
15.S50 - Poker Theory and Analytics

Tournaments



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Tournaments

- Tournament Life Cycle
 - Flop Turn River Play
 - Psychology
- Bankroll Management
- PokerStars Prize League Results



Cash Games vs Tournaments

Cash Games	Tournaments
Chips = Winnings	Finish Position = Winnings
Chip EV = \$EV	Chip EV \cong \$EV
Come-and-Go at Will	Locked into Tournament Structure
Unlimited Buy-ins	One Fixed Buy-in
Fixed Blinds	Increasing Blind Levels
Table Selection	Player Pool Selection
Higher Liquidity	Higher Overhead
Lower Variance	Higher Variance
Well-documented	Limited Literature



Why tournaments?

- Tournaments are more difficult to master
 - Cash games have lots of published literature, tournaments have very little
 - Tournaments are generally more publicized
 - Tournament results are permanent (track record)
 - Tournaments let you play higher stakes against people used to lower stakes
 - ROI on tournaments is generally higher
-



Why not tournaments?

- Tournaments are harder to master
 - Less obvious when you're bad, long run takes forever
 - More variance
 - Tournaments take a long time
 - High stakes generally required to get a worthwhile hourly
 - Lots of incidental costs like dealer tipping, travel/hotels
 - Requires more planning/research
-



Tournament Life Cycle

The most important tournament concept is tempo

- Early Game
- Bubble and Early Cashes
- Late Game/Final Table



Early Game

- Early Game is the majority of the tournament
- Play is very similar to cash games
- Chip EV = \$EV
- Playing style based on stack size
- Establishing reads/image is extra value



Stack Sizes

- $M < 2$ – Dead Zone
- $2 < M < 8$ – Steal Period
- $8 < M < 12$ – Steal/Re-steal Period
- $12 < M < 30$ – Value Betting Zone
- $M > 30$ – Set Mining Zone



A note on tournament tempo

- The most important aspect of a tournament is playing at the right level of aggression
- You will have to win coin flips to cash
 - That's inevitable
- Your goal is to slowly grow your stack without showdowns and avoid voluntarily entering flips



M < 2 – Dead Zone

- If you get to this Zone, it should only be because you lost a hand where you had slightly more chips
- You have virtually no Fold Equity since the BB will have odds to call any push
- Your goal is to get enough chips to regain Fold Equity
- Never fall under M=1 under any circumstance
 - This is particularly bad since even if you win at Showdown, you will still be in the dead zone



2 < M < 8 – Steal Period

- Your only move here is all-in or fold
- Every time you steal blinds, your stack increases by 10%-40%
- This is much more value than the edge you have by playing good cards
- Identify players who don't protect their blinds and steal from them
- Adopt an image of someone who defends their blinds, but don't
- Avoid showdowns if at all possible
- Gap Theory (Sklansky)
 - Calling requires a much stronger hand than betting



8 < M < 12 – Steal/Re-steal Period

- At this point, you have the option to fold to a raise
- Why? Your standard steal-bet will be 3BB, or about 2M.
- A re-raise of 6M more will make it +EV to call with $6/17 = 35\%$ equity, so it's not +EV to call ATC vs a re-raise



15 < M < 30 – Value Betting Zone

- In this zone, you might actually see some flops
- Avoid flat calling pre flop, come in for a raise and c-bet the flop when heads up
- I think it's okay to go broke on a set on an uncorrelated board
- Don't go broke on a low two pair or TPTK, or a set on a board where a flush/straight is obvious



M > 30 – Set Mining Zone

- “Set Mining” is when you flat call a pocket pair preflop for cheap with hopes of flopping a hidden set
 - In general, I recommend waiting for monster hands and value betting aggressively them once they are made
 - When you are in a hand that is raised and re-raised, you should consider how many hands can beat you
 - If your hand is not the absolute best possible hand, don’t go broke for 50M
 - See flops cheaply and use pot odds to assess draws to nut hands
 - Use implied odds conservatively
 - If you can’t keep it together, fold JJ- until you have 30M
-

Flop, Turn, River Play

- Psychology – Levels of Thinking
- Medium Stack Play ($M > 10$)
- Psychology (Tells and Other Concepts)



Levels of Thinking

- L0 – Not reading/indifference to hand value
- L1 – What cards do I have? **Hand Reading**
- L2 – What cards does he have? **Opponent Reading**
- L3 – What cards does he think I have? **Representation**
- L4 – What cards does he think he's representing?
- L5 – etc...



