

Chess at 2200

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Many people wonder what the difference is between their level and the next, and I wonder too. I had been playing chess kind of automatically from 8 to 17 years old, not really thinking about what I was doing and just playing with some knowledge about pawn structural weakness and weak squares. 15 years later, I am trying to rewrite the chess map in my brain. ¹Spending money on yourself when you're old is all about trying to stay young.

Here I describe my (lack of) chess understanding at 2200-2300 lichess. I think that the *main themes never really go away*. Positions never repeat themselves, but themes do. I first started noticing this when N told me I made the same mistakes from 15 years ago. I then started mentally grouping things into themes.²

All games are played with Rapid Time Control, which means a search depth of 1-5 steps. As bb said, at my level the games have a lot of interesting mistakes. I suppose for many of these positions, one could say that "this is a logical move, but...". There are a lot more short-term reactionary mistakes (depth 2) but also making the wrong evaluation in complicated positions which has some reflection of how I would play in classical.

I think progressing with chess at this level is about resisting "natural" or "logical" looking moves and trying to play what the position requires (paying attention to details), or paying conscious attention to opponent's counterplay, which should make "natural" moves not necessarily the best one. It's almost like "natural" is a dirty word because it does not equate to "correct", but yet it is the one we would most gravitate towards. ³

Even so, chess *has* to be played with mental heuristics. Because it's not humanly possible to calculate depth 15 on every move. A better chess map is knowing when you have to calculate versus when you can just play a "natural" move. Beginners don't know how to use their time, because they don't know what they should be thinking about. Intermediate players don't know how to use their time *well*, because they don't know how much they should be thinking.

At the same time, completely winning games are still being "thrown" with horrific 1 move blunders (chess blindness) - something that happens about 10% of games.⁴ It is not that big

¹ A lot of research says that the brains of older people are less plastic, but once we know what these themes are, we can apply conscious effort to change cognition, and it follows that there is hope for rewriting the chess map in your brain.

² However, sometime after 100 games on lichess, I started losing track of in which game each kind of theme had occurred and was scrolling through lichess trying to find a position from a month ago. Hence this document.

³ Let y be a move, and R a reward function. Then, the natural move is $y = \operatorname{argmax}_y R(y \mid \text{position}_0)$, which is looking at the position at time 0. But what we really want to do is to find $y' = \operatorname{argmax}_y R(y \mid \text{position}_t)$.

⁴ An example of emotional saliency effect and "you're not doing as badly as you think". My initial estimate was 20-30% (3 out of 10 games is alot!) but it's actually 10%.

a deal to blunder online and one can argue that it would happen much less in classical time controls, but an opportunity is wasted to play a position when the game ends there, and if the rating does not increase, neither do the chess adventures.

Midway writing this, I have also started to appreciate that positional beauty and disaster coexist in the same position. In many cases, a single move is what separates beauty from catastrophe and one should be willing to accept the discomfort of an imbalanced position. As V would say, "the position is objectively equal, but the cost of a single move is high". Of course the definition of what is imbalanced or complex varies for players of different levels, but the willingness to go for it should be there.

I have also started to appreciate momentum in a position and aside from intermediate moves which I already knew before, there is also this general idea of "tactical defence" which is that even if the opponent carries out his threat, there is a tactical response to it because of where their pieces end up. So far I have seen this go together with i) Queen's long range abilities, both attacking an opponent piece in our camp, and threatening something in the other's camp. ii) Pins (especially rook)

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ML Inspired Learning Strategy:

Batch Gradient Descent

Batch several examples together, and compare and contrast positions. If you look at a single position, there is a tendency to overfit, but if you combine several positions of the same theme together, there is a higher chance for comparing and contrasting.

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Automatic Moves

Automatic Aggressive Looking Moves



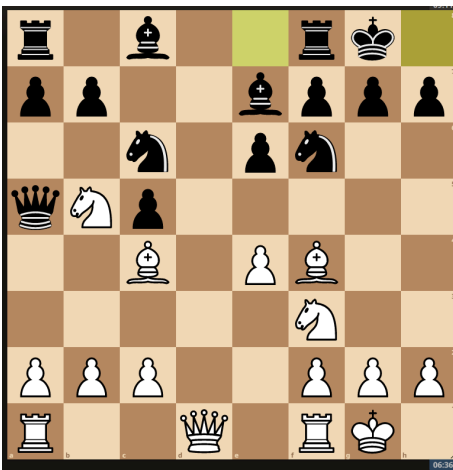
[V]

Situation: Black Queen attacks c3, White has a scary looking attack on Black's king. But the king side pawns are all intact and there's no immediate breakthrough.

What happened: 1. Rxf6 Qxc3. An aggressive looking move capturing a defending piece right in front of the king. So I thought it should be right. But it was without continuation. Only after 1... Qxc3 did I start calculating. I saw 2. Qh5 Bxe4 2. Rxe4 Qf6 was bad, and 2. Rg4 g6 my queen and rook need another two moves to reposition themselves and Black's king looks quite safe. To prepare Qh5 and guard back rank, I played 2. Rf1.

Better was: e5 Ne8 Bd3 h6 Rxh6. White needs to make progress by forcing black to advance h6 then it becomes straightforward.

<https://lichess.org/ZOqmAClj#36>



Situation: White seems slightly ahead of development and even though Black is not that terrible either, it seems like White should press for some kind of advantage.

What happened: Nc7 a most automatic move. Knight jumping to c7 is seen in many beginner games where it does some nasty fork or gets the Rook on a8. This was a very rash -- "play first think later" move.

Better was: Bc7 gaining a tempo on the queen, and covering d8 square. Moving Knight on c7 is very unstable. It is always under threat from the Queen on a5. And Bishop cannot easily stay on h2-b8 diagonal. If it doesn't win any material it can't be good, because White just created problems for himself to solve, and the Knight on c7 doesn't even cover any important squares..

<https://lichess.org/WPAmk2ZH#18>



Situation: White has misplayed the opening somewhere, and lost the ability to castle. Black wants to play aggressively against the King.

What happened: Bg4 developing the Bishop aggressively pinning the Knight. However Black is unable to castle queenside if White just plays Nc3. If Black plays Bxf3 even gxf3 with safe square Kg2 and Qd2 Re1 is coming. Black underestimates the chance for counterplay and neglected own king's safety.

Better was: Bd7 preparing to 0-0-0 and overwhelm White along the open files.

<https://lichess.org/fFpWx5ts/black#23>

Unrecognisable mistakes

- <https://lichess.org/z40lo5gg#18>
- <https://lichess.org/rRuuZPTs#54>
-

Automatic King checks

	<p>Situation: White has sacrificed a piece on the queenside and Black's king looks exposed, yet at the same time he will complete the king walk to g7 and be well guarded by Rook, Queen and Bishop.</p> <p>What happened: 1. Re1. An automatic check which looks attractive as it activates White's worst piece. However after ..Kf6 2.Rc5 Qg4, Black's king escapes to g7. If 2. Rc3 Kg7 3. Rxe7 there is a crazy backrank tactic with 3... Re8</p> <p>Better was: 1. Rc3. Black wants Kf6, so this is both an attacking and prophylactic move. Black continues with 1... f6 2. Rxf3 Qg4 and now 3. Re1 Kf7.</p>
<p>[v]</p>	

Blundering Tactics with Natural Moves (Not paying attention to opponent's plan)

	<p>Situation: After a really scary opening, Black seems to be coming out of the attack. There is no problem with development, the Knights cannot hold the position on f6 and White has compromised his kingside.</p> <p>What happened: Qc5 defending d4 and also threatening discover check. But white plays Rxe6</p> <p>Better was: Qd8.. In this kind of scary position where there are a lot of tactical threats, the more important thing is to hold on and check carefully all the ways you can die.</p> <p>https://lichess.org/wcltHLte/black#27</p>
<p>[v]</p>	



[v]

Situation: White looks very good, Black seems like he just played a developing move for activity and it seems like White should continue to pressure the King in the center or Kingside.

What happened: Rae1, bringing the last non-active piece to play. But this move should have been punished with Nxf4.

Better was: Kh1. White forgot that the king is actually very exposed, which means that we should be alert to sudden counter-tactics

(Didn't pay attention to opponent's threats)

<https://lichess.org/uR3jXhn4#38>

Automatic Rook Trade



Situation: White is a pawn down but the rooks seem more meaningfully placed.


What happened: Rxe5 a truly horrendous move. Not willing to be dominated by two rooks on the e-file, Black panicked and converted the drawish position into a losing one by activating White's dark square Bishop after fxe5.

Better was: Be4. A much smarter way to cut off White's e-file dominance!

