Poker Lessons From Chess

Jennifer Shahade

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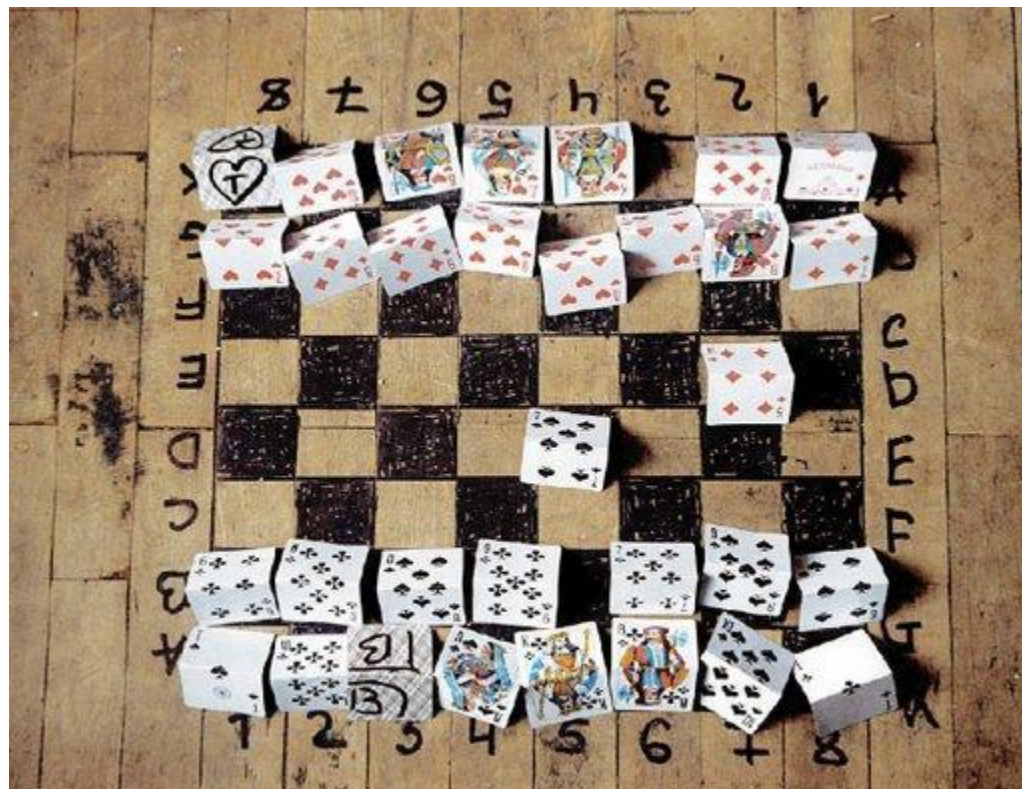
MIT Poker Class

Chess and Self-Improvement

- Not a Lot of money in Chess, but People are obsessed with improvement for personal satisfaction

- Unfortunately, many are bad at improving

- Why? Self-assessment and poor direction

Improving at Poker

- People are willing to spend even more money to get better at poker since they will earn or save the money back.

- Conflict that is more acute in poker: Most profitable in given moment not always the best for learning

Big Mistakes Ruin Everything

Avoiding Blunders

- In both NLHE poker and chess, avoiding blunders is one of the most crucial parts of the game.

- If you misread the action or misclick 1/100 times, it doesn't matter if you understand poker better

- If you blunder a rook 1/100 moves but know the opening better, also does not matter.

Which Rook Theory
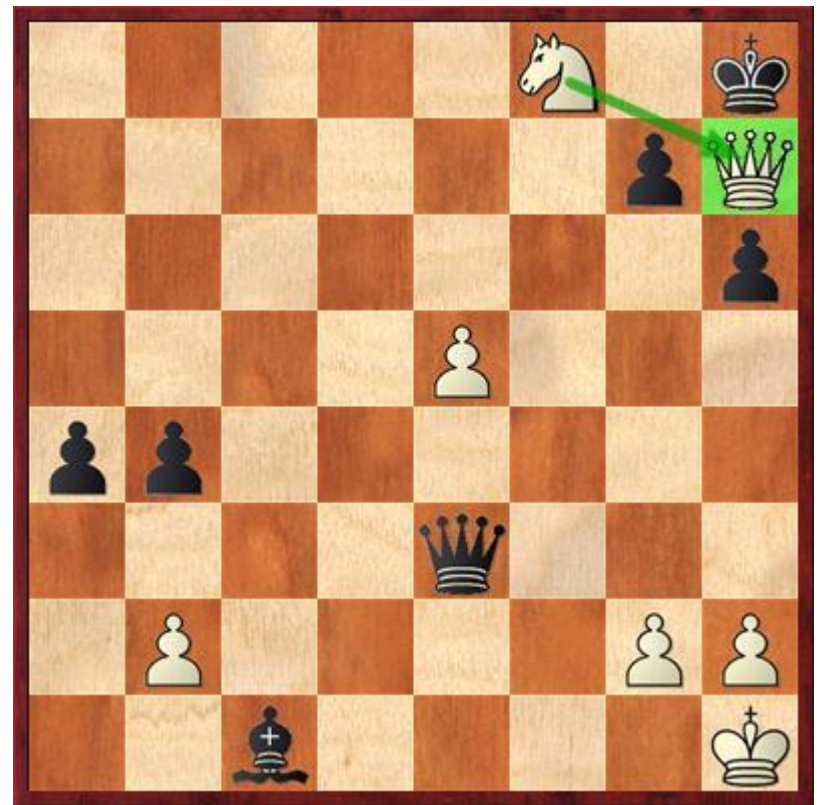## In either case, White is slightly better