Levels of Thinking



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LEAVE TABLE

VIEW LOBBY

nylin53
\$1500

d1ssemler
\$1500

TaNKERRRRRRR
\$1500

tonecas76
\$1490



Desmond_MIT
\$1500

We have a
good hand
vs ATC



Post BB

bieelsg
\$1500

trifluvian
\$1500

Chat Notes Stats Info

tonmon001
\$1500

Last Action

cucky83 posts big blind

LEAVE TABLE

VIEW LOBBY



[LEAVE TABLE](#)

[VIEW LOBBY](#)



[LEAVE TABLE](#)[VIEW LOBBY](#)nylin53
\$1500d1ssemler
\$1500TaNKERRRRRRR!
\$1500tonecas76
\$1490MP1 has TT+
AQo+, AJs+**Raise**

\$280

bieelsg
\$1500

\$80

Hero
\$1420cucky83
\$1480[Chat](#) | [Notes](#) | [Stats](#) | [Info](#)tonmon001
\$1500**Last Action**

Desmond_MIT raises to 280\$

LEAVE TABLE

VIEW LOBBY

d1ssemler

\$1500

nylin53

\$1500



Desmond_MIT
\$1220

\$280

bieelsg
\$1500

Raise

tonmon001
\$1500

UTG has 77+,
ATo+, TJs+

\$10

\$20

cucky83
\$1480

\$730

Last Action

trifluvian raises to 730S

Chat Notes Stats Info

LEAVE TABLE

VIEW LOBBY





Levels of Thinking

- You want to be exactly **one** level above your opponents
 - L0 – Not reading/indifference to hand value
 - L1 – What cards do I have? **Hand Reading**
 - L2 – What cards does he have? **Opponent Reading**
 - L3 – What cards does he think I have? **Representation**
-



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Annette Obrestad

- Annette
 - One of the best poker players from Norway
 - Youngest player to win WSOP bracelet @ 18 yrs
 - Started playing poker online @ 15 yrs with screen name Annette_15



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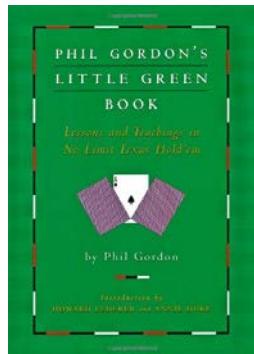
Annette Obrestad Interview

- *Annette Obrestad's Best Poker Moment: The No-Look Tournament Win.* August 2014. Pokerlistings. Accessed March 19, 2015.



Mismatched Levels of Thinking

- “The Fourth Raise Means Aces”



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 Gordon, Phil. *Phil Gordon's Little Green Book: Lessons and Teachings in No Limit Texas Hold'em*. Simon Spotlight, 2005.



Mismatched Levels of Thinking

- “The Fourth Raise is Aces”



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LEAVE TABLE

VIEW LOBBY

CO
\$2000



Hero
\$1460

SB
\$1995

D
S
\$540

S
\$5

K
\$2000

All In

LP
\$2000

MP2
\$2000

MP1
\$2000

UTG+1
\$2000

UTG
\$2000

Chat

Notes

Stats

Info

Last Action

Villain is All-in



Mismatched Levels of Thinking

- “The Fourth Raise is Aces”

Phil Ivey



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Level 1 Thinking Player



vs

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Mismatched Levels of Thinking

- Thinking on Level 3 (“What am I representing?”) when opponent isn’t trying to read you (Not Level 2)



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LEAVE TABLE

VIEW LOBBY

CO
\$2000

Hero
\$1150

SB
\$1975

All-In

MP2
\$2000



D

400

\$600

BB
\$1950

UTG
\$2000

Chat Notes Stats Info

MP1
\$2000

UTG+1
\$2000

Last Action

Villain is All-in



Mismatched Levels of Thinking

Villain (LP): \$2000

Blinds 25/50

Hero (BTN): \$2000

Pre Flop: (\$75) Hero is BTN with K♣ J♣

Villain calls \$50, Hero raises \$200 to \$250, Villain calls

Flop: (\$575) 7♣ T♣ 3♣ (2 players)

Villain bets \$200, Hero raises \$400 to \$600, Villain
raises \$1150 to \$2000 and is all-in



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Mismatched Levels of Thinking

Flop: (\$575) 7♣ T♣ 3♣ (2 players)

Villain bets \$200, Hero raises \$400 to \$600, Villain raises \$1150 to \$2000 and is all-in

Weak Player Ranges

JJ+

AT

TT, 77, 33

T7, T3, 73

Any two ♣

Strong Player Ranges

A♣X♣

Maybe TT



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Levels of Thinking

- One of your first “reads” will be whether a person is a good or bad player
 - Any one player may jump around +/- 1 level depending on the hand
 - e.g. some might be good at preflop opponent reading, but will focus on own hand on flop (btw L1 and L2)
 - e.g. some might think a low flush is good, but won’t think low pair is good (btw L0 and L1)
 - A reasonable assumption is that new players are L1, average tournament players are L2, and cash game players are L3
-



Example of Level 5 thinking

- For players that are familiar with each other there's a race to a higher level to dominate one-another
- This is more common in cash games, but this example is from a tournament



Example of Level 5 thinking

- CaRmEIO2008. “WSOP 2011 ME: Shaun Deeb AA’s vs. Max Heinzelmann A6.” September 2, 2011. *YouTube*. Accessed March 19, 2015.
<https://www.youtube.com/watch?v=dmIIrvcYDtY>



Strong vs Weak Treadmill

	Actual Hand	Represented Hand
Level 1 (reading)	Strong	Strong
Level 3 (representation)	Strong	Weak
Level 5	Strong	Strong
Level 7	Strong	Weak



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Why are we learning about levels of thinking?