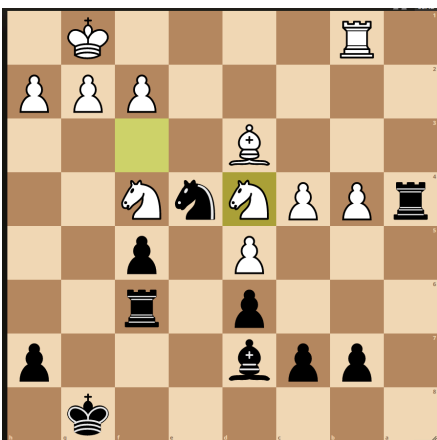
<https://lichess.org/95Be0QkD/black#49>

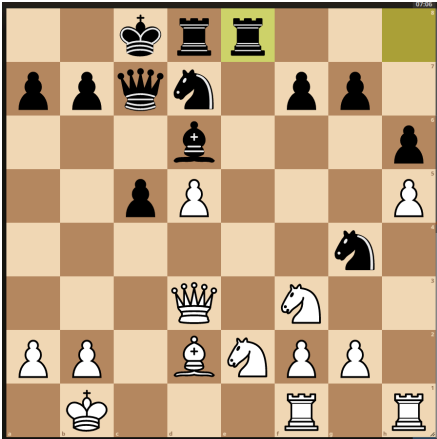
Strategy

Not Flexible Enough - Castling

	<p>Situation:</p> <p>What happened: 0-0</p> <p>Better was: Nbd2</p> <p>https://lichess.org/X8UDdQAU#19</p>
[v]	

Identifying the wrong plan

	<p>Situation: Black is slight material up but his pieces have poor coordination and no target. Rook on f6 needs to be rerouted, Rook on a4 has no mission at present, Bishop does not fulfil any purpose on d7.</p> <p>What happened: Ra2 attacking the obvious target of f2. After f3 obvious move, I played another mistake, Ng5 rerouting the Knight to the wrong part of the board, completely underestimating White's eventual c5-c6 b5 on the queenside.</p> <p>Better was: 1.. Nc3 2. Rb3 Na2 targeting b4, 3. b5 Nc1 forking Bishop and Rook. Very creative Knight manoeuvre to the corner of the board and then to the last rank.</p>
[v]	<p>https://lichess.org/hVSAqcat/black#45</p>

	<p>Situation: Black has solved all his opening problems and is starting to put pressure on White's position. There are no clear targets for White in Black's position and White has an obvious weakness on d5 and f2.</p> <p>What happened: g3 with the idea of Bf4 trading off pieces and wanting to plant a Knight on f4 to protect d5 weakness.</p> <p>Better was: Qf5-Nc3-Nb5 or Qf5-Nh4-f3. White needs to kick the Knight out from g4 or will be suffering with a very passive position.</p>
	<p>https://lichess.org/lmsfIFHY#36</p>



Situation: Black is clearly better, with two bishop advantage and a pawn up but how to press the advantage? d5 is controlled by White and e4 is overprotected.

What happened: f5. Thinking that I should open the f-file and trade off rooks to liquidate towards a winning endgame.

Better was: I dont know. Computer doesn't like f5.

<https://lichess.org/vHcn6GIC/black#35>

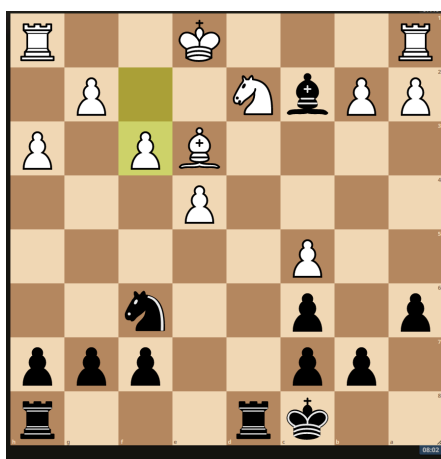


Situation:

What happened: Nfg5

Better was: Bg5 (I don't necessarily get it)

<https://lichess.org/ol21WizZ#28>



Situation:

What happened: Rd3

Better was: Nd7. But hard to play this move because White looks like can easily control e5 square with Nc4.

<https://lichess.org/gF6FiKZh/black#27>

Lack of forward planning



Situation: This is a Ruy Lopez exchange variation and Black has a lot of options to complete development

What happened: Nf6, an automatic developing move. Knights go to c3 and f6 are what e4-e5 beginners are taught. But this is too inflexible for the position. Knight has no prospects because after f3, Black cannot break the g2-f3-e4 pawn chain.

Better was: A setup with Bd7-000-g6-Bg7-Ne7-c5

<https://lichess.org/ho2UEAxZ/black#13>

[v]



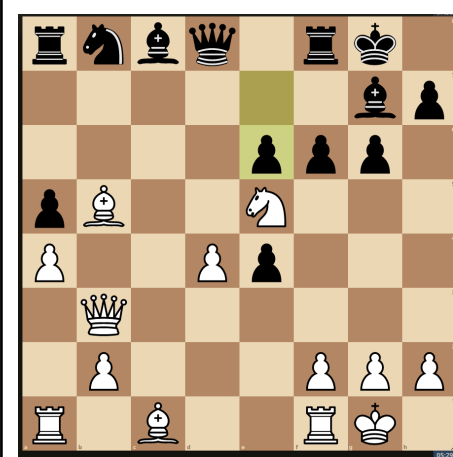
Situation: White should probably not be advancing the queenside pawns because it just makes it easier for Black to undouble the pawns.

What happened: Ba7

Better was: Bf8. Black needs to play c5 in the very near future. With the Bishop on a7, White pins c5 pawn to the a7 bishop and Black has to waste tempo moving kb8, and if an exchange happens on a7, Black king is even more far from the centre.

<https://lichess.org/ho2UEAxZ/black#27>

[v]



What happened: Ng4

Better was: Nc4

<https://lichess.org/KGsywiXy#30>

Failure to consider Opponent easily responding to our plan



[v]

Situation: A closed position in the French, where white might eventually play g4-f4-f5. Black wanted to play actively on the queen side, and could do so by challenging the “over-extended” pawns on the Queenside with 1.. a5, creating a square for the Bishop on b4 and rerouting the Knight to d7-g6-f4.

What happened: 1.. a5 is a catastrophic positional mistake. After 2. b5 Ne7 3.a4 Ng6 4. g3 white removes all prospects for the Black Knight on g6. If the dark-square Bishop gets to b4 it looks good only temporarily, the dark squared Bishops will inevitably be traded, and Black is left with a bad bishop and weak dark squares.

Better was: Be7-f6

<https://lichess.org/FJi4cEKgpwzo>

V: In this kind of position, White has space advantage and the asymmetry of the position means that the cost of each move is “higher”. Black has to look for some counterplay on the kingside, with g5-h5-g4-Be7-0-0-Bg5. If he does not White just plays with space advantage.

Resourcefulness

Missing Typical Attacking Sacrifices



What happened: Rf7

Better was: f4

<https://lichess.org/vHcn6GIC/black#37>



Situation:

What happened: What happened instead: Rh4 preparing Rxf6 but too obvious. Black plays Ne8

Better was: Rf6! After gxf6 Qh6 Re8 Bg4->Bf5.

<https://lichess.org/ZOqmAClj#30>



Situation: A pirc game where Black has just played b5 a6.

What happened: 1. Qe2 automatic developing move

Better was: 1. dxe5 dxe5 2. Nd5 exd5 3. Qxd5 just winning. If 2.. Ngf6 3. Nxf6 Bxf6 4. Ng5 0-0 5. Qh5 Bxg5 6. Bxg5 Qe8 7. F4 with very strong pressure.

This was a very interesting opportunity but I did not even consider this sequence or plan at all. First I thought I should keep center pawns, next I didn't even imagine bringing the queen to attack f7. Nd5 is probably a typical maneuver.

<https://lichess.org/fQZfph0m#14>

“Passive” Attacking Sacrifices



Situation: Black is going for a Kingside attack, h file is open, White just played Bg2 attacking the rook, and this Bishop is notoriously good at covering h1 square. To get rid of it Black has to play Queen somewhere, Nd5-Nf4-Nxg2 which gives white a lot of time to organise the defence

What happened: Rh4, looks normal. Moving the rook to an annoying square where it cannot easily be attacked, and attacking g4. This was the second best engine move.

Better was: Qh8. Unpinning the queen in one move. We would be happy to sacrifice this Rook for the Bishop! In fact some continuations might even involve getting the rook to the g-file and then sacking it. And Rook on 3rd rank is super annoying because it is targeting c3 pawn.

<https://lichess.org/MAP6fNGb/black#39>

Lack Creativity



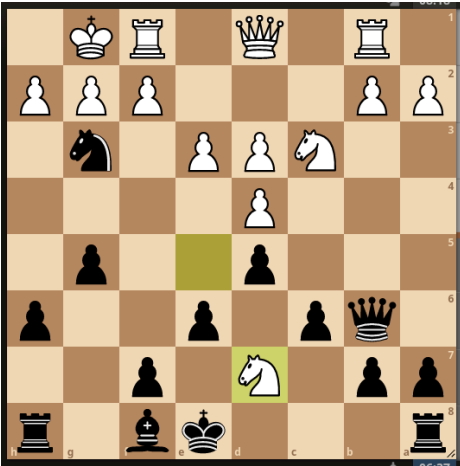
Situation: Black looks clearly better and is searching for a win

What happened: Re8 this doesn't look objectively bad. Taking control of the open file after Nxd5 cxd5. But after h4 h5 Qh3, White's position suddenly looks alive, and threatens Qd7.

Better was: Nxe3 Bxe3 Rf5 with a very creative idea of Bg3 and Rh5 with winning the queen.

<https://lichess.org/dNXz9if7/black#63>

[V]



Situation: Black's queen is under attack so Black should respond to the Knight on d7.

What happened: Kxd7. A super natural move. But then fxg3 and Black's king will become exposed subsequently.

Better was: Qd8, not recapturing the Knight immediately, White has to recapture on g3 and then Qxd7, reroutes the queen to a better square and protects f7. King can still castle.