Blunder by a World Champion vs. a Computer

Black just moved his queen

Checkmate!

Power of Chess Computers

Using online tools crucial in chess

Online Poker Calculators

- Program you already know about: PokerStove
- Programs that simulate and analyze action: Hold Em Resources particularly useful for tournament players

Hold Em Resources

Input hand details

- Ace-nine, hijack 18 bbs at 1000/2000 with 300 ante, payouts(or Chip EV calc)

Get analysis tree, much like in chess!

- Uses equilibrium ranges but you can adjust them manually

Jamming

- Marginally profitable even assuming pretty wide calling ranges from 4 opponents.

Raise/calling vs. equilibrium range

- A9 in margins again using 3-betting range of 16% (A5s/ATo/Kqo/33)+

Raise/Calling vs. tight &wide ranges

Tight range (7.5%- 77/AJ+)   **Wide range (25%)- A5o/33+**

MP3 calls 31200 against BU: 5.6%

AA	AKs	AQs	AJs	ATs	A9s	A8s	A7s	A6s	A5s	A4s	A3s	A2s
+5.01	+1.65	+0.73	-0.15	-0.63	-0.91	-1.00	-1.10	-1.12	-0.96	-1.00	-1.04	-1.09
AKo	**KK**	KQs	KJs	KTs	K9s	K8s	K7s	K6s	K5s	K4s	K3s	K2s
+1.39	+3.47	-0.33	-0.49	-0.45	-0.67	-0.85	-0.92	-0.91	-0.92	-0.96	-1.00	-1.04
AQo	KQo	**QQ**	QJs	QTs	Q9s	Q8s	Q7s	Q6s	Q5s	Q4s	Q3s	Q2s
+0.41	-0.73	+2.67	-0.55	-0.50	-0.72	-0.90	-1.11	-1.07	-1.08	-1.12	-1.16	-1.21
AJo	KJo	QJo	**JJ**	JTs	J9s	J8s	J7s	J6s	J5s	J4s	J3s	J2s
-0.54	-0.90	-0.95	+1.88	-0.55	-0.76	-0.95	-1.16	-1.24	-1.24	-1.28	-1.32	-1.36
ATo	KTo	QTo	JTo	**TT**	T9s	T8s	T7s	T6s	T5s	T4s	T3s	T2s
-1.08	-0.86	-0.91	-0.95	+1.27	-0.63	-0.83	-1.04	-1.14	-1.27	-1.27	-1.31	-1.35
A9o	K9o	Q9o	J9o	T9o	**99**	98s	97s	96s	95s	94s	93s	92s
-1.35	-1.09	-1.13	-1.17	-1.04	+0.70	-0.80	-0.99	-1.08	-1.21	-1.36	-1.37	-1.41
A8o	K8o	Q8o	J8o	T8o	98o	**88**	87s	86s	85s	84s	83s	82s
-1.44	-1.28	-1.33	-1.37	-1.24	-1.21	+0.25	-0.96	-1.05	-1.18	-1.33	-1.49	-1.50
A7o	K7o	Q7o	J7o	T7o	97o	87o	77	76s	75s	74s	73s	72s
-1.55	-1.35	-1.55	-1.60	-1.47	-1.41	-1.37	-0.24	-1.04	-1.15	-1.30	-1.46	-1.63
A6o	K6o	Q6o	J6o	T6o	96o	86o	76o	66	65s	64s	63s	62s
-1.57	-1.34	-1.51	-1.70	-1.57	-1.51	-1.47	-1.46	-0.38	-1.04	-1.19	-1.34	-1.50
A5o	K5o	Q5o	J5o	T5o	95o	85o	75o	65o	55	54s	53s	52s
-1.39	-1.35	-1.52	-1.68	-1.71	-1.64	-1.60	-1.57	-1.46	-0.40	-1.03	-1.18	-1.34
A4o	K4o	Q4o	J4o	T4o	94o	84o	74o	64o	54o	44	43s	42s
-1.44	-1.39	-1.56	-1.72	-1.71	-1.80	-1.77	-1.74	-1.61	-1.44	-0.45	-1.22	-1.38
A3o	K3o	Q3o	J3o	T3o	93o	83o	73o	63o	53o	43o	33	32s
-1.48	-1.43	-1.61	-1.77	-1.76	-1.81	-1.94	-1.91	-1.77	-1.61	-1.65	-0.51	-1.43
A2o	K2o	Q2o	J2o	T2o	92o	82o	72o	62o	52o	42o	32o	22
-1.53	-1.48	-1.65	-1.81	-1.80	-1.86	-1.94	-2.09	-1.94	-1.78	-1.82	-1.87	-0.57