- My recommendations for flop, turn, river play assumes or opponents are average players
 - Capable of doing basic opponent reading
- This strategy isn't optimal against very new players
- This strategy is probably losing to pros
- It's at least enough to beat low-stakes games

Flop, Turn, River Play

- Psychology – Levels of Thinking
- Medium Stack Play ($M > 10$)
- Psychology (Tells and Other Concepts)



Flop, Turn, River Play

- The basic idea will be to provide the value of different hands during each stage and to recommend betting aggressively
 - Standard bets are $3BB + 1BB$ for each previous caller preflop
 - Flop-turn-river bets should be around 2/3rds of the pot to discourage draws
 - This is only good for $M > 10$
 - For $M < 10$, this will be reviews in the “Pre-flop” lecture later
 - For $M > 30$, I recommend very conservative play
-



Pre-flop Play

- Hands are ranked based on the likelihood of flopping a winning hand
- Position impacts the strength of hands materially because many hands will be winners in late position but losers in early position
- The tiers are roughly correlated with Sklansky-Karlson rankings
- The ranking is generally going to come out of Harrington on Hold Em



Pre-flop Play

- You will enter few pots, but will generally be ahead when you play
 - You will have easy decisions on the flop, since you will either hit or miss them completely
 - You will win medium-size pots, but not huge ones
 - Any hand you play should be raised by you to $3 \times \text{BB} + 1$ per caller
 - This will be about 15% of hands
 - In general, you'd like to be heads-up by the flop
-



Pre-flop Play (Opening)

Position	Range
Blind and UTG/UTG+1	TT+ AQS+ AKo+
MP1 MP2 MP3	88+ AJ+ KQ+
LP CO BTN	77+, Axs, high suited connectors



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Pre-flop Play (Facing a Raise)

Position	Range
Early or Middle Position	TT+ AQs+ AKo+
LP CO BTN	88+ AJ+ KQ+



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Flop Play

- Any hand where you were the aggressor pre-flop should be c-bet on the flop with a 2/3rd pot bet
 - This needs to work about 40% of the time to be profitable
 - We don't vary the size to avoid exploitation
- Any hand that isn't TPGK or better is considered a drawing hand and can be treated that way
 - So you can semi-bluff or call with good pot odds



Flop Play

Tier	Hand
Tier 1	K-high flush, top straight (unpaired board) Top two sets, full house
Tier 2	A-high flush, top straight (paired board) T-high flush, 2 nd straight (unpaired board) Bottom set, any two pair
Tier 3	Overpair, Top-Pair Good-Kicker
Drawing	Top-Pair Bad Kicker Mid or Bottom Pair, Pocket Pair 4-flush, straight draw



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Turn/River Play

- By the Turn, the pot will be about 10M
- Use hand ranges to get an idea of your hand value
 - i.e. what hands could fit his action so far and still beat you



Reading hand ranges

- After pre-flop, you should have a reasonable idea of your opponents range
- Each decision lets you eliminate some of those hands to give you a better idea of your position
- A story that “doesn’t make sense” could be a bluff
- But in general, the chance of a “complete bluff” is negligible



Reading hand ranges



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[LEAVE TABLE](#)

[VIEW LOBBY](#)