<https://lichess.org/IFNVUJOy/black#25>

[V]



Situation:

What happened:



Better was: h4, sacrificing a pawn to open the h-file

<https://lichess.org/uR3jXhn4#48>

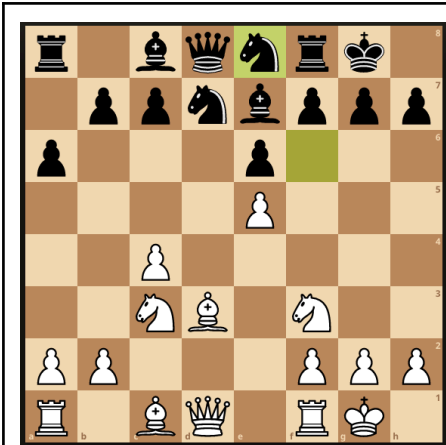
[V]

Impatience

Opposite side castling Strategic impatience

 <p>[v]</p>	<p>Situation: Opposite castling and now both sides want to try and launch an attack “as fast as possible”.</p> <p>What happened: 1. b5. The sequence 1... exf5 2.bxc6 Qxc6 3.exf5 was easy to calculate but I wrongly evaluated the position as chances for both when it Black is just better.</p> <p>With the weak pawn on f5 and strong centre for Black, it is much easier for Black to develop pieces and attack Whites kingside. Queen on c6 is a good attacker and defender, much better than Q on d1. Also I overestimated what I can do on the b-file, which is much less dangerous than the g-file.</p> <p>Better was: Ne3, Ne7, Nh6 are all good</p> <p>https://lichess.org/rRuuZPTs#22</p>
	<p>Situation: A continuation of the previous position.</p> <p>What happened: 1.d4 Qxc4 2.Bf4 exf4 3.Rc1. Black has absolutely no worries on the queen side, and has control over the centre so he can take this pawn for free. At this point I already know that I’m worse but have to “justify” the b5 move from before (tilted) and start to play more desperate moves.</p> <p>Better was: Bxf4 exf4 Rc1 or Qd2</p>

Hallucinating an Attack



[v]

Situation: White seems like should be taking control of the game after e5.

What happened: b3. With the expectation that Black will try to play Qc7, then White can play Ba3, and after Bxa3 Bxh7-Ng5-Qh5. Setting up for a dream tactical position.

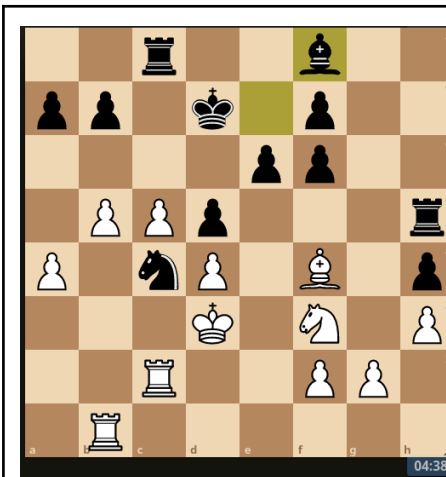
I just wanted to try the idea from this game

<https://lichess.org/study/4UhBRNce>

Better was: Qc2. White's advantage is in the center, not the kingside. There is an intermediate threat to trade queens with .. Nc5, so White should play Qc2 - develop with a tempo, and then Bf4.

N says its "overestimating attacking chances" which is described in Jonathan Rowson's book "Seven Deadly Chess Sins".

Poorly executed Exchange Sacrifice



Situation: It is not clear whether White can proceed in this position because Knight on c4 controls b6 and also blocks the Rooks from c file.

What happened: 1. Rxc4. Impatient to do something in this position and trying to play for a passpawn on the queenside. But after 1.. dxc4 2. Kxc4 e5 White loses his pawn mass in the center and is just an exchange down

Better was: 1. c6 bxc6 2. bxc6 Rc6 3. Rb7 giving up the potential c pass pawn but creating an "a" pass pawn but even the continuation is unclear for me still. Another way to continue is 1. Re1 just watching out for e5.

<https://lichess.org/BIsdl16o#58>

Not controlling for counterplay



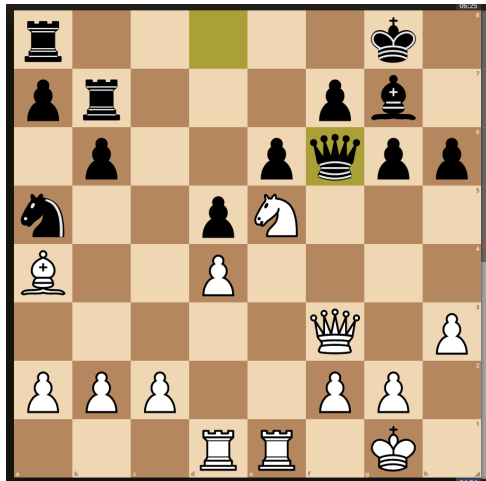
Situation: Black fumbled a Marshall attack but White fumbled back. White's queen is terribly trapped but it looks like everything is protected, and Black cannot directly attack on the kingside.

What happened: 1.. Qf5. Seeing no clear way to proceed on the Kingside (everything is protected) and all Black pieces look well placed, I tried to invade in the center/switch to playing on the queenside. However, White should play 2. Bh6 Rd8 and 3. Nd2. starting to free up the pieces.

Better was: 1.. Qh3 or 1.. Kg7. Control h6 square, dont allow h pawn to advance to h4 (super trap the queen).

<https://lichess.org/dNXz9if7/black>

[V]



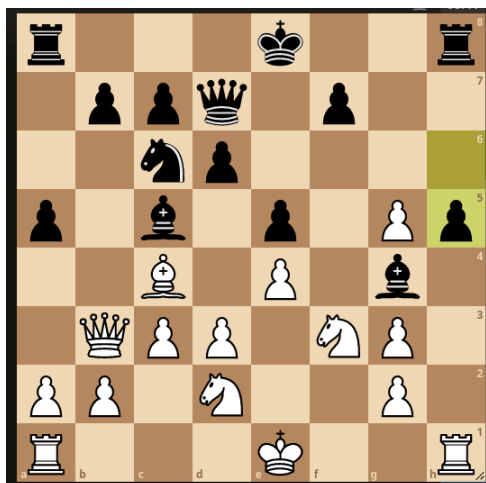
Situation:

What happened: b4 b5

Better was: Qe2 guarding b5, and after a6, c3 or Rd3

<https://lichess.org/O2ALEKjt/white#40>

[V]

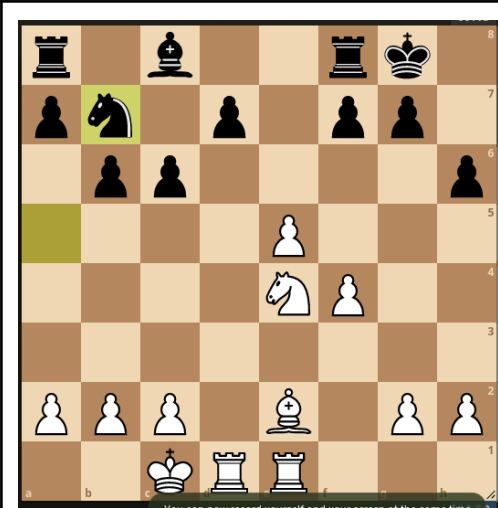


Situation: White is a pawn up but has triple pawns on g-file however White has very strong control over f-file. Black has no chance to play d5 or f5 and thus if White controls the position should be better.

What happened: Nh4 with the idea of Rf1 and Nf5, which should have been punished by a4 followed by Na5.

Better was: a4 killing Black's counterplay. According to V, a4 is typical for Black in Italian

<https://lichess.org/89sQBSQu#26>



[v]

Situation: White is positionally dominating, and should win the d7 pawn easily if we control the position.

What happened: Bg4 which suddenly allows d5. Tactical Blunder

Better was: g4, Ba6 Nd6 are all completely winning

<https://lichess.org/FKdRyzJN#36>

Not securing the Center before attacking on Kingside



[v]

Situation: White has completed all development and wants to start a king side attack which looks like a natural plan.

What happened: 1. Qf3. Preparing Qg3 without securing the center. After 1... exd4 2.Bxd4 c5 Black gains some tempo and starts counterplay in the center.

Better was: 1. dxe5 dxe5 2.Qf3->Qg3. If 1.. Nxe5 2.f4

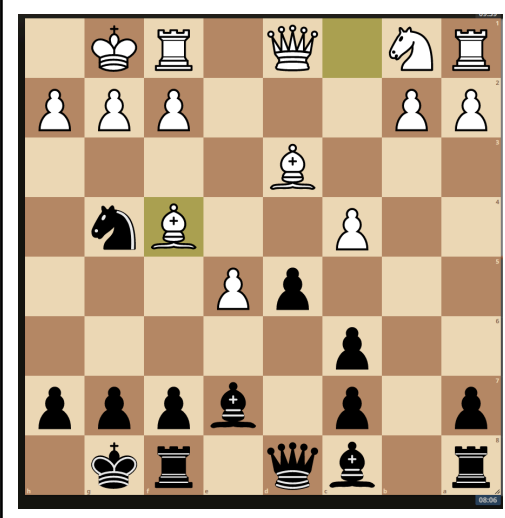
<https://lichess.org/fQZfph0m#30>

Creating weaknesses (short-sightedness)

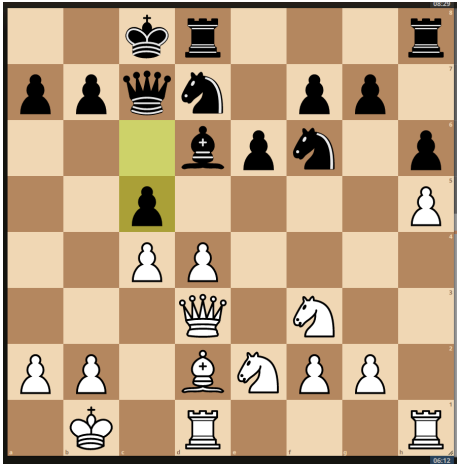
	<p>Situation: Black has two Bishops against two knights but White is still ahead in development.</p> <p>What happened: 1... f5 controlling the centre, pushing the Knight back from e4, Black expects to play Be6 and Re8 attacking d3. However, f5 is extremely shortsighted. Suddenly e5 is a serious weakness, white already has two pieces attacking e5 and rook is ready to be doubled on e-file. Black gave White very obvious plan to play for.</p> <p>I thought f5 was obviously good here and had to be played without too much thinking.</p> <p>Better was: 1... Bf5</p> <p>https://lichess.org/qk9DRfow/black#37</p>
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Trade Offs

Unwillingness to advance pawns in front of king

	<p>https://lichess.org/KcBsijvK/black#59</p>
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Creating weakness in own position instead of conceding a square



[V]

Situation: White has misplayed the opening (caro-kann) and Black has completed development and is now fighting for the center. Clearly dxc5 is bad for White, because Nxc5 and White gives up the c5 square with tempo. Black might want to exchange on d4, and then move Knight to c5 or e5.