MP3 calls 31200 against BU: 26.4%

AA	AKs	AQs	AJs	ATs	A9s	A8s	A7s	A6s	A5s	A4s	A3s	A2s
+5.05	+2.68	+2.40	+2.12	+1.84	+1.34	+1.08	+0.85	+0.69	+0.69	+0.60	+0.52	+0.46
AKo	**KK**	KQs	KJs	KTs	K9s	K8s	K7s	K6s	K5s	K4s	K3s	K2s
+2.47	+4.03	+1.16	+0.92	+0.69	+0.34	+0.15	-0.01	+0.11	+0.10	-0.01	-0.04	-0.14	-0.18
AQo	KQo	**QQ**	QJs	QTs	Q9s	Q8s	Q7s	Q6s	Q5s	Q4s	Q3s	Q2s
+2.17	+0.86	+3.58	+0.64	+0.40	+0.12	-0.05	-0.21	-0.19	-0.29	-0.32	-0.43	-0.47
AJo	KJo	QJo	**JJ**	JTs	J9s	J8s	J7s	J6s	J5s	J4s	J3s	J2s
+1.87	+0.59	+0.30	+3.12	+0.24	+0.01	-0.14	-0.31	-0.41	-0.48	-0.51	-0.63	-0.66
ATo	**KTo**	QTo	JTo	**TT**	T9s	T8s	T7s	T6s	T5s	T4s	T3s	T2s
+1.58	+0.35	+0.05	-0.12	+2.65	+0.01	-0.14	-0.32	-0.42	-0.64	-0.64	-0.76	-0.79
A9o	K9o	Q9o	J9o	T9o	**99**	98s	97s	96s	95s	94s	93s	92s
+1.05	-0.03	-0.26	-0.37	-0.37	+2.16	-0.08	-0.24	-0.34	-0.55	-0.70	-0.78	-0.81
A8o	K8o	Q8o	J8o	T8o	98o	**88**	87s	86s	85s	84s	83s	82s
+0.77	-0.22	-0.43	-0.53	-0.53	-0.47	+1.84	-0.06	-0.27	-0.48	-0.63	-0.85	-0.85
A7o	K7o	Q7o	J7o	T7o	97o	87o	**77**	76s	75s	74s	73s	72s
+0.52	-0.27	-0.61	-0.70	-0.71	-0.63	-0.55	+1.54	-0.22	-0.43	-0.57	-0.80	-0.94
A6o	K6o	Q6o	J6o	T6o	96o	86o	76o	**66**	65s	64s	63s	62s
+0.34	-0.28	-0.58	-0.81	-0.83	-0.74	-0.66	-0.61	+1.32	-0.32	-0.45	-0.68	-0.83
A5o	K5o	Q5o	J5o	T5o	95o	85o	75o	65o	**55**	54s	53s	52s
+0.34	-0.40	-0.69	-0.90	-1.06	-0.96	-0.88	-0.82	-0.70	+1.10	-0.39	-0.61	-0.76
A4o	K4o	Q4o	J4o	T4o	94o	84o	74o	64o	54o	**44**	43s	42s
+0.24	-0.43	-0.73	-0.93	-1.06	-1.12	-1.04	-0.98	-0.85	-0.78	+0.88	-0.66	-0.80
A3o	K3o	Q3o	J3o	T3o	93o	83o	73o	63o	53o	43o	**33**	32s
+0.16	-0.54	-0.85	-1.05	-1.18	-1.21	-1.28	-1.22	-1.09	-1.02	-1.06	+0.62	-0.91
A2o	K2o	Q2o	J2o	T2o	92o	82o	72o	62o	52o	42o	32o	**22**
+0.09	-0.58	-0.89	-1.09	-1.22	-1.24	-1.28	-1.38	-1.25	-1.17	-1.21	-1.34	+0.40

Takeaway

- Raise calling, raise-folding and jamming all viable options based on equilibrium simulation (but not if opp. is tight or aggro)

- Not an error to obsess over much like "Which Rook?"