CO
\$2000



Hero
\$2000

SB
\$2000

LP
\$2000

Villain
\$2000

MP2
\$2000

UTG
\$2000

MP1
\$2000

UTG+1
\$2000

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Last Action

SB posts small blind

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CO
\$2000



Hero
\$1960

D
S
\$40

SB
\$1995

S
\$5

S
\$40

Call

LP
\$2000

MP2
\$2000

Chat Notes Stats Info

MP1
\$2000

UTG+1
\$2000

UTG
\$2000

Last Action

Villain calls 30\$

LEAVE TABLE

VIEW LOBBY

SB

\$1995

CO
\$2000



Hero
\$1960

D

S

\$40

22+, JT+

S

\$5



Call

LP
\$2000



UTG

\$2000

88-JJ
78+, AQ-

Chat Notes Stats Info



MP1
\$2000

UTG+1
\$2000

Last Action

Villain calls 30\$

LEAVE TABLE

VIEW LOBBY







Reading hand ranges



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LEAVE TABLE

VIEW LOBBY

CO
\$2000



Hero
\$1960

SB
\$1995

22+, JT+

D

S

\$40

\$5

\$40

Call

UTG
\$2000

88-JJ
78+, AQ-

LP
\$2000

MP2
\$2000

MP1
\$2000

UTG+1
\$2000

Chat

Notes

Stats

Info

Last Action

Villain calls 30\$

LEAVE TABLE

VIEW LOBBY

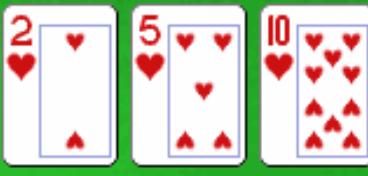
CO
\$2000



Hero
\$1890

SB
\$1995

22+, JT+



\$85



\$70

Call

T5, 55, TT, AT
Low flush
88-JJ, KJ+, AQ

UTG
\$2000

LP
\$2000

MP1
\$2000

UTG+1
\$2000

Chat Notes Stats Info



Last Action

Villain calls 70\$





Zeebo's Theorem

- “No player is capable of folding a full house on any betting round, regardless of the size of the bet.”



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[LEAVE TABLE](#)

[VIEW LOBBY](#)

CO
\$2000

Villain
\$1890

SB
\$1995

LP
\$2000

BB
\$1990

MP2
\$2000

UTG
\$2000

[Chat](#) [Notes](#) [Stats](#) [Info](#)

Hero
\$1890

UTG+1
\$2000



100 25 5
\$235



Last Action

Dealing River

[LEAVE TABLE](#)

[VIEW LOBBY](#)

CO
\$2000

Villain
\$0

SB
\$1995



LP
\$2000

BB
\$1990

MP2
\$2000

UTG
\$2000

\$4015



Hero
\$0

UTG+1
\$2000

[Chat](#) | [Notes](#) | [Stats](#) | [Info](#)

Hero: wins 4015 from the main pot with Four of a kind, kings

Last Action

Villain shows [Qs;Ts]

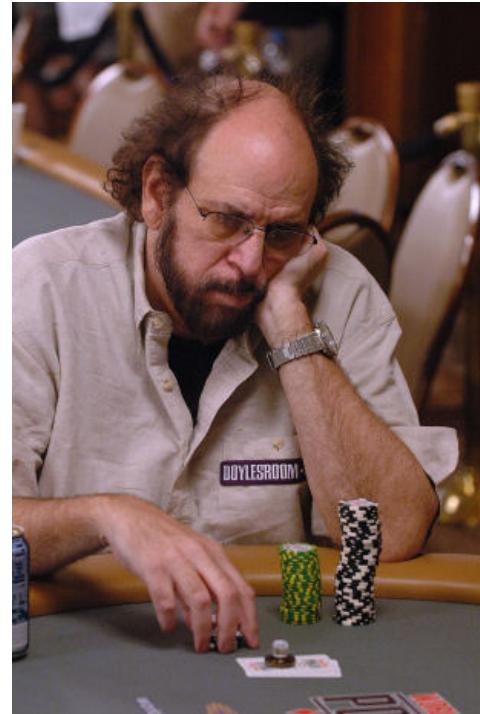
Flop, Turn, River Play

- Psychology – Levels of Thinking
- Medium Stack Play ($M > 10$)
- Psychology (Tells and Other Concepts)

Mike Caro

- Mike Caro
 - One of the first poker theorists
 - Author *Caro's Book of Poker Tells*
 - Advocate for 4-color decks
 - Developed early poker AI, Orac

 Caro, M. *Caro's Book of Poker Tells: The Psychology and Body Language of Poker*. Cardoza, 2003.



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Psychological Concepts

- Fundamental Concepts
 - Goal is to make +EV decisions
 - Results of individual session or hand doesn't matter
- Image
 - Organization and makeup of chip stack suggests play style
 - Advertisement – opponent remember shown hands
 - Preferred LAG when blinds are small, TAG when blinds are high
- Manipulation
 - Opponents want to call or want to fold, depending on the person
 - Don't be afraid to loosen up the table



Long run concepts

- What you've already invested doesn't matter
- Cards won't breakeven in long run
- Threshold of Misery – players often lose the most money immediately after losing more than they planned
- Don't try to prove you are the best; this isn't basketball



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Fears and tilt

- Showing down bad hands
- Losing money
- Playing short sessions while ahead and long sessions while behind



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Techniques for stabilizing

- Mark your bankroll to market
- Don't forget poker's most important secret. The secret is simply, "Play your best game all the time."
- Don't think about streaks, think about breakeven periods
- Have a short memory for hands - this is easier online



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Bubble Play

- Bubble
 - Generally 10% or so of the field away from the money
 - Average amateur players are way too tight
 - Arguably your performance here determines how deep you finish
 - Use ICM in marginal spots
- Two types of metagame
 - Traditionally bubble is very passive
 - More recently bubble is too aggressive



Independent Chip Model (ICM)