What happened: d5. Unwilling to give Black the c5 square (not allowing cxd4, White played d5 thinking of “expanding” in the center. But was just volunteering a weakness for nothing after exd5 cxd5. The d5 pawn does not even control c6 and e6 square.

Better was: 1. Nc3, just trying to reroute the Knight with intermediate threat of Nb5. Black should play 1.. a6 2. D5 exd5 3. Nxd5 Nxd5 4. Qxd5 and now we have Black pawn on c5 and more active pieces, instead of what happened in the game being tied down to d5.

<https://lichess.org/lmsfIFHY#30>

Wrong trade-off for Bishop diagonals



Situation: e4 pawn controls d5, f5 and covers the h1-a8 diagonal, giving black no chance for counterplay. Every 1900 player would consider advancing e5 Ne8. But is it worth weakening the diagonal?

What happened: Qg5, second best move but now White chases away the defender to a better square. All future e5 will be met with Nd5.

Better was: e5 Ne8 Bc4/Bd3 brings another piece into the attack, while black has no chance to attack along the a8-h1 diagonal even if it looks scary.

<https://lichess.org/ZOqmAClj#30>



[V]


Situation:

What happened: e6. Weiming said I killed my light square Bishop and activated my opponent's dark square Bishop for free.


Better was: g4 cutting off the Knight

<https://lichess.org/RpgAyeo30ZEI>

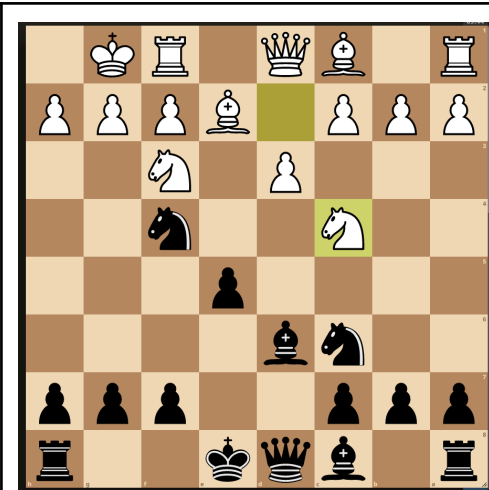
Refusing to play a piece twice

	<p>Situation: White has a very nice position here, Black cannot castle because of Nxc6 and needs to solve his development and centre. White needs Bishop and Rook in the game.</p> <p>What happened: fxe5 Nxe5 Bf4 Bd6. Trying to develop the Bishop without moving it twice by first capturing on e5. But we gave Black control over critical e5 square by trying to save this tempo.</p> <p>Better was: Bd2. Allowing exf4 Bxf4 (We moved the Bishop twice but surprisingly actually one tempo up compared to the variation above.)</p> <p>N: <i>“Chess is a trade, you give something but you gain something in return. If you give something without getting anything in reward then it is wrong. If Black takes on f4, then what you get (position) is more important than what you give (a tempo)”</i></p> <p>https://lichess.org/wHGkV92x#25</p>
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Pawn Structure vs Tempo

	<p>Situation: Black is playing for a win here with opposite color bishops and one pawn up. Should we allow Nxc4 dxc4 doubling the pawns and making it harder to make a connected pass pawn? Or keep the pawn structure but lose the tempo in exchanging pieces.</p> <p>What happened: Nxd2. I chose to lose the tempo because I thought pawn structure was more important.</p> <p>Better was: Kh7. According to V, the decision depends not so much on doubled pawns here, but on control of d4 and d3 squares. Because after Nxc4, dxc4 Black gets a really good square for the Bishop on d3 and also White has no time to get the Bishop to d4.</p> <p>https://lichess.org/95Be0QkD/black#39</p>
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[v]



[V]

Situation: Black looks more developed and slightly more active. But he has to decide what happens with the Knight on f4, allow it to be captured by the Bishop spoiling the pawn structure, or capture on e2 helping Queen to develop.

What happened: 0-0. Choosing to try and maintain momentum (tempo) and allowing White to take the Knight.

Better was: Nxe2 Qxe2 and 0-0. It felt very silly to play Knight g8-e7-g6-f4 only to trade on e2 and help the Queen develop. However, allowing Bxf4 is worse, because Black cannot play g5-g4 in time, and white just has near complete control of the centre after d4 and c3.

<https://lichess.org/s4fgAbz7/black>

Active vs Defensive



[V]

Situation:

What happened: 1. c3, I was not that interested in preserving the b2 pawn, but was more concerned about controlling d4 square so there's no checks on an already exposed king. But after 1.. Re8 suddenly White has a problem with the e-file.

Better was: 1. Ng3 threatens Rxe7 Qxe7 and Nxf5. And the rolling kingside pawns are much more dangerous than the activity of the dark-square Bishop.

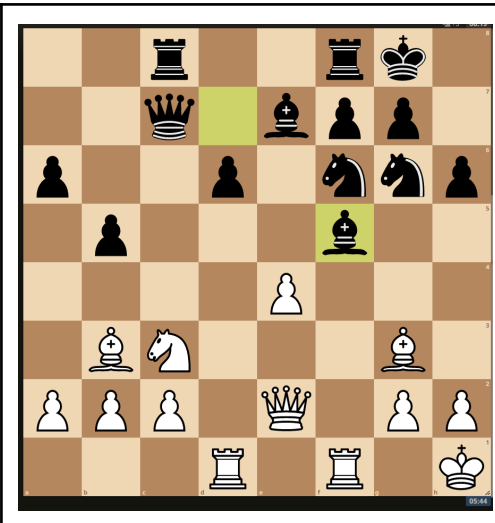
<https://lichess.org/uR3jXhn4#55>

Trading off active piece for a holding piece

G: It's not about what pieces were removed, but what pieces remain.

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Pawn Structure vs Open-file



What happened: exf5

Better was: Rxf5

<https://lichess.org/0vrtjn14#36>

Calculation

Stopping Calculation early

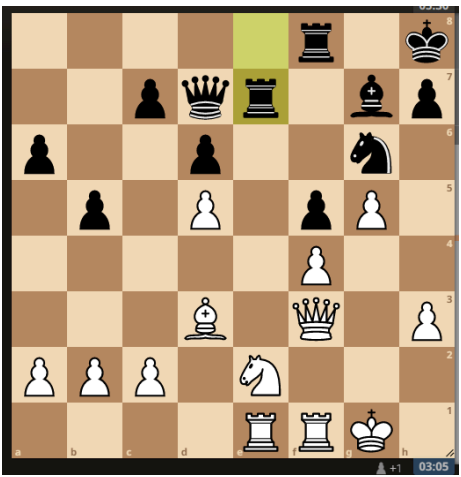
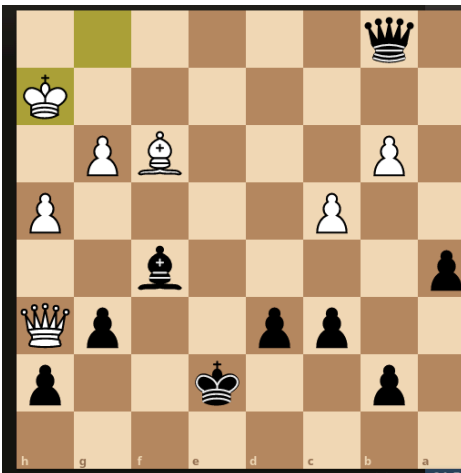
	<p>Situation: What happened: Nxe5</p> <p>Better was: Nxa8 https://lichess.org/aOsnQ8rG#52</p> <p>[This should be a calculation exercise]</p>
	<p>Situation: White has just played a very dubious Qc1 with an obvious threat of Bxh6. Black's options are f4, or Kh7. If Black can roll the pawns forward with f4-e4 then this is clearly better than Kh7 which moves the King to a worse square. (weak on h7-b1 diagonal)</p> <p>What happened: Kh7. After thinking for 20 seconds, I rejected 1.. f4 because 2. Qc2 Nd7 3.Be2 Nc5 4. 0-0-0 Bd7 and I thought that White can attack with g3 and f4 would be over-extended. Also if White takes control of the e4-square then f4 would be regret</p> <p>Better was: 1..f4. 2.Qc2 Nd7 3.Be2 Nc5 4. 0-0-0 There is Nfe4 interesting tactic on the Queen. If f4 can work, it should be much preferred as an active defense.</p> <p>https://lichess.org/70PDzgyb/black#23</p>
	<p>Situation: White is one pawn up and really wants to keep the material advantage. Qxa7 bringing the queen to the side of the board looks bad of course. But how else to keep the extra pawn?</p> <p>What happened: 1. Qxa7 Qxb2 2. Rb1 Qxc3 3. Qxb7 keeps the pawn. So white just went for this line, ending calculation prematurely. Because after Re8 Black threatens Qd4.</p> <p>Better was: 1. E5, first shutting down the Bishop along the diagonal. There is nothing fundamentally wrong about Qxa7-Qxb7, but White should shut down Black's play on the b8-h2 diagonal. If 1... Be7 2.Qg4-Bh6. If 1... Ba3 2.Qxa7 Bxb2 3. Rb1 Bxc3 4. Qc5 (but it's very hard for me to see this move).</p>

Middlegame

Contesting open files

it's easy to understand that if there's no square for invasion, there's no need to contest the opponent's rooks' open files. But what if there actually are and you still should NOT contest these files.