- Still, players who are apt to be good at games apt to be perfectionist, which probably helps more than it hurts overall.

Tactics vs. Strategy

- In chess, players are often categorized as tactical (aka attacking) players or strategic (aka positional) players.

- Tactics are short term operations to win material or checkmate.

- Strategy is positioning yourself when there are no immediate material gains.

- **All** world-class players are good at both.

Tactics vs. Strategy in Poker

- Same lingo not used as frequently in poker but can also apply

- Tactics: hand-reading, betsizing within a hand

- Strategy: when you're not in a hand: Adjusting opening ranges, imagining good spots that may come up, figuring out which opponents you want to isolate/avoid in marginal situations, etc.

Example: Balancing vs. good plyrs

- Basic example may be adjusting the range of hands you open from in a particular position.

- I.e- You're deep at a table with plenty of good players, and you include some suited connectors into your UTG opening range and delete some dominated hands like AJo/Kqo

- Not as relevant against weaker players

Calculation vs .Evaluation

- Open to 2.5x (at 500/1000/100) from UTG with pocket tens. A player in the BB jams for 18 big blinds effective (you cover).

- You figure out your pot odds: you need to call **15500** to win 21900 (total pot of 37400). You are getting a little worse than 1.5 to 1 odds or you need about 42% to call

- You assign the opponent a range of 88+/AJs+

- You have familiarity with similar ranges

PokerStove Calculation

Input Range: AJs/88+

Results: 48% equity

Results

- You call, your opponent turns over KK and later tells you they wouldn't have done it with less than JJ/AK+

- A problem of evaluation, rather than calculation.

- In chess, Capablanca famously said, " (I see) only one move ahead, but it's the right one."

Your actual equity vs. JJ/AK+

JJ/AK offsuit +

Equity=34%

Two Common Cases of Misevaluating

- In chess, amateurs usually enjoy trading pieces, so they evaluate till they prove a trade is correct.

- In poker, amateurs usually prefer calling with good hands to folding so evaluating whether to call a large bet may bias toward overestimating bluffs

- In both cases, evaluating can be more like justifying a desire.

Confidence in Chess & Poker

- Confidence is an underrated ingredient to success in chess and poker. Better to err on the side of confidence

- Confident players avoid crippling "mistake tilt" as explained in Tendler's The Mental Game of Poker

- If you're extremely streaky, you may err on the side of under-confidence.

Part II: Quick Intro to Image in Poker

- In chess, image is relatively unimportant. May affect opening choice and draw offers, but most good players forget who they are playing and focus on the position.
- In poker, monitoring your own image and that of other players is a huge part of the game

What About Image in Online Poker?

- Screen-name, average buy in, profits
- Avatar
- Country of Origin
- Heads-Up-Display (HUD)
- Showing Cards/chatting
- Timing
- Note-taking
- Number of tables

Almost All-In to Exploit The Distracted

Comparing All-in vs. Almost All in

Benefits

- Players not paying attention may fold

- Confusing

- May get called by 2 players and checked down

- If close to a payjump, may stall you into it (ethically debatable)

Costs

- Chances of Disconnection or Misclicking/Life EV

- Slows down game/meta game considerations (esp. live)

- Possibility of decreased fold equity vs. certain players

Why Am I Number #169?

- Anonymous Poker: Bovada's solution to HUDs, online player databases, datamining, etc.

- Pros & Cons

- Players may feel more comfortable

- Players may have less fun (w.o avatars)

- Players may be abusive and stall more

Being a Woman in Chess/Poker

© PokerFairytale.com

Another photographic example

© PokerFairytale.com

Another…

And a Women's World Champ

OK, One More

Female in Games?: Pros & Cons

Pros

- Special promotional or prestigious tournaments
- Increased opportunities for sponsorship/external income
- Underestimated or avoided in ways that are profitable for you
- Attention is fun
- Success & Skill Celebrated

Cons

- Harder to share expenses for live tournaments
- May be underestimated or avoided in ways that are unprofitable for you
- Attention is annoying (try online)
- Mistakes Mocked

It's All One Long Session

Q+A

Ask Me Anything!