KK, 30% to win



Big Slick

- At a full table, if you have AK, probability that someone has AA or KK is about 4%
- AK is strange
 - Small favorite against most hands
 - Small underdog against some hands (e.g. pairs)
 - Does well when dominating
 - Only big underdog to two hands
- Excellent hand for short stack situations (e.g. tournaments)
 - You want to shove it in and see 5 cards
- Not a great hand for deep stack cash games
 - Rarely way in front
 - Remember, small hand – small pot
 - Try to win lots of small pots (check some streets)
 - Careful not to lose a huge pot when you hit your TPTK.

Big Slick

- So, how do you play AK in deep stack?
- Raise in any position
- Re-raise in late position
- Only when facing raise, re-raise, re-raise have to fold
- You will not be a great poker player until you are able to fold AK pre-flop.
 - But don't make a habit of it. It's a premium hand

Daniel Negreanu on Big Slick



Ace Queen – Little Slick

- A lot like AK, only weaker
- AK is a big underdog to 12 hand combos out of 1,225
 - AQ is also underdog to QQ and AK
 - $6+16=22$ more combinations out of 1,225
 - So, AQ is big underdog to 34 hand combinations of out of 1,225
 - Almost 3 times as many bad hand combinations for AQ than AK
- Still a strong hand
 - Play in every position
 - Be more likely to fold to serious action
 - If you see a 4 bet, someone probably has AA, KK, or AK
 - And remember you're even slightly behind 22 and rarely way ahead.