Queen activity

	<p>https://lichess.org/uR3jXhn4#55 Situation: What happened: c3 Better was: Ng3</p>
	<p>What happened: Qc2 Better was: Qb2 I understand the concept of attack while defending, but I ended overprotecting the Bishop because I was afraid to lose it. https://lichess.org/vHcn6GIC/black#73</p>

Not considering opponent advancing pawns in front of king

	<p>Situation: What happened: 1.. Bh5 g4</p> <p>Better was: Bxf3 https://lichess.org/WloYXbhq/black#21</p>
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Blindness to rook pins

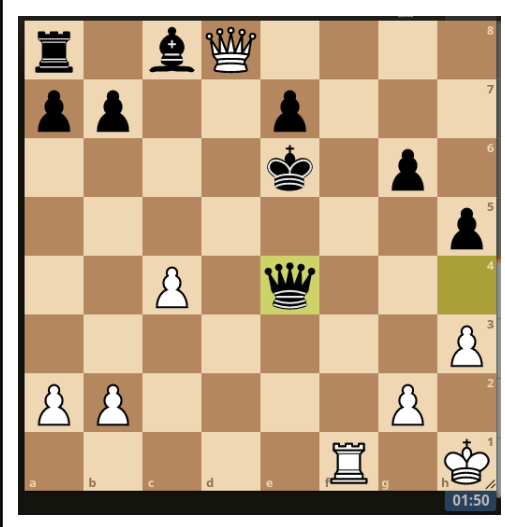
I had a very poor chess map of how to use/play with rooks compared to other minor pieces (they kind of get positioned and then sacrificed, not that much shuffling around happens with them)

	<p>Situation: Missing a tactical rook pin</p> <p>What happened: Qd3</p> <p>Better was: Re8</p> <p>https://lichess.org/GMIb1Vvn/black#25</p>
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Liquidating to a worse endgame: I was completely outplayed in this game:

<https://lichess.org/bSUOM2Nc/white#32>

Allowing King to escape

	<p>Situation: White does not have enough resources to mate Black despite the King being wide exposed in the center.</p> <p>What happened: Qg8. Thinking there might be a mate on the Queenside because of the advanced c pawn.</p> <p>Better was: Rd1. The best we can hope for is keeping Bishop and Rook paralysed on starting positions, and do perpetual check.</p> <p>https://lichess.org/iJSSwXwG/white#56</p>
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Defending

Not capturing sacrifices

if the opponent offers you a sacrifice and you don't immediately see how it's losing, one of the best ways to refute it is to take it. I missed my chances on several wrong sacrifices because I was too afraid of the attack



Irrational unwillingness to play defensive

Radjabov said "you should win winning positions and you should not lose losing positions". I think my defensive mentality is actually very weak and I'm unable to be objective. I see the losing lines, but I play into the losing lines anyway because I don't want to play the *unpleasant* position.



Situation: Ne6 is being threatened and Black's only response seems to be Nb6. However after Nb6 white plays c4 after securing the Knight on g5, Black's Knight is awkward on b6 and there is no solid way to continue

What happened: The super unsound Nxd5 was played trying to trade off the exchange for a central pawn. However there was no compensation because the g8-a2 diagonal was just too weak. White played Qb3 Bc4 and Black's position collapsed.

Better was: Just suck it up and play Nb6. It doesn't make sense to exchange sac in an equal or defensive position. N told me, "we reject some option that we don't like and then jump off the cliff"

<https://lichess.org/GMIb1Vvn/black#25>

Not able to do damage control (bad defensive psychology)



Situation: Black is regretting playing Qd5-Bb4-Ne4-Bf5 because White managed to castle, and the tension in the centre is now in White's favour. (Hanging pieces on d5, f5, e4)

What happened: Nxc3 losing immediately. In the game I even saw Nxc3 Bxf5 Nb5 Bh7 losing a pawn, but I didn't want to play Bxc3 bxc3 giving up the dark-square bishop and improving White's pawn structure. So I played Nxc3 Bxf5 Nxa2, not losing a pawn, but losing a piece. Another case of "reject the option and jump off the cliff"

Better was: Bxc3 bxc3 Nd6 defending f5. Black needs to admit the previous moves and plan were misplayed, and just do damage control to save the position, give up the Bishop which is the lesser evil.

<https://lichess.org/GMIb1Vvn/black#25>





Situation: White is in some trouble with the exposed king, Qxh3 Qg4 is coming, with pressure on the e4 pawn. F3 can probably never be played because second rank is too weak.

What happened: a4. Thinking that the only opportunity left is to distract black with the a-pawn. White just plays it hoping for a good outcome.

Better was: 1.e5 forcing the queen trade even though we give up a pawn, and just trying to play for a draw with one pawn down. Qxb2 2. Rxb2 Be5 3.a4 Rb8 4. Rxb8 Rxb8 5. Kd3

<https://lichess.org/FJP0omMt#42>

Wrong defence with Natural Moves

	<p>Situation: After a really scary opening, Black seems to be coming out of the attack. Black's queen is attacked and has three squares, d5, b5 or a5</p> <p>What happened: Qd5. This central square looks very natural. Black centralises the queen, defends d4, and "ghost attacks" f3. But the problem is that White is still attacking, we still can't capture on f6, and tempo will be lost on this queen.</p> <p>Better was: Qa5. now the Bishop on f6 is threatened, and d4 was not actually hanging because of Rd8.</p> <p>https://lichess.org/wcltHLte/black#27</p>
	<p>Situation:</p> <p>What happened: Be7 seems very natural retreating square for the Bishop. However, it takes away the defensive d5 resource.</p> <p>Better was: 1.. Bc5. Then after 2. E5 d5 3.exf6 dxc4 4.fxc6 Rg7 game goes on. If Bishop is on e7 then instead of 4. Fxc6 there is fxe7</p> <p>https://lichess.org/3myPePdG/black#13</p>

Poor Sense of danger:

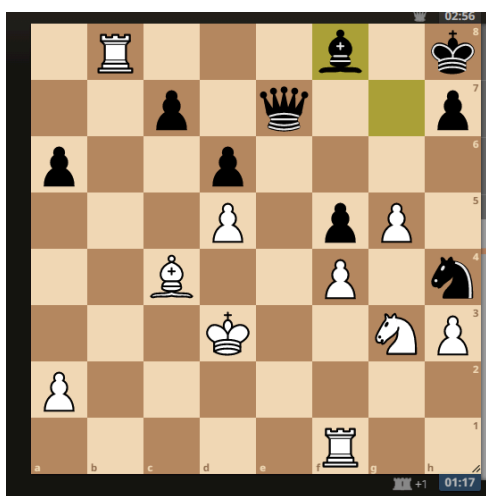


Situation: White wants to activate e1 and f1 rooks and start rolling down the last rank but his king is also very exposed.

What happened: Ng3 attacking f5, opening e-file for the rook but giving up control of critical d4 square. Black responded with Nh4 Kf2 and Bd4.

Better was: Rb1. Rook can be moved to a different open file Why move the defensive Knight which is covering important squares? It is very difficult for White to put pressure on f5 because Bishop is tied to the defence of d5

<https://lichess.org/uR3jXhn4#56>

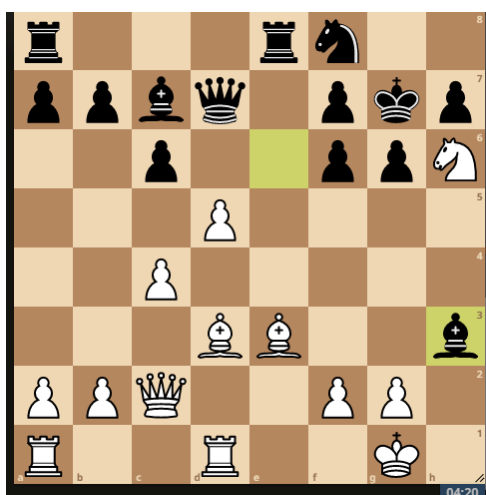


Situation: White wants to activate the f rook along the efile with dangerous threats along Black's backrank. We can't play Re1 immediately so how do we get to the e-file?

What happened: Rf2 obviously going for Re2. But too hasty. Black should have responded with Qe1!

Better was: Kd2. Covering all squares, and then we can play Rf2-Re2. And all squares remained covered in White's camp.

<https://lichess.org/uR3jXhn4#56>



Situation:

What happened: dxc6

Better was: Be4

<https://lichess.org/w036iQJP#34>



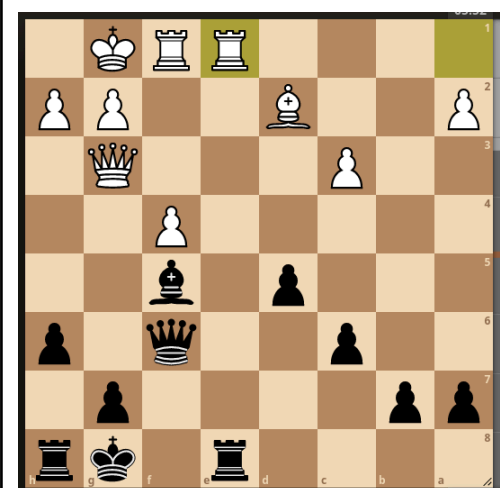
What happened: Nc4
<https://lichess.org/K3mrHRJT#20>



Situation: White sacrificed a pawn in the opening and is ahead in development. Black played Bg4?! On the previous move and must know complete development.