- The ICM is used to convert cEV to \$EV in tournaments
- It's based on likelihood of ending up in certain payout spots
- As of now, it can only be solved algorithmically
- Just intuitively,
 - When winner-takes-all, cEV is close to \$EV
 - When payouts are flat, cEV is far from \$EV
 - With big changes in cEV, \$EV moves are not symmetrical
 - Losing hurts more than winning



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ICM Example

Player	Chips
Adam	2500
Bob	2500
Charlie	2500
David	2500

Finish	Payout
1st	\$1000
2 nd	\$600
3 rd	\$400
4th	\$0



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ICM Example

Player	Chips	Equity
Adam	2500	\$500
Bob	2500	\$500
Charlie	2500	\$500
David	2500	\$500

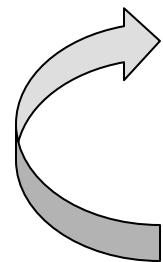
Finish	Payout
1st	\$1000
2 nd	\$600
3 rd	\$400
4th	\$0



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ICM Example



Player	Chips
Adam	5000
Bob	2500
Charlie	2500
David	0

Finish	Payout
1st	\$1000
2 nd	\$600
3 rd	\$400
4th	\$0



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ICM Example

Player	Chips	Equity
Adam	5000	\$766
Bob	2500	\$616
Charlie	2500	\$616
David	0	\$0

Finish	Payout
1st	\$1000
2 nd	\$600
3 rd	\$400
4th	\$0



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ICM Example

Player	Chips	Equity
Adam	5000	\$766
Bob	2500	\$616
Charlie	2500	\$616
David	0	\$0

Finish	Payout	Delta
1st	\$1000	+\$400
2 nd	\$600	+\$200
3 rd	\$400	
4th	\$0	

The Winner (Who has all the chips in the end) “gives up” equity to those knocked out before him



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ICM Example

Player	Chips	Equity
Adam	5000	\$1000
Bob	2500	\$500
Charlie	2500	\$500
David	0	\$0

Finish	Payout	Delta
1st	\$2000	+\$2000
2 nd	\$0	
3 rd	\$0	
4th	\$0	

The Winner (Who has all the chips in the end) “gives up” equity to those knocked out before him



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ICM Example (WSOP Satellite)

Player	Chips	Equity	Finish	Payout
Adam	2500	\$9000	1 st - 9 th	\$10000
Bob	2500	\$9000	10 th	\$0
Charlie	2500	\$9000		
David	2500	\$9000		
Elaine	2500	\$9000		
Fred	2500	\$9000		
George	2500	\$9000		
Hannah	2500	\$9000		
Irene	2500	\$9000		
Jessica	2500	\$9000		



ICM Example (WSOP Satellite)

Player	Chips	Equity	Finish	Payout
Irene	2500	\$9000	1 st - 9 th	\$10000
Jessica (Hero)	2500	\$9000	10 th	\$0

Blinds 200/400

Irene raises 2100 to 2500

Jessica dealt K♦K♥

Jessica...



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ICM Example (WSOP Satellite)

Player	Chips	Equity	Finish	Payout
Irene	2500	\$9000	1 st - 9 th	\$10000
Jessica (Hero)	2500	\$9000	10 th	\$0

Blinds 200/400

Irene raises 2100 to 2500

Jessica dealt K♦K♥

Jessica...

KK vs ATC = 82%

cEquity = 82% * 5000 + 18% * 0 = 4100 cEV = 1600

\$Equity = 82% * \$10000 + 18% * 0 = \$8200 \$EV = -\$800



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Tournament Life Cycle

The most important tournament concept is tempo.

- Early Game
- Bubble and Early Cashes
- Late Game/Final Table



Late Game

- Don't be overwhelmed by stakes, play it like a single-table tournament
 - Continue to steal/re-steal as appropriate
 - Be conscious of ICM
 - Know the marginal payouts of positions
 - Exploit players who are under bankrolled
-

Tournaments

- Tournament Life Cycle
 - Flop Turn River Play
 - Psychology
- Bankroll Management
- PokerStars Prize League Results



Bankroll Management

- What is a bankroll?
 - Generally “the amount of money you devote to poker investments”
 - More specifically, it’s the amount of money that you would deem “irrecoverable” if lost and would force you to stop playing poker
 - This only matters for winning players
 - Some examples:
 - For new players: “A large amount of money”
 - For amateurs: Expendable cash available, not in investments
 - For pros: Expendable cash and capacity to borrow



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Bankroll Management Rules

- Rules of Thumb
 - based off a 2% chance of going broke (Risk of Ruin)
 - uses average stakes/buy ins
 - does not assume natural increase/decrease in stakes
 - Assumes Solid Winning Play and Typical Variance
 - Bankroll recommended for each game
 - Cash Games
 - NL – 20 Max Buy-ins
 - Limit – 300 Big Bets
 - Tournaments
 - Single Table Tournaments – 30 Entries
 - Multi-Table Tournaments – 50 - 100 Entries
-