What happened: e6. White should then continue with Qa4 and surprisingly Black's position starts to look very scary after that. If Qc7 or Qb6 there's Nd5, and Nd4 is coming next for White. If Rc8 there's Qxa7

Better was: a6. The e8-a4 diagonal is surprisingly a serious threat.



<https://lichess.org/95Be0QkD/black#43>

King Safety: Choosing wrong retreating square for King



<https://lichess.org/uR3jXhn4#56>

What happened: Kf3, walking into potential Nh4+s.

Better was: Kd2. Pawns are intact on the queenside

Losing Momentum while attacking/ Not finding active defences



Situation: White played Qe3, with the obvious threat of Qa7. It doesn't look that cheap because a mate is threatened on a8.

What happened: Kb8. Black responded the most obvious way, which is not terrible, but after Qg3 White equalises.

Better was: Bd6! Developing a piece into the attack, and questioning the Knight's shakiness on e5. If white captures on g6 we are extremely happy to open the h-file, if Nc4 h5 Nd cd6 Qa7 is harmless with no backup. We need to react to the threat but if there's a way to do it without losing tempo why not?

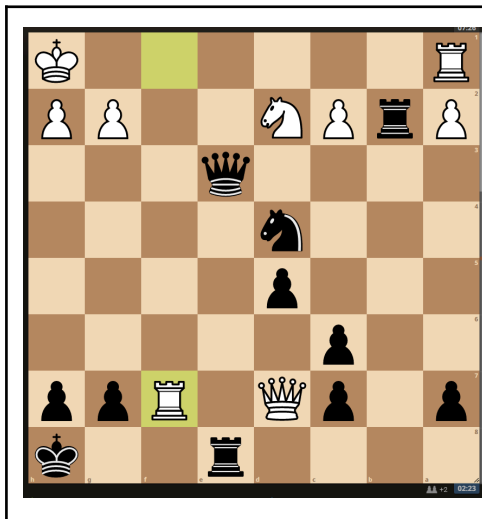
<https://lichess.org/4Et5lrgs/black#19>



What happened: g6
Better was: f5

<https://lichess.org/dNXz9if7/black#63>

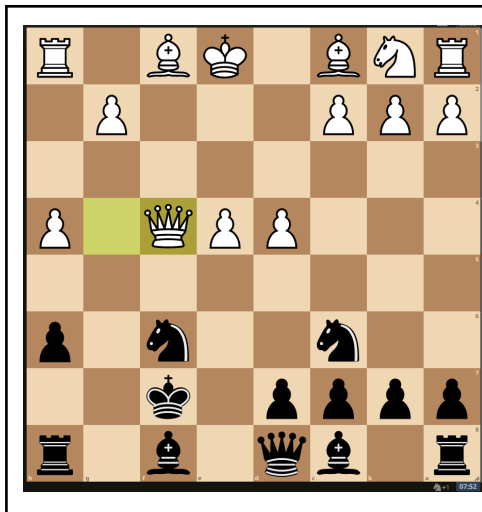
Not Neutralising Attack



Situation:
What happened: Rb8
Better was: Qe6

<https://lichess.org/G1HNCmxr/black#43>

Defence Move that doesn't solve my problems



What happened: Kg7. Black failed to correctly evaluate White's threats in the position. Anything with light-square Bishop check and 0-0 is devastating for Black.

Better was: Nxd4.is actually winning.

<https://lichess.org/F8dnJWIm/black#17>

Overly passive defence

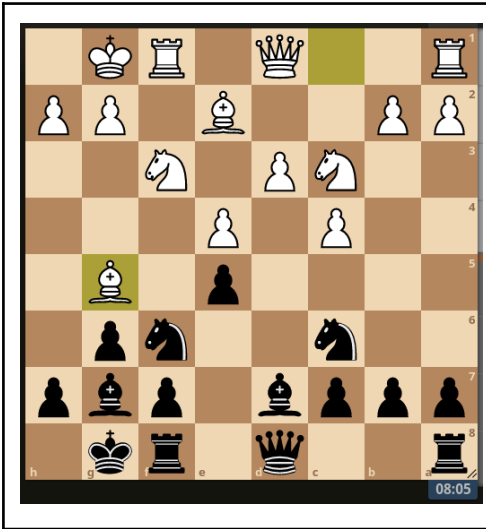


What happened: Ne1
 Better was: Kh1

<https://lichess.org/rRuuZPTs#40>

FIX

Coordination



Situation: White is threatening to play Nd5, a very unpleasant situation for Black.

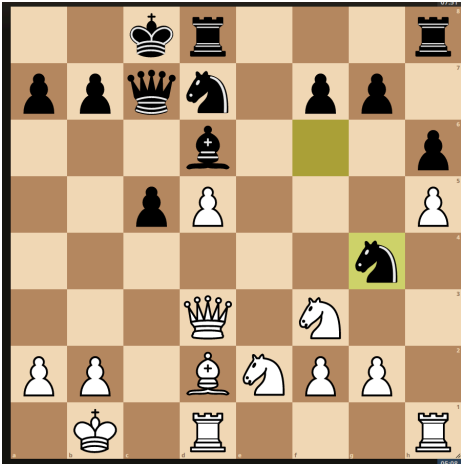
What happened: Qe8 already feels like the wrong way to unpin. Black pieces are very cramped and the rooks are not connected. White just improves his position, Qd2, h3 Rf2 etc.

Better was: Bg4 Nd5 Qd6. I was afraid of h3 and Bishop has to move again, but Bxf3 and take d4 square for Black Knight.

<https://lichess.org/AMYmoFqD/black#19>

Not fighting for the center

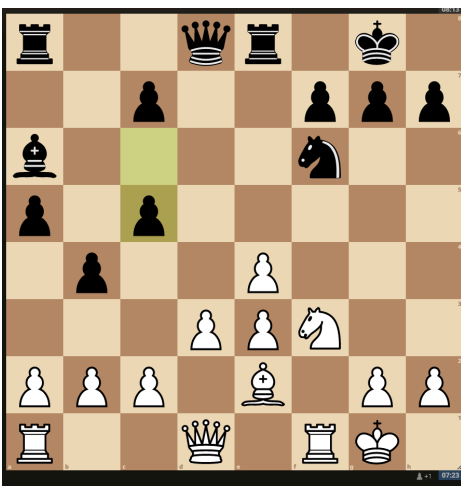
Automatic Defending/Reacting (Not finding Tactical Defense)



What happened: Rdf1
 Better was: Rhf1

Resourcefulness in playing a position
 Things can be defended tactically (when Nxh5 Qf5+)
 Pieces can be developed tactically (Nfd4 is possible)
 Knight needs to be booted from g4

<https://lichess.org/lmsfIFHY#34>



What happened: b3 obviously trying to stop c4
 Better was: Qe1-Qg3

d3 can never be captured because of Rd1.

<https://lichess.org/vnzFrail#26>



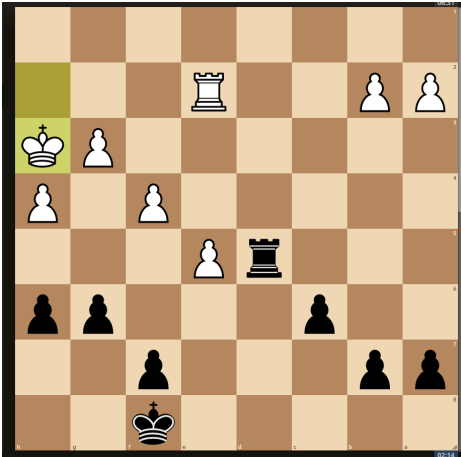
What happened: a3
 Better was: 1. Rfd1

1. a4 b4 2. Qc4. did not consider this at all.

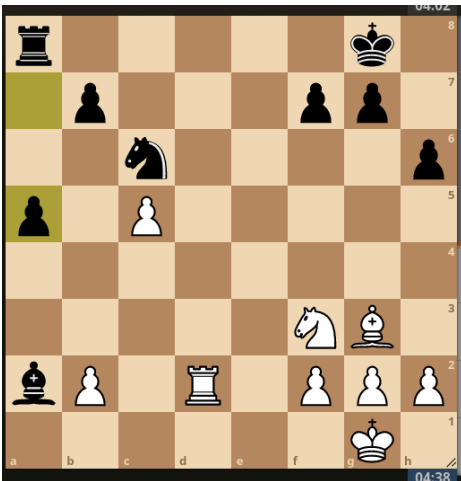
<https://lichess.org/fQZfph0m#18>

Endgame

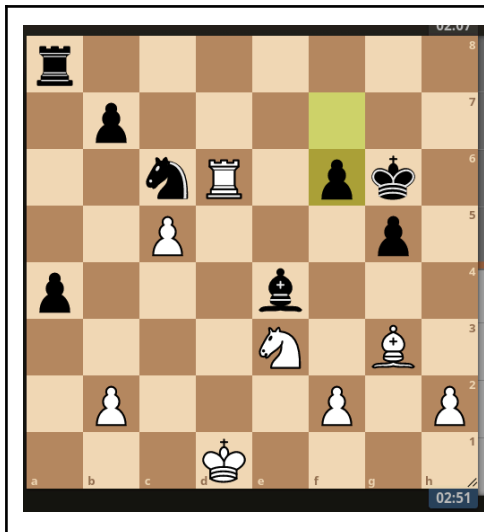
Centralising King vs Fixing Pawn Structure

	<p>Situation: It's 4v3 for the king and v 3v2 queen side in what looks like an easily drawn endgame.</p> <p>What happened: 1.. Ke7 2. Kg4 Ke6 3. h5 gxh5 4. f6 .. 4 embarrassingly bad moves in a row which shows that Black has absolutely no understanding that White is creating a pass pawn with his pawn majority.</p> <p>Better was: h5 and if White eventually plays g4 (after covering the third rank checks), don't capture on g4 which gives White an outside pass pawn</p> <p>https://lichess.org/bqBjCzFr/black#67</p>
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Centralising King vs vs Trading off Rooks

	<p>Situation:</p> <p>What happened: Kf1</p> <p>Better was: Rd7 Rd8 trading off rooks</p> <p>https://lichess.org/Jb5wuiNG#44</p>

Centralising King vs vs Piece Placement/Controlling counterplay

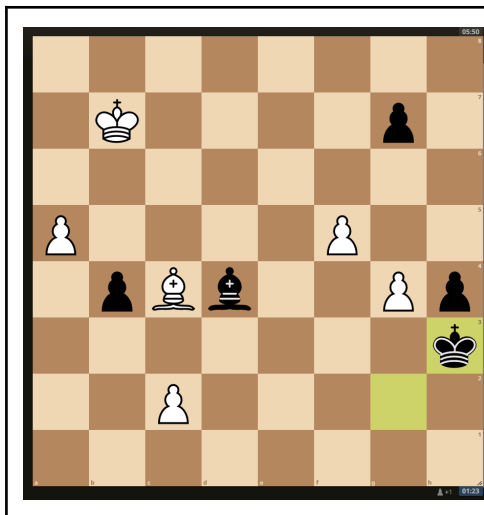


Situation:

What happened: Kd2

Better was: Nc4

Trousers



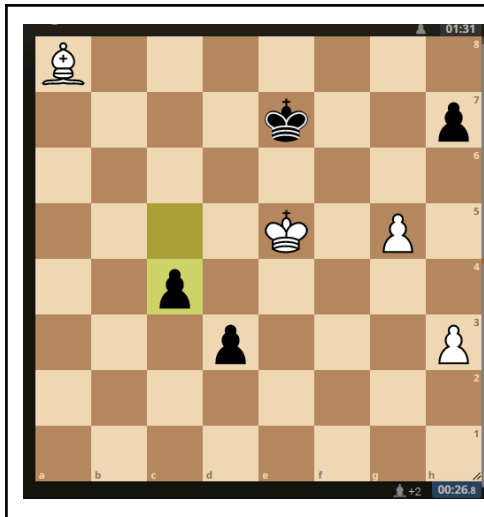
Situation:

What happened: a6

Better was: g5

<https://lichess.org/0vrtjn14#92>

Wrong Plan with Natural Move



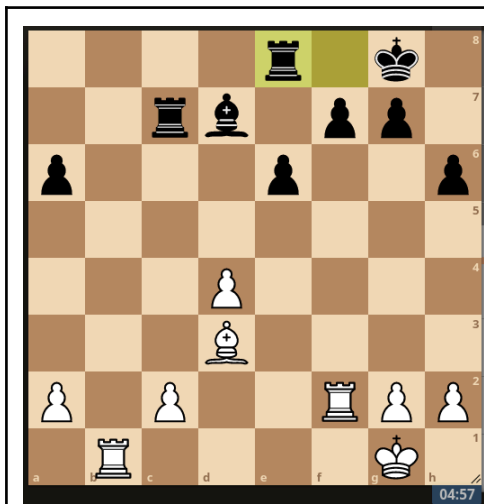
Situation:

What happened: Kd4

Better was: Be4 containing the pawns with the Bishop, and then winning on the queenside with king and 2 pawns vs King +1..

<https://lichess.org/uR3jXhn4#112>

Liquidating/losing control in a slightly better position



Situation: Material is equal and the endgame might be heading towards a draw. However White controls the only open file and has a ready pass "c" pawn and better placed Bishop. What is White's best chance to play for a win?

What happened: Bxa6 giving Black a chance to activate the rook with Ra8-Rxa2. I didn't even see Ra8 and just grabbed a pawn thinking since it is equal material now, grab the pawn while I still can because it wont stay on a6 for me.

Better was: c4 which both responds to Black's obvious plan of e5 with d5. Game would continue Rd8 Rd2. The strategy seems to be to hold c4 and d4 in place, bring king forward to protect the two pawns, and then start activating pieces(white controls the only open b file) to harass Black's position.

<https://lichess.org/i14PjdGt#44>

Trying too hard to avoid (Rook) trades when material down



[V]

Situation: White is a pawn down and has to look for a draw, best chance is with keeping Rooks on the board only, Bishop and Queen is the most dangerous. [Edit: Actually Queens is drawish]

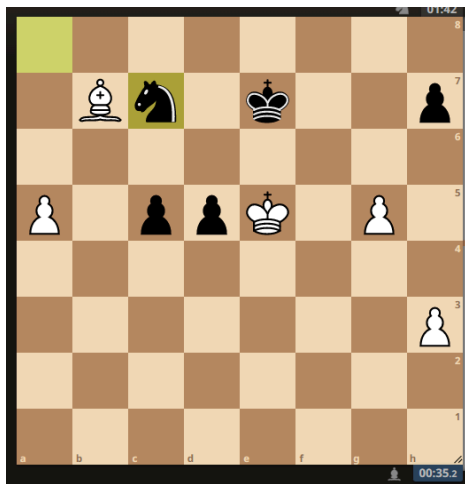
What happened: White knows that should keep rooks, hence 1. Qe2 was natural to me, defending d1 attacking b5 and not trading Rooks. However this dream only lasts for one move. The forced sequence of Rd8 2.Bc2 Qc6! 3.Rxd5 Qxd5 4. Qf1 displaces whites pieces. Bishop is misplaced on c2 and Queen on f1 and Black pieces are just very well placed.

Better was: Be2. After Qc6 Rxd5 Qxd5, Bf1 is the natural square for the Bishop defending g2 and attacking b5.

V: We should set the strategic goals in this position. Taking b5 is a goal, and liquidating to a theoretical drawn endgame is the other goal. The worst scenario is a Bishop ending with black pawn on b4, white pawn on a2. If Bishop ending with Black pawn on b5 and White pawn on a3 it's drawable.

<https://lichess.org/aOsnQ8rG#50>

Blindly rushing pawn to queen



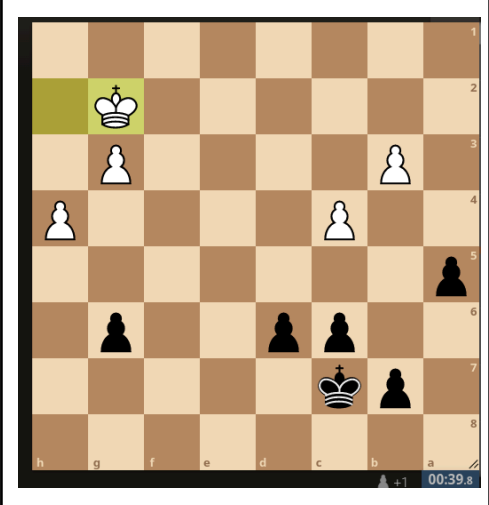
Situation:

What happened: a6

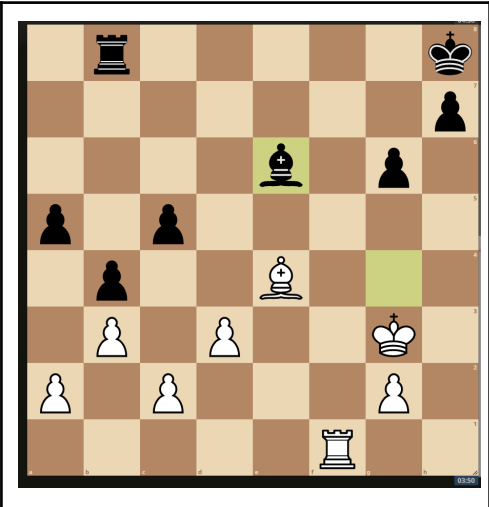
Better was: Bd5

<https://lichess.org/uR3jXhn4#104>

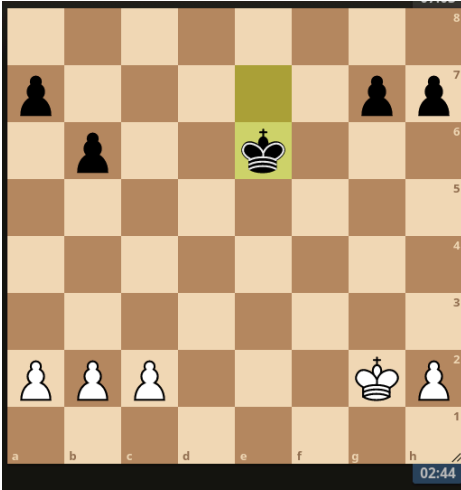
Playing pawns in the endgame like it's the middlegame

	<p>Situation:</p> <p>What happened: d5 fighting for the center! But after c5 it's actually a draw. White's C and B pawn contain cba pawn on the queenside.</p> <p>Better was: b5 making an outside pass pawn with a straightforward win.</p> <p>https://lichess.org/vHcn6GIC/black#89</p>
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Shortsighted moves