Bankroll Management Theory

- Kelly Criterion
 - If your utility curve is logarithmic
 - Maximize utility by betting with regard to edge
 - For example, in a biased coin game, if you are 60% to win, you should risk 20% of your bankroll (60%-40%) on that bet
 - This is the fundamental basis of bet-sizing in BlackJack



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Bankroll Management in WSOP

- WSOP has one of the biggest tournament fields with 6000+ entries
 - The buy-in is large at \$10,000, even among MTT pros
 - The appropriate bankroll for this would be over \$1,000,000
 - Compared to equivalent \$1,000,000 investments, playing one hundred WSOP main events has terrible risk-adjusted returns
-
- WSOP has the softest field of any \$10,000 tournament
 - Placing deep in the WSOP has publicity upsides in addition to winnings



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Risk Management

- Staking and Investment
 - Using the WSOP as an example, a good winning player might have a \$EV of +\$5000 (+50% roi), with a huge variance
 - Investors with appropriate risk preferences can eat the variance in return for a portion of the winnings
 - Common deal is 50% of upside + 100% of losses
 - This is an equity investment
 - Selling Shares and Trading Percentages
 - Almost universally, pros will trade percentages of their play in big events with other pros
 - In addition, players might sell single-tournament shares to individuals to split their play into 10 smaller chunks at 10% markup
-

Other Considerations

- Counterparty Risk
- Lifestyle
- Current Poker Environment
- Game Selection

Tournaments

- Tournament Life Cycle
 - Flop Turn River Play
 - Psychology
- Bankroll Management
- PokerStars Prize League Results



MIT Poker Theory and Analytics

Club Manager: (Desmond/MIT)

Established: November, 2011

Members: 457

Club ID: 557832

Club Home

Schedule

Results

Standings

Options

Manage Games

Manage Club

Club Standings

Real Money

Play Money

Season 4 (2015)

Rename...

Rank	Player	Games	Points	Average	KO
1	McSmith MIT	64	94.79	1.48	94.5
2	JZhao MIT	63	89.39	1.42	138.5
3	Rao MIT	66	84.99	1.29	69.5
4	ArjunN MIT	72	83.5	1.16	38.5
5	Amereno MIT	51	77.56	1.52	90.5
6	mwymer MIT	54	70.33	1.3	54.5
7	Shields MIT	47	67.48	1.44	36
8	ChenGu MIT	70	62.49	0.89	35
9	Subashki MIT	55	57.8	1.05	62
10	Harris MIT	46	56.46	1.23	49
11	Hilton MIT	52	55.17	1.06	100
12	wtareid MIT	55	53.7	0.98	66
13	Mannes MIT	36	53.02	1.47	54
14	YKato MIT	30	52.81	1.76	55
15	AMoran MIT	62	52.27	0.84	82
16	Wang MIT	46	52.17	1.13	43.5
17	Liu MIT	61	51.97	0.85	38
18	JKramer MIT	42	51.94	1.24	23.5
19	DMa MIT	54	50.95	0.94	40

* Points are only awarded in tournaments with four or more players.



McSmith MIT

Member since:
January, 2015

Season Statistics (Play Money)

Total Points: 94.79 (1.48 PPG)

Games Played: 64, 6 win(s)

Finishes: Best Place: 1 of 30

Worst Place: 38 of 40

In The Money: 14 out of 64 (22%)

[Gold] x 6

[Silver] x 3

[Bronze] x 4

Knockouts: 94.5

* Tournaments with less than four players do not count towards player statistics.

Final Standings

Prize Order	Player	Points	PPG
 1	YKato/MIT	52.81	1.76
 2	Amereno/MIT	77.56	1.52
 3	McSmith/MIT	94.79	1.48
4	Mannes/MIT	53.02	1.47
5	Shields/MIT	67.48	1.44
6	JZhao/MIT	89.39	1.42
7	mwymer/MIT	70.33	1.3
8	Rao/MIT	84.99	1.29
9	JKramer/MIT	51.94	1.24



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Final Standings (continued)

Prize Order	Player	Points	PPG
10	Harris/MIT	56.46	1.23
11	ArjunN/MIT	83.5	1.16
12	Wang/MIT	52.17	1.13
13	Hilton/MIT	55.17	1.06
14	Subashki/MIT	57.8	1.05
15	wtareid/MIT	53.7	0.98
16	DMa/MIT	50.95	0.94
17	ChenGu/MIT	62.49	0.89
18	Liu/MIT	51.97	0.85
19	AMoran/MIT	52.27	0.84



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Prizes

- An iPad Mini from Jane Street
- A GoPro from Citadel
- Private coaching from Will Ma
- Kindle Paperwhite and \$100 Amazon Gift Card from Prismata
- A customized poker chip set from SIG
- Lots of books

An iPad Mini from Jane Street



iPad mini Wi-Fi 16GB Silver
“Best of Skill!”