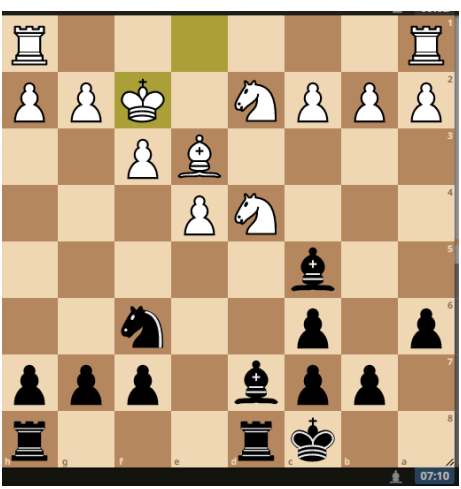
	<p>Situation:</p> <p>What happened: Rf6</p> <p>Better was: Re1</p> <p>https://lichess.org/vnzFrail#72</p>
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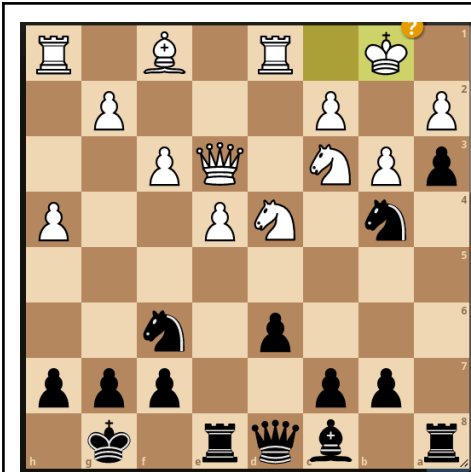
Advancing pawns on the side where enemy king is active

	<p>Situation:</p> <p>What happened: 1.c4 a very bad endgame mistake. White thought that c4 restricts the d5 square for the king, and also is one step closer to creating the passed pawn with the pawn majority. Since white can play b3, the pawn chain should be safe.</p> <p>Better was: Kf3. The pawn chain is in fact not safe, because Black will play K on c3, and then a5</p> <p>https://lichess.org/qsc9QVJs#62</p>
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Miscellaneous Psychological Things

Embarrassing Cheap Tricks which are sad but funny

 <p>[v]</p>	<p>Situation: Black is maybe slightly worse in this position having doubled pawns on the queenside. He needs to do something with the Bishop on d7, so maybe Kb8 and Bc8.</p> <p>What happened: Bh3, and White just calmly plays c3 or Nb3 and Black has achieved nothing!</p> <p>Better was: Re8</p> <p>https://lichess.org/ho2UEAxZ/black#22</p>
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Situation:

What happened: Nd5. White calmly trades off the Knight on c3 with Nxd5 Nxd5 and Qd2. Black has to move the Knight again, e.g. Nb4. Effectively losing 2 tempos, it is now White to play, and White queen has moved out of the pin. .

Better was: d5 (a line that needs a bunch of calculation)

<https://lichess.org/3ckZjbEz/black#59k>



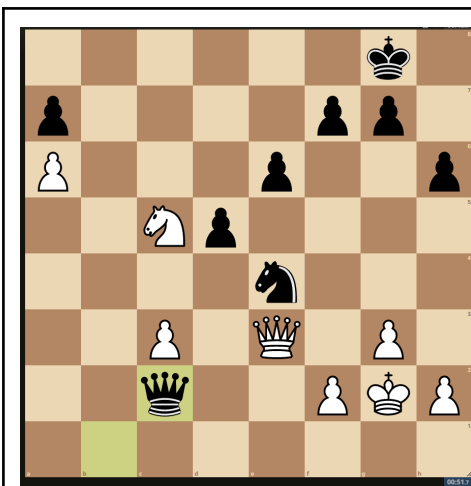
Situation:

What happened: d5. I saw the Bh3 threat and decided to play d5 to distract the opponent. I might try to open a1-h8 diagonal and give d4 square to Bishop later.

Better was: Bf1

<https://lichess.org/w036iQJP/white#32>

Giving up too easily




Situation: White played badly the entire game, and now is about to lose another pawn (2 pawns down) after 1... Nxc3

What happened: 1. Nxe4 with 1 min left. Not fully realising that the endgame is completely lost without calculating.


Better was: Nd7

<https://lichess.org/Xl47j5T6#66>


Frightened by Fancy Tactics that don't work

	<p>Situation: White is in a messy situation with the pin and discover check</p> <p>What happened: 1. Nf5. I calculated if 1. bxc5 Nxc5 2.d4 Bxd6 3. dxe5 Bxe5+ and Black's Bishop is centralised on e5, and Knight is already on c5 attacking e4. Hence I rejected this line.</p> <p>Better was: 1. bxc5 Nxc5 2. d4 Bxd6 3. dxc5 . The reason I missed this, is because I was frightened by the discovered double check 3.. Nxg4, but there is simply 4. Kh1.</p> <p>Bishop-knight on c5 e5 vs e5 c5 makes a difference in the position evaluation because Black cannot anchor the Bishop with f6, and e4 is not being attacked.</p> <p>https://lichess.org/X8UDdQAU#62</p>
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Alertness

	<p>Situation:</p> <p>What happened: Re8.</p> <p>Better was: g5.</p> <p>I thought g5 helps Bishop to get to a better diagonal (h2-b8 or g1-a7) so I didn't play it. The problem is my brain thinks that g5 <i>only</i> for removing the pin or getting Bishop off h4-d8 diagonal.</p> <p>I didn't realise Black should play g5 to avoid Bxf6 (which btw could have been played on the previous move). And wants to play g5 for something else - Bxf1 Rxf1 Rd2.</p> <p>https://lichess.org/gF6FiKZh/black#37</p>
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Unclassified

	<p>Situation:</p> <p>What happened: d5. Fighting for center Better was: d6</p> <p>https://lichess.org/cvxmmacU/black#15</p>
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An interesting Tactical Motif

	<p>Situation:</p> <p>What happened: Nxc3 Better was: c5; (I would never see this)</p> <p>https://lichess.org/2r90s4Hr/black#25</p>
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Completely outplayed: <https://lichess.org/bSUOM2NcrS3Z>

Confused: <https://lichess.org/IOjDKWgm/white#40>

Still needs Analysis: <https://lichess.org/SlelwJH0#86>

Solving Puzzles

I used to think solving puzzles is just about building pattern recognition. And if I solved a 10000 puzzles I would gain pattern recognition from all of that. Like a golf player practising a 10000 swings. But after a certain level the issue is not pattern recognition, but calculation discipline. I typically have no issue finding aggressive attacking ideas in the position or calculating forced variations. But the problem is with finding defence for the opponent in non forcing variations. In forcing variations you do not even need to “find” the response for the opponent in fact, because it’s simply right there and having to work for the opponent’s defence is “new”.

[After reading this interview](#) - I started to track why I was getting puzzles wrong and again I found similar problems to my games from 15 years ago even in classical time control. Many things can be traced back to **Brain Fuzzed out/ impatience**. Excited to see a winning line and visualisation got extremely clouded, basically finding one winning variation that looks good and just going for it even though I KNOW that I'm fuzzy and just hoping that everything works out. Simply put, a lazy brain.

This is different from in-game problems, because while we may have to cut calculation short in game or rely on some evaluation on whether or not its a critical position, there's no excuse for not pushing for the right answer when solving puzzles, we know its a critical position and there's no time limit.

A) Didn't find the best defence even if it's easy. I kind of go with the first move for the defender and leave it like that. It's the same mistake as a beginner who would go for the very first move from the attacker. As a result the defence usually gets the stupidest variations. I need to apply equal effort to finding the defence/searching for candidate moves for the defender, as I would to finding the attack. When we can't find the winning move for the attacker I try and try, but when I find a single move for the defender, I just settle for it. But what can they actually do here? What are the candidate options for the defender? The overall mindset has to be for the position rather than just thinking for one side.

B) Didn't find the best counterattack for the opponent in a dynamic position. Immediately going into the position, not evaluating that the position is dynamic and that there are counter threats to begin with. There are positions where the opponent has immediate threats on my king, and stopping the calculation thinking I am winning material, actually loses the king on the next move.

C) Lack of creativity. Only looking out for standard mate construction with existing pieces.

D) Completely fixated on the previous idea after position changed - did not generate a new set of candidate moves after a new surprising move was played. Even if the new correct move is super obvious. This usually comes from cheap computer traps which require a different response to what had been planned in the previous variation.

E) Did not have candidate move generated in the initial calculation

A) Didn't find the best defence for opp (even if it's easy)

- Blocking a check with a pawn/piece instead of moving the king [3]
- Defending against the immediate threat instead of accepting the sacrifice [1]
- Defending by retreating a piece [2]
- Defending by moving a piece out of attack and cover multiple squares [1]
- Blocking a check prophylactically instead of advancing a pawn (endgame) [1]

B) Didn't find the best counterattack for opp

- Backrank [1]
- Opp Tactics involving drawing the king out of the pawn-queening box [1]
- An intermediate move which threatens mate, if we had chosen a different move or different piece placement, then this counterattack is neutralised/doesn't exist. [1]

C) Lack of creativity.

- Not sacrificing rook to open file (not immediate checkmate) [1]
- Not sacrificing rook (no capture) to clear a square/diagonal [1]
- Didn't sacrifice a piece to force another piece into a bad position so that a combination that wasn't working now works [1]
- Not advancing pawns in front of king to attack

D) Completely fixated on the previous idea after position changed

- Computer tries to trick me with a free queen from a long distance. [1]
- Lost the plot trying to survive a mating attack, losing sight of other side of the boat

E) Did not have the correct candidate move generated

- Endgame, playing a move which *offers* a favorable exchange [1]
- Non-forcing candidate moves with no checks or captures or even immediate threat (such as castling) [1]
- NOT trading the Knight for Bishop in the endgame [1]
- Retreating a piece quietly when attacked. Instead, captured the piece that attacks it which moves our piece out of position. [1]
- Quiet move that doesn't advance pawns in a pawn race endgame

F) Ended Calculation early (thought position is winning)

- Enemy King can still hold 2 connected passed pawns [1]
- Exchange up but too little material in endgame [1]
- Ended material up. Material is attacked and is not trapped, but moving it away loses to another tactical motif [1]