Courtesy of [Wind.com.my](#) on
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Quant trading firm, based in NYC
Major player in the HFT market

A GoPro from Citadel



GoPro Hero3 - White Edition

Image courtesy of [Intel Free Press](#) on
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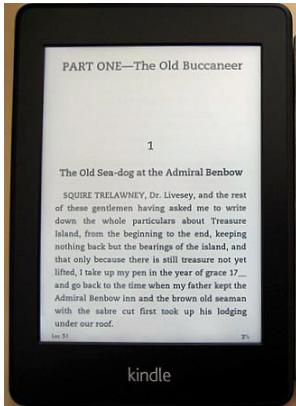
Multi-Strategy Hedge Fund, based in NYC
\$25 Billion AUM

Private Coaching from Will Ma

Photo of [Will Ma](#) removed due
to copyright restrictions.

- One Hour Coaching Donated
- Will is a CardRunners.com
Professional Poker Coach
- \$1 Million+ in Career
Tournament Winnings

Kindle Paperwhite from Prismata

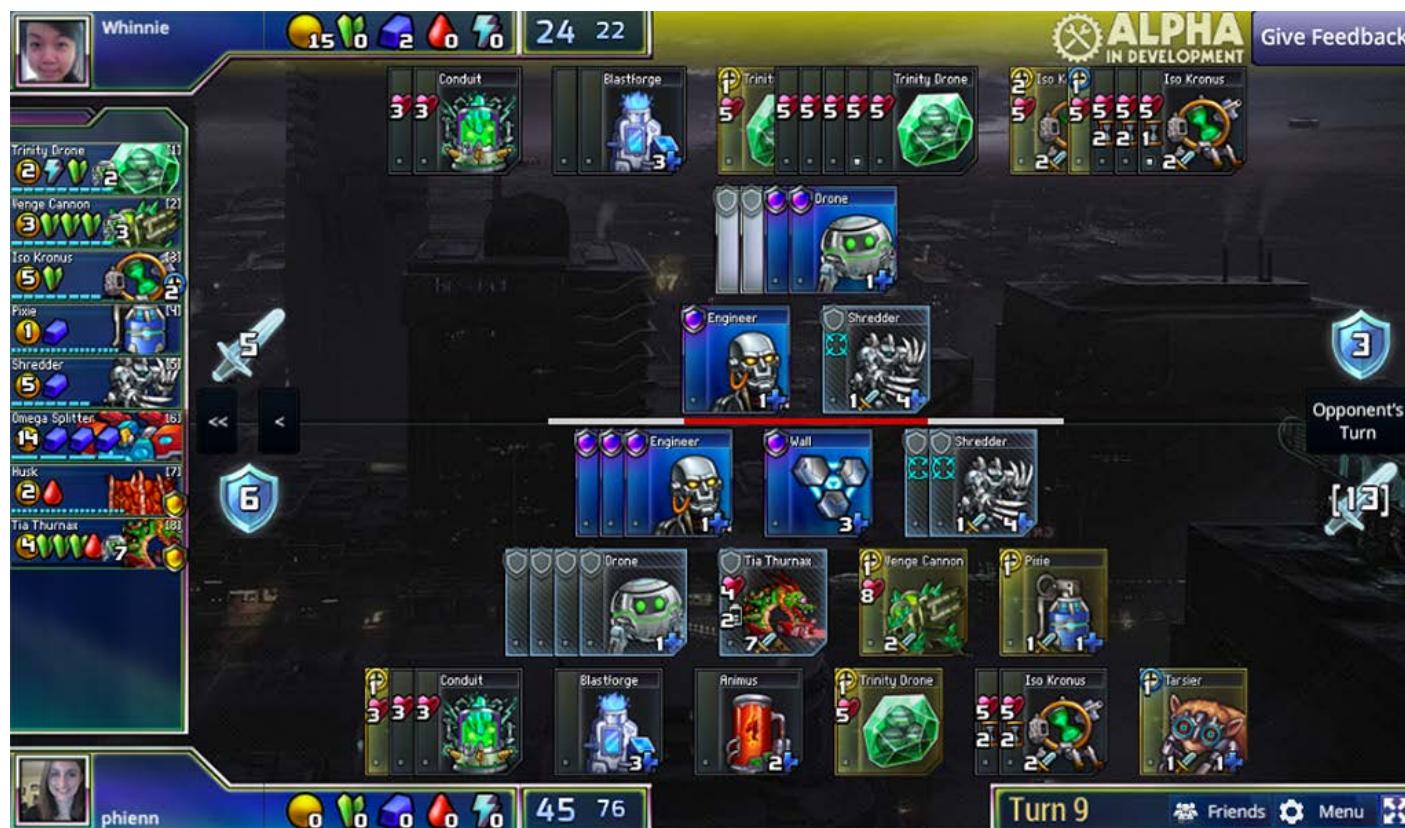


Kindle Paperwhite WiFi
+\$100 Amazon Gift Card

Kindle Paperwhite image courtesy of Explain That Stuff on Flickr. License: CC BY-NC-SA.

Prismata™
Turn-based strategy card game
Developed by Will Ma + Lunarch Studios

Prismata™



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A poker chip set from SIG



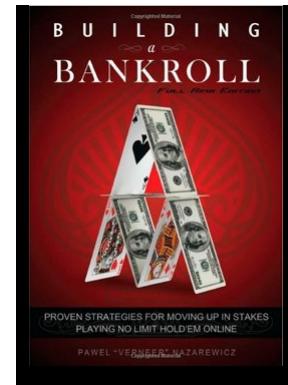
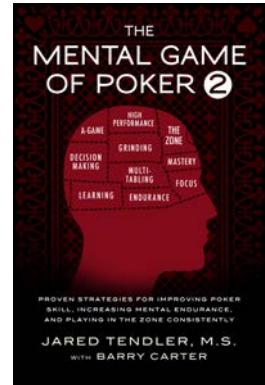
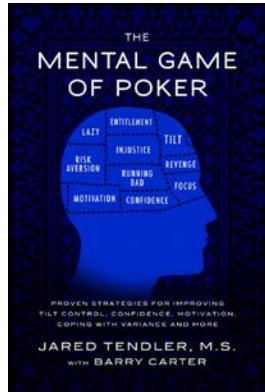
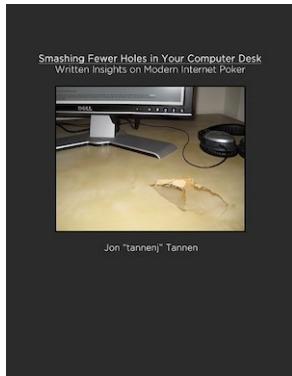
300-piece Diamond Suited 12.5g Chips
Metal Case and Chips Engraved with SIG

Image is in the public domain.
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Trading Firm, based in Philadelphia
Founded by Poker Players

Books



Tannen, Jon. *Smashing Fewer Holes in Your Computer Desk: Written Insights on Modern Internet Poker*.

Tendler, J. and B. Carter:

[Buy at Amazon](#) *The Mental Game of Poker*. Jared Tendler, LLC., 2001.

[Buy at Amazon](#) *The Mental Game of Poker 2*. Jared Tendler, LLC., 2013.

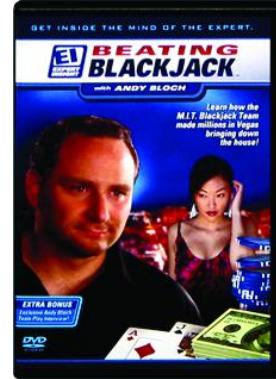
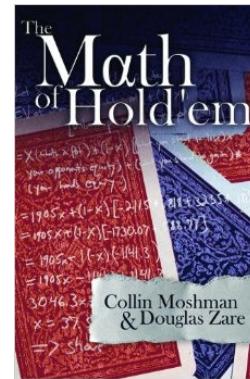
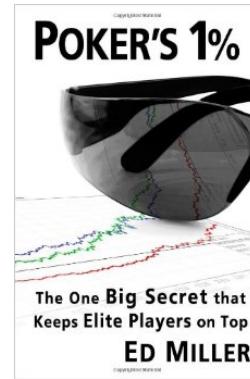
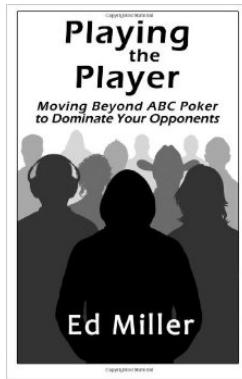
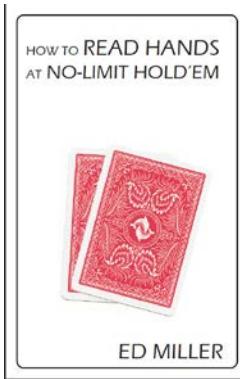
[Buy at Amazon](#) *Building a Bankroll*. Jared Tendler, LLC., 2012.



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- [Buy at Amazon](#) Miller, Ed. *How to Read hands at No-Limit Hold'em*. CreateSpace, 2011.
- [Buy at Amazon](#) Miller, Ed. *Playing the Player*. CreateSpace, 2012.
- [Buy at Amazon](#) Miller, Ed. *Poker's 1%*. CreateSpace, 2014.
- [Buy at Amazon](#) Moshman, C. and D. Zane. *The Math of Hold'em*. Dimat Enterprises, 2011.
- [Buy at Amazon](#) *Beating Blackjack with Andy Bloch*. Directed by Keller, Michael. Color / 60 min. 2007.



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Closing Remarks

- Great Class Overall
- Fantastic Support from MIT and from Sponsors
- Competitive Online League
- High Quality Guest Speakers

MIT OpenCourseWare
<http://ocw.mit.edu>

15.S50 Poker Theory and Analytics

January IAP 2015

